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Date Software Package Opened: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

CPU Model: \_\_\_\_\_

Licensee Name: \_\_\_\_\_

Serial No: \_\_\_\_\_

CPU Partitioned: No ( ) Yes ( )

Address: \_\_\_\_\_

Loaded Partition # \_\_\_\_\_

Address: \_\_\_\_\_

Max Printers Allowed: Two ( ) Five ( )

City, State, Zip: \_\_\_\_\_

Ten ( ) Unlimited ( )

**Signature :** \_\_\_\_\_ Title \_\_\_\_\_ Print Name \_\_\_\_\_

(Authorized Representative of Licensee)

## Contacto

**American Top Tools**

**Distribuidor Oficial**

Via Laietana 20  
08003 Barcelona  
España

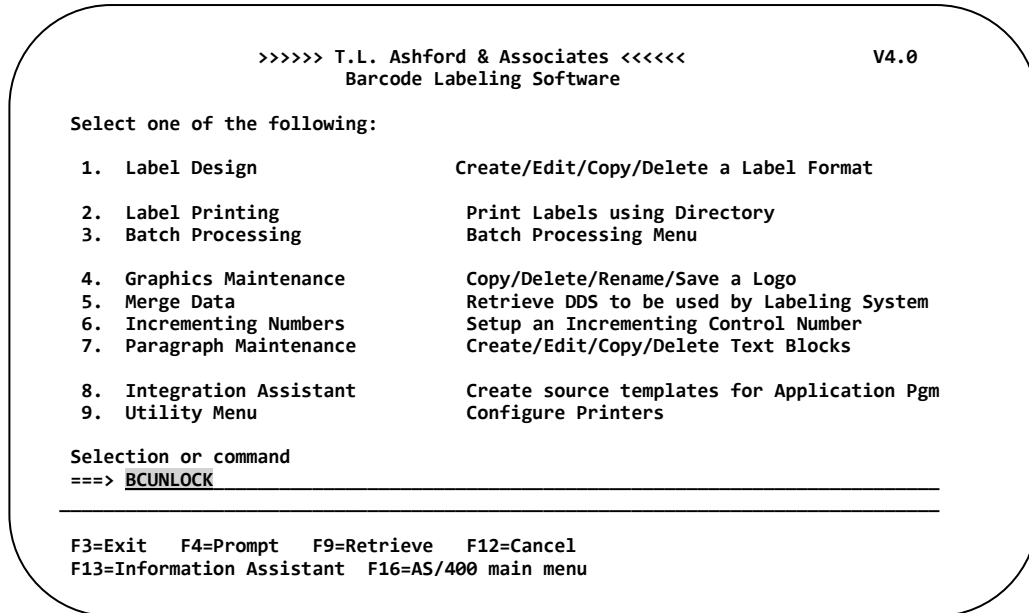
[att@att.es](mailto:att@att.es)  
[www.att.es](http://www.att.es)  
+34 933 191 612

# Unlocking the Software

Barcode400 is **FULLY FUNCTIONAL** from the date of installation. However, the software must be ‘unlocked’ within 30 days of installation; otherwise users will be unable to design or print labels. The software will notify users of the number of days remaining in the Trial Period.

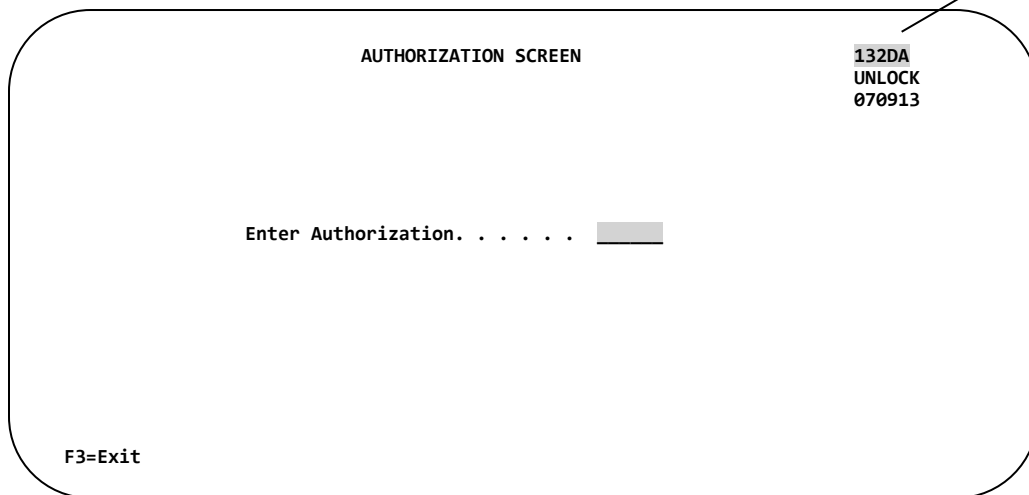
At any time after receiving your Authorization Code from your sales representative, you can ‘unlock’ the software. In the event your package does expire, contact your sales representative immediately.

At a command line type **LBLMENU**, and then **PRESS ENTER** to display the Barcode400 Main Menu.



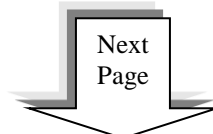
Type **BCUNLOCK** then... **PRESS ENTER**.

The following **AUTHORIZATION SCREEN** appears.

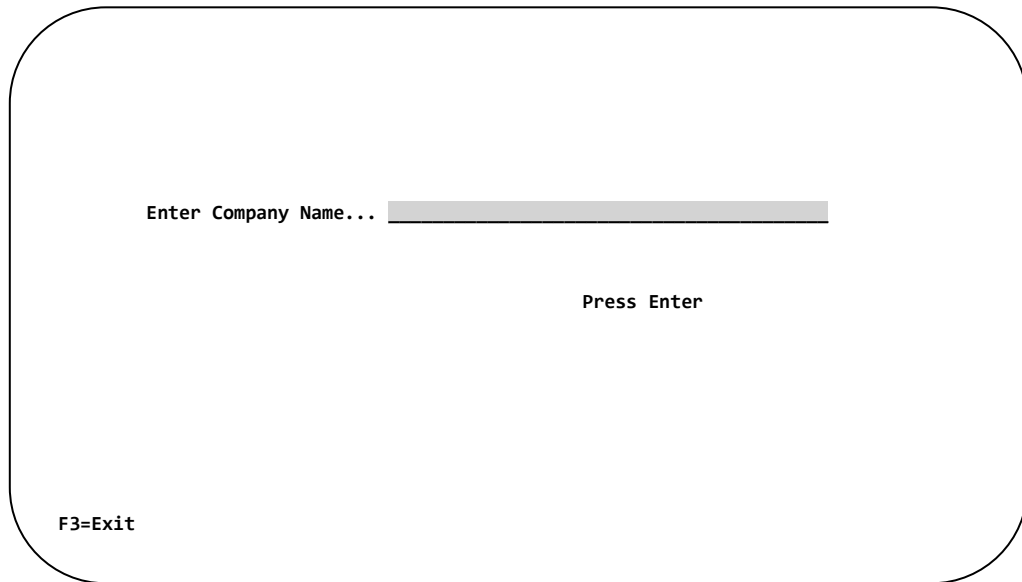


CPU  
Serial #

Enter your six-digit **Authorization Number**, then **PRESS ENTER**.



The following screen appears.



Enter Company Name...

Press Enter

F3=Exit

Type: **YOUR COMPANY NAME**, then **PRESS ENTER**.

The message screen "**UNLOCKED SUCCESSFULLY**" will be displayed. **PRESS ENTER**.

Your software is now unlocked permanently for this CPU.

***NOTE:** If you decide to transfer the software to another CPU, you will need to complete a T.L. Ashford Software Transfer form before the software is unlocked on the new CPU. Call your sales representative for complete details on software transfers or additional licenses.*

**Version**

**4.0**

T.L. Ashford & Associates

Bar Code Labeling Software for the IBMi

# Barcode400

5250 Label Designer  
User's Manual

## Contacto

**American Top Tools**

**Distribuidor Oficial**

Via Laietana 20  
08003 Barcelona  
España

att@att.es  
www.att.es  
+34 933 191 612

© T.L. Ashford & Associates  
626 Buttermilk Pike  
Crescent Springs, KY 41017

Phone 800-541-4893  
Fax 859-291-1804  
Web [www.tlashford.com](http://www.tlashford.com)

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# Introduction

## Barcode400 Label Designer

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### Using this Manual

This manual details barcode label design using Barcode400's Traditional Label Designer ("green screen"), including creating a label format, adding various design elements (text, barcodes, graphics, lines, etc.), integrating various types of data, and printing formats using diverse printing methods.

The book is intended for both beginning and experienced users, who will be using the software to create and print barcode labels. Portions of this manual are intended for IBM i programmers **ONLY**. Those sections will be prefaced by such a warning.

The manual covers:

- Format Design – Create and edit label layouts
- Label Elements – Add and change various objects on the format
- Format Options – Copy, Delete, Rename, and Save formats
- Label Printing – Produce labels from test prints, batch processing, and interactive programs
- Graphics – Add and use static and variable images
- Merged Data – Retrieve and use data from a IBM i database file
- Incrementing Numbers – Create and use a control number
- Paragraphs - Add and use static and variable blocks of text
- Printing Labels – Producing formats from menu options or applications
- Integration Assistant – Create and use source templates for interactive applications
- Printer Configuration – Add and Maintain output queues and their associated printers
- History Maintenance – Archive label prints to search or reprint
- Format Listings – Produce reports of available formats, including by file data or logos used
- Transferring Formats and Graphics – Relocate labels and images between CPUs
- Download Fonts – Install special fonts onto printer's on-board memory.
- Supported Printers – Lists printer types and the programs to call
- Supported Fonts – Lists of available letter styles by printer brand
- Two-Dimensional Symbologies – Add and use the latest high capacity barcodes
- Backing Up the Software – Protect the software and your label formats.

**NOTE:** This material does **NOT** cover software installation, software updates, or installation and use of the Graphical Label Designer. Separate manuals are provided on the CD-ROM media or in the download.

Additional copies or parts of this manual can be printed from the **Barcode400.pdf** Adobe Acrobat document located on the CD-ROM or included in the Barcode400 download, under the **Manuals** folder.

## Terminology

The Label Design Program (Barcode400) describes label size, label content, how the label is printed, and where the label is to be printed. This set of parameters is referred to as the "Label Format".

Each Label Format is stored under a unique alphanumeric name consisting of eight characters or less. The user assigns the Label Format Name and the Target Printer (Format's default printer type).

Label Formats can contain a mixture of Constant Data (Static information that never changes), Variable Data (Merged, Prompted or System information that changes each time the label format is printed), or Special Data (Graphics, Incrementing Numbers, and Paragraphs).

Constant data is simply typed into the format. Variable Data can be Prompted (Entered by the print operator), Merged (Retrieved from a IBM i file), or System (Extracted from the IBM i, like current date, time, etc.). Also Special Data can incorporate variable values for more flexibility.

Positions of these objects are determined by their coordinate values; measured in inches, tenths of inches and hundreds of inches or dots (iit.)

Text objects use a broad selection of fonts, or letter styles, to display data in alphanumeric form. The fonts available depend upon the printer model used (See Appendix B).

A barcode is a representation of encoded data expressed in lines and spaces or dots and spaces that can be 'read' or scanned and translated back into data. Barcodes come in a variety of types, or symbolologies, each of which has specific functions and abilities. Barcode400 supports all the common traditional, linear barcodes as well as the new, more complex two-dimensional symbols.

Label formats can also use graphics, which are logos or images uploaded to the IBM i.; as well as lines and boxes, and paragraphs (or blocks of text).

## New Features for Version 4

- |                                       |   |
|---------------------------------------|---|
| <b>Adobe Acrobat - Label Printing</b> | <b>Barcode400</b> now has a new add-on module that allows labels to be printed directly into Adobe Acrobat files that can even be automatically emailed to numerous locations as well as be printed remotely.   |
| <b>Arrays -</b>                       | <b>Merge Data</b> can now be used by byte position in the file record, not just field number. This allows for easier data manipulation and access to fields beyond the current 99 field limitation. This feature is also supported in the Graphical Label Designer. |
| <b>HP Fonts -</b>                     | The HP/AFP driver is enhanced to include a broader variety of popular fonts.  |
| <b>Justification -</b>                | Text can be set to center, left or right-justified.   |
| <b>Overlay Transfer -</b>             | HP/AFP labels support overlays for printing more detailed documents. Our GUI now has an Overlay Transfer feature.   |



# Chapter 1

---

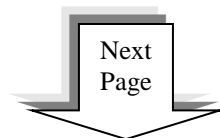
## Work with Label Formats

### Overview

Barcode400's Traditional Designer maintains a Label Directory, under Option 1 of the software's Main Menu. Label formats can be created or updated, but also printed, copied, saved, renamed, and deleted.

Labels from the very simple to the complex may be designed; using barcodes, enlarged characters, lines, boxes, blocks of text and graphics. Characters and barcodes may be rotated to print vertically or even upside down. Reverse image may be used to highlight information.

Before entering the Label Design Program, it may be best to make a rough sketch of the label you wish to design. Once in the Designer, it's not recommended to make precise measurements initially. "Fine Tuning" a Label Format can be done after the initial printing.



## Work with Label Formats Directory

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #1

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Label Design          Create/Edit/Copy/Delete a Label Format
2. Label Printing        Print Labels using Directory
3. Batch Processing      Batch Processing Menu
4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data            Retrieve DDS to be used by Labeling System
6. Incrementing Numbers Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks
8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu          Configure Printers, History Maintenance ...

Selection or command
===> 1_____

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```

After selecting Option #1, the following directory screen appears<sup>1</sup>

Options

Functions

```

Work with Label Formats
Position to . . . . . _____

Type options, press Enter.
1=Print  2=Edit  3=Copy  4=Delete  6=List  7=Rename
9=Save   13=Type/Text  22=Print Options

Opt  Format      Type      Text
---  ---
---  SAMPMA      Z140XI    VERY BASIC LABEL- USING EXPANDED LETTERS
---  SAMPBAR      Z140XI    SAMPLE LABEL USING A BARCODE
---  SAMPFZ      Z140XI    SAMPLE ADDRESS LABEL- USING FILL ZONES
---  SAMPLOGO    Z140XI    SAMPLE LABEL USING A LOGO
---  SAMPMRG     Z140XI    SAMPLE USING DEMO MERGEFILE
---  SAMPSYS     Z140XI    SAMPLE USING SYSTEM DATA (DATE,TIME...)
---  SAMPVBAR    Z140XI    SAMPLE USING A VERTICAL BARCODE
---  SAMPVERT    Z140XI    SAMPLE LABEL USING VERTICAL PRINT

F3=Exit  F5=Refresh  F6=Create  F8=Restore  F10=Functions Window
F11=Alternate screen  F21=Command Window
    
```

The Format directory displays all existing label formats in alphabetical order. The list of format names can be positioned to an alphabetic sequence by typing character(s) in the **Position To** field and pressing **Enter**.

From within the Format Directory options such as Edit, Copy, Delete, and Rename label formats can be accomplished. Functions such as Create and Restore are also available.

*NOTE: If the Work with Label Format Directory does not appear in the same manner as the example, press the **F11** key to change the Alternate Screen.*

<sup>1</sup> A multi-column screen, which does not display a description of the label format, could also be displayed. Each time the F11 Function Key is pressed, the screen toggles between a single and multi-column display.

## Create a Label Format

To create a Label Format, press the “F6” Key from within the Work with Label Formats Directory.

Press F6

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

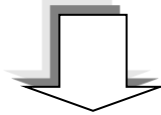
1=Print	2=Edit	3=Copy	4=Delete	6=List	7=Rename
9=Save	13=Type/Text	22=Print Options			

Opt	Format	Type	Text
—	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit	F5=Refresh	<b>F6=Create</b>	F8=Restore	F10=Functions Window
F11=Alternate screen				F21=Command Window



After pressing F6, the Create a New Label Format screen appears.

Create a New Label Format

Type choices, press Enter.

Label format name . . . . .	
Printer type . . . . .	AFPHP4, AFPHP5, AFPHP6, AFP...
Text (description) . . . . .	

Bottom

**Label Format Name.** Enter a valid label format name. The label format name may contain up to 8 alphanumeric characters. The first character must be alphabetic (A-Z, #, @, or \$) and it must not contain blanks, commas, or quotes ("). "All" is a reserved word and is not permitted.

**Printer Type.** The printer type is required so that the appropriate printer features and options are displayed during label design. While the cursor is in this field, press F4 to view all printer types.

*Note: Printer output is determined by the printer configuration table, see Chapter 7 (Configure Printers).*

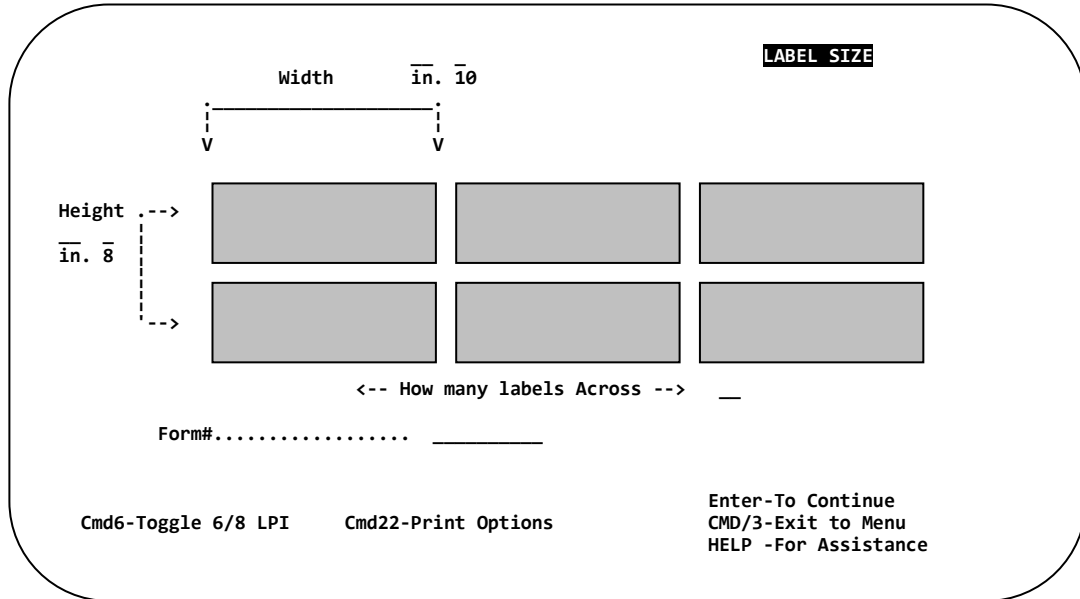
**Text (Description).** Enter an optional label description. The description may contain up to 40 characters and should NOT include ( \, /, ?, \*, :, <, >, | ). The label description may be changed anytime.

then... **PRESS ENTER** to continue.

## Label Size

After naming the new format, you must specify label size. The label size should not be confused with the "form" size. A form may contain several labels across. When speaking of label size, we are referring to the dimensions of the individual label as the media advances through the printer. "**LEFT** of label to **LEFT** of next label, **TOP** of label to **TOP** of next label."

*NOTE: The Field Exit key is not available on this screen.*



**Label Width.....** Measured in inches and tenths of inches from the left edge of one label to the left edge of the next label. Include any space located between the labels in your measurement. This space is referred to as the "HORIZONTAL GAP". Maximum label width is 13 inches, but can also depend on the width of the printer.

**Label Height....** Measured in inches, and sixths or eighths of inches, from the top of one label to the top of the next label. Always include the INTERLABEL GAP. Maximum label height is 22 inches, but can also depend on the type of printer. The CMD6 key will toggle between printing at 6 LPI and 8 LPI.

**Labels Across...** Number of labels across the form. This value can be overridden at label print time. Printing of different records across the form is currently not supported. If two labels are requested and the across value is set to 2, two identical labels will be printed across the form. If unique values are required on each label across the form, the format will need to be designed to encompass all of the labels.

**Form# .....**Used to inform the operator of a forms change. The recommended default is \*STD. This is value may be overridden at label print time.

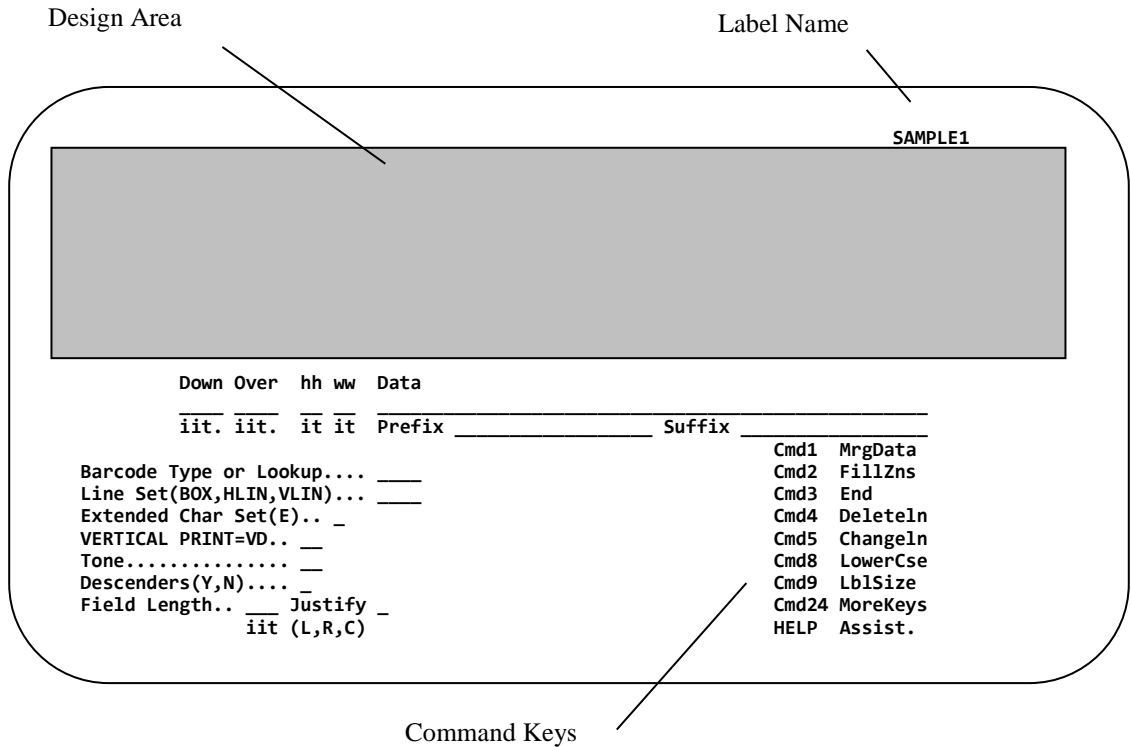
The **CMD22** key will display additional Print Options (print speed, quality, media type, dispensing options, etc.) based on the Printer Type. The print options will also be displayed upon exiting the label format design.

## Designing Your Label

The Parameter Entry Screen (below) is used to describe the label format.

At first glance this screen may seem a bit overwhelming, but don't be intimidated. Most of this screen is optional. Each field is explained on the following pages of this chapter.

After you complete a new object (down, over, size, data, etc.), **PRESS ENTER**. The new line will move up into the design area.



## Command Keys

**CMD1- Merge Data**  
**CMD2- Fill Zones**  
**CMD3- End**  
**CMD4- Delete Line**  
**CMD5- Change Line**  
**CMD6- Sequence**  
**CMD8- Lower Case**  
**CMD9- Label Size**  
**CMD10- Duplicate**  
**CMD11- Include**  
**CMD13- Reposition**  
**CMD14- Logos**  
**CMD15- Text**  
**CMD16- Control Number**  
**CMD17- Sequence Options**  
**CMD22- Print Options**  
**CMD24- More Keys**  
**HELP -**

**Select Data Fields (IBM i Data Base or Data Structure)**  
**Setup/Select prompts for operator to enter variable data.**  
**Exit Label Design Program.**  
**Delete a line or group of lines.**  
**Edit an existing line in the format. This key is a toggle.**  
**Sorts the sequence of label entry lines by Down or Over.**  
**Toggle between Upper/Lower case.**  
**Display Label Size screen.**  
**Copy a line or group of lines.**  
**Include lines from another label format.**  
**Reposition a line or group of lines to another location on the label.**  
**Display Logo Directory.**  
**Display Paragraph (Text) Directory.**  
**Display Control Number Directory.**  
**Options for label format sequence (Sort).**  
**Display Label Print Options.**  
**Displays All of the Available Key Options.**  
**Displays A Help Screen Dependent on Cursor Position.**

## Down and Over (Print Position)

The “Down” and “Over” fields tell the labeling system where you want the Data Field information to print.

All measurements are made from the top left corner of the label to the top left corner of the Data Field to be printed. All Down and Over measurements are made in INCHES, TENTHS, and DOTS. (Each dot = 1/100<sup>th</sup> of an inch.)

SAMPLE1

Down	Over	hh	ww	Data
<u>   </u>	<u>   </u>	<u>  </u>	<u>  </u>	Prefix _____ Suffix _____
Barcode Type or Lookup...				Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...				Cmd2 FillZns
Extended Char Set(E)...				Cmd3 End
VERTICAL PRINT=VD..				Cmd4 DeleteIn
Tone.....				Cmd5 ChangeIn
Descenders(Y,N)....				Cmd8 LowerCse
Field Length..			Justify -	Cmd9 LblSize
			iit (L,R,C)	Cmd24 MoreKeys
				HELP Assist.

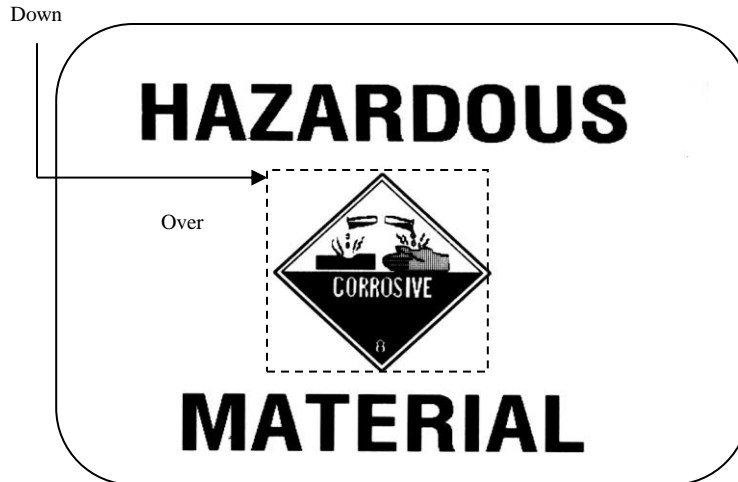
Example: Print the word “HAZARDOUS” Down 2/10” and Over 6/10”.



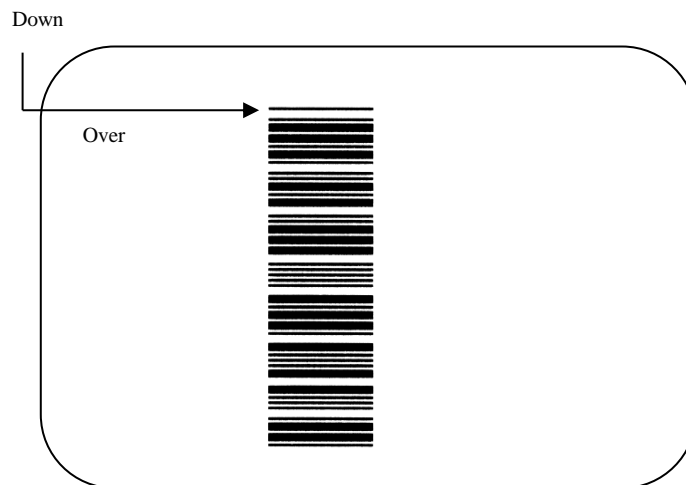
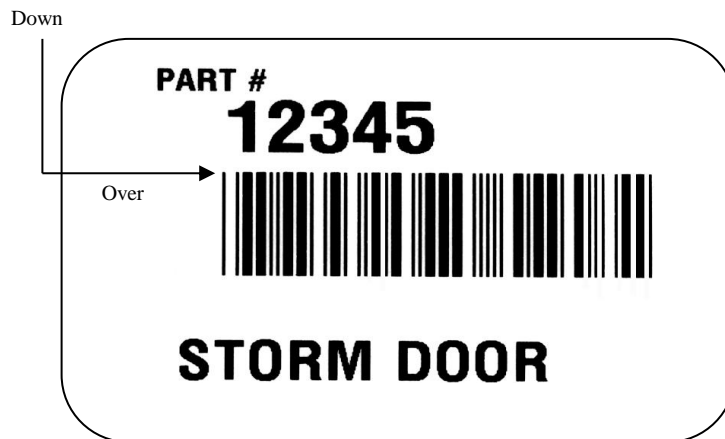
(iit.) = inches, tenths, and dots. Use “Dots” to fine adjust print position.

Down	Over	hh	ww	Data
0020	0060	01	01	<u>HAZARDOUS</u>
iit.	iit.	it	it	_____

Down and Over measurements are to the top left corner of the LOGO.



Down and Over Measurements are to the top left corner of a barcodes and printed text. THIS IS REGARDLESS OF ORIENTATION.



## HH WW (Character Size)

The “hh” and “ww” fields determine the expansion (size) of an object.

They are used to expand the base size of Vector Fonts (see Appendix B).

When printing barcodes, the “hh” field is used to describe the height of the barcode in inches and tenths of inches. Barcodes do NOT use the “ww” field.

The hh and ww fields also expand the size of a graphic on supported printers.

*NOTE: When a graphic is expanded in this method, the image quality may become distorted.*

SAMPLE1

Down Over	hh ww	Data
iit. iit.	it it	Prefix _____ Suffix _____
Barcode Type or Lookup... _____		Cmd1 MrgData
Line Set (BOX,HLIN,VLIN)... _____		Cmd2 FillZns
Extended Char Set(E).. _		Cmd3 End
VERTICAL PRINT=VD.. _		Cmd4 Deleteln
Tone..... _		Cmd5 ChangeIn
Descenders(Y,N).... _		Cmd8 LowerCse
Field Length.. _____ Justify _		Cmd9 LblSize
iit (L,R,C) _		Cmd24 MoreKeys
		HELP Assist.



## Data (Constant, Variable, Special)

The Data Field is used to specify what information you wish to print on your label format.

This manual distinguishes the information placed into the data field by three types.

SAMPLE1

Down Over	hh ww	Data	Prefix	Suffix
iiit.	iiit.	it it	_____	_____
Barcode Type or Lookup....	_____			Cmd1 MrgData
Line Set (BOX,HLIN,VLIN)...	_____			Cmd2 FillZns
Extended Char Set (E)...	-			Cmd3 End
VERTICAL PRINT=VD..	__			Cmd4 DeleteIn
Tone.....	__			Cmd5 ChangeIn
Descenders (Y,N)....	__			Cmd8 LowerCse
Field Length..	_____	Justify -		Cmd9 LblSize
	iiit	(L,R,C)		Cmd24 MoreKeys
				HELP Assist.

### Constant Data

This is information that remains the same every time the label is printed. Constant Data is often referred to as “Static Copy”. Constant Data is simply entered into the data field.

*NOTE: The following section uses constant data to explain label design.*

### Variable Data

Variable Data comes from three sources:

1. **Mergefield Data (M!)** .....IBM i data base file or Data Structure by field number.
2. **Array Data (A!)** .....IBM i data structured by byte position, not field number.
3. **Fill Zone Data (F!)** .....Data entered by the operator via a prompt screen.
4. **System Data (S!)** .....System date, time, etc.

### Special Data

Special Data elements use objects that pre-defined in Options 4, 6, or 7 in the Barcode400 Main Menu (See Main Menu, page 1).

1. **Logos - (L!)**
2. **Incrementing (Control) Numbers - (C! or R!)**
3. **Paragraph (Text Blocks) - (T!)**
4. **Overlays – (O!)** (HP only)

## Constant Data

Constant Data is simply entered into the Data Field.

Example: Notice that only two input lines are required.

*Printed Label*



*Label Design*

						SAMPLE1																																																																																				
<u>SpclTn</u>	<u>Down</u>	<u>Over</u>	<u>hh</u>	<u>ww</u>	<u>Data</u>																																																																																					
01 F910	0030	0030	01	01	FRAGILE																																																																																					
02 F907	0130	0040	01	01	HANDLE WITH CARE																																																																																					
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td><u>Down</u></td> <td><u>Over</u></td> <td><u>hh</u></td> <td><u>ww</u></td> <td><u>Data</u></td> <td></td> </tr> <tr> <td></td> <td><u>ii.</u></td> <td><u>ii.</u></td> <td><u>it</u></td> <td><u>it</u></td> <td><u>Prefix</u></td> <td><u>Suffix</u></td> </tr> <tr> <td>Barcode Type or Lookup....</td> <td>_____</td> <td></td> <td></td> <td></td> <td></td> <td>Cmd1 MrgData</td> </tr> <tr> <td>Line Set(BOX,HLIN,VLIN)...</td> <td>_____</td> <td></td> <td></td> <td></td> <td></td> <td>Cmd2 FillZns</td> </tr> <tr> <td>Extended Char Set(E)..</td> <td>__</td> <td></td> <td></td> <td></td> <td></td> <td>Cmd3 End</td> </tr> <tr> <td>VERTICAL PRINT=VD..</td> <td>__</td> <td></td> <td></td> <td></td> <td></td> <td>Cmd4 Deleteln</td> </tr> <tr> <td>Tone.....</td> <td>__</td> <td></td> <td></td> <td></td> <td></td> <td>Cmd5 ChangeIn</td> </tr> <tr> <td>Descenders(Y,N)....</td> <td>__</td> <td></td> <td></td> <td></td> <td></td> <td>Cmd8 LowerCse</td> </tr> <tr> <td>Field Length..</td> <td>__</td> <td>Justify</td> <td>__</td> <td></td> <td></td> <td>Cmd9 LblSize</td> </tr> <tr> <td></td> <td></td> <td>ii</td> <td>(L,R,C)</td> <td></td> <td></td> <td>Cmd24 MoreKeys</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>HELP Assist.</td> </tr> </table>															<u>Down</u>	<u>Over</u>	<u>hh</u>	<u>ww</u>	<u>Data</u>			<u>ii.</u>	<u>ii.</u>	<u>it</u>	<u>it</u>	<u>Prefix</u>	<u>Suffix</u>	Barcode Type or Lookup....	_____					Cmd1 MrgData	Line Set(BOX,HLIN,VLIN)...	_____					Cmd2 FillZns	Extended Char Set(E)..	__					Cmd3 End	VERTICAL PRINT=VD..	__					Cmd4 Deleteln	Tone.....	__					Cmd5 ChangeIn	Descenders(Y,N)....	__					Cmd8 LowerCse	Field Length..	__	Justify	__			Cmd9 LblSize			ii	(L,R,C)			Cmd24 MoreKeys							HELP Assist.
	<u>Down</u>	<u>Over</u>	<u>hh</u>	<u>ww</u>	<u>Data</u>																																																																																					
	<u>ii.</u>	<u>ii.</u>	<u>it</u>	<u>it</u>	<u>Prefix</u>	<u>Suffix</u>																																																																																				
Barcode Type or Lookup....	_____					Cmd1 MrgData																																																																																				
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Each entry was described separately; then the “Enter Key” was pressed. After the “Enter Key” was pressed, the entry moved up into the display area of the screen.

If the display area of the screen fills up (more than 9 lines), roll forward (page down) and roll backward (page up) to review the elements on the label.

See the listing below for the appropriate sections that describe the use of Variable and Special Data.

**If you are reading this manual for the first time, it is advisable to continue reading the material in the sequence that it is presented.**

**Variable Data**

**Page**

FILL ZONE DATA (Prompting Operator for Data) F <sub>i</sub> .....	29
MERGE DATA (System Files) M <sub>i</sub> .....	34
SYSTEM INFORMATION (Date, Time, etc.) S <sub>i</sub> .....	41

**Special Data**

**Page**

LOGOS (Graphic Images) L <sub>i</sub> .....	42
PARAGRAPHS (Retrieving blocks of text) T <sub>i</sub> .....	44
INCREMENTING CONTROL NUMBERS C <sub>i</sub> or R <sub>i</sub> .....	47

## Prefix / Suffix (Appending to the Data Field)

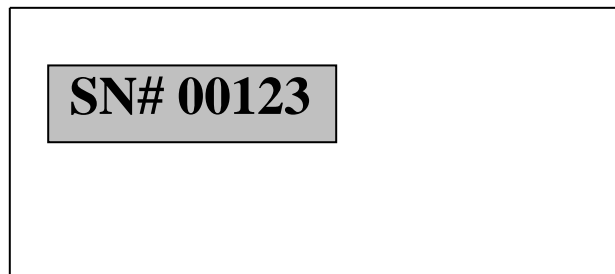
The PREFIX / SUFFIX fields allow data to be inserted ahead or behind the contents of the Data Field. This can be helpful, if the contents will exceed the Data Field or to isolate portions of the data for easier designing.

These fields most often append Constant Data to Variable Data or Special Data. This, however, is not always the case. The Prefix / Suffix field may also contain variable information. The sections of this manual that explain Variable Data also have examples using the Prefix / Suffix fields.

**NOTE:** *Incrementing (Control) Numbers can never be used in the Prefix / Suffix fields.*

Down	Over	hh	ww	Data		
<u>iit.</u>	<u>iit.</u>	<u>it</u>	<u>it</u>	Prefix		Suffix
Barcode Type or Lookup...				_____		Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...				_____		Cmd2 FillZns
Extended Char Set(E)..				__		Cmd3 End
VERTICAL PRINT=VD..				__		Cmd4 Deleteln
Tone.....				__		Cmd5 Changeln
Descenders(Y,N)....				__		Cmd8 LowerCse
Field Length..				Justify _		Cmd9 LblSize
				iit (L,R,C)		Cmd24 MoreKeys
						HELP Assist.

**Example:** Append "SN# " to the front of the Data Field 00123.



Down	Over	hh	ww	Data		
<u>0020</u>	<u>0060</u>	<u>01</u>	<u>01</u>	00123		
<u>iit.</u>	<u>iit.</u>	<u>it</u>	<u>it</u>	Prefix	"SN# "	

**NOTE:** *The Prefix / Suffix must always begin and end with quotation marks, to allow for added blanks.*

# Barcodes

Printing data as a barcode is just a matter of entering the appropriate barcode type into the “Barcode Type or Lookup” field. Barcode types can be found on the following pages and are printer dependent.

All information in the data field will be converted to a single barcode in the type requested. Barcodes may be printed vertically by making an entry in the “Rotation Field”. (See *Rotation*, page 25).

Human Readable data is automatically printed beneath the barcode by entering a “Y” as the second position of the barcode type.

Position cursor  
and press HELP  
for a list of  
barcode types.

Down	Over	hh	ww	Data
iit.	iit.	it	it	Prefix _____ Suffix _____
Barcode Type or Lookup...				Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...				Cmd2 FillZns
Extended Char Set(E)..				Cmd3 End
VERTICAL PRINT=VD..				Cmd4 DeleteIn
Tone.....				Cmd5 ChangeIn
Descenders(Y,N)....				Cmd8 LowerCse
Field Length..				Cmd9 LblSize
				Cmd24 MoreKeys
				HELP Assist.

**Example:** Print the information in the Data Field (12345) as a “Code 39” type Barcode.



\*12345\*

**NOTE:** Code 39 automatically adds a ‘\*’ as start/stop codes at the beginning and end of the barcoded data.

Down	Over	hh	ww	Data
0020	0060	01	01	00123
iit.	iit.	it	it	

Barcode Type or Lookup..... **BYA2**

*Second character “Y” causes Human Readable to print. “N” suppresses Human Readable.*

## Barcode Types – Thermal Printers

The Barcode Type is composed of four characters. The first character is always "B". The second character designates whether Human Readable data is printed below the barcode (Y) or no Human Readable (N) data prints. The third defines the Barcode Type (see below). The fourth position specifies the thickness of the narrow bar, determining barcode density (width). Density ranges from 1-9, with 1 being the highest (Lower numbers result in narrower barcodes). If the density is left blank, the software defaults to 2.

A barcode may need to meet a certain *mil spec*. A mil is one one-thousandth of an inch (0.001"). To calculate the mil spec, simply divide the fourth position of the barcode type by the dots per inch (DPI) of the printer. For example; to determine the mil spec for barcode type **BNA3** on a 203 dpi printer:  $3/203 = .0147$  which is approximately 14.7 mils.

Type	Description	Check Digit	Ratio	Data	Length
<b>BNA2</b>	Code 39	None	1:3	A-Z	1-40
<b>BNY2</b>	Code 39	None	1:2	0-9	1-40
<b>BN32</b>	Code 39	Mod43	1:3	\$,%, +, -, /, .,	1-40
<b>BN@2</b>	Code 39	None	2:5	space	1-40
<b>BYP2</b>	UPC-A	Mod10	Fixed	Numeric	11
<b>BYR2</b>	UPC-E	Mod10	Fixed	Numeric	10
<b>BNb2</b>	UPC-2 Digit Addendum	None	Fixed	Numeric	2
<b>BNc2</b>	UPC-5 Digit Addendum	None	Fixed	Numeric	5
<b>BNU2</b>	EAN-8	Mod10	Fixed	Numeric	7
<b>BNT2</b>	EAN-13	Mod10	Fixed	Numeric	12
<b>BN02</b>	Code 128 Subset A	None	Fixed	Alpha	1-40
<b>BNZ2</b>	Code 128 Subset B	None	Fixed	Alpha	1-40
<b>BN12</b>	Code 128 Subset C	None	Fixed	Numeric	2-40
<b>BNf2</b>	Code 128 Subset C w/FNC1	Mod103	Fixed	Numeric	2-40
<b>BNW2</b>	Code 128 Subset C UCC Shipping Container Code	Mod10/Mod103	Fixed	Numeric	19
<b>BNu2</b>	Code 128 Subset C UPS Ground Shipper	Modified Mod10	Fixed	Alpha	17
<b>BNi2</b>	Interleaved 2 of 5	None	2:5	Numeric	2-12
<b>BNK2</b>	Interleaved 2 of 5	None	1:3	Numeric	2-40
<b>BNa2</b>	Interleaved 2 of 5	Mod10	1:3	Numeric	2-40
<b>BN92</b>	Interleaved 2 of 5 SCC-14 / GTIN / UPC Container	Mod10	2:5	Numeric	13
<b>BND2</b>	Codabar	None	Fixed	Numeric	1-100
<b>BNM2</b>	Plessey	None	Fixed	0-9,A-F	1-100
<b>BNF2</b>	MSI	None	1:2	Numeric	1-14
<b>BN22</b>	Code 93	None	Fixed	Alpha	1-100
<b>BNX2</b>	UPS Maxicode*	None	Fixed	Alpha	1-100
<b>BNE2</b>	PDF-417*	None	Fixed	Alpha	1-1200
<b>BN#2</b>	Postnet	None	Fixed	Numeric	5 or 9
<b>BNQ</b>	Data Matrix*	None	Fixed	Alpha	1-2000
<b>BNq</b>	QR Code*	None	Fixed	Alpha	1-7048

\* See Appendix C for detailed instructions.

## Barcode Types – Dot Matrix Printers

The Barcode Type is composed of four characters. The first character is always "B". The second character designates whether Human Readable data is printed below the barcode (Y) or no Human Readable (N) data prints. The third defines the Barcode Type (see below). The fourth position specifies the thickness of the narrow bar, determining barcode density (width). Density ranges from 1-9, with 1 being the highest (Lower numbers result in narrower barcodes). If the density is left blank, the software defaults to 2.

A barcode may need to meet a certain *mil spec*. A mil is one one-thousandth of an inch (0.001"). To calculate the mil spec, simply divide the fourth position of the barcode type by the dots per inch (DPI) of the printer. For example; to determine the mil spec for barcode type **BNA3** on a 203 dpi printer:  $3/203 = .0147$  which is approximately 14.7 mils.

Type	Description	Check Digit	Ratio	Data	Length
<b>BNA2</b>	Code 39	None	1:3	A-Z 0-9 \$,%, +, -, /, ., space	1-40
<b>BNB2</b>	Code 39	None	1:2:4:5		1-40
<b>BNC2</b>	Code 39	Mod43	1:3		1-40
<b>BNY2</b>	Code 39	None	1:2		1-40
<b>BYP2</b>	UPC-A	Mod10	Fixed	Numeric	11
<b>BYQ2</b>	UPC-E	Mod10	Fixed	Numeric	10
<b>BNR2</b>	UPCE-0	Mod10	Fixed	Numeric	6
<b>BNS2</b>	UPCE-1	Mod10	Fixed	Numeric	5
<b>BNU2</b>	EAN-8	Mod10	Fixed	Numeric	7
<b>BNT2</b>	EAN-13	Mod10	Fixed	Numeric	12
<b>BNZ2</b>	Code 128 Subset B	Pseudo 103	Fixed	Alpha	1-40
<b>BNJ2</b>	Straight 2 of 5	None	1:2:3:X	Numeric	2-12
<b>BNK2</b>	Interleaved 2 of 5	None	1:3	Numeric	2-40
<b>BNL2</b>	Interleaved 2 of 5	None	1:2:4:5	Numeric	2-40
<b>BND2</b>	Codabar	None	Fixed	Numeric	1-100
<b>BNM2</b>	Plessey	CRC 8 (2)	Fixed	0-9,A-F	1-100
<b>BNF2</b>	MSI	None	1:2	Numeric	1-14
<b>BNG2</b>	MSI	Mod10	1:2	Numeric	1-14
<b>BNH2</b>	MSI	Mod10/10	1:2	Numeric	1-14
<b>BNI2</b>	MSI	Mod10/11	1:2	Numeric	1-14
<b>BNX2</b>	MSI	MOD11	1:2	Numeric	1-14
<b>BN#2</b>	Postnet	None	Fixed	Numeric	5 or 9

## Barcode Types – AFP-HP Laser Printers

The Barcode Type is composed of four characters. The first character is always "B". The second character designates whether Human Readable data is printed below the barcode (Y) or no Human Readable (N) data prints. The third defines the Barcode Type (see below). The fourth position specifies the thickness of the narrow bar, determining barcode density (width). Density ranges from 1-9, with 1 being the highest (Lower numbers result in narrower barcodes). If the density is left blank, the software defaults to 2.

A barcode may need to meet a certain *mil spec*. A mil is one one-thousandth of an inch (0.001"). To calculate the mil spec, simply divide the fourth position of the barcode type by the dots per inch (DPI) of the printer. For example; to determine the mil spec for barcode type **BNA3** on a 203 dpi printer:  $3/203 = .0147$  which is approximately 14.7 mils.

Type	Description	Check Digit	Ratio	Data	Length
<b>BNA2</b>	Code 39	None	1:3	A-Z 0-9 \$,%, +, -, /, .. space	1-40
<b>BNB2</b>	Code 39	None	1:2:4:5		1-40
<b>BN32</b>	Code 39	Mod43	1:3		1-40
<b>BNY2</b>	Code 39	None	1:2		1-40
<b>BN@2</b>	Code 39	None	2:5		1-40
<b>BYP2</b>	UPC-A	Mod10	Fixed	Numeric	11
<b>BYQ2</b>	UPC-E	Mod10	Fixed	Numeric	10
<b>BNR2</b>	UPCE-0	Mod10	Fixed	Numeric	6
<b>BNS2</b>	UPCE-1	Mod10	Fixed	Numeric	5
<b>BNU2</b>	EAN-8	Mod10	Fixed	Numeric	7
<b>BNT2</b>	EAN-13	Mod10	Fixed	Numeric	12
<b>BN02</b>	Code 128 Subset A	Mod103	Fixed	Alpha	1-40
<b>BNZ2</b>	Code 128 Subset B	Mod103	Fixed	Alpha	1-40
<b>BN12</b>	Code 128 Subset C	Mod103	Fixed	Alpha	1-40
<b>BNf2</b>	Code 128 Subset C w/FNC1	Mod103	Fixed	Alpha	1-40
<b>BNJ2</b>	Straight 2 of 5	None	1:2:3:X	Numeric	2-12
<b>BNK2</b>	Interleaved 2 of 5	None	1:3	Numeric	2-40
<b>BNL2</b>	Interleaved 2 of 5	None	1:2:4:5	Numeric	2-40
<b>BNV2</b>	Matrix 2 of 5	None	1:3	Numeric	2-40
<b>BND2</b>	Codabar	None	Fixed	Numeric	1-100
<b>BNM2</b>	Plessey	CRC 8 (2)	Fixed	0-9,A-F	1-100
<b>BNF2</b>	MSI	None	1:2	Numeric	1-14
<b>BNG2</b>	MSI	Mod10	1:2	Numeric	1-14
<b>BNH2</b>	MSI	Mod10/10	1:2	Numeric	1-14
<b>BNI2</b>	MSI	Mod10/11	1:2	Numeric	1-14
<b>BN#2</b>	Postnet	MOD11	1:2	Numeric	5 or 9
<b>BNX2</b>	UPS Maxicode*	None	Fixed	Alpha	100
<b>BNE2</b>	PDF-417*	None	Fixed	Alpha	1-1200

\* See Appendix C for detailed instructions.



## Barcode Types – Continuous Form Laser Printers

The Barcode Type is composed of four characters. The first character is always "B". The second character designates whether Human Readable data is printed below the barcode (Y) or no Human Readable (N) data prints. The third defines the Barcode Type (see below). The fourth position specifies the thickness of the narrow bar, determining barcode density (width). Density ranges from 1-9, with 1 being the highest (Lower numbers result in narrower barcodes). If the density is left blank, the software defaults to 2.

A barcode may need to meet a certain *mil spec*. A mil is one one-thousandth of an inch (0.001"). To calculate the mil spec, simply divide the fourth position of the barcode type by the dots per inch (DPI) of the printer. For example; to determine the mil spec for barcode type **BNA3** on a 203 dpi printer:  $3/203 = .0147$  which is approximately 14.7 mils.

Type	Description	Check Digit	Ratio	Data	Length
<b>BNA2</b>	Code 39	None	1:3	A-Z 0-9 \$,%, +, -, /, .. space	1-40
<b>BNB2</b>	Code 39	None	1:2:4:5		1-40
<b>BN32</b>	Code 39	Mod43	1:3		1-40
<b>BNY2</b>	Code 39	None	1:2		1-40
<b>BN@2</b>	Code 39	None	2:5		1-40
<b>BYP2</b>	UPC-A	Mod10	Fixed	Numeric	11
<b>BYQ2</b>	UPC-E	Mod10	Fixed	Numeric	10
<b>BNR2</b>	UPCE-0	Mod10	Fixed	Numeric	6
<b>BNS2</b>	UPCE-1	Mod10	Fixed	Numeric	5
<b>BNU2</b>	EAN-8	Mod10	Fixed	Numeric	7
<b>BNT2</b>	EAN-13	Mod10	Fixed	Numeric	12
<b>BN02</b>	Code 128 Subset A	Mod103	Fixed	Alpha	1-40
<b>BNZ2</b>	Code 128 Subset B	Mod103	Fixed	Alpha	1-40
<b>BN12</b>	Code 128 Subset C	Mod103	Fixed	Alpha	1-40
<b>BNf2</b>	Code 128 Subset C w/FNC1	Mod103	Fixed	Alpha	1-40
<b>BNJ2</b>	Straight 2 of 5	None	1:2:3:X	Numeric	2-12
<b>BNK2</b>	Interleaved 2 of 5	None	1:3	Numeric	2-40
<b>BNL2</b>	Interleaved 2 of 5	None	1:2:4:5	Numeric	2-40
<b>BNV2</b>	Matrix 2 of 5	None	1:3	Numeric	2-40
<b>BNE2</b>	Identicon 2 of 5	None	Fixed	Numeric	2-40
<b>BND2</b>	Codabar	None	Fixed	Numeric	1-100
<b>BNM2</b>	Plessey	CRC 8 (2)	Fixed	0-9,A-F	1-100
<b>BNF2</b>	MSI	None	1:2	Numeric	1-14
<b>BNG2</b>	MSI	Mod10	1:2	Numeric	1-14
<b>BNH2</b>	MSI	Mod10/10	1:2	Numeric	1-14
<b>BNI2</b>	MSI	Mod10/11	1:2	Numeric	1-14
<b>BNX2</b>	MSI	MOD11	1:2	Numeric	1-14
<b>BN#2</b>	Postnet	MOD11	1:2	Numeric	5 or 9

## Barcode: Sample Label

Study the finished label design below. Line 3 is responsible for printing the barcode.

Notice also that Human Readable is not printed below the barcode because the middle character of the barcode type is “N”.

*Printed Label*



### Barcode entry...

```

Down Over  hh ww Data
0070 0050  05 00 P12345
iit. iit.  it it Prefix _____ Suffix _____
Barcode Type or Lookup... BNA3
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ____ Justify _
                    iit (L,R,C)
Cmd1  MrgData
Cmd2  FillZns
Cmd3  End
Cmd4  DeleteIn
Cmd5  ChangeIn
Cmd8  LowerCse
Cmd9  LblSize
Cmd24 MoreKeys
HELP  Assist.
    
```

### Finished Label design...

```

                                                                    SAMPBAR
SpclTn  Down Over  hh ww  Data
01 F903  0020 0020  01 01  PART#
02 F907  0035 0050  01 01  12345
03 BNA3  0070 0050  05 00  P12345
04 F906  0150 0030  01 01  STORM DOOR

Down Over  hh ww  Data
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... ____
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ____ Justify _
                    iit (L.R.C)
Cmd1  MrgData
Cmd2  FillZns
Cmd3  End
Cmd4  DeleteIn
Cmd5  ChangeIn
Cmd8  LowerCse
Cmd9  LblSize
Cmd24 MoreKeys
HELP  Assist.
    
```

## Lookup Field

See **Appendix B** for a list of supported lookup fonts for your printer.

Enter the desired Font (Lookup\*). All information in the data field will print using this font.

SAMPLE1

Spc	lTn	Down	Over	hh	ww	Data
01	F903	0010	0075	01	01	EXPANSION EXAMPLE
02	F903	0040	0020	01	01	ZD11
03	ZD11	0040	0080	00	00	ABCDEFGHIJKLMNO
04	ZD21	0060	0020	00	00	ZD21
05	ZD21	0060	0080	00	00	ABCDEFGHIJKLMNO
06	F903	0090	0020	01	01	ZD22
07	ZD22	0090	0080	00	00	ABCDEFGHIJKLMNO
08	F903	0110	0020	01	01	ZD32
09	ZD32	0110	0080	00	00	ABCDEFGHIJKLMNO

Down	Over	hh	ww	Data
0040	0080	__	__	ABCDEFGHIJKLMNO
iit.	iit.	it	it	Prefix _____ Suffix _____

Barcode Type or Lookup....	ZD11	Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)...	_____	Cmd2	FillZns
Extended Char Set(E)..	_	Cmd3	End
VERTICAL PRINT=VD..	_	Cmd4	DeleteIn
Tone.....	_	Cmd5	ChangeIn
Descenders(Y,N)....	_	Cmd8	LowerCse
Field Length..	_____ Justify _	Cmd9	LblSize
	iit (L,R,C)	Cmd24	MoreKeys
		HELP	Assist.

## Expanding Fonts

**Bitmap Fonts** (See Appendix B) Use the last two digits of the font code for expansion. The base font height and width can be expanded up to 9 times. For example, the ZD font shown above can range from ZD11 to ZD99. The third digit of the font code expands the height, while the fourth digit resizes the width.

See Example below.

**Expansion Example**

ZD11	ABCDEFGHIJKLMNO
ZD21	ABCDEFGHIJKLMNO
ZD22	ABCDEFGHIJKLMNO
ZD32	ABCDEFGHIJKLMNO

Fonts Can Be Expanded 9 Times (Example: ZD99)

Titles Used  
F903 Font

**Vector Fonts** (F901-F910, See Appendix B) Use the HH and WW fields for font expansion. The HH and WW fields must have at least '01' which indicates the base font size.

**Downloaded Fonts** (PBxx – PGxx, See Appendix B) where xx is the point size to print (04-72). The HH and WW fields must have '01' which indicates the base font size. **Cannot** be expanded.

\*The term Lookup once referred to a book that was used to look up a font type in earlier versions.

## Line Set (Boxes, Horizontal and Vertical Lines)

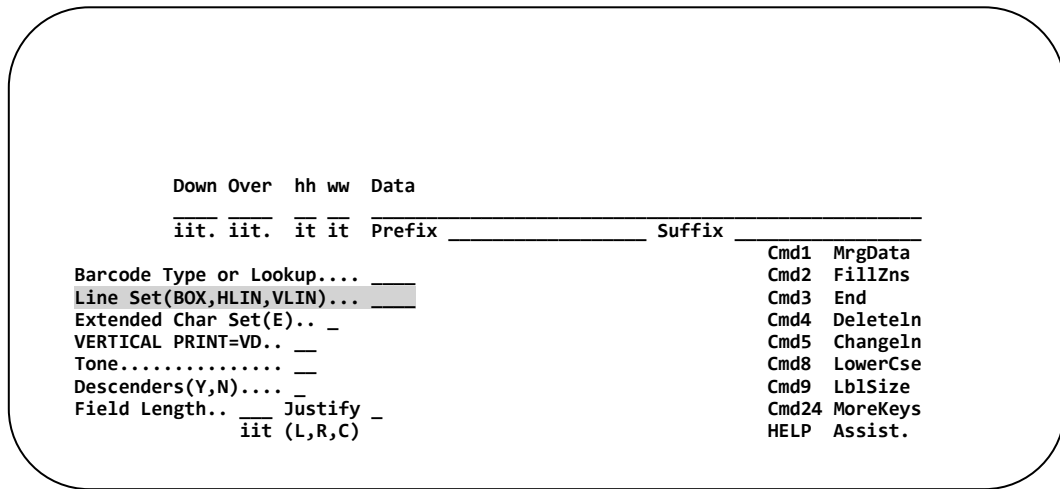
To add a line or a box, first position the cursor to the “Line Set” field.

Enter one of the following:

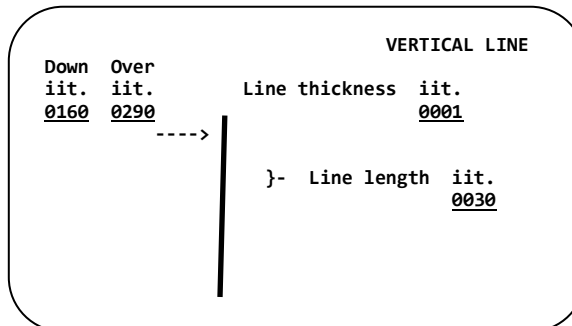
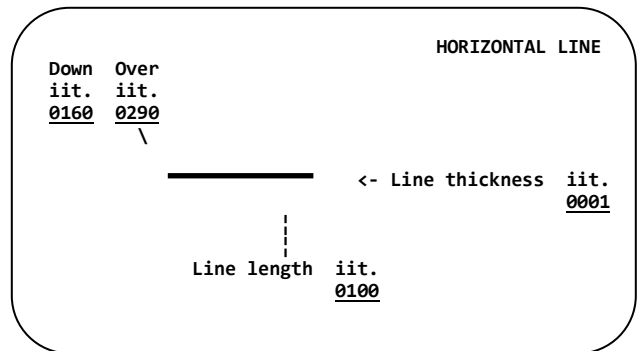
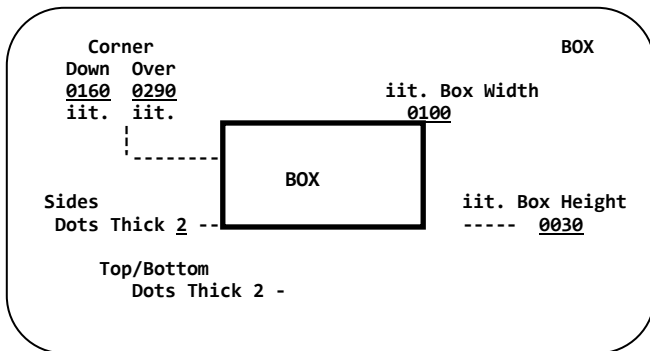
- BOX** to place a box on the label.
- HLIN** to place a horizontal line on the label.
- VLIN** to place a vertical line on the label.

No other entry is necessary; you will be prompted for information... **PRESS ENTER.**

*NOTE: Diagonal lines are currently not supported.*

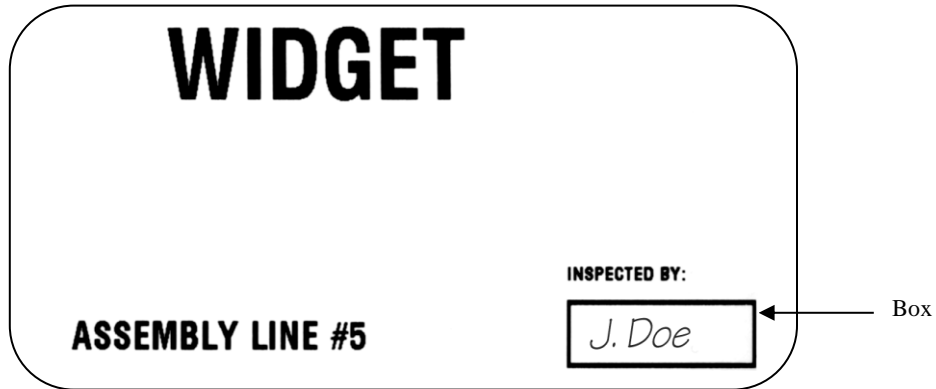


After entering the word “BOX”, “HLIN”, or “VLIN”, one of the following screens will appear. Note the Down and Over positions are to the top left corner.



### BOX: Sample Label

Print a Box **1 inch long by 3 tenths high** in the lower right hand corner of the label (Down 1 5/10", Over 3").

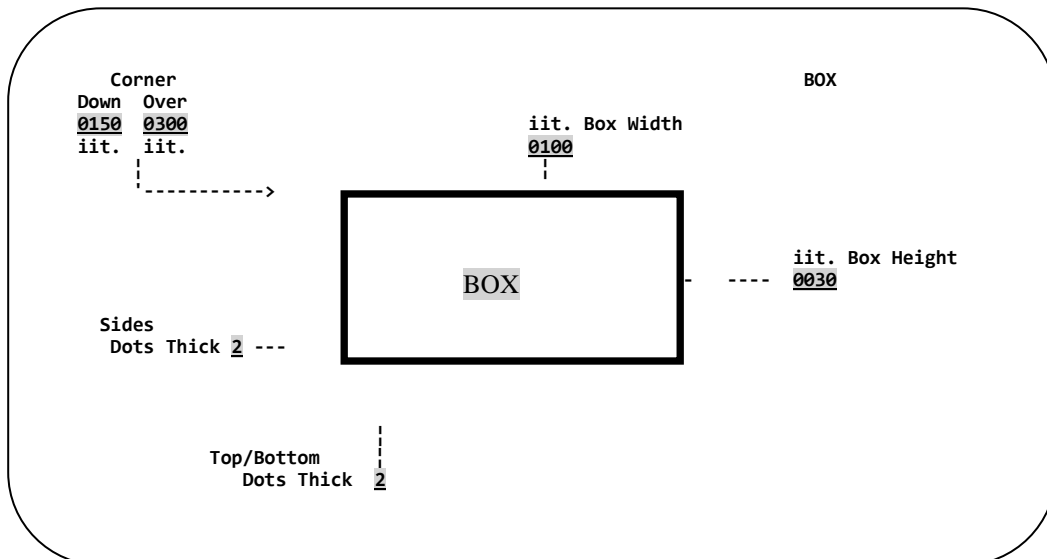


Enter **BOX** into the “Line Set” field, then... **PRESS ENTER** to continue.

Down	Over	hh	ww	Data	Prefix	Suffix	Cmd1	MrgData
iit.	iit.	it	it					
Barcode Type or Lookup...							Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)... <b>BOX</b>							Cmd2	FillZns
Extended Char Set(E).. _							Cmd3	End
VERTICAL PRINT=VD.. _							Cmd4	DeleteIn
Tone..... _							Cmd5	ChangeIn
Descenders(Y,N).... _							Cmd8	LowerCse
Field Length.. _ Justify _							Cmd9	LblSize
iit (L,R,C)							Cmd24	MoreKeys
							HELP	Assist.

The “**BOX SCREEN**” appears.

Enter the position of the box, and its dimensions. Measure Down and Over to the upper left hand corner of the box, then... **PRESS ENTER** to continue.



**Box Sample Continued:**

After pressing **ENTER** from the “BOX SCREEN”, the label design screen is returned. Note that the data field contains information generated by the program. It is not necessary to understand its meaning, but the values for height, width and line thickness comprise this new value.

SAMPBOX

SpclTn	Down	Over	hh	ww	Data
01	F908	0040	0080	01 01	WIDGET
02	F901	0145	0300	01 01	INSPECTED BY:
03	F904	0170	0030	01 01	ASSEMBLY LINE #5
04	BOX	0160	0300	04 04	-LB0100003022

Down	Over	hh	ww	Data
ii.	ii.	it	it	Prefix _____ Suffix _____

Barcode Type or Lookup... _____	Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)... _____	Cmd2 FillZns
Extended Char Set(E).. _	Cmd3 End
VERTICAL PRINT=VD.. _	Cmd4 Deleteln
Tone..... _	Cmd5 Changeln
Descenders(Y,N).... _	Cmd8 LowerCse
Field Length.. ___ Justify _	Cmd9 LblSize
ii (L,R,C) _	Cmd24 MoreKeys
	HELP Assist.

The box will now print on the completed label.

The other elements on this format were created using font lookups. Lookups were discussed in the previous section of this manual and are located in **Appendix B** for each printer.

# WIDGET

**ASSEMBLY LINE #5**

INSPECTED BY:

*J. Doe*

← BOX

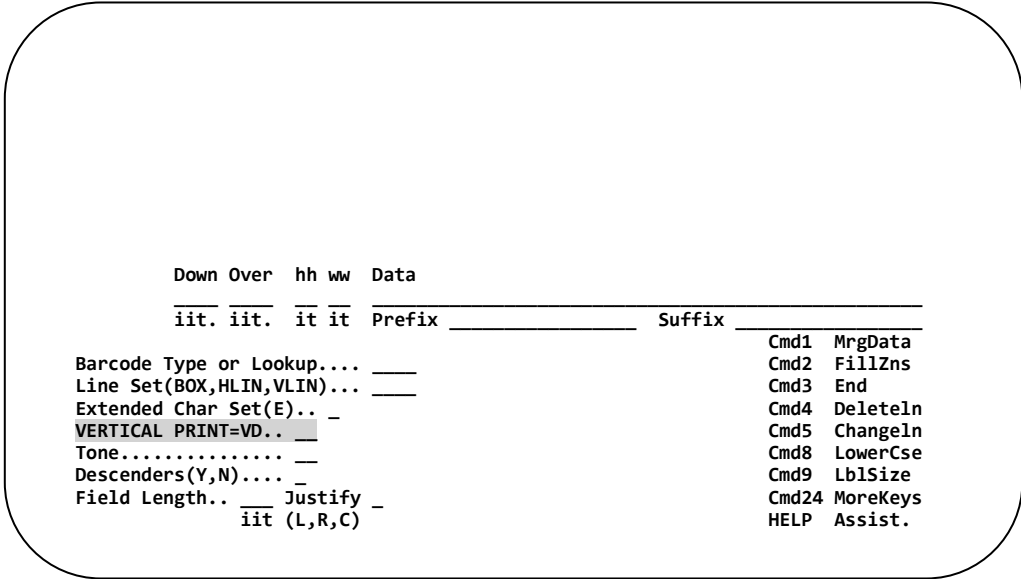
## Rotation (Printing Vertically and Upside-Down)

**NOTE:** Some printers and some object types may not support all rotation parameters.

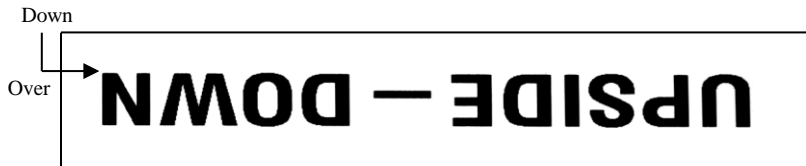
The following values can be used in the “Rotation” field:

- VD (R1)** Print the entire Data field Vertically-Down. (90 degree rotation). This is preferred method for Vertical Printing.
- VU (R3)** Print the entire Data field Vertically-Up. (270 degree rotation). Use only when necessary (e.g., preprinted stock)
- U (R2)** Print the Data field Upside-Down. (180 degree rotation).

**\*NOTE:** If the label is to be printed Landscape (90 degree rotation) use Vertical Down (VD) if at all possible.



**Example:** Print the word “UPSIDE-DOWN” Upside-Down.



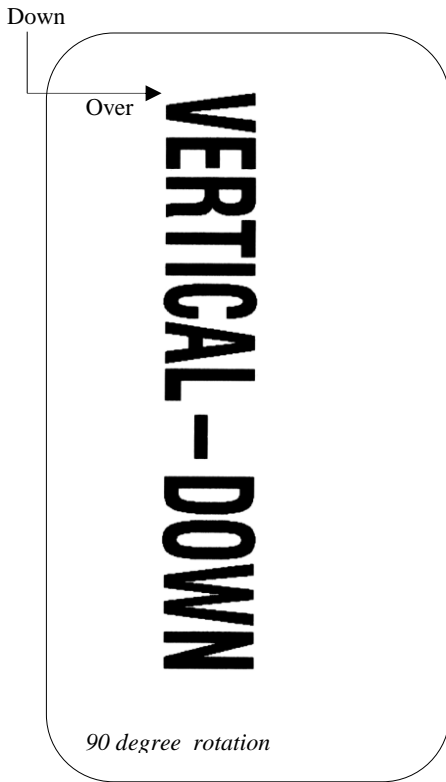
Down	Over	hh	ww	Data
<u>0020</u>	<u>0060</u>	<u>01</u>	<u>01</u>	<u>UPSIDE-DOWN</u>
iit.	iit.	it	it	

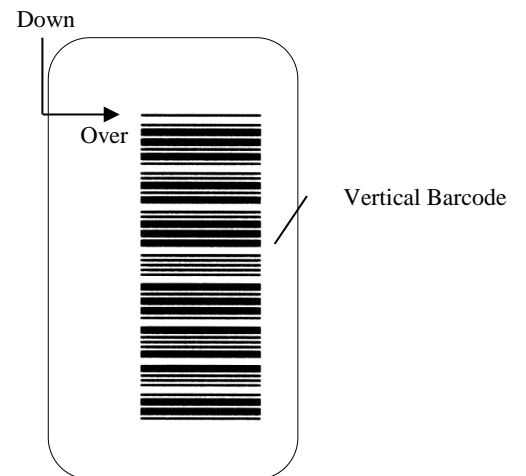
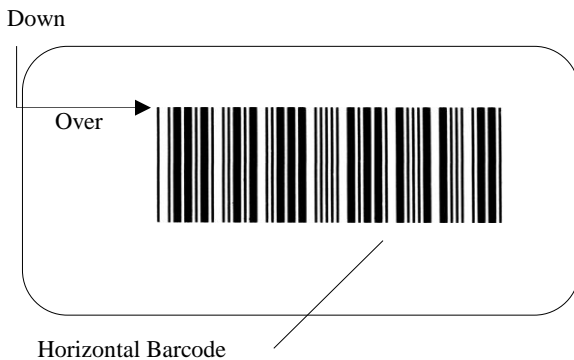
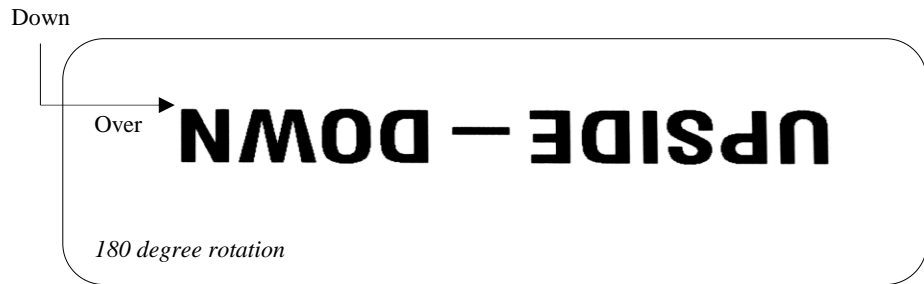
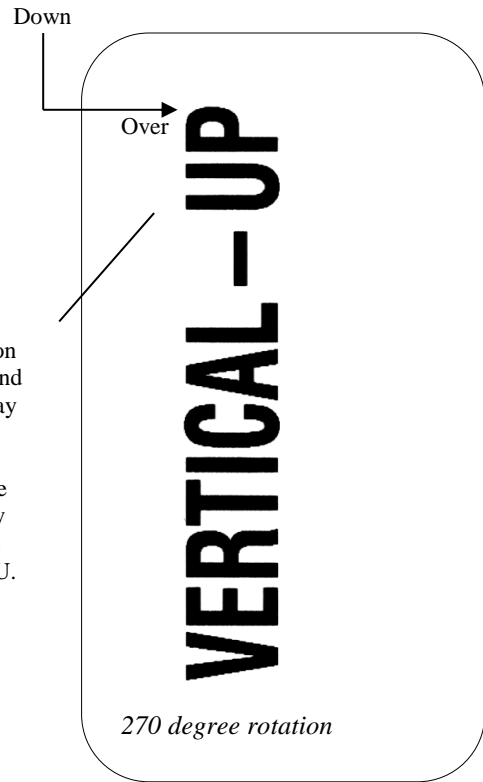
Barcode Type or Lookup...	<u>F908</u>
Line Set (BOX,HLIN,VLIN)	<u>      </u>
Rotation (VU)...	<u>U</u>

Enter “U” into the Rotation field to print Upside-Down.

All print positioning, regardless of rotation, is to the top left corner of the Data field to be printed.



**Caution:** Since the Down position reflects the top end of the field, it may appear Right Justified in this case. So, variable length fields may be more difficult to align using VU.



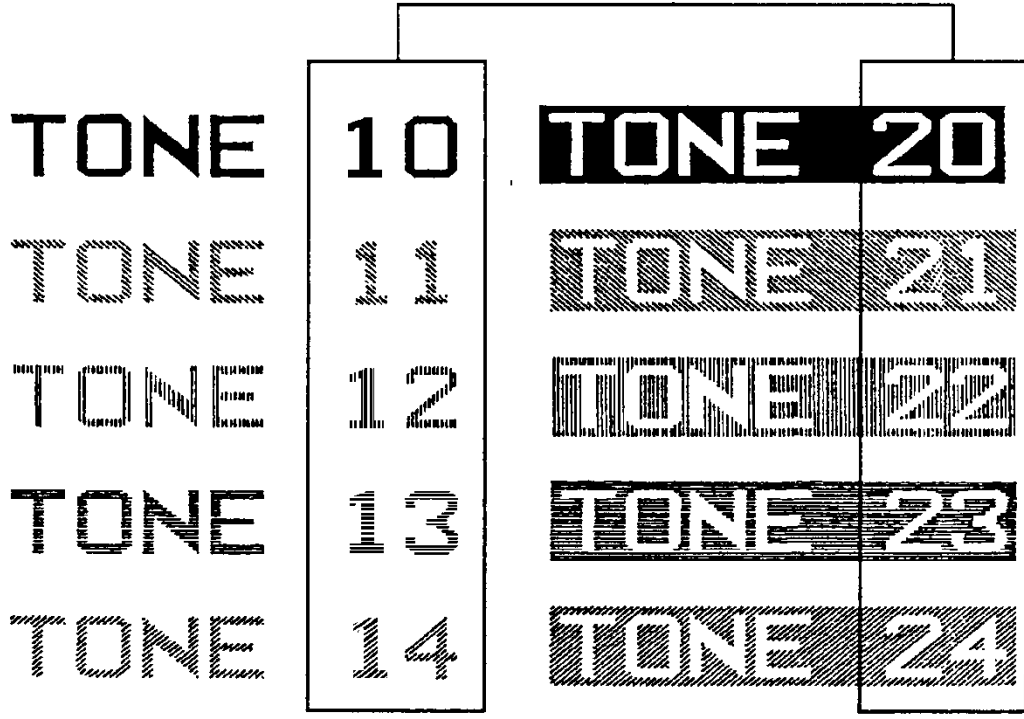


## Tones (Reverse Image and Special Effects)

Tones are used for reverse image and special effects. Enter one of the ten “Tones” the Tone Field. The entire data field will be printed using the tone specified. Tone 20 (Reverse Image) is the only tone available for most thermal transfer printers. Continuous Laser printers and Dot Matrix printers can use all ten tones.

**NOTE:** Tones should NOT be used in conjunction with Vector fonts. See Appendix B for a complete list of fonts for your printer.

Down	Over	hh	ww	Data
ii.	ii.	it	it	Prefix _____ Suffix _____
Barcode Type or Lookup...				Cmd1 MrgData
Line Set (BOX,HLIN,VLIN)...				Cmd2 FillZns
Extended Char Set (E)..				Cmd3 End
VERTICAL PRINT=VD..				Cmd4 DeleteIn
Tone.....				Cmd5 ChangeIn
Descenders (Y,N)....				Cmd8 LowerCse
Field Length..			Justify _	Cmd9 LblSize
			iiit (L,R,C)	Cmd24 MoreKeys
				HELP Assist.



## Field Length / Justification

This function is used when the information in the data field is to be centered, left or right-justified into a specific area of your label format. Barcode400 normally defaults to justifying a label object to the upper-left most point.

**Field Length** - Specifies width of the area in which data is to be positioned by inches and tenths of inches. (Ex. 015 = 1.5")

**Justify** - Indicates the orientation of the field contents (**L**eft, **R**ight or **C**enter).

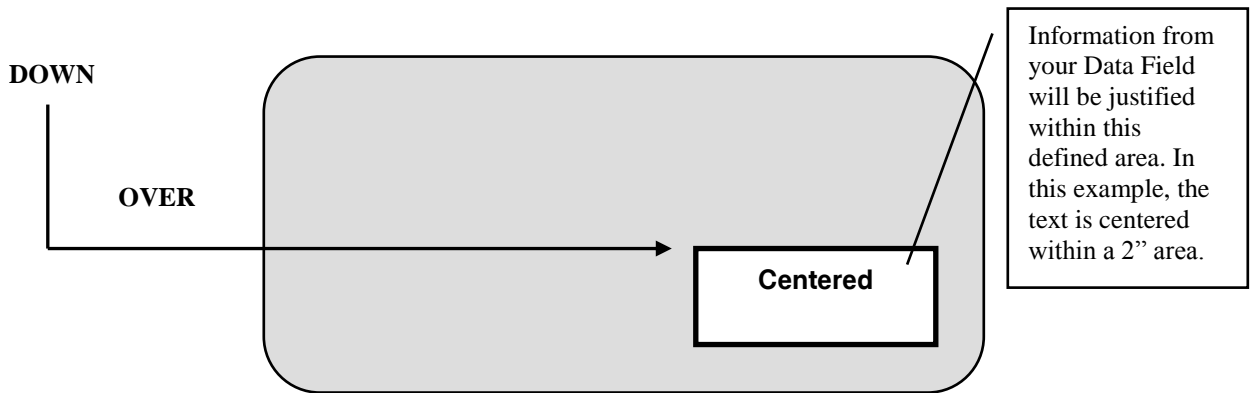
```

Down Over hh ww Data
0210 0230 01 01 Centered
iit. iit. it it Prefix _____ Suffix _____

Barcode Type or Lookup... FD22
Line Set(BOX,HLIN,VLIN)... _____
Extended Char Set(E).. -
VERTICAL PRINT=VD.. -
Tone..... -
Descenders(Y,N).... -
Field Length.. 020 Justify C
                    iit (L,R,C)

Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 Deleteln
Cmd5 Changeln
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
    
```

The Down and Over values set the left edge of the Data Area as a starting point. The contents of the Data Field will be justified WITHIN the Field Length indicated.

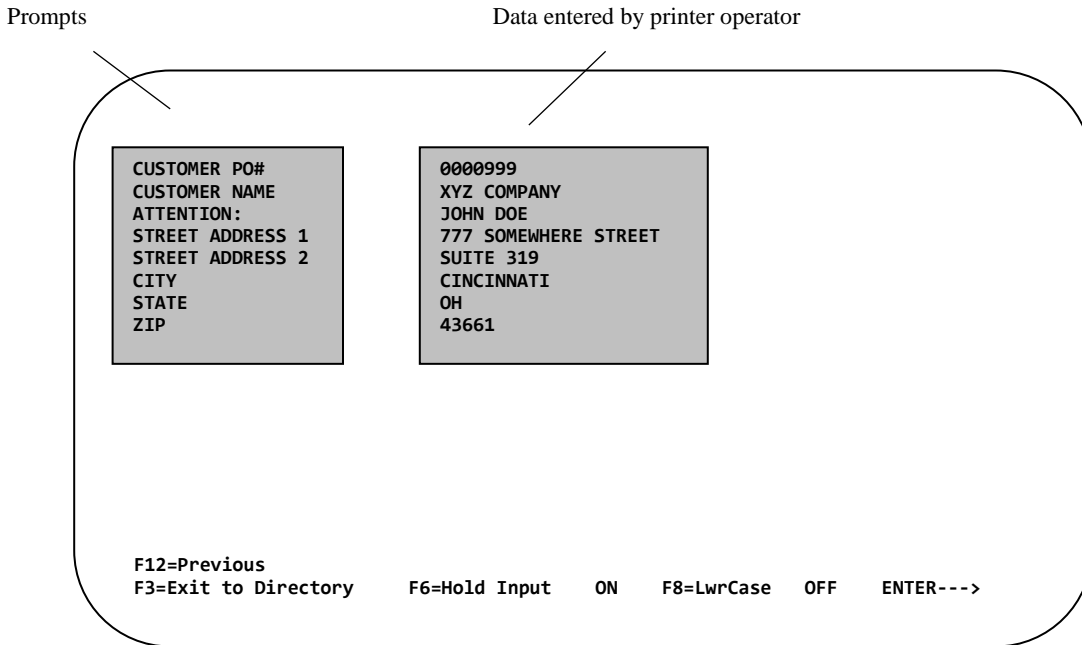


**NOTE:** If an object is to be justified across the entire width of the label, set the Over value to 0000 and use the media width for the field length.

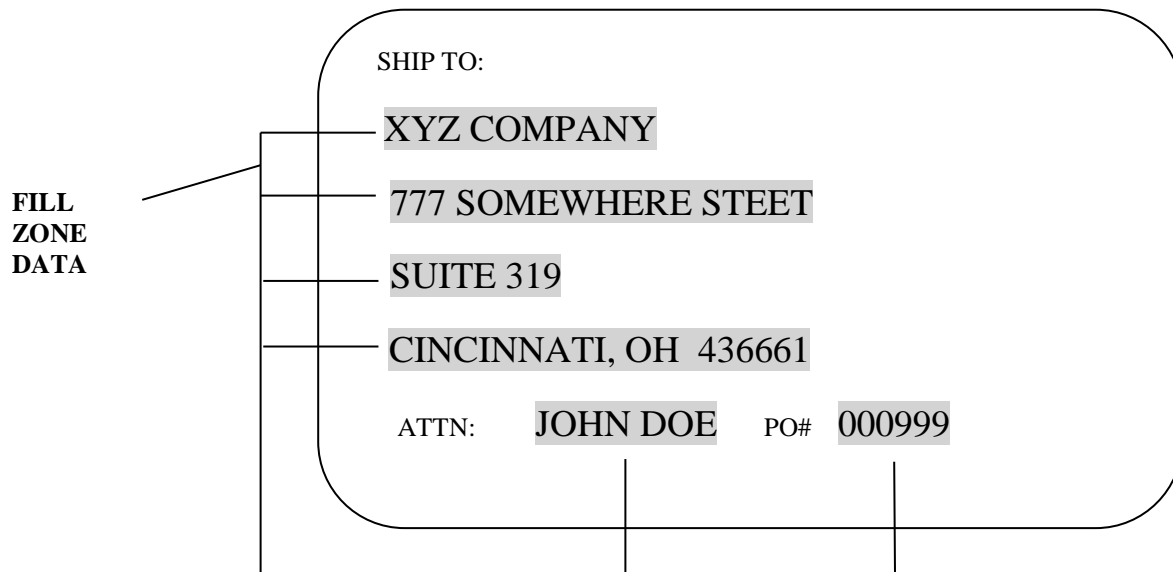
## Fill Zones (Prompting Operator for Data)

Fill Zone Data is variable data that will be entered or, “Filled-in”, by the operator at label print time

The example below displays how the printer operator is prompted for information at time of printing.



### Printed Label:

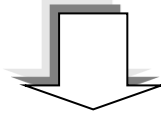
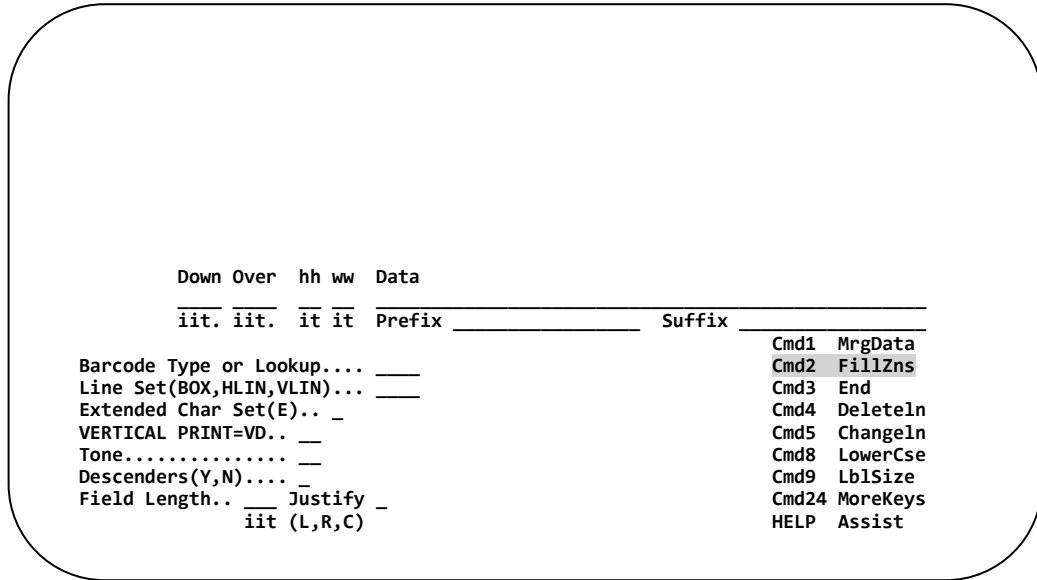


The following pages describe how fill zones are designed into a label format.

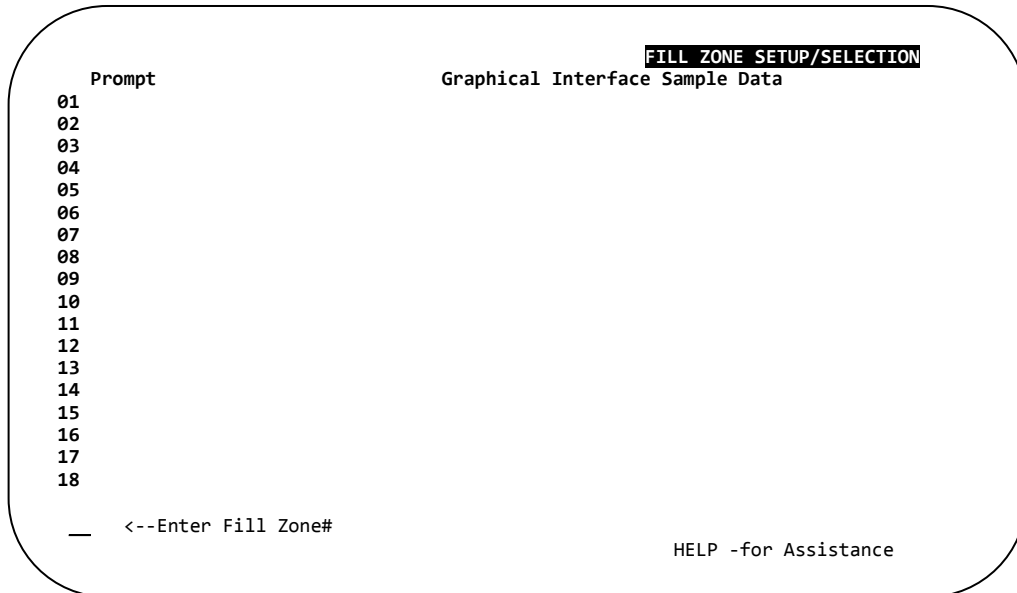
## Chapter 1 – Work with Label Formats

The first step is to setup the prompts you wish the operator to see.

Press **CMD2** from the label design screen.



After pressing CMD2, the **Fill Zone Prompt Screen** appears.



Up to eighteen (18) different prompts may be set up.

Type in the prompts as the printer operator will see them. Prompts may be added or changed as often as necessary. The data entered for each prompt may be re-used at several locations on the label format. At label print time, the operator needs to enter the information only once.

Prompt	Graphical Interface Sample Data
01 CUSTOMER PO#	
02 CUSTOMER NAME	
03 ATTENTION:	
04 STREET ADDRESS 1	
05 STREET ADDRESS 2	
06 CITY	
07 STATE	
08 ZIP	
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	

<--Enter Fill Zone#
 HELP -for Assistance

The second column contains Sample Data that will appear when a Fill Zone prompt is used in the Graphical Label Designer. It is *optional*.

Once the Fill Zone Prompts and Sample Data have been set up, enter at the lower left, the number located to the left of the prompt that you currently wish to use.

Prompt	Graphical Interface Sample Data
01 CUSTOMER PO#	00099
02 CUSTOMER NAME	XYZ COMPANY
03 ATTENTION:	JOHN DOE
04 STREET ADDRESS 1	777 SOMEWHERE STREET
05 STREET ADDRESS 2	SUITE 319
06 CITY	CINCINNATI
07 STATE	OH
08 ZIP	43661
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	

**02**  <--Enter Fill Zone#
 HELP -for Assistance

Once the fill zone number has been entered, **PRESS ENTER** to continue.

## Chapter 1 – Work with Label Formats

The Label Design Screen re-appears with the Fill Zone information in the data field.

SAMPFZ

SpclIn	Down	Over	hh	ww	Data
01	F902	0020	0020	01 01	SHIP TO:

Down	Over	hh	ww	Data
iit.	iit.	it	it	F!02`CUSTOMER NAME
				Prefix _____ Suffix _____

Barcode Type or Lookup....	_____	Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)...	_____	Cmd2	FillZns
Extended Char Set(E)..	__	Cmd3	End
VERTICAL PRINT=VD..	__	Cmd4	DeletIn
Tone.....	__	Cmd5	ChangeIn
Descenders(Y,N)....	__	Cmd8	LowerCse
Field Length..	_____	Cmd9	LblSize
	Justify -	Cmd24	MoreKeys
	iit (L,R,C)	HELP	Assist.

### F! 02 `CUSTOMER NAME

			Used only for comment purposes (May be omitted).
		Fill Zone Prompt Number	
		F! Identifies the data source as Fill Zone Data.	

Enter the remaining information, down and over positions, barcode type or lookup, and any other attributes you wish to use, and then... **PRESS ENTER** to continue.

The line moves up into the display area. The next item on your label format can now be defined.

```

                                     SAMPFZ
SpclTn  Down Over  hh ww  Data
01 F902  0020 0020  01 01  SHIP TO:
02 F903  0040 0020  02 01  F|02` CUSTOMER NAME

Down Over  hh ww  Data
--- --  -- --  -- --  -- --
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... ____
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ___ Justify _

Cmd1  MrgData
Cmd2  FillZns
Cmd3  End
Cmd4  Deleteln
Cmd5  ChangeIn
Cmd8  LowerCse
Cmd9  LblSize
Cmd24 MoreKeys
    
```

Completed Label Format:

```

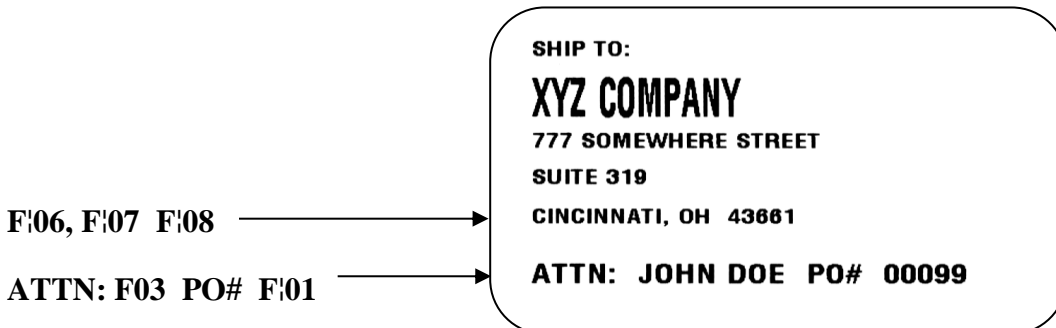
                                     SAMPFZ
SpclTn  Down Over  hh ww  Data
01 F902  0020 0020  01 01  SHIP TO:
02 F902  0040 0020  02 01  F|02` CUSTOMER NAME
03 F902  0070 0020  01 01  F|04` STREET ADDRESS 1
04 F902  0090 0020  01 01  F|05` STREET ADDRESS 2
05 F902  0110 0020  01 01  F|06, F|07 F|08
06 F903  0140 0020  01 01  ATTN: F|03 PO# F|01

Down Over  hh ww  Data
--- --  -- --  -- --  -- --
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... ____
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ___ Justify _
                +++ ( L B C ) _

Cmd1  MrgData
Cmd2  FillZns
Cmd3  End
Cmd4  Deleteln
Cmd5  ChangeIn
Cmd8  LowerCse
Cmd9  LblSize
Cmd24 MoreKeys
HELD  Assist
    
```

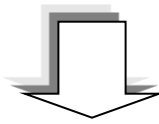
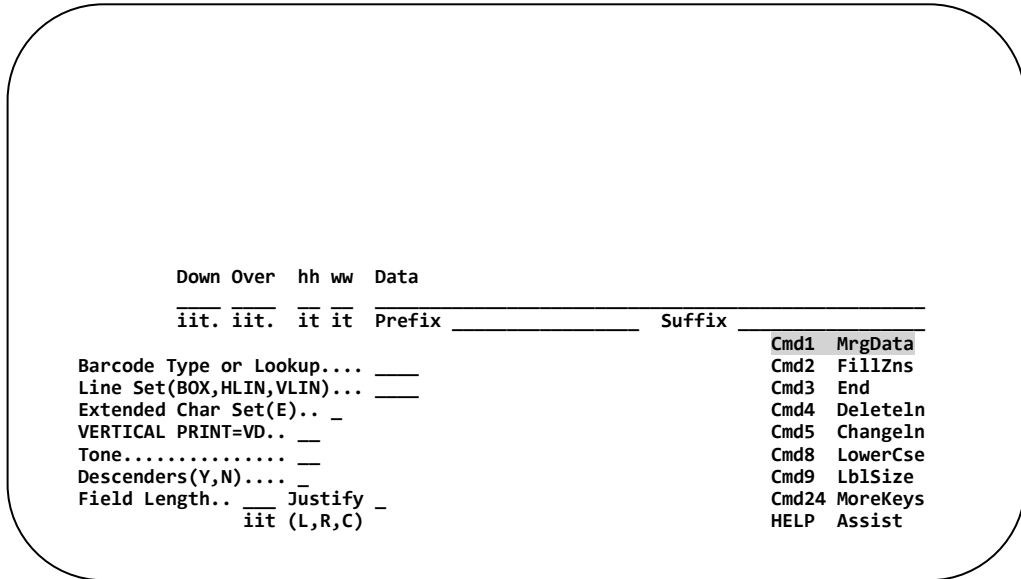
Study Lines 5 and 6. The CMD2 (F2) key was not used but, the identifier (F|) and the fill zone prompt numbers were entered directly into the data field. Also, note that multiple fill zones are being joined together; constant data and fill zone data are being intermixed.



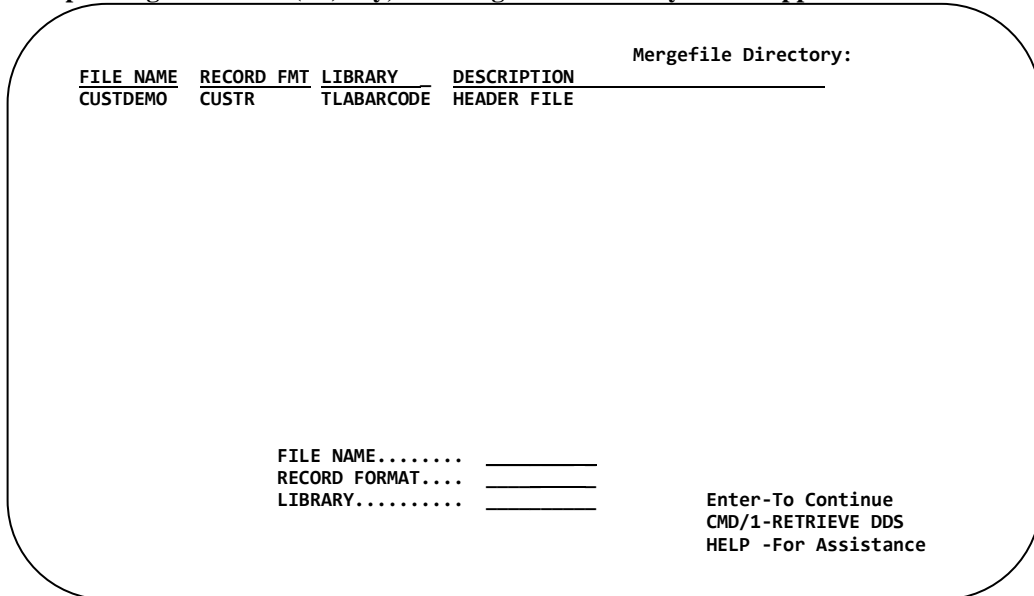
## Using Merge File Data (IBM i File or Data Structure)

Merge File data is information that resides in a IBM i file or passed to Barcode 400 via a Data Structure. Proceeding with the label design process, press **CMD1** (F1) to select the merge file you wish to use with the label format.

*NOTE: Only one file may be used per label format.*



After pressing the **CMD1** (F1) key, the Merge File Directory screen appears.



The Merge File Directory Screen lists all the files that are currently being used by the labeling system.



Before the file can be accessed by the labeling system, a current copy of the DDS (Data Description Specifications) must be retrieved.

Mergefile Directory:

<u>FILE NAME</u>	<u>RECORD FMT</u>	<u>LIBRARY</u>	<u>DESCRIPTION</u>
CUSTDEMO	CUSTR	TLABARCODE	HEADER FILE

FILE NAME.....	CUSTDEMO
RECORD FORMAT....	CUSTR
LIBRARY.....	TLABARCODE

Enter-To Continue  
 CMD/1-RETRIEVE DDS  
 HELP -For Assistance

Enter the **name of the file**, the **record format** name, and the **library** name of the desired file to be used with this label format. The file name must appear in the Merge File directory at the top of this screen.

If it does not, press **CMD1** (F1) to execute the DDS retrieval program (Refer to **Chapter 4 – Merge Data**).

<u>#</u> <u>Field Description</u>	<u>#</u> <u>Field Description</u>
01.CUST #	11.FAX NO
02.NAME	12.CONTACT FIRST NAME
03.ADDRESS LINE 1	13.CONTACT LAST NAME
04.ADDRESS LINE 2	
05.CITY	
06.STATE	
07.ZIP CODE	
08.ZIP CODE +4	
09.PHONE	
10.EXTENSION	

CUSTDEMO

---

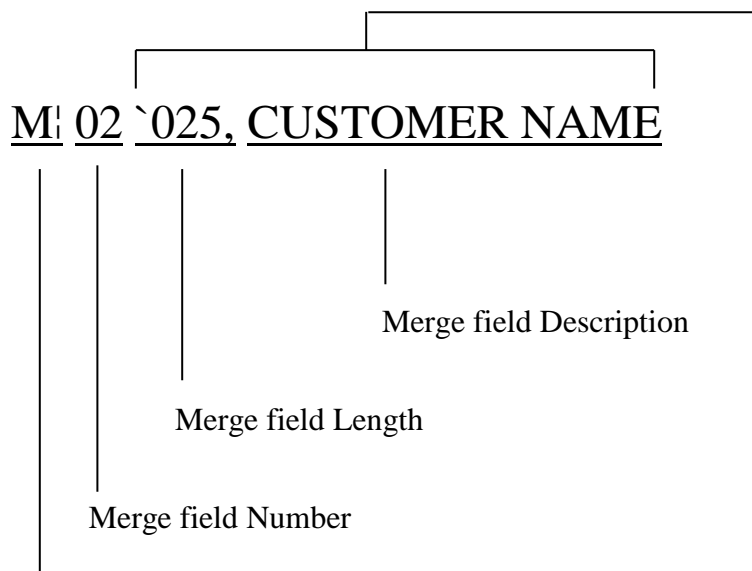
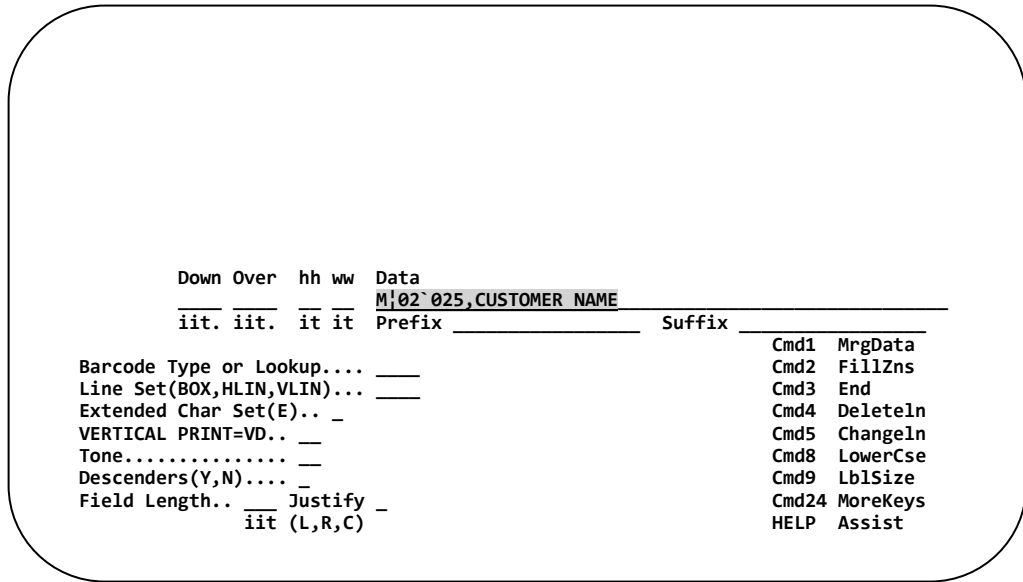
Bottom

**Is this the file you wish to use(Y,N)?** █

The fields located within the file are displayed. If this is the file you wish to use enter “**Y**”. If this is not the correct file enter “**N**” the merge file screen will be re-displayed.



The parameter entry screen re-appears with the merge field information in the data field.



This description is used for comment purposes only. It can be omitted, however any merge editing options must be manually entered.

(See next page)

M! Identifies the data as Merge field Data.

Fill in the remaining information, such as the Down and Over positions, Character size, Barcode type or lookup, etc., then **PRESS ENTER** to continue.

The information entered will move up into the display area. You are now ready to add your next line.

## Array Data Processing (IBM i File or Data Structure)

Barcode400 supports array processing on a label design. This allows the format to access a data string from the record or to manipulate a data string. Array Processing uses the currently attached merge data structure, but unlike Merge Data, which references specific fields, Arrays allow data from any part of the file record to be used. They can also be used to create multi-line objects.

Barcode400 uses the A! to indicate an Array, which can manipulate both variable and static data.

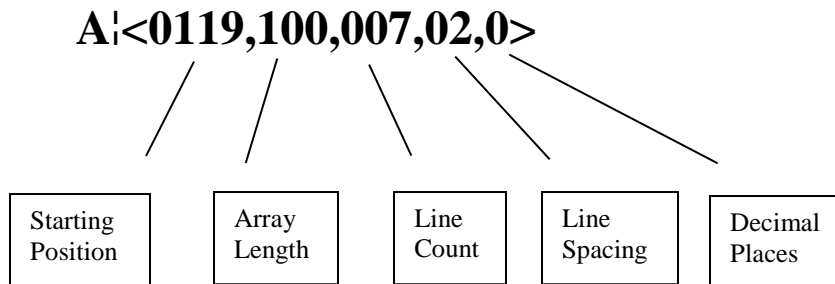
Below are some examples of how to use Array Processing:

### Array String

The primary feature of Array Data Processings is for Barcode400 to retrieve and manipulate data from a file and select exact the bytes desired.

This function is not limited by merge field numbers or DDS structure.

In the example below, an Array is being defined using a starting point in the record, the number of bytes, number of lines to repeat the array and the number of dots between the lines.



Starting at position 119 in the record, the software will read for 100 bytes, then move down the next line for another 100 bytes for 7 lines. The lines will be spaced 2 dots apart.

This function can also support the <Z> Zero Suppress option.

**A!<0119,100,007,02,0><Z>**

### Static Array

In this instance, the Array function is being used to parse static or constant data to form a column. The comma ( , ) acts as a carriage return. Line spacing can be controlled from the value in the brackets (<>).

**A!<~,05>S~H~I~P~ ~T~O**

Result:

**S  
H  
I  
P**

# of Dots  
Between  
Lines

### Merge Field Array

Though Arrays are primarily used for retrieving and manipulating data beyond individual merge fields, those merge fields can be concatenated and combined into a single object.

In this case, a series of merge fields have been arranged to function as a single shipping address object on a label format.

**A! <~,05>M:'01~M:'02~M:04 M:'05 M:'06**

Line  
Spacing

Tilde jumps to  
the next line.

Prints on the  
same line.

Result:

**T.L. Ashford & Associates  
626 Buttermilk Pike  
Crescent Springs KY 41017**

## Concatenating Merge Fields

Before fields can be concatenated (combined), a Merge File must have been associated with the format.

To combine more than one merge field on a data line, simply enter the M<sup>i</sup>, the Merge Field number, and any desired Edit Options. Comment information (i.e. `025,CUSTOMER NAME) can **NOT** used.

Merge Fields can be combined with constant data or other form of variable data, NO separator is required.

Example: “SKU #: M<sup>i</sup>:XXM<sup>i</sup>:XX<Y>”

Where: **M<sup>i</sup>** is the function. (Indicates data as Merge field Data)  
**XX** is the merge field number from the file.  
**Y** is an edit option.

Edit options are not necessary for using or concatenating Merge Fields, but do allow for more user control of how the data is printed. Option(s) must be enclosed between less than “<” and greater than “>” signs.

### Merge Field Edit Options

<u>Option</u>	<u>Description</u>	
<b>Z</b>	Zero Suppress	(Converts leading zeroes to blank spaces)
<b>R</b>	Remove Leading Spaces	(Truncates leading blank spaces)
<b>D</b>	Print Decimal Point	(Places decimal according to numeric field’s file definition)
<b>M</b>	Maintain Field Length	(Inserts trailing blanks to reserve field size)
<b>?xxx,yyy?</b>	Substring Field Data	( <b>xxx</b> is the starting position in the field <b>yyy</b> is the number of positions to extract from the field)

*\*NOTE: A field may have multiple edit options. For example, an edit option of <ZD> would both zero suppress and print a decimal point.*

### Examples

The examples reflect the information stored in the data table.

<u>Data Line Entry</u>	<u>Printed on the Label</u>	<u>Remarks</u>
M <sup>i</sup> :03, M <sup>i</sup> :02 M <sup>i</sup> :04	Athens, OHIO 45211	Three fields with spaces and commas intermixed.
M <sup>i</sup> :05<ZR>	38	Leading zeros suppressed and leading spaces removed.
M <sup>i</sup> :01 of M <sup>i</sup> :02	ROBERT of OHIO	Two fields with “ of “ in the middle.
M <sup>i</sup> :05<?001,005?ZR>	3	Substring first 5 characters from the Quantity field, zero suppress and remove leading spaces.
M <sup>i</sup> :06<R>	STEEL	Leading spaces removed.

### Data Table

<b>Merge Field Number</b>	<b>Field Contents</b>	<b>Description</b>
01	ROBERT	First Name
02	OHIO	State
03	Athens	City
04	45211	Zip Code
05	000038	Quantity
06	STEEL	Material Description (preceded by 3 spaces)

## Using System Information (Date, Time, etc.)

System Data is easily merged into a label format by entering “S<sub>i</sub>” followed by one of the reserved words listed below. “S<sub>i</sub>” does not have to start in column one of the Data Field, it can be positioned anywhere within the line, and reserved words can be used in combination with constants, other variables or other system data.

“S<sub>i</sub>” followed by a reserve word may also be used in the Prefix or Suffix.

### RESERVED WORDS

<b>HH</b>	System Hour
<b>MN</b>	System Minutes
<b>SS</b>	System Seconds
<b>MM</b>	System Month Number
<b>MMM</b>	System Month Name Abbreviated
<b>mmm</b>	System Month Name Abbreviated (lower case)
<b>MMNAME</b>	System Month Full Name
<b>DD</b>	System Day of the Month
<b>YY</b>	System Two-Digit Year Code
<b>CCCC</b>	System Four-Digit Year Code
<b>JJJ</b>	System Julian Day
<b>QQ</b>	Label Quantity
<b>QZ</b>	Label Quantity with Zero Suppress

### EXAMPLES

<u>Data Field Contents</u>	<u>Printed Results</u>
S!MM/DD/YY HH:MN:SS	03/20/15 08:35:00
S!MM/DD/CCCC HH:MN:SS	03/20/2015 08:35:00
S!CCCC/MM	2015/02
S!MMM	JAN
S!mmm	jan
S!MMNAME	JANUARY
S! Month-MM Day-DD Year-YY	Month-03 Day-20 Year-15
S!Time-HH:MN:SS Date-MM/DD/CCC	Time-08:35:00 Date-03/20/2015
C!DEMO#	Labels Numbered using Qty and Control Number
<b>SUFFIX “ of S!QZ”</b>	1 of 3
	2 of 3
	3 of 3

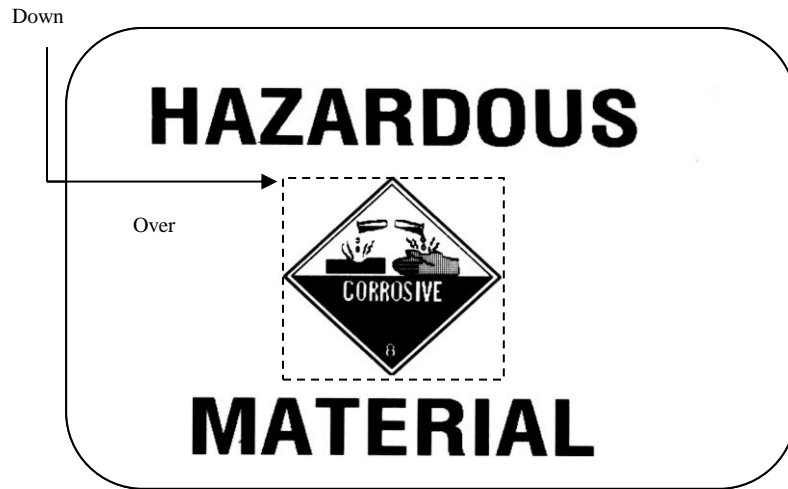
## Using Graphics

Once a graphic has been uploaded to the IBM i (See Chapter 3 - Graphics), it is easily placed on a label format. The only information needed is the graphic name, its print position on the label, and an expansion height (hh) and width (ww) values of “01” by “01”.

*\*NOTE: Some printers allow the size of the graphic to be expanded by increasing the hh and ww values. This may cause the printer image to distort.*

Enter “L” followed by the logo name in the Data Field. “L” is used as a Graphic Identifier.

In the example below, notice that the print position is down and over to the upper left corner of the graphic.



Enter L1 into the first two positions of the Data Fields, followed by the logo name.

Down	Over	hh	ww	Data	Prefix	Suffix
0070	0120	01	01	L1HAZARD		
iit.	iit.	it	it			

Barcode Type or Lookup....	___					Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...	___					Cmd2 FillZns
Extended Char Set(E)...	_					Cmd3 End
VERTICAL PRINT=VD...	___					Cmd4 DeleteIn
Tone.....	___					Cmd5 ChangeIn
Descenders(Y,N)....	___					Cmd8 LowerCse
Field Length..	___	Justify	___			Cmd9 LblSize
	iit	(L,R,C)				Cmd24 MoreKeys
						HELP Assist

NOTE: Entering “10” into the Tone Field will darken the logo on Dot Matrix and Continuous Laser printers.

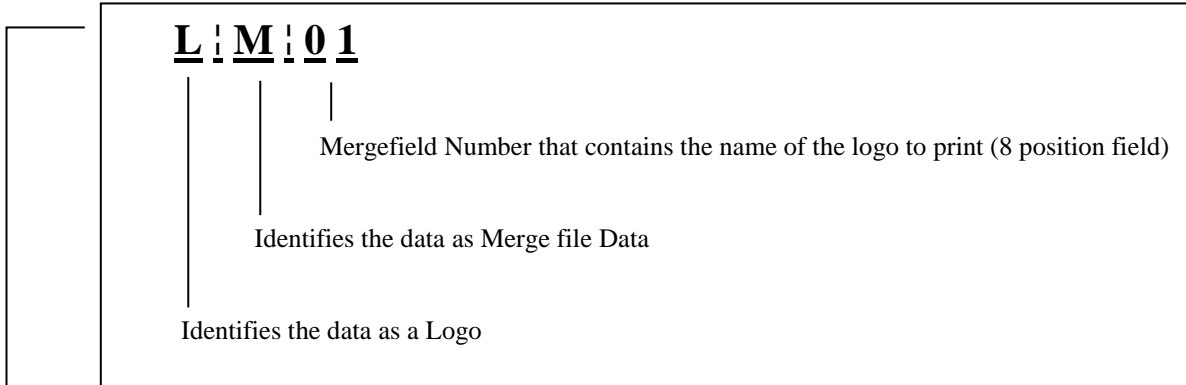
If graphic name is unknown, press **F14** (CMD14 or Shift-CMD2). A pop-up list of the Logo Directory will appear. Place a **1** next to the graphic you wish to use and then **PRESS ENTER**.



## Variable Logos

A logo on a label that never changes is called a fixed or constant logo. A Variable Logo is a logo that changes based on the logo name supplied to the software at label print time. The desired results can be accomplished by using either Merge fields ( M ) or Fill Zones ( F ).

The following example uses a variable logo from a Merge field.



Down	Over	hh	ww	Data	Prefix	Suffix
0070	0120	01	01	L:M:01		
iit.	iit.	it	it			

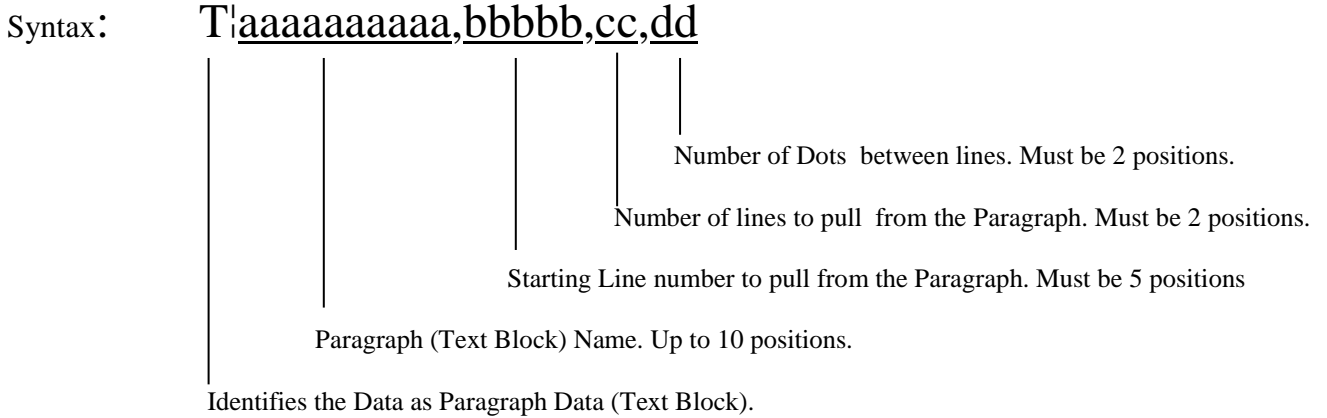
Barcode Type or Lookup....	___	Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)...	___	Cmd2	FillZns
Extended Char Set(E)..	_	Cmd3	End
VERTICAL PRINT=VD..	__	Cmd4	DeleteLn
Tone.....	__	Cmd5	ChangeLn
Descenders(Y,N)....	__	Cmd8	LowerCse
Field Length..	___ Justify _	Cmd9	LblSize
	iit (L,R,C)	Cmd24	MoreKeys
		HELP	Assist

**NOTE:** A Merge File must be associated to the label format or Fill Zone fields must be defined.

## Using Paragraphs (Retrieving Blocks of Text)

Once a paragraph (text block) has been entered using Main Menu Option #7 ([See Chapter 6](#)) or via the Graphical Label Designer’s Paragraph function, it takes only one command to place it into a label format. Up to 99 lines may be merged with a single data field entry.

The following command is used to place a block of text into your label format.



**NOTE:** Paragraphs must be entered using the “Paragraph Maintenance program” or the Multi-line Text Editor in the Graphical Label Designer before it can be placed into a label format.

The screen below is an example of a Paragraph, which was entered using Main Menu option #7 (Paragraph Maintenance) or the GUI Designer. See Chapter 6 of this manual for instructions on creating paragraphs.

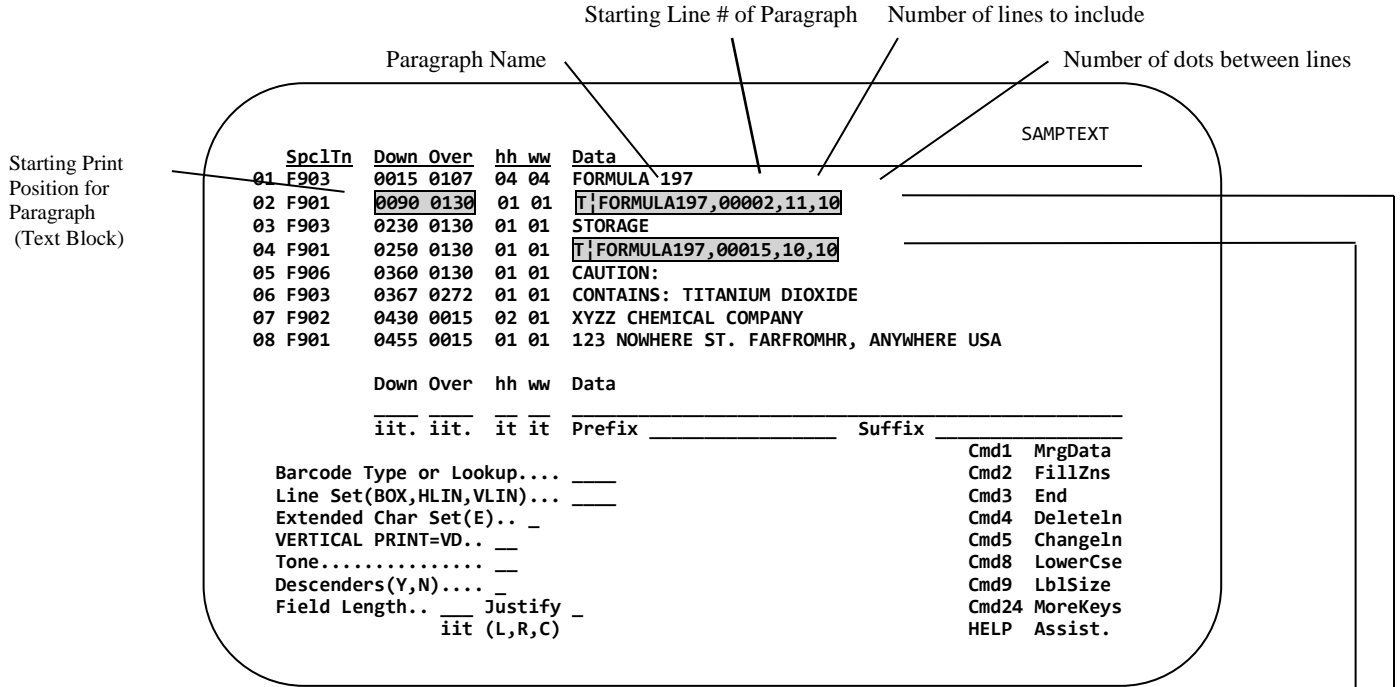
```

Document Name:  FORMULA197
0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...
=====GENERAL DESCRIPTION (lines 2-13)=====
FORMULA 197 is a non-flammable product which can be applied without fire
hazard. Also solvent emissions are almost totally non-existent. This
product contains ingredients which may be harmful if carelessly or in-
correctly used. Use, and observe precautions as directed by XYZ Company
representative. Avoid contact with eyes or prolonged contact with skin.
Do not take internally. Use with adequate ventilation. For accidental
contact, flush promptly with water; for eyes, continue flushing with
plenty of water and get medical attention.

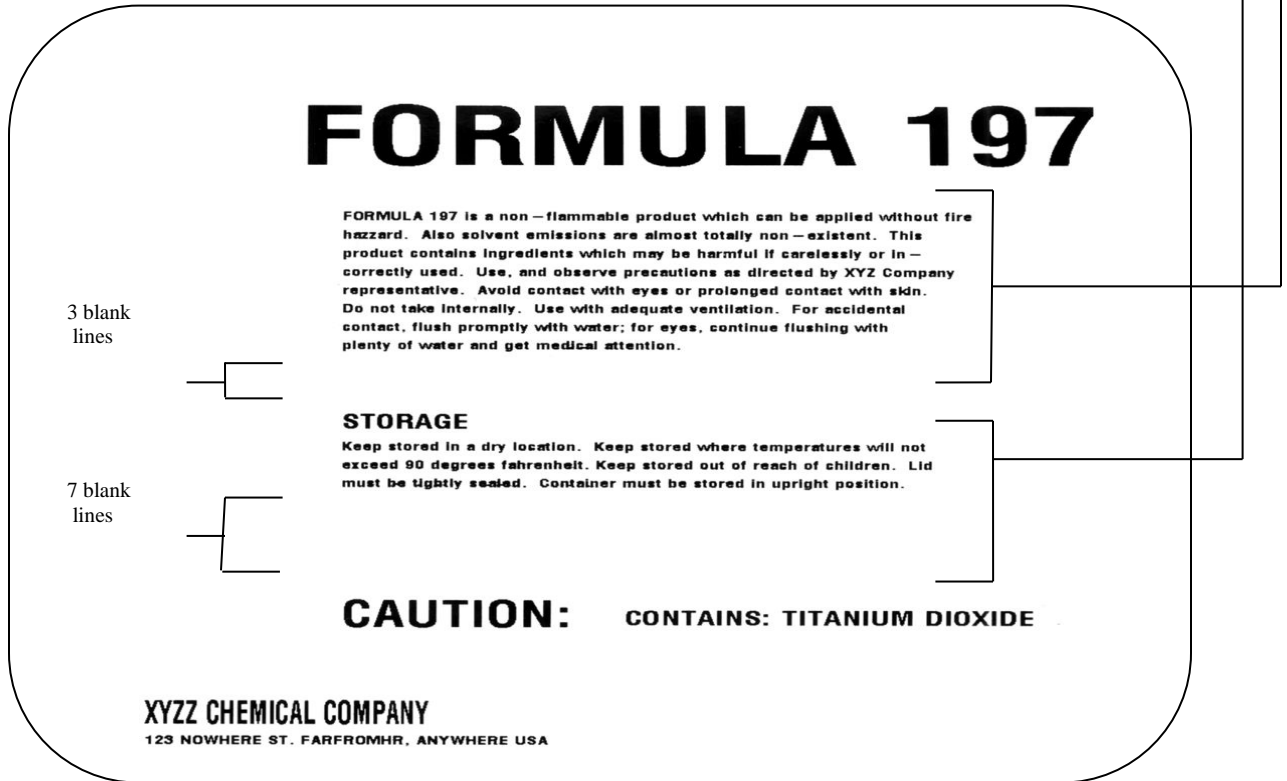
=====STORAGE SECTION (lines 15-25)=====
Keep stored in a dry location. Keep stored where temperatures will not
exceed 90 degrees Fahrenheit. Keep stored out of reach of children. Lid
must be tightly sealed. Container must be stored in upright position.

F2=ShowLn#   F3=Exit   F5=Refresh   F11=ShowLineCmdColumn   F15=Include
F21=System Command Line
    
```

The Paragraph above (FORMULA197) will be used in the example on the following page.



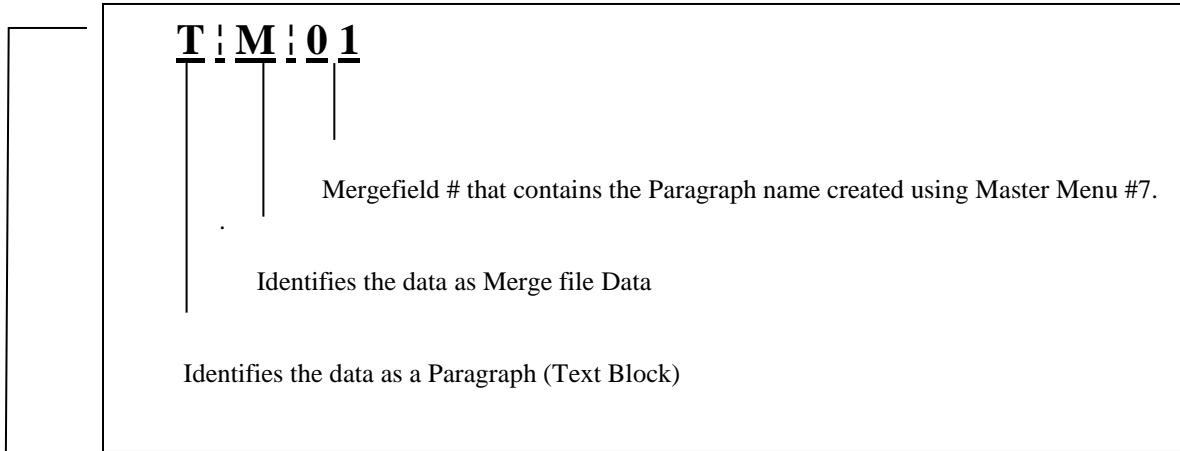
NOTE: This example is not to scale.



## Variable Paragraph

A Variable Paragraph is a paragraph that changes between label printings. This can be accomplished by supplying the paragraph name at label print time.

Variable paragraphs may use Merge Data (M!) or Fill Zone Data (F!). See the illustration below for an example using Merge Data.



Down	Over	hh	ww	Data		
ii.	ii.	it	it	T!M!01	Prefix	Suffix
Barcode Type or Lookup...						Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...						Cmd2 FillZns
Extended Char Set(E)..						Cmd3 End
VERTICAL PRINT=VD..						Cmd4 Deleteln
Tone.....						Cmd5 ChangeIn
Descenders(Y,N)....						Cmd8 LowerCse
Field Length..						Cmd9 LblSize
				Justify		Cmd24 MoreKeys
				it (L,R,C)		HELP Assist

**NOTE:** Unlike a Constant Paragraph, you will NOT be able to select a starting point, how many lines to print or line spacing. The entire paragraph will be printed.

## Using Incrementing Control Numbers (C! or R!)

An incrementing number is a value maintained in the software that can be retrieved and produced on a label; for example, to print a non-repeating serial number on each label or a repeating “Box of” count.

Before an Incrementing Number can be used, it must be defined using Main Menu Option 6 (Chapter 5).

Incrementing numbers may be up to 12 digits long and may increment or decrement by any value. They are placed on a label format by entering C! or R! into the first two positions of the data field followed by the name of the incrementing number. The incrementing number directory may be displayed by pressing **CMD16** (CMD16 or Shift-CMD4) from within label design.

The incrementing number must be the ONLY item in the Data Field (except for zero suppression.) Any additional information to be appended to the front and/or back of the Incrementing number can be done using the Prefix and Suffix fields.

If a label format contains an incrementing number, then at label print time you will also be prompted for **HOW MANY SETS** and **THE NUMBER OF LABELS PERSET** to print. Study the two examples below, the first example uses C! and the second uses R!.

### Example 1: Incrementing Number Using C!

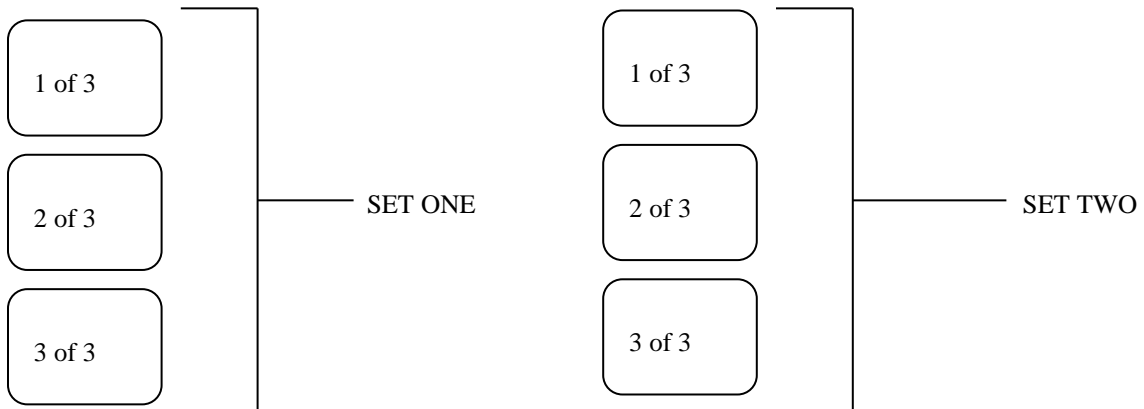
The screenshot shows a software interface with the following fields and content:

- Down Over hh ww Data**: C!DEMO#
- Prefix**: (empty)
- Suffix**: " of S!QZ"
- Cmd1**: MrgData
- Cmd2**: FillZns
- Cmd3**: End
- Cmd4**: DeleteIn
- Cmd5**: ChangeIn
- Cmd8**: LowerCse
- Cmd9**: LblSize
- Cmd24**: MoreKeys
- HELP**: Assist.

<Z will Zero Suppress the incrementing number. The <Z must start in position 15 or greater.

S!QZ Prints the number of Labels PERSET Zero suppressed.

Print **TWO SETS** of labels with **THREE LABELS PERSET**. A total of 6 labels will print.



**When C! is used the numbers will increment within the set, then repeat in the next set.**

*NOTE: If the Number of Labels Perset is 0001, the C! value will appear to repeat.*

**Example 2: Incrementing Number Using R!**

Print **THREE SETS** of labels with **TWO LABELS PERSET**. A total of 6 labels will print.

*Label Design*

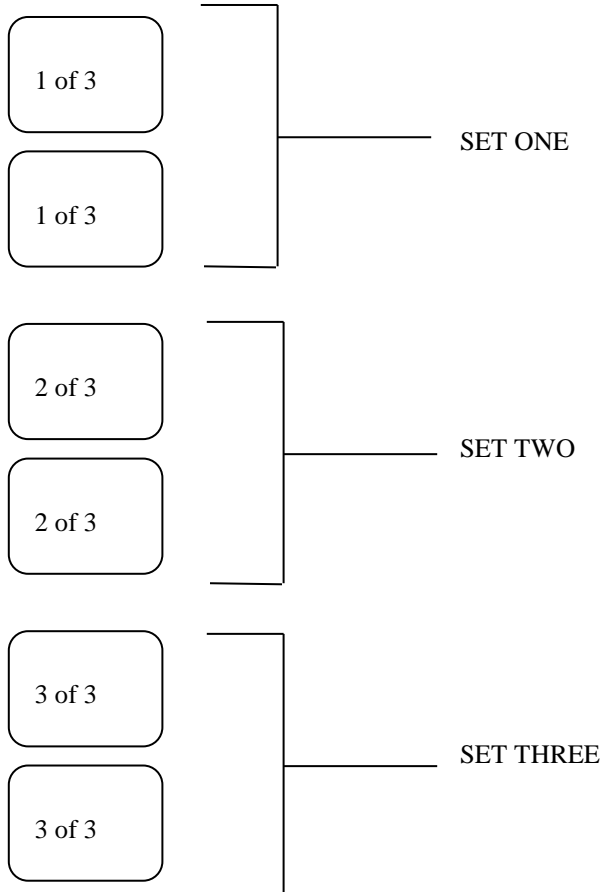
The screenshot shows a label design interface with several sections:

- Fields:** Down Over, hh ww, Data, R!DEMO#, Prefix, Suffix, " of S!QZ".
- Options:** Barcode Type or Lookup..., Line Set (BOX,HLIN,VLIN)..., Extended Char Set (E)..., VERTICAL PRINT=VD..., Tone..., Descenders (Y,N)..., Field Length.. Justify, iit (L,R,C).
- Command List:**
  - Cmd1 MrgData
  - Cmd2 FillZns
  - Cmd3 End
  - Cmd4 DeleteLn
  - Cmd5 ChangeLn
  - Cmd8 LowerCse
  - Cmd9 LblSize
  - Cmd24 MoreKeys
- HELP Assist**

<Z will Zero Suppress the incrementing number. The <Z must start in position 15 or greater.

**S!QZ**  
Prints the number of Labels PERSET  
Zero suppressed.

*Printed Labels*



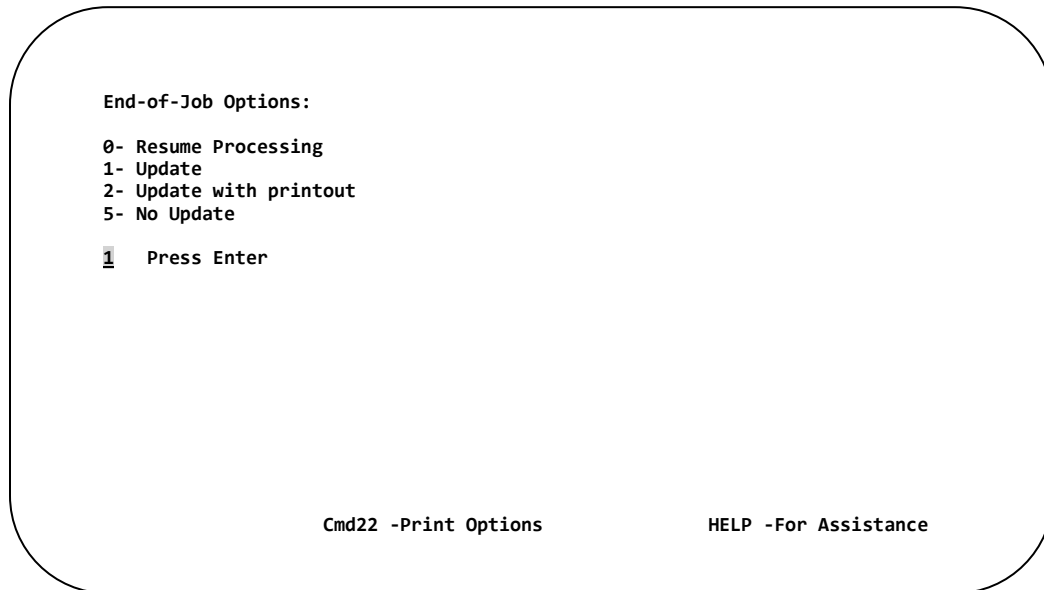
When R! is used the numbers will repeat, then increment as the sets change.



## Exiting Label Design

At any point, pressing **CMD3** (F3) will exit the label being edited. The software will NOT automatically update or save any changes.

One of the following End-of-Job Options must be selected.



- 0 - Return to the previous screen for continued processing, no update.
- 1 - **ADD** the new format to the labeling system or **UPDATE** an existing format with current changes. The label print options screen will be displayed. Simply press **Enter** to accept default printer options. Printer options will vary by printer type.
- 2 - **ADD** a new format, **UPDATE** an existing format. In addition you will be prompted for the name of the IBM i output queue to print a generated report of the label design. This does not print the actual label itself.
- 5 - Return to the Label Format Directory Screen. NOTHING IS UPDATED.



## Edit a Label Format

Editing a label format allows for changes to be made to the existing label design. To Edit a label, place a “2” next to the label you wish to modify, then press **ENTER**.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.  
 1=Print    2=Edit    3=Copy    4=Delete    6=List    7=Rename  
 9=Save    13=Type/Text    22=Print Options

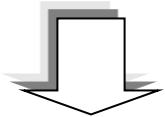
**Enter 2**

Opt	Format	Type	Text
<u>2</u>	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit    F5=Refresh    F6=Create    F8=Restore    F10=Functions Window  
 F11=Alternate screen    F21=Command Window



After entering “2” and pressing Enter, the following **PARAMETER ENTRY SCREEN** appears.

SAMPA

SpclTn	Down	Over	hh	ww	Data
01	F910	0030	0030	01 01	FRAGILE
02	F907	0130	0040	01 01	HANDLE WITH CARE

Down	Over	hh	ww	Data
iiit.	iiit.	it	it	Prefix _____ Suffix _____

Barcode Type or Lookup....	_____	Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)...	_____	Cmd2	FillZns
Extended Char Set(E)..	—	Cmd3	End
VERTICAL PRINT=VD..	—	Cmd4	DeleteIn
Tone.....	—	Cmd5	ChangeIn
Descenders(Y,N)....	—	Cmd8	LowerCse
Field Length..	_____ Justify _	Cmd9	LblSize
	iiit (L.R.C)	Cmd24	MoreKeys
		HELP	Assist.



## Chapter 1 – Work with Label Formats

To change an existing entry on the label, press CMD5 (F5) and enter the line number you wish to modify, then... **PRESS ENTER**.

Line Numbers

```

SAMP
  SpclTn  Down Over  hh ww  Data
  01 F910  0030 0030  01 01  FRAGILE
  02 F907  0130 0040  01 01  HANDLE WITH CARE

  Down Over  hh ww  Data
  iit. iit.  it it  Prefix _____ Suffix _____
Barcode Type or Lookup.... ____
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ____ Justify _
                    iit (L,R,C)
ENTER LINE TO CHANGE → 01
Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 DeleteLn
Cmd5 ChangeLn
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
  
```

Line Number to Change

The line you wish to modify will appear in the center of the screen allowing adjustments to be made.

```

SAMP
  SpclTn  Down Over  hh ww  Data
  01 F910  0030 0030  01 01  FRAGILE
  02 F907  0130 0040  01 01  HANDLE WITH CARE

  Down Over  hh ww  Data
  0030 0030  01 01  FRAGILE
  iit. iit.  it it  Prefix _____ Suffix _____
Barcode Type or Lookup.... F910
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ____ Justify _
                    iit (L,R,C)
Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 DeleteLn
Cmd5 ChangeLn
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
  
```

Once all adjustments have been made, **PRESS ENTER** to continue.

To exit Change line mode, press CMD5. To Exit and Save the label format changes press CMD3.

## Copy a Label Format

To Copy a Label Format, place a “3” next to the Format(s) you wish to Copy, and then **PRESS ENTER**.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.  
 1=Print    2=Edit    3=Copy    4=Delete    6=List    7=Rename  
 9=Save    13=Type/Text    22=Print Options

**Enter**  
**3**

Opt	Format	Type	Text
<u>3</u>	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit    F5=Refresh    F6=Create    F8=Restore    F10=Functions Window  
 F11=Alternate screen    F21=Command Window



After entering “3” and pressing Enter, the following COPY SCREEN appears.

Copy Label Formats

To copy label format, type New Name, Type, Text, then press Enter.

	New Name	Type	Text
SAMPA	SAMPA1	Z140XI	THIS IS A COPY OF SAMPA

Bottom

F3=Exit    F4=List    F5=Refresh    F12=Cancel    F21=Command Window

Enter a new **Label name**, **Type** and new **Text** description (Optional) then... **PRESS ENTER**. The copied label will appear in the Label Directory.

## Delete a Label Format

To Delete a Label Format, place a “4” next to the Format(s) you wish to Delete, and then **PRESS ENTER**.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.  
 1=Print    2=Edit    3=Copy    4=Delete    6=List    7=Rename  
 9=Save    13=Type/Text    22=Print Options

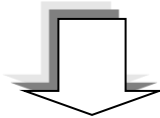
**Enter**  
**4**

Opt	Format	Type	Text
<u>4</u>	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit    F5=Refresh    F6=Create    F8=Restore    F10=Functions Window  
 F11=Alternate screen    F21=Command Window



After entering “4” and pressing Enter, the following **DELETE SCREEN** appears.

Confirm Delete of Label Formats

Press Enter to confirm your choices for Delete.  
 Press F12 to cancel and return to directory

Name	Type	Text
SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS

F12=Cancel

**PRESS ENTER** to confirm the deleted Label format. Press **F12 to cancel** the Delete.

## Label Format Listing

The List option will produce a detailed report of the label format design characteristics to a System I printer. Included in the report will be form size, data field contents, the merge file name along with other useful information.

To produce a listing, place a “6” next to the Format(s) you wish to List, **PRESS ENTER**.

Enter  
6

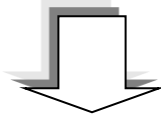
```

Work with Label Formats
Position to . . . . . _____

Type options, press Enter.
1=Print  2=Edit  3=Copy  4=Delete  6=List  7=Rename
9=Save   13=Type/Text  22=Print Options

Opt  Format  Type  Text
6   SAMPA  Z140XI  VERY BASIC LABEL- USING EXPANDED LETTERS
   SAMPBAR  Z140XI  SAMPLE LABEL USING A BARCODE
   SAMPFZ   Z140XI  SAMPLE ADDRESS LABEL- USING FILL ZONES
   SAMPLOGO Z140XI  SAMPLE LABEL USING A LOGO
   SAMPMRG  Z140XI  SAMPLE USING DEMO MERGEFILE
   SAMPSYS  Z140XI  SAMPLE USING SYSTEM DATA (DATE,TIME...)
   SAMPVBAR Z140XI  SAMPLE USING A VERTICAL BARCODE
   SAMPVERT Z140XI  SAMPLE LABEL USING VERTICAL PRINT
                                           Bottom

F3=Exit  F5=Refresh  F6=Create  F8=Restore  F10=Functions Window
F11=Alternate screen  F21=Command window
    
```



After entering “6” and pressing Enter, the following LIST SCREEN appears.

```

Print Label Format Listing

Format Name:  SAMPA
Description:  VERY BASIC LABEL- USING EXPANDED LETTERS

Output Queue . . . . . 
Forms Number . . . . . *STD
Hold/Save . . . . . *NO          *YES, *NO, SAVE

F3=Exit
    
```

Enter a valid IBM i Output Queue name to print the label format listing. The Hold/Save option will allow listing reports to stay held in the output queue or to be saved after the report has been printed.

**PRESS ENTER** to print the listing, or press **F12 to exit** and not perform the Listing operation.

## Rename a Label Format

To Rename a Label Format place a “7” next to the Format(s) you wish to Rename, then **PRESS ENTER**.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

1=Print	2=Edit	3=Copy	4=Delete	6=List	7=Rename
9=Save	13=Type/Text	22=Print Options			

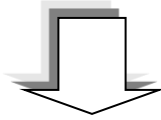
**Enter 7**

Opt	Format	Type	Text
<u>7</u>	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit	F5=Refresh	F6=Create	F8=Restore	F10=Functions Window
F11=Alternate screen				F21=Command Window



After entering “7” and pressing Enter, the following **RENAME SCREEN** appears.

Rename Label Formats

To rename Label Format, type New Name, press Enter.

New Name	Type	Text
SAMPA <u>SAMPA1</u>	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS

F3=Exit      F5=Refresh      F12=Cancel

Enter a new format name.

**PRESS ENTER** to rename the Label format. Press **F12** to cancel the Rename.

## Save a Label Format

To Save a Label Format, place a “9” next to the Format(s) you wish to Save, and **PRESS ENTER**.

In addition to saving a label to media or a save file, formats can be transferred directly to another IBM i using the Transfer Labels feature (*See Chapter 8*), otherwise -

**Enter 9**

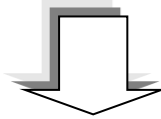
```

Work with Label Formats
Position to . . . . . _____

Type options, press Enter.
 1=Print   2=Edit   3=Copy   4=Delete   6=List   7=Rename
 9=Save   13=Type/Text 22=Print Options

Opt  Format      Type      Text
 9  SAMP A      Z140XI   VERY BASIC LABEL- USING EXPANDED LETTERS
   SAMPBAR     Z140XI   SAMPLE LABEL USING A BARCODE
   SAMPFZ      Z140XI   SAMPLE ADDRESS LABEL- USING FILL ZONES
   SAMPLOGO    Z140XI   SAMPLE LABEL USING A LOGO
   SAMPMRG     Z140XI   SAMPLE USING DEMO MERGEFILE
   SAMP SYS    Z140XI   SAMPLE USING SYSTEM DATA (DATE,TIME...)
   SAMPVBAR    Z140XI   SAMPLE USING A VERTICAL BARCODE
   SAMPVERT    Z140XI   SAMPLE LABEL USING VERTICAL PRINT
                                     Bottom

F3=Exit   F5=Refresh   F6=Create   F8=Restore   F10=Functions Window
F11=Alternate screen          F21=Command Window
    
```



After entering “9” and pressing Enter, the following **SAVE SCREEN** appears.

```

Save Label Formats

Type choice, press Enter.

Device . . . . . _____ Name, *SAVF
Save File Name . . . . . _____ Name

F3=Exit   F10=Additional parameters
    
```

**Device Name:** Enter a valid IBM i device name or \*SAVF.

**Save File Name:** If \*SAVF is entered in the device name field, you must enter a save file name in this field. A save file with this name will be created in a library called **TLAWORK**.

**Additional Parameters:** Pressing the **F10** will display the Target Release parameter.

## Restore Label Formats

The Restore Function Key (F8) will allow label formats to be restored from IBM i media (Tape/Disk) or a Save File. These formats must have been saved using Option 9 in the Work with Label Formats directory.

In addition to saving and restoring a label from media or a save file, formats can be transferred directly to another IBM i. If this is an option you wish to use, *See Chapter 8 – Transfer Labels*, otherwise -

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

1=Print	2=Edit	3=Copy	4=Delete	6=List	7=Rename
9=Save	13=Type/Text	22=Print Options			

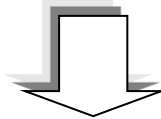
Press F8

Opt	Format	Type	Text
—	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit	F5=Refresh	F6=Create	<b>F8=Restore</b>	F10=Functions Window
F11=Alternate screen				F21=Command Window



After pressing F8, the first entry field of the RESTORE SCREEN appears.

Restore Label Formats/Logos (TLARSTCM1)

Type choices, press Enter.

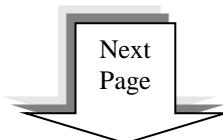
Device Name/Save File Name . . SAVENAME      Device Name, Save File Name

Bottom

---

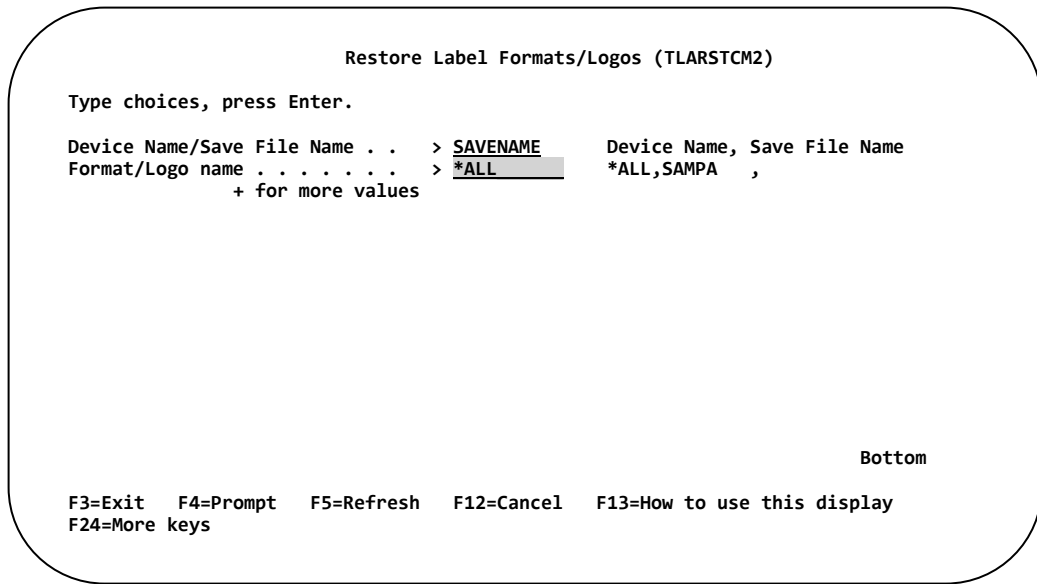
F3=Exit	F4=Prompt	F5=Refresh	F12 Cancel	F13=How to use this display
F24=More keys				

**Enter a valid IBM i Device or Save File Name.** If using a save file, the save file must be located in library TLAWORK. Press F3 to Exit and not perform the restore operation.





After pressing **ENTER**, the second entry field of the RESTORE SCREEN appears.



Enter the name of the Format you wish to restore in the Format/Logo name field or use the default value **\*ALL** to restore all the formats from the media or save file. To display all the formats located in the save file or on the media, press **F4** while the cursor is in the Format/Logo name.

If the format name already exists in the label software, you will be prompted on whether you wish to continue with the restore operation.

SAMPA already on the system. Delete Yes(Y) No(N) ?

If you continue with the restore operation (**Y**), the existing label format will be deleted and replaced. Otherwise, enter an **N** to cancel the transfer.

***\*NOTE:** The Save/Restore function also copies additional elements from the label format(s) (Two-dimensional bar code data, graphics, paragraphs, and RFID data).*

## Change the Type and Text of a Label Format

To Change the Type and or Text description of a label format, place a “13” next to the name of the format you wish to change, and then **PRESS ENTER**.

Enter  
13

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

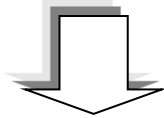
1=Print	2=Edit	3=Copy	4=Delete	6=List	7=Rename
9=Save		13=Type/Text		22=Print Options	

Opt	Format	Type	Text
<u>13</u>	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit	F5=Refresh	F6=Create	F8=Restore	F10=Functions Window
F11=Alternate screen		F21=Command Window		



After entering “13” and pressing Enter, the following SCREEN appears.

Change Label Description and Type

Type choices, press Enter.

Label Format Name . . . . .	<u>SAMPA</u>
Text 'description'. . . . .	<u>VERY BASIC LABEL- USING EXPANDED LETTERS</u>
Designed for Printer Type . .	<u>Z140XI</u> AFPHP4, AFPHP5, AFPHP6, A...

Bottom

---

F3=Exit	F4=List	F5=Refresh	F12=Cancel	F21=Command Window
---------	---------	------------	------------	--------------------

**Text ‘description’** - The label description may contain up to 40 characters and should NOT include ( \, /, ?, \*, :, <, >, | ). The label description may be changed anytime. It does NOT affect print results.

**Printer Type** - This field is required so that the appropriate printer features and options are displayed during label design. This value also affects the Graphical Label Designer. Press **F4** to view all printer types.

*Note: Printer output is determined by the printer configuration table, see Chapter 7 (Configure Printers).*

Press **Enter** to Change the Type and or Text. Press **F12** to Exit without changing.

## Label Print Options

To modify or display the printer options for a label format, place a “22” next to the names of the format whose printer options you wish to change, then press ENTER.

Enter  
22

```

Work with Label Formats

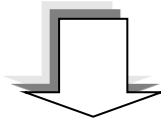
Position to . . . . . _____

Type options, press Enter.
  1=Print   2=Edit   3=Copy   4=Delete   6=List   7=Rename
  9=Save   13=Type/Text  22=Print Options

Opt  Format      Type      Text
22  SAMPBA      Z140XI   VERY BASIC LABEL- USING EXPANDED LETTERS
   SAMPBAR      Z140XI   SAMPLE LABEL USING A BARCODE
   SAMPFZ       Z140XI   SAMPLE ADDRESS LABEL- USING FILL ZONES
   SAMPLOGO     Z140XI   SAMPLE LABEL USING A LOGO
   SAMPMRG      Z140XI   SAMPLE USING DEMO MERGEFILE
   SAMPSYS      Z140XI   SAMPLE USING SYSTEM DATA (DATE,TIME...)
   SAMPVBAR     Z140XI   SAMPLE USING A VERTICAL BARCODE
   SAMPVERT     Z140XI   SAMPLE LABEL USING VERTICAL PRINT

Bottom

F3=Exit   F5=Refresh   F6=Create   F8=Restore   F10=Functions Window
F11=Alternate screen          F21=Command Window
    
```



After typing “22” and pressing Enter, the following SCREEN appears.

```

Label Print Options

Label Format:  SAMPBA
              VERY BASIC LABEL- USING EXPANDED LETTERS

Type choices, press Enter.

Setup Options for Printer Type. .  Z140XI          AFPHP4, AFPHP5, AFPHP6, AFP..
                                   + for more values

Bottom

F3=Exit   F5=Refresh   F12=Cancel   F21=Command line
    
```

**Printer Type:** While the cursor is in this field, press **F4** to see all printer types that are available. Select the type of printer whose options you wish to modify for the label format.

*NOTE: Printer output is determined by the printer configuration table see Chapter 7 (Configure Printer).*

Label Print Options are different for each brand and type. Any changes made only affect that type. This will NOT change the Target Printer type.

Press **ENTER** to continue; Press **F3** to Exit.



## Alternate Screen

The Alternate Screen allows for three different views of the Work With Label Formats Directory. The default view is show below. To change the view, press the **F11 (CMD11) Function Key**.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

1=Print	2=Edit	3=Copy	4=Delete	6=List	7=Rename
9=Save	13=Type/Text	22=Print Options			

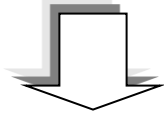
Opt	Format	Type	Text
—	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit	F5=Refresh	F6=Create	F8=Restore	F10=Functions Window	F21=Command Window
F11=Alternate screen					

Press F11



After pressing F11, the Directory is re-displayed in a multi-column format without Text.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

1=Print	2=Edit	3=Copy	4=Delete	6=List	7=Rename
9=Save	13=Type/Text	22=Print Options			

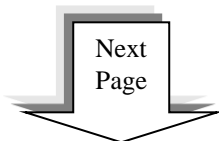
Opt	Format	Type
—	SAMPA	Z140XI
—	SAMPBAR	Z140XI
—	SAMPFZ	Z140XI
—	SAMPLOGO	Z140XI
—	SAMPMRG	Z140XI
—	SAMPSYS	Z140XI
—	SAMPVBAR	Z140XI
—	SAMPVERT	Z140XI

Bottom

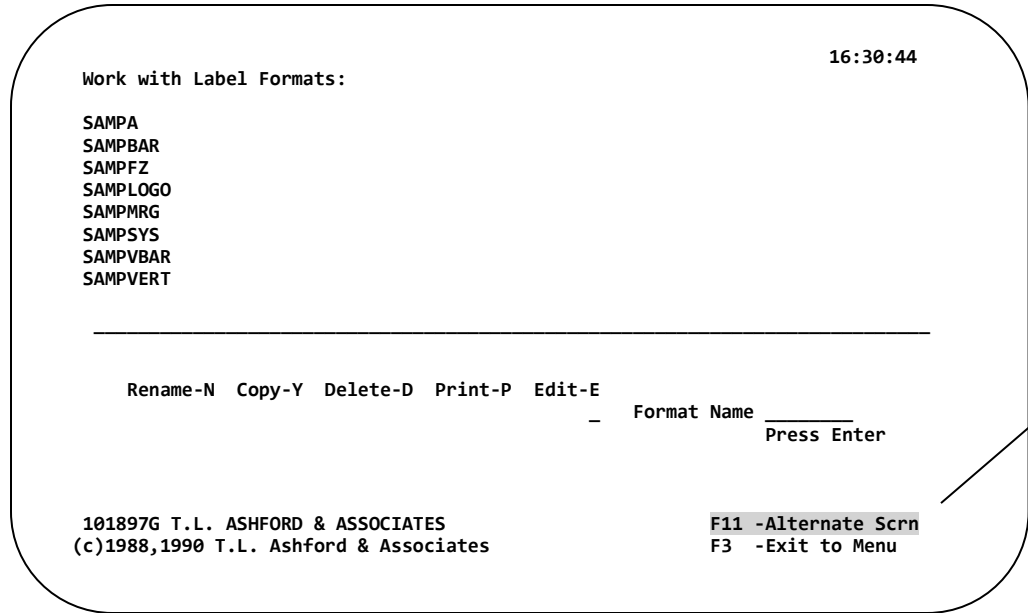
---

F3=Exit	F5=Refresh	F6=Create	F8=Restore	F10=Functions Window	F21=Command Window
F11=Alternate screen					

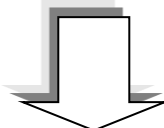
Press F11



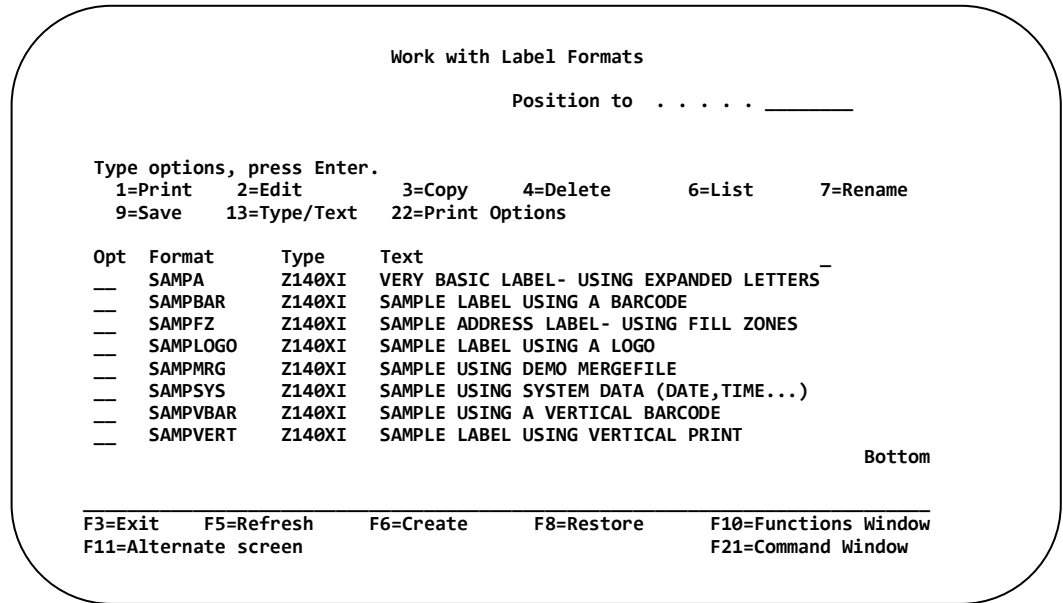
After pressing F11, the Directory is re-displayed listing all formats at the top of the screen.



Press F11



After pressing F11, the original Directory is re-displayed.



## Command Window

The Command Window allows you to access a IBM i command line by simply pressing the **CMD21** (F21) key.

**Press F21**  
(Shift F9)

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

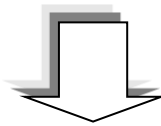
1=Print   2=Edit   3=Copy   4>Delete   6=List   7=Rename  
9=Save   13=Type/Text   22=Print Options

Opt	Format	Type	Text
—	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
—	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit   F5=Refresh   F6=Create   F8=Restore   F10=Functions Window  
F11=Alternate screen   F21=Command window



After pressing **CMD21**, the Command Window appears.

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

1=Print   2=Edit   3=Copy   4>Delete   6=List   7=Rename  
9=Save   13=Type/Text   22=Print Options

<u>Opt</u>	<u>Format</u>	<u>Type</u>	<u>Text</u>
SAMPA	Z140XI	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
SAMPBAR	Z140XI	Z140XI	SAMPLE LABEL USING A BARCODE
SAMPFZ	Z140XI	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
SAMPLOGO	Z140XI	Z140XI	SAMPLE LABEL USING A LOGO
SAMPMRG	Z140XI	Z140XI	SAMPLE USING DEMO MERGEFILE
SAMPSYS	Z140XI	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
SAMPVBAR	Z140XI	Z140XI	SAMPLE USING A VERTICAL BARCODE

: Command :

: : :

: ===> \_\_\_\_\_ :

: F4=Prompt   F9=Retrieve   F12=Cancel :

: : :

: : :

Enter an iSeries command or the option number corresponding to the Function to execute.

Press **ENTER** to Execute the Option; Press **F3** to abort.





# Chapter 2

---

## Printing Labels

### Overview

Creating a label design is only one part of the process. The completed format is intended to be printed, either on a label, tag, or other material.

Formats can be printed directly from the Barcode400 Main Menu (**Option 2**), processed from a batch prompt (**Option 3**) or test-printed directly from the Graphical Label Designer (*\*See GUI Manual*).

And with just a few lines of source code, labels can be generated from a custom-built menu (**LBLPRNT**), a CL Batch Process (**LBLBATCH / LBLBATHC**), or from an interactive application (**RPG / COBOL**).

## Printing from the Label Directory

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #2

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Label Design          Create/Edit/Copy/Delete a Label Format
2. Label Printing       Print Labels using Directory
3. Batch Processing     Batch Processing Menu

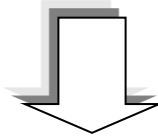
4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data          Retrieve DDS to be used by Labeling System
6. Incrementing Numbers Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks

8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu        Configure Printers, History Maintenance ...

Selection or command
==>> 2

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu

```



After selecting option #2, the following directory screen appears<sup>2</sup>

```

Work with Label Formats
Position to . . . . .

Type options, press Enter.
1=Print

Opt  Format      Type      Text
---  -
SAMPA  Z140XI  VERY BASIC LABEL- USING EXPANDED LETTERS
SAMPBAR  Z140XI  SAMPLE LABEL USING A BARCODE
SAMPFZ  Z140XI  SAMPLE ADDRESS LABEL- USING FILL ZONES
SAMPLOGO  Z140XI  SAMPLE LABEL USING A LOGO
SAMPMRG  Z140XI  SAMPLE USING DEMO MERGEFILE
SAMPSYS  Z140XI  SAMPLE USING SYSTEM DATA (DATE,TIME...)
SAMPVBAR  Z140XI  SAMPLE USING A VERTICAL BARCODE
SAMPVERT  Z140XI  SAMPLE LABEL USING VERTICAL PRINT

Bottom

F3=Exit  F5=Refresh  F11=Alternate screen

```

<sup>2</sup> An alternate version of the Label Directory could be displayed. Pressing the F11 Function, toggles the screen between a single and multi-column display. (See *Alternate Screen*)

## Printing a Label Using Constant Data

To print a label format with constant data, place a “1” next to the name(s) of the Label(s) you wish to Print, and then **PRESS ENTER**.

Enter  
1

Work with Label Formats

Position to . . . . . \_\_\_\_\_

Type options, press Enter.  
1=Print

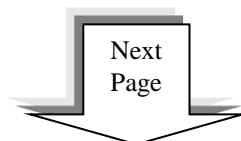
Opt	Format	Type	Text
—	SAMPA	Z140XI	VERY BASIC LABEL- USING EXPANDED LETTERS
<u>1</u>	SAMPBAR	Z140XI	SAMPLE LABEL USING A BARCODE
—	SAMPFZ	Z140XI	SAMPLE ADDRESS LABEL- USING FILL ZONES
—	SAMPLOGO	Z140XI	SAMPLE LABEL USING A LOGO
—	SAMPMRG	Z140XI	SAMPLE USING DEMO MERGEFILE
—	SAMPSYS	Z140XI	SAMPLE USING SYSTEM DATA (DATE,TIME...)
—	SAMPVBAR	Z140XI	SAMPLE USING A VERTICAL BARCODE
—	SAMPVERT	Z140XI	SAMPLE LABEL USING VERTICAL PRINT

Bottom

---

F3=Exit    F5=Refresh    F11=Alternate screen

**NOTE:** More than one format can be selected. The software will print the selected labels in alphabetical order. Each label selected can be directed to a different printer with a different print quantity.



After entering “1” and pressing Enter, the following PRINT LABELS SCREEN appears.

```
Print Labels

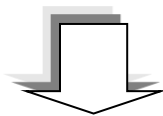
Label Format . . . . . SAMPBAR
Description . . . . . SAMPLE LABEL USING A BARCODE

Output Queue . . . . . PRT01
Forms Number . . . . . *STD
Hold/Save . . . . . *NO          *YES, *NO, SAVE

F3=Exit  F5=Refresh  F12=Cancel  F21=Command line
```

- Output Queue** Enter the IBM i Output Queue to receive the printed label.
- Forms Number** The Forms Number will prompt the user with a forms message on the IBM i when this value changes. The default is **\*STD**.
- Hold/Save** **\*YES** to hold the spool file, **\*NO** to not hold the spool, or **SAVE** to save the spool file after printing. The default is **\*NO**

Press **ENTER** continue, or press **F3** to return to the Work with Formats directory.



The Label Quantity screen appears.

```
SAMPBAR

HOW MANY LABELS.... 0001

ENTER -Process Label

F22=Print Options
F3=Exit to label Directory
```

Enter the number of labels to be printed, then... **PRESS ENTER.**

## Printing Labels Using Fill Zone (Prompted) Data

To print a label format that uses Fill Zone Data, place a “1” next to the names of the Labels you wish to Print, then **PRESS ENTER**.

Enter  
1

```

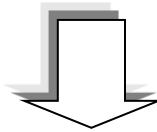
Work with Label Formats
Position to . . . . . _____

Type options, press Enter.
  1=Print

Opt  Format      Type      Text
---  ---
  1  SAMPFZ      Z140XI   SAMPLE ADDRESS LABEL- USING FILL ZONES
  ---  ---
  ---  SAMPLOGO     Z140XI   SAMPLE LABEL USING A LOGO
  ---  ---
  ---  SAMPMRG      Z140XI   SAMPLE USING DEMO MERGEFILE
  ---  ---
  ---  SAMPVBAR     Z140XI   SAMPLE USING A VERTICAL BARCODE
  ---  ---
  ---  SAMPVERT     Z140XI   SAMPLE LABEL USING VERTICAL PRINT

Bottom

F3=Exit  F5=Refresh  F11=Alternate screen
    
```



After entering “1” and pressing Enter, the following **PRINT LABELS SCREEN** appears.

```

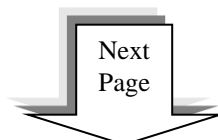
Print Labels

Label Format . . . . . SAMPFZ
Description . . . . . SAMPLE ADDRESS LABEL- USING FILL ZONES

Output Queue . . . . . PRT01
Forms Number . . . . . *STD
Hold/Save . . . . . *NO          *YES, *NO, SAVE

F3=Exit  F5=Refresh  F12=Cancel  F21=Command line
    
```

- Output Queue**            Enter the IBM i Output Queue to receive the printed label.
- Forms Number**            The Forms Number will prompt the user with a forms message on the IBM i when this value changes. The default is **\*STD**.
- Hold/Save**                **\*YES** to hold the spool file, **\*NO** to not hold the spool, or **SAVE** to save the spool file after printing. The default is **\*NO**
- PRESS ENTER** continue, or press **F3** to return to the Work with Formats directory.



## Chapter 2 – Printing Labels

The “Fill Zone” prompt screen appears requiring the variable data to be entered.

CUSTOMER PO# . . . . .  
CUSTOMER NAME . . . . .  
ATTENTION: . . . . .  
STREET ADDRESS 1. . . . .  
STREET ADDRESS 2. . . . .  
CITY . . . . .  
STATE . . . . .  
ZIP . . . . .

**HOLD INPUT**

**ON**, the prompt entries will remain “filled in” if the user answers Yes to print more labels.

**OFF**, the “filled in” areas are erased.

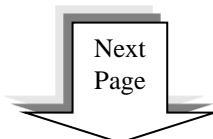
F12=Previous  
F3=Exit to Directory    **F6=Hold Input ON**    F8=LwrCase OFF    ENTER--->

Key in the “Fill Zone” data to be printed on the label. Up to fifty (50) characters may be entered for each fill zone prompt. Once all data has been typed in, **PRESS ENTER**.

CUSTOMER PO# . . . . . 00099  
CUSTOMER NAME . . . . . XYZ COMPANY  
ATTENTION: . . . . . JOHN DOE  
STREET ADDRESS 1. . . . . 777 SOMEWHERE STREET  
STREET ADDRESS 2. . . . . SUITE 319  
CITY . . . . . CINCINNATI  
STATE . . . . . OH  
ZIP . . . . . 43661

F12=Previous  
F3=Exit to Directory    F6=Hold Input ON    F8=LwrCase OFF    ENTER--->

**NOTE:** Barcode400 does NOT filter any Fill Zone data. Whatever is entered at the time of printing is what will be printed on the label. If operator entry must meet specific requirements or restrictions, consider an interactive method of printing where data can be conditioned or filtered before printing.



The Label Quantity screen appears.

```
SAMPFZ  
  
HOW MANY LABELS.... 0001  
  
ENTER -Process Label  
  
F22=Print Options  
F3=Exit to label Directory
```

Enter the number of labels to be printed, then **PRESS ENTER**.

The following “Labels Have Been Processed” screen appears.

```
LABEL HAS BEEN PROCESSED  
  
Do you wish to print more labels (Y,N)? Y  
  
PRESS ENTER
```

If you wish to print more labels using the same format, **PRESS ENTER** (“Y” is the default), and return to the “Fill Zone” prompt screen. If no more labels are to be printed using this format, respond “N”, and **PRESS ENTER** to return to the Work with Label Formats Directory.

## Printing Labels Using Merge Data (IBM i File)

To print a label format that uses Merge Data, place a “1” next to the names of the Labels you wish to Print, and then **PRESS ENTER**.

*\*NOTE: The IBM i Merge File must be an indexed file with a unique key. The file must also be in the library list.*

Enter  
1

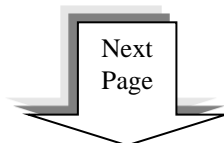
```
Work with Label Formats
                          Position to . . . . . _____

Type options, press Enter.
  1=Print

Opt  Format      Type      Text
---  ---        ---        ---
---  SAMP      Z140XI  VERY BASIC LABEL- USING EXPANDED LETTERS
---  SAMPBAR   Z140XI  SAMPLE LABEL USING A BARCODE
---  SAMPFZ    Z140XI  SAMPLE ADDRESS LABEL- USING FILL ZONES
---  SAMPLOGO  Z140XI  SAMPLE LABEL USING A LOGO
  1  SAMPMRG   Z140XI  SAMPLE USING DEMO MERGEFILE
---  SAMPSYS   Z140XI  SAMPLE USING SYSTEM DATA (DATE,TIME...)
---  SAMPVBAR  Z140XI  SAMPLE USING A VERTICAL BARCODE
---  SAMPVERT  Z140XI  SAMPLE LABEL USING VERTICAL PRINT

Bottom

-----
F3=Exit  F5=Refresh  F11=Alternate screen
```





After entering “1” and pressing Enter, the following PRINT LABELS SCREEN appears.

```

                                Print Labels

Label Format . . . . . SAMPMRG
Description . . . . . SAMPLE USING DEMO MERGEFILE

Output Queue . . . . . PRT01
Forms Number . . . . . *STD
Hold/Save . . . . . *NO                *YES, *NO, SAVE

Data File Override . . CUSTDEMO
Member . . . . . *FIRST
Library . . . . . TLABARCODE

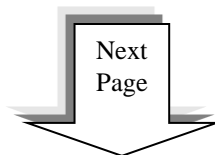
F3=Exit  F5=Refresh  F12=Cancel  F21=Command line
    
```

- Output Queue**            Enter the IBM i Output Queue to receive the printed label.
- Forms Number**            The Forms Number will prompt the user with a forms message on the IBM i when this value changes. The default is **\*STD**.
- Hold/Save**                **\*YES** to hold the spool file, **\*NO** to not hold the spool, or **SAVE** to save the spool file after printing. The default is **\*NO**

Data File Override options allow the data to be retrieved from a different file, member, or library. However, the record layouts must be the same.

- Data File Override**        To print labels using a different data file, enter the new file name.
- Member**                    To change the member name, enter the new member name. The default is **\*FIRST**.
- Library**                    To change the library name, enter the new library name.

**PRESS ENTER** continue, or press **F3** to return to the Work with Formats directory.



## Chapter 2 – Printing Labels

The “Search Key Prompt” screen will appear.

```
4/07/14                                     16:53:33

Type choices, press Enter:

CUST #..... 000001

F3=Exit   F4=List/Scroll Records
```

The operator will be prompted for which record to print by the Key Field of the file. In this example, the key field is CUST#. Enter the customer number (Ex. **000001**) and then **PRESS ENTER**.

To search by the key value, **PRESS F4** to display all records in the file as shown below.

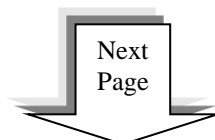
```
Record Search  Screen  Key Field  Descriptive Field
X To select record, Press Enter
KEY FIELD  Descriptive Field
- 000001    DOE INC.
- 000002    SNOW INC.
- 000003    SMITH INC.
- 000004    FIELD INC.
- 000005    FRANKLIN MINT
- 000006    LABEL SYSTEMS INC.
- 000007    SYSTEMS INC.
- 000008    CRICKETT INC.
- 000009    S.O.S.
- 000010    PATTY'S CORNER
-
-
-
-
Position: _____
F3=Exit to Directory  F12=Previous
```

**Position:**  
Enter the beginning value you wish to appear at the top of the screen.

For Example, keying 000003 and pressing Enter will start listing with key field 000003 at the top.

The Key Field and Descriptive Fields are displayed, sorted by the key field value.

Place an “X” next to the record you wish to print. Only one record may be selected at a time.



The “Label Quantity” screen appears.

Key Field

Descriptive Field

CUST : 000001  
NAME : DOE INC.

Label Name: SAMPMRG

HOW MANY LABELS.... 0001

ENTER -Print Label

F22=Print Options  
F23=Quit to Label Directory...

Enter the number of labels to be printed, then... **PRESS ENTER.**

The following “Label Has Been Processed” screen appears.

LABEL HAS BEEN PROCESSED

Do you wish to print more labels (Y,N)? Y

PRESS ENTER

If you wish to print more labels using the same format, **PRESS ENTER** (“Y” is the default), and return to the “Search Key Prompt” screen. If no more labels are to be printed using this format, respond “N”, and **PRESS ENTER** to return to the Work with Label Formats Directory.



# Batch Processing

## Overview

Batch Processing, in this system, refers to reading a data file which contains one or more records and printing labels for each record in that file. The data file is referred to as Merge Data. As each record is read, the fields containing label information are merged into the label format and the label is printed.

The label quantity can be retrieved from a field located within each record or may be overridden to print a specified number of labels for every record processed.

Unlike Menu Option #2, Batch Processing requires minimal or no operator intervention. Label printing may be initiated by filling in a batch parameter prompt screen (Option 3) or by placing a CL statement inside your CL program.

## Batch Processing Menu

Select  
OPTION #3

```
>>>>> T.L. Ashford & Associates <<<<<<          V4.0
Barcode Labeling Software

Select one of the following:

1. Label Design           Create/Edit/Copy/Delete a Label Format
2. Label Printing        Print Labels using Directory
3. Batch Processing      Batch Processing Menu
4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data            Retrieve DDS to be used by Labeling System
6. Incrementing Numbers Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks
8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu          Configure Printers, History Maintenance ...

Selection or command
===> 3

-----

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
```



After selecting Option #3, the following BATCH PROCESSING menu appears.

```
MNUBAT           Batch Processing Menu

Select one of the following:

1. LBLBATCH           Execute Batch Processing
2. LBLBATHC           Execute Batch Processing with Incrementing Numbers
3. CL Example         Example of how to execute from your CL Program

Selection or command
===>

-----

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
```

## Batch Processing Using the Prompt Screen

*\*NOTE: Choose this option if the Label Format Does Not use **Incrementing Numbers** (C/ or R/)*

Select  
OPTION #1

```

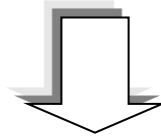
MNUBAT                                Batch Processing Menu

Select one of the following:

  1. LBLBATCH                          Execute Batch Processing
  2. LBLBATCHC                          Execute Batch Processing with Incrementing Numbers
  3. CL Example                          Example of how to execute from your CL Program

Selection or command
===> 1

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```



After selecting Option #1, the following LBLBATCH screen appears.

```

6/25/14                                LBLBATCH                                16:53:55

Type options, press Enter.

Label format name ..... LBLNAM  _____
Qty field name in record ..... QTYFLD  _____
-or- Qty override value ..... QTYOVR  _____

Output Queue ..... OUTQ          *DEV _____
Form# ..... FORM#                *STD _____
Number of labels across form .. ACROSS  01 _____
HOLD(*YES,*NO) ..... HOLD        *NO  _____

Mergefile NAME ..... MRGFILE     _____
Mergefile LIBRARY ..... MRGLIB    *LIBL _____
Mergefile MEMBER ..... MRGMBR     _____

F3=Exit  F4=Prompt Label Name                                F1=Help
    
```

Fill in the Parameters, and **PRESS ENTER**. For details on the parameters, see Table 2-1 on the next page.

If you do not know the name of the format, press **F4** (Prompt Label Name) to display a pop-up menu of the Label Directory. Place a '1' next to the desired format and then **PRESS ENTER**.

**Table 2-1. LBLBATCH Parameters**

PARMS	LENGTH	DESCRIPTION
LBLNAM	8	Enter the name of the previously designed label or press F4 to select.
QTYFLD Or QTYOVR	10 4	If the number of sets is to be retrieved from a field located within the record, enter the name of the field containing the Label Quantity (QTYFLD).  If you want to print a fixed number of sets for every record processed, make an entry in the quantity override (QTYOVR) field (Ex. '0002').  <b>Make only one entry, QTYFLD or QTYOVR. Leave the other blank.</b>
OUTQ	10	Enter the name of the IBM i Output Queue associated with the printer.
FORM#	10	This entry is used to initiate a forms change message. <b>*STD</b> is default.
ACROSS	2	Enter the number of labels across the form.  <i><b>*NOTE:</b> When more than one is specified for the across value, the same record will be printed across each form.</i>
HOLD	4	<b>*NO</b> to print the labels without holding the spool file. <b>*YES</b> to hold the spool file for printing at a later time. <b>SAVE</b> to save the spool file after the labels have printed.
MGRFILE	10	The name of the file containing data to be printed on your label.  <i><b>*NOTE:</b> The name of file entered may be different than the name used when designing your label. The record layout, however, must be the same.</i>
MRGLIB	10	Enter the name of the library containing the data file (MGRFILE). Make sure this library is in your library list.
MGRMBR	10	Enter the file member you wish to use. The default is the filename repeated.
SELECT	10	Must be <b>*ALL</b> .



**Example 1: Call LBLBATCH (Same number of labels per record)**

Read the CUSTDEMO file and print one label for every record in the file using the quantity override field (QTYOVR).

Syntax:

```
CALL PGM(LBLBATCH) PARM(SAMPMRG ' ' '0001' PRT01 *STD '01' *NO CUSTDEMO +
                        TLABARCODE CUSTDEMO *ALL)
```

PARMS	VALUE	LENGTH	DESCRIPTION
LBLNAM	SAMPMRG	8	Enter the name of the previously designed label format.
QTYFLD Or QTYOVR	' ' '0001'	10 4	If the number of sets is to be retrieved from a field located within the record, enter the name of the field containing the Label Quantity (QTYFLD).  If you want to print a fixed number of sets for every record processed, make an entry in the quantity override (QTYOVR) field.  <b>Only one entry should be made, QTYFLD or QTYOVR.</b>
OUTQ	PRT01	10	Enter the name of the IBM i Output Queue associated with the label printer.
FORM#	*STD	10	This entry is used to initiate a forms change message. *STD is default.
ACROSS	01	2	Enter the number of labels across the form.  <i>*Note: When more than one is specified for the across value, the same record will be printed across each form.</i>
HOLD	*NO	4	*NO to print the labels without holding the spool file. *YES to hold the spool file for printing at a later time. SAVE to save the spool file after labels have printed.
MRGFILE	CUSTDEMO	10	The name of the file containing data to be printed on your label.  <i>*Note: The name of file entered may be different than the name used when designing your label. The record layout, however, must be the same.</i>
MRGLIB	TLABARCODE	10	Enter the name of the library containing the data file (MRGFILE). Make sure this library is in your library list.
MRGMBR	CUSTDEMO	10	Enter the file member name. The default is the filename.
SELECT	*ALL	10	Must be *ALL.

**Example 2: Call LBLBATCH (Variable number of labels per record).**

Read the CUSTDEMO file, then retrieve the label quantity from the QTYOH field within the record, print labels.

Syntax:

**CALL PGM(LBLBATCH) PARM(SAMPMRG QTYOH '0000' PRT01 \*STD '01' \*NO CUSTDEMO +  
TLABARCODE CUSTDEMO \*ALL)**

PARMS	VALUE	LENGTH	DESCRIPTION
LBLNAM	SAMPMRG	8	Enter the name of the previously designed label format.
QTYFLD Or QTYOVR	QTYOH  '0000'	10  4	If the number of sets is to be retrieved from a field located within the record, enter the name of the field containing the Label Quantity (QTYFLD).  If you want to print a fixed number of sets for every record processed, make an entry in the quantity override (QTYOVR) field.  <b>Only one entry should be made, QTYFLD or QTYOVR.</b>
OUTQ	PRT01	10	Enter the name of the IBM i Output Queue associated with the label printer.
FORM#	*STD	10	This entry is used to initiate a forms change message. <b>*STD</b> is default.
ACROSS	01	2	Enter the number of labels across the form.  <i>*Note: When more than one is specified for the across value, the same record will be printed across each form.</i>
HOLD	*NO	4	<b>*NO</b> to print the labels without holding the spool file. <b>*YES</b> to hold the spool file for printing at a later time. <b>SAVE</b> to save the spool file after labels have printed.
MRGFILE	CUSTDEMO	10	The name of the file containing data to be printed on your label.  <i>*Note: The name of file entered may be different than the name used when designing your label. The record layout, however, must be the same.</i>
MRGLIB	TLABARCODE	10	Enter the name of the library containing the data file (MRGFILE). Make sure this library is in your library list.
MRGMBR	CUSTDEMO	10	Enter the file member name. The default is the filename.
SELECT	*ALL	10	Must be <b>*ALL</b> .

## Batch Processing Using Incrementing Numbers

*\*NOTE: Only use this option if the Label Format uses **Incrementing Numbers** (C' or R!)*

Select  
OPTION #2

```

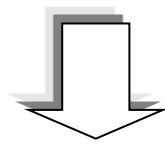
MNUBAT                                Batch Processing Menu

Select one of the following:

  1. LBLBATCH                          Execute Batch Processing
  2. LBLBATCHC                          Execute Batch Processing with Incrementing Numbers
  3. CL Example                          Example of how to execute from your CL Program

Selection or command
===> 2

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```



After selecting Option 2, the following LBLBATCHC screen appears.

```

6/25/14                                LBLBATCHC

Type options, press Enter.

Label format name ..... LBLNAM  _____
Field name containing # of SETS  QTYFLD  _____
-or- Qty override value ..... QTYOVR  _____
Field name containing PersetQty  SETFLD  _____
-or- Perset override qty..... SETOVR  _____
Output Queue .....            OUTQ    *DEV  _____
Form# .....                   FORM#  *STD  _____
Number of labels across form .. ACROSS  01    _____
HOLD(*YES,*NO) .....          HOLD   *NO   _____

Mergefile NAME .....          MRGFILE _____
Mergefile LIBRARY .....       MRGLIB  *LIBL _____
Mergefile MEMBER .....        MRGMBR  _____

F3=Exit      F4=Prompt Label Name      F1=Help
    
```

Fill in the Parameters, and **PRESS ENTER**. For details on the parameters, see Table 2-1 on the next page.

If you do not know the name of the format, press **F4** (Prompt Label Name) to display a pop-up menu of the Label Directory. Place a '1' next to the desired format and then **PRESS ENTER**.

**Table 2-2. LBLBATCHC Parameters**

PARMS	LENGTH	DESCRIPTION
LBLNAM	8	Enter the name of the previously designed label or press F4 to select.
QTYFLD Or QTYOVR	10  4	<i>Number of SETS per Record to Print</i> If the number of sets is to be retrieved from a field located within the record, enter the name of the field containing the Label Quantity (QTYFLD). If you want to print a fixed number of sets for every record processed, make an entry in the quantity override (QTYOVR) field. <b>Only one entry should be made, QTYFLD or QTYOVR.</b>
SETFLD Or SETOVR	10  4	<i>Number of LABELS in each SET to Print</i> If the number of labels for each set is to be retrieved from a field located within the record, enter the name of the field containing the label quantity (SETFLD). If you want to print a fixed number of labels for each set, make an entry in the Perset override (SETOVR) field. <b>Only one entry should be made, SETFLD or SETOVR.</b>
OUTQ	10	Enter the name of the IBM i Output Queue associated with the printer.
FORM#	10	This entry initiates a forms change message. <b>*STD</b> is default.
ACROSS	2	Enter the number of labels across the form. <b>*Note:</b> When more than one is specified for the across value, the same record will be printed across each form.
HOLD	4	<b>*NO</b> to print the labels without holding the spool file. <b>*YES</b> to hold the spool file for printing at a later time. <b>SAVE</b> saves the spool file after the labels have been printed.
MRGFILE	10	This is the name of the file containing data to be printed on your label. <b>*Note:</b> The name of file entered may be different than the name used when designing your label. The record layout, however, must be the same.
MRGLIB	10	Enter the name of the library containing the data file (MRGFILE). Make sure this library is in your library list.
MRGMBR	10	Enter the file member. The default is the filename.
SELECT	10	Must be <b>*ALL</b> .

**Example 3: Call LBLBATCHC (Same number of labels per record)**

The following example assumes that the label format uses an incrementing number ( C ).

Read the CUSTDEMO file and print one label for every record in the file with an incrementing number. Use the quantity override field (QTYOVR) for the number of sets and the set override field (SETOVR) field for the number of labels per set.

Syntax:

CALL PGM(LBLBATCHC) PARM(SAMPMRG ‘ ‘ ‘0001’ ‘ ‘0001’ PRT01 \*STD ‘01’ \*NO +  
CUSTDEMO TLBARCODE CUSTDEMO \*ALL)

PARMS	VALUE	LENGTH	DESCRIPTION
LBLNAM	SAMPMRG	8	Enter the name of the previously designed label format.
QTYFLD	‘ ‘	10	<i>Number of SETS per Record to Print</i> If the number of sets is to be retrieved from a field located within the record, enter the name of the field containing the Label Quantity (QTYFLD).
Or			
QTYOVR	‘0001’	4	To print a fixed number of sets for every record processed, make an entry in the quantity override (QTYOVR) field. <b>Only one entry should be made, QTYFLD or QTYOVR.</b>
SETFLD	‘ ‘	10	<i>Number of LABELS in each SET to Print</i> If the number of labels for each set is to be retrieved from a field located within the record, enter the name of the field containing the label quantity (SETFLD).
Or			
SETOVR	‘0001’	4	To print a fixed number of labels for each set, make an entry in the Perset override (SETOVR) field. <b>Only one entry should be made, SETFLD or SETOVR.</b>
OUTQ	PRT01	10	Enter the name of the IBM i Output Queue associated with the label printer.
FORM#	*STD	10	This entry initiates a forms change message. *STD is default.
ACROSS	1	2	Enter the number of labels across the form. <i>*Note: When more than one is specified for the across value, the same record will be printed across each form.</i>
HOLD	*NO	4	*NO to print the labels without holding the spool file. *YES to hold the spool file for printing at a later time. SAVE saves the spool file after labels have been printed.
MRGFILE	CUSTDEMO	10	This is the name of the file containing data to be printed on your label. The record layout, however, must be the same. <i>*Note: The name of file entered may be different than the name used when designing your label.</i>

## Chapter 2 – Batch Processing

<b>MRGLIB</b>	<b>TLABARCODE</b>	<b>10</b>	Enter the name of the library containing the data file (MRGFILE). Make sure this library is in your library list.
<b>MRGMBR</b>	<b>CUSTDEMO</b>	<b>10</b>	Enter the file member. The default is the filename.
<b>SELECT</b>	<b>*ALL</b>	<b>10</b>	Must be <b>*ALL</b> .

# LBLPRNT Command

## Introduction

The LBLPRNT command is a method of printing a label outside of the Barcode400 software. Upon execution, the operator will be prompted for Merge Data and/or Fill Zone Data, then the number of labels to print. *\*NOTE: If merge data is used, the merge file must be indexed (keyed) and in the library list.*

## Example using LBLPRNT

Type the following command;

**TLABARCODE/LBLPRNT**, then press **F4**

The following screen will be displayed.

(LBLPRNT)

Type choices, press Enter.

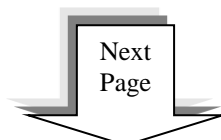
Label format name.....	.	<input style="width: 100%;" type="text"/>		Character value
Output Queue.....	.	<input style="width: 100%;" type="text"/>		Character value

Bottom

F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display  
F24=More keys

**Label format name:** Name of a previously designed label format.  
**Output Queue:** Name of the IBM i output queue you wish to print to.

Once a valid Label Format Name and Output Queue have been entered, then **PRESS ENTER**.

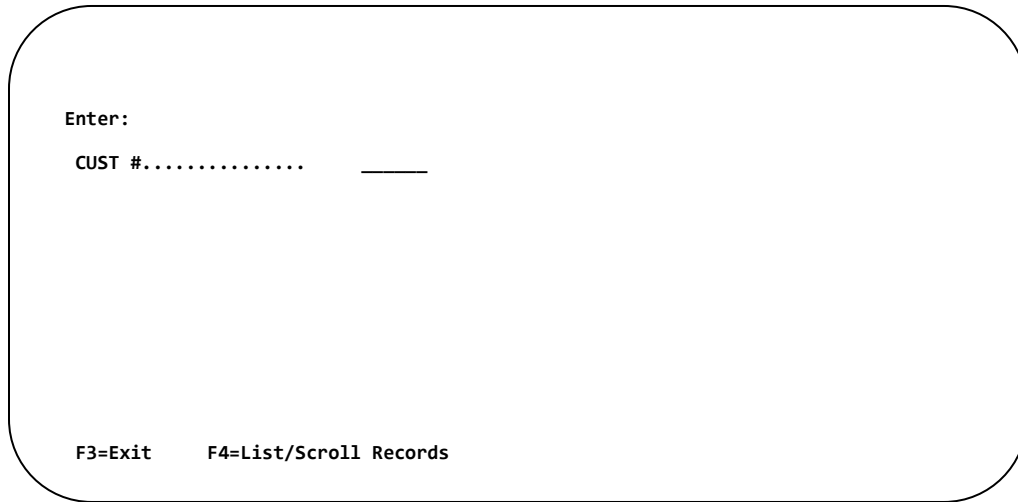


## Chapter 2 – LBLPRNT Command

One of three screens may be displayed based on the type of information used on the label format. If the format uses Merge data, Screen 1 will appear. If the format uses Fill Zone data, Screen 2 will appear. If the format uses all constant data, then Screen 3 will appear.

### Screen 1:

The “**Search Key Prompt**” screen will be displayed when the format uses Merge Data (IBM i file).



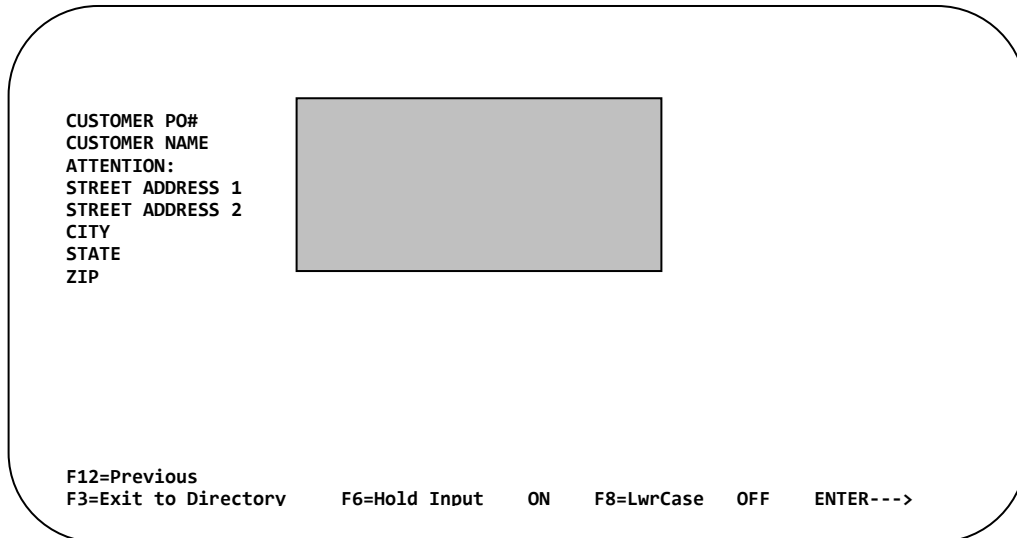
Enter:  
CUST #..... \_\_\_\_\_

F3=Exit      F4=List/Scroll Records

The operator will be prompted for the specific record to print by the Key Field of the file. If the operator is not sure which record to print, press **F4** to display all the records in the file. Once the record has been selected the operator will be prompted for fill zones or the number of labels to print.

### Screen 2:

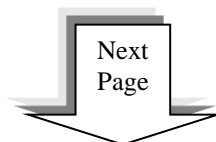
The “**Fill Zone**” prompt screen will be displayed when the format uses Fill Zone data.



CUSTOMER PO#  
CUSTOMER NAME  
ATTENTION:  
STREET ADDRESS 1  
STREET ADDRESS 2  
CITY  
STATE  
ZIP

F12=Previous      F3=Exit to Directory      F6=Hold Input      ON      F8=LwrCase      OFF      ENTER--->

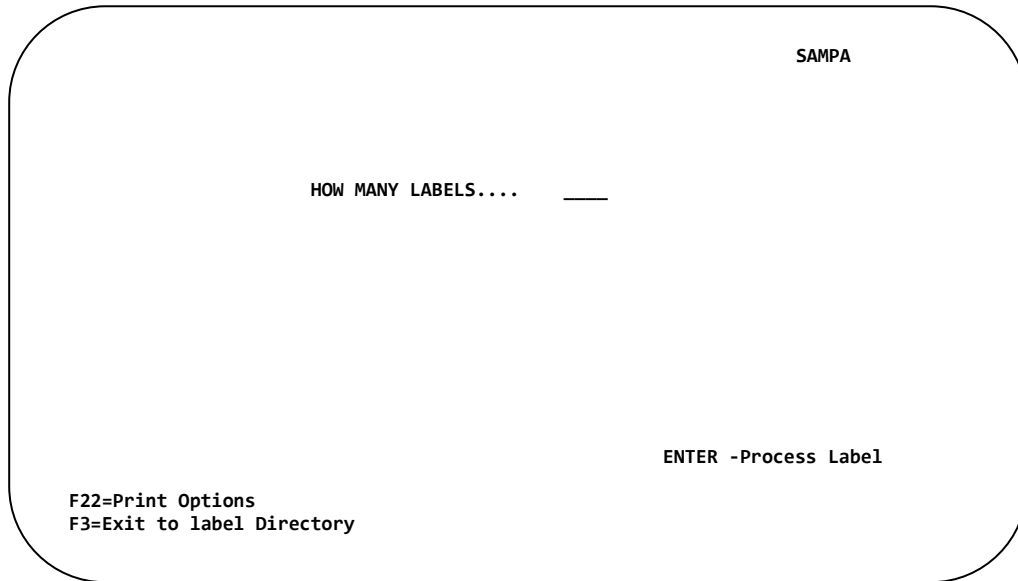
Once the fill zones have been entered the operator will be prompted for the number of labels to print.





Screen 3:

The “**Label Quantity**” prompt screen appears requesting the number of label to print.



Type the quantity of labels to print and then **PRESS ENTER.**

## Creating a Custom Menu that executes LBLPRNT

The following steps describe how to create a custom menu on the IBM i to print labels. In this example, the LBLPRNT command will be executed from the menu and print a label named SAMPMRG.

1. Add the TLABARCODE library to the library list. Type:

**ADDLIB TLABARCODE**, and then **PRESS ENTER**

2. Create a library to contain the menu objects. Type:

**CRTLIB LIB(MYLIB) TEXT('Library containing menu objects for label printing')**, and then **PRESS ENTER**

3. Create a source physical file in the MYLIB library called QMENU. Type:

**CRTSRCPF FILE(MYLIB/QMENU) TEXT('Menu source program')**, **PRESS ENTER**.

4. Start the IBM i SDA (Screen Design Aid) utility on the IBM i. Type:

**STRSDA** and then **PRESS ENTER**

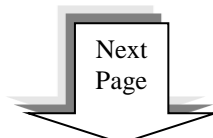
5. Select Option 2 – **Design Menus**. The following “**Design Menus**” screen will be displayed.

The screenshot shows the 'Design Menus' screen in the SDA utility. The title 'Design Menus' is centered at the top. Below it, the instruction 'Type choices, press Enter.' is displayed. There are three rows of input fields, each with a label on the left, a text input field in the middle, and a description on the right. The first row is 'Source file . . . . . QMENU Name, F4 for list'. The second row is 'Library . . . . . MYLIB Name, \*LIBL, \*CURLIB'. The third row is 'Menu . . . . . PRTLBLS Name, F4 for list'. At the bottom of the screen, there are three function key assignments: 'F3=Exit', 'F4=Prompt', and 'F12=Cancel'.

Type the information as shown below;

**Source File** QMENU  
**Library** MYLIB  
**Menu** PRTLBLS

and then **PRESS ENTER**.



The “Specify Menu Functions” screen will be displayed.

```

Specify Menu Functions
File . . . . . : QMENU           Menu . . . . . : PRTLBLE
Library . . . . : MYLIB

Type choices, press Enter.

Work with menu image and commands . . . . . Y Y=Yes, N=No
Work with menu help . . . . . N Y=Yes, N=No

F3=Exit  F12=Cancel
Menu PRTLBLE is new.
    
```

Place a **Y** in the Work with menu image and commands field, then **PRESS ENTER**.

The menu design screen will be displayed.

```

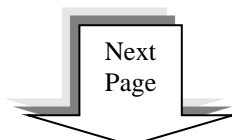
PRTLBLE                               PRTLBLE Menu

Select one of the following:

'1. Print SAMPA label.'
2.
3.
4.
5.
6.
7.
8.
9.
10.

Selection or command
F3=Exit           F10=Work with commands   F12=Cancel
F13=Command area  F20=Reverse               F24=More keys
Press Help for a list of valid operations.
    
```

Type **'1. Print SAMPMRG label.'** as shown above, then **PRESS ENTER**.



## Chapter 2 – LBLPRNT Command

Press **F10** to display the “Define Menu Commands” screen.

```
Define Menu Commands
Menu . . . . . : PRTLBS          Position to menu option . . . . . _
Type commands, press Enter.
Option  Command
01  LBLPRNT LNAME(SAMPMRG) SOUTQ(PRT01)
-----
02  _____
-----
03  _____
-----
04  _____
-----
05  _____
-----
06  _____
-----
07  _____
-----
F3=Exit      F11=Defined only options  F12=Cancel    More...
F24=More keys
```

Type **LBLPRNT LNAME(SAMPMRG) SOUTQ(PRT01)** next to Option 01. When the user selects Option 1 from the menu, the command LBLPRNT will be executed.

### Parameters:

LNAME 8 byte field which represents the name of the label format.

SOUTQ 10 byte field which represents the name of the IBM i output queue. (i.e. PRT01)

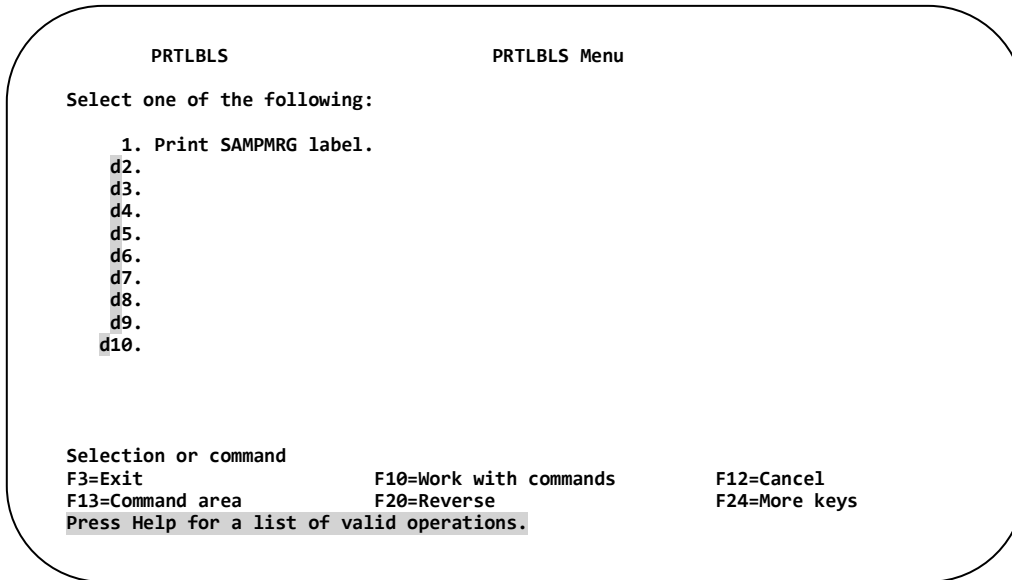
### PRESS ENTER.

The menu design screen will be re-displayed.

```
PRTLBS          PRTLBS Menu
Select one of the following:
1. Print SAMPMRG label.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Selection or command
F3=Exit          F10=Work with commands  F12=Cancel
F13=Command area F20=Reverse             F24=More keys
Press Help for a list of valid operations.
```

To remove additional prompts place a ‘d’ immediately in front of the field to delete.



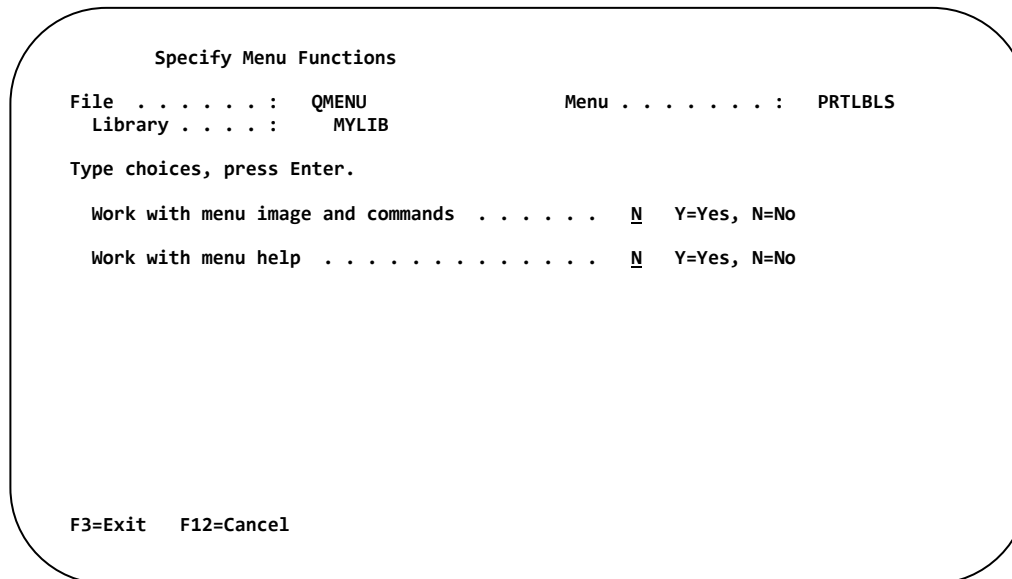
Press **ENTER**.

Options 2 through 10 will be removed from the menu.

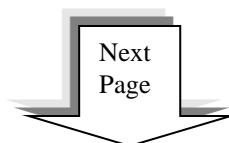
For further information in regards to modifying the menu, press the F1 key to display on-line help.

Press **F3** to exit.

The “Specify Menu Functions” screen will be displayed.



**PRESS ENTER.**



## Chapter 2 – LBLPRNT Command

The “Exit SDA Menus” screen will be displayed. Ensure that the entries appear as shown below.

```
Exit SDA Menus

File . . . . . : QMENU          DDS member . . . . . : PRTLBS1
Library . . . . . : MYLIB       Commands member . . . : PRTLBS1QQ

Type choices, press Enter.

Save new or updated menu source . . . . . Y      Y=Yes, N=No
For choice Y=Yes:
Source file . . . . .           QMENU          Name,
                                  F4 for list
Library . . . . .               MYLIB          Name, *LIBL, *CURLIB
Text . . . . .

Replace menu members . . . . .   Y            Y=Yes, N=No

Create menu objects . . . . .    Y            Y=Yes, N=No
For choice Y=Yes:
Prompt for parameters . . . . .  N            Y=Yes, N=No
Object library . . . . .        MYLIB          Name, *CURLIB
Replace menu objects . . . . .   Y            Y=Yes, N=No

F3=Exit   F4=Prompt   F12=Cancel
```

**PRESS ENTER.**

The message ‘SDA is Compiling menu PRTLBS.’ will be displayed at the bottom of the screen.

The “Design Menu” screen will be re-displayed.

```
Design Menu

Type choices, press Enter.

Source file . . . . .   QMENU      Name, F4 for list
Library . . . . .     MYLIB      Name, *LIBL, *CURLIB
Menu . . . . .       PRTLBS     Name, F4 for list

F3=Exit   F4=Prompt   F12=Cancel
```

Press **F3** to return to the SDA screen. Press **F3** to return to the IBM i command line.

The PRTLBS menu has now been created in the MYLIB library.

## Execute a Custom Menu using LBLPRNT

To execute the custom menu designed in the previous section, follow the steps listed below.

1. Add the 'TLABARCODE' library to the library list. Type:

**ADDLIBLE TLABARCODE** and then **PRESS ENTER**

2. Add the 'MYLIB' library to the library list. Type:

**ADDLIBLE MYLIB** and then **PRESS ENTER**

3. Execute the PRTLBS menu. Type:

**GO PRTLBS** and then **PRESS ENTER**

The following menu will be displayed.

```
PRTLBS                                PRTLBS Menu
Select one of the following:
    1. Print SAMPMRG label.

Selection or command
===> _____
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=System main menu
```

To print the SAMPMRG label, select Option **1**. The user will be prompted for record selection.

# Access to Main Menu Options

## Introduction

It may be desirable to limit user access to the Barcode 400 Main Menu options. This can be accomplished by writing a simple CL program to call one of the programs listed in table below as opposed to granting access to our Main Menu screen.

**Main Menu Program Names**

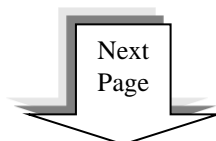
Barcode 400 Main Menu	Program Name
Option 1 - Label Design	LBL1
Option 2 - Label Printing	LBL2
Option 4 - Graphics Maintenance	LBL4
Option 5 - Merge Data	LBL5
Option 6 - Incrementing Numbers	LBL6
Option 7 - Paragraph Maintenance	LBL7
Option 9 - Utility Menu	LBL9

## Calling Menu Options from a IBM i Command Line

To access any of the Barcode400 Main Menu options directly from a command line, add TLABARCODE to the library list and then call one of the Programs Names.

Selection or command  
====> CALL LBL2

F3=Exit F4=Prompt F9=Retrieve F12=Cancel





## Sample Program Calling LBL2

The following CL program calls the LBL2 program in Barcode 400. LBL2 is the program that is executed when a user selects Option 2 from LBLMENU. In this example, a user would be allowed to print label formats, however they would not be able to Edit, Copy, Delete, or Rename label formats (LBL2).

```

Columns . . . :   1  71           Edit                               MYLIB/QCLSRC
SEU==>                                     OPTION2
***** Beginning of data *****
0000.01 /* The following program executes the T.L. Ashford Menu Option 2 */
0000.02 /* Print Labels. This program allows to print labels. Users will */
0000.03 /* NOT be able to Edit, Copy, Delete, or Rename existing label */
0000.04 /* formats. */
0000.05
0001.00          PGM
0002.00
0003.00          ADDLIBLE  LIB(TLABARCODE)
0003.01          MONMSG   MSGID(CPF0000)
0003.02
0004.00          CALL     PGM(LBL2)
0005.00
0005.01          RMVLIBLE  LIB(TLABARCODE)
0005.02          MONMSG   MSGID(CPF0000)
0005.03
0005.04          ENDPGM
***** End of data *****

```

When this program is executed, the following Ashford screen will be displayed.<sup>3</sup>

```

                                Work with Label Formats
                                Position to . . . . . _____

Type options, press Enter.
  1=Print

Opt  Format      Type      Text
---  ---
SAMPA  Z140XI    VERY BASIC LABEL- USING EXPANDED LETTERS
SAMPBAR  Z140XI    SAMPLE LABEL USING A BARCODE
SAMPFZ  Z140XI    SAMPLE ADDRESS LABEL- USING FILL ZONES
SAMPLOGO Z140XI    SAMPLE LABEL USING A LOGO
SAMPMRG Z140XI    SAMPLE USING DEMO MERGEFILE
SAMPSYS Z140XI    SAMPLE USING SYSTEM DATA (DATE,TIME...)
SAMPVBAR Z140XI    SAMPLE USING A VERTICAL BARCODE
SAMPVERT Z140XI    SAMPLE LABEL USING VERTICAL PRINT

Bottom

F3=Exit  F5=Refresh  F11=Alternate screen

```

<sup>3</sup> An alternate version of the Label Directory could be displayed. Pressing the F11 Function, toggles the screen between a single and multi-column display. (See *Alternate Screen*)

# Printing Labels from RPGLE Program

**NOTE:** This section of the manual is intended for programmers.

## Introduction

Sometimes it may be desirable to call the labeling software from within an existing application program. Using the instructions that follow, you will see that very little effort is required to accomplish this task. Once the proper code has been placed within your application program and compiled, the label format may be changed as often as you like without recompiling your program. Anyone skilled with the labeling software can now make changes to the label format without the assistance of the programming staff.

**\*NOTE:** When printing labels in this method Fill Zone data ***may not*** be used.

A sample RPGLE program is at the end of this section. The source for the sample program can be found in the TLABARCODE library in source member QRPGLSRC.

### Perform the following 6 steps to print labels from an RPGLE program:

- STEP 1**            **CREATE DDS** corresponding to the Data Structure inside your RPGLE program. The DDS does not need to be compiled.
- STEP 2**            Using Labeling System Menu Option #5 (**RETRIEVE the DDS for the Data Structure**), the labeling system will use this information to process the data structure passed to it when the label print program is called.
- STEP 3**            Create the label format using Menu Option #1 or the Graphical User Interface (GUI). Associate the DDS retrieved in Step 2 to this label format.
- STEP 4**            Place "**D**" **SPECS** inside your program. This is the previously defined Data Structure that contains all the fields that are going to be printed on the label format.

```
D* The Data structure must be 1024 or 4096 bytes long.
D* Holds variable data being passed to the label print program.
D*
D MrgDta          DS          1024
D  Cust#          1           6S 0
D  Cname          7           31
D  Addr1          32          56
D  Addr2          57          81
D  City           82          95
D  State          96          97
D  Zip1           98         102
D  Zip2          103         106
D  Phone         107        116S 0
D  Exten         117        120S 0
D  Faxno         121        130S 0
D  Name1         131         144
D  Name2         145         158
D  Filler        1024        1024
```

**STEP 5** Place a “CALL” statement into the ‘CALC SPECS’ of your RPG Program.

Call	'Z4XI1024'	
Parm		Lblnam
Parm		Across
Parm		Lbldev
Parm		Lblqty
Parm		Demand
Parm		Mrgdta
Parm		Perset

**Program Name**

The Program Name is unique for each printer.

See *Appendix A* to determine the specific program name for your printer make and model

Or

**CALL “TLAPRINT”** determines which Barcode400 program to call automatically, based on the value of LBLDEV. TLAPRINT MUST be used if using the History Maintenance File function (See Page 185).

**NOTE: MRGDTA must be 4096.**

**PARAMETERS:**

PARMS	LENGTH	DATA TYPE	DESCRIPTION
<b>LBLNAM</b>	<b>8</b>	Character	Name of label to be printed
<b>ACROSS</b>	<b>2</b>	Packed	Number of labels across the form.
<b>LBLDEV</b>	<b>10</b>	Character	Name of the output queue.
<b>LBLQTY</b>	<b>4</b>	Packed	Number of labels to print.
<b>DEMAND</b>	<b>1</b>	Character	<b>Y</b> = Will close the label print program. Labels will print immediately. Label system files are closed.
			<b>D</b> = Will close just the spool file. Labels will print immediately. Label systems files remain open.
			<b>N</b> = Will keep program and spool file open. Labels will not print until job is ended. Label system files remain open.
<b>MRGDTA</b>	<b>1024 or 4096</b>	No Packed Data	Data Structure holding variable data (M!). Can be 1024 or 4096 bytes long. If the data structure is 4096, change the called program from 1024 to 4096. <i>For example: Z4XI1024 to Z4XI4096.</i>  <b>*NOTE: Program TLAPRINT must have a 4096-byte structure.</b>
<b>PERSET</b>	<b>4</b>	Packed	Number of labels per set. Use with incrementing numbers. If the label format does not use an incrementing number simply load with a 0001.

**STEP 6** Place ‘PRINTER OVERRIDE STATEMENT’ into YOUR CL program to override the print file ‘BCLABELS’. This override must specify CPI (15). The OUTQ, FORM, etc. may also be entered.

*EXAMPLE*      **OVRPRTF FILE(BCLABELS) CPI(15) OUTQ(PRT01) +  
FORMTYPE(\*STD)**

If using Intermec IPL drivers, override the printer file ‘BCLBL132’. This override must specify CPI (10).

*EXAMPLE*      **OVRPRTF FILE(BCLBL132) CPI(10) OUTQ(PRT01) +  
FORMTYPE(\*STD)**

**\*NOTE: TLAPRINT does NOT require an Override Printer File be performed before the call.**

## Sample RPGLE Program

```

FCUSTDEMO  IF  E           K DISK
FSCREEN1   CF  E           WORKSTN InDDS(Indicators)

D* Declared parameters to be passed to Barcode400.
D*
D  Lblnam      S           8      Inz('SAMPMRG ')
D  Across     S           2P 0   Inz(01)
D  Lbldev     S           10     Inz('PRT01   ')
D  Lblqty     S           4P 0
D  Demand    S           1      Inz('N')
D  Perset    S           4P 0   Inz(0001)

D* The Data structure must be 1024 or 4096 bytes long.
D* Holds variable data being passed to the label print program.
D*
D  MrgDta      DS           1024
D  Cust#       1           6S 0
D  Cname       7           31
D  Addr1      32          56
D  Addr2      57          81
D  City       82          95
D  State      96          97
D  Zip1       98          102
D  Zip2      103          106
D  Phone     107          116S 0
D  Exten     117          120S 0
D  Faxno     121          130S 0
D  Name1     131          144
D  Name2     145          158
D  Filler    1024         1024

D  Indicators  DS
D  CancelKey  1N          overlay(Indicators:03)
D  ReturnKey  1N          overlay(Indicators:12)
D  CustError  1N          overlay(Indicators:30)
D  QtyError   1N          overlay(Indicators:40)

C*-----
C* Main Processing
C*-----
C           Exfmt      SCRFMT
C           If         CancelKey = *on or
C                   ReturnKey = *on
C           Eval      *inLR = *on
C           EndIf

C* Chain to CUSTDEMO file to retrieve data
C*
C  Scust#     Chain    Custr
C           If         %found
C           Eval      CustError = *off
C           Else
C           Eval      CustError = *on
C           Endif

```

Fields in the Data Structure being passed to the Labeling System **must not be packed.**

Data Structure must be extended to 1024 or 4096 Bytes. (An entry of '1024-1024 FILLER' would be sufficient)

## Chapter 2 – Printing Labels from RPGLE Program

(Sample RPGLE Program Continued)

```
C* Check QUANTITY entered from screen
C*
C           If           Sqty# < 1  or
C           Sqty# > 9999
C           Eval         QtyError = *on
C           Else
C           Eval         QtyError = *off
C           Endif

C* Execute $LabelSR subroutine to generate labels
C*
C           If           QtyError = *off and
C           CustError = *off
C           Eval         Lblqty  = Sqty#
C           Exsr         $LabelSR
C           Eval         Scust#  = *zeros
C           Eval         Sqty#   = *zeros
C           Endif

C*-----
C*   At Last Record execute the $LabelSR subroutine with LBLQTY = 0
C*                                           DEMAND = Y
C*
C*   This will CLOSE the spool file and ALL Barcode400 files.
C*   No label will be printed since LBLQTY is 0.
C*-----
C*
C           If           *inLR = *on
C           Eval         Lblqty  = *zeros
C           Eval         Demand  = 'Y'
C           Exsr         $LabelSR
C           Endif

C*-----
C*           Call Barcode400 Label Print Program
C*-----
C*
C           $LabelSR      Begsr
C*
C           Call          'Z4XI1024'
C           Parm          Lblnam  /
C           Parm          Across
C           Parm          Lbldev
C           Parm          Lblqty
C           Parm          Demand
C           Parm          Mrgdta
C           Parm          Perset
C*
C           Endsr
```

Numeric fields:  
**LBLQTY**  
**ACROSS**  
**PERSET**  
must be packed.

**End of Program**

# Printing Labels from RPGLE Freeform Program

**NOTE:** This section of the manual is intended for programmers.

## Introduction

Sometimes it may be desirable to call the labeling software from within an existing application program. Using the instructions that follow you will see that very little effort is required to accomplish this task. Once the proper code has been placed within your application program and compiled, the label format may be changed as often as you like without recompiling your program. Anyone skilled with the labeling software can now make changes to the label format without the assistance of the programming staff.

**NOTE:** When printing labels in this method Fill Zone data may not be used.

**A sample RPGLE Freeform program is at end of this section. The source for the sample program can be found in the TLABARCODE library in source member QRPGLSRC.**

### Perform the following 6 steps to print labels from an RPG Free Form Program:

- STEP 1**            **CREATE DDS** corresponding to the Data Structure inside your RPG LE Free program. The DDS does not need to be compiled.
- STEP 2**            Using Labeling System Menu Option #5, (**RETRIEVE the DDS for the Data Structure**). The labeling system will use this information to process the data structure passed to it when the label print program is called.
- STEP 3**            Create the label format using Menu option #1 or the Graphical User Interface (GUI). Associate the DDS retrieved in Step 2 to this label format.
- STEP 4**            Place "**D**" **SPECS** inside your program. This is the previously defined Data Structure that contains all the fields that are going to be printed on the label format.

```
D* The Data structure must be 1024 or 4096 bytes long.
D* Holds variable data being passed to the label print program.
D*
D MrgDta          DS          1024
D  Cust#          1          6S 0
D  Cname          7          31
D  Addr1          32         56
D  Addr2          57         81
D  City           82         95
D  State          96         97
D  Zip1           98        102
D  Zip2          103        106
D  Phone         107        116S 0
D  Exten         117        120S 0
D  Faxno         121        130S 0
D  Name1         131        144
D  Name2         145        158
D  Filler        1024       1024
```

**STEP 5** Place a “CALL” statement in your RPGLE Freeform Program.

```

CallP TlaProgram (LblNam :
                  Across  :
                  LblDev  :
                  LblQty  :
                  Demand  :
                  MrgDta  :
                  PerSet  );
    
```

**PARAMETERS:**

PARMS	LENGTH	DATA TYPE	DESCRIPTION
<b>Lblnam</b>	8	Character	Name of label to be printed
<b>Across</b>	2	Packed	Number of labels across the form.
<b>Lbldev</b>	10	Character	Name of the output queue.
<b>Lblqty</b>	4	Packed	Number of labels to print.
<b>Demand</b>	1	Character	<b>Y</b> = Will close the label print program. Labels will print immediately. Label system files are closed.
			<b>D</b> = Will close just the spool file. Labels will print immediately. Label systems files remain open.
			<b>N</b> = Will keep program and spool file open. Labels will not print until job is ended. Label system files remain open.
<b>Mrgdta</b>	1024 or 4096	No Packed Data	Data Structure holding variable data (M). Can be 1024 or 4096 bytes long. The structure size indicates which program to call. <i>For example: Z4XI1024 to Z4XI4096.</i>  <b>*NOTE: Program TLAPRINT must have a 4096-byte structure.</b>
<b>PerSet</b>	4	Packed	Number of labels per set. Use with incrementing numbers. If the label format does not use an incrementing number simply load with a 0001.

**STEP 6** Place ‘PRINTER OVERRIDE STATEMENT’ into *YOUR CL* program to override the the print file ‘BCLABELS’. This override must specify CPI (15). The OUTQ, FORM, etc. may also be entered.

```

EXAMPLE      OVRPRTF FILE(BCLABELS) CPI(15) OUTQ(PRT01) +
              FORMTYPE(*STD)
    
```

If using Intermec IPL drivers, override the printer file ‘BCLBL132’. This override must specify CPI (10).

```

EXAMPLE      OVRPRTF FILE(BCLBL132) CPI(10) OUTQ(PRT01) +
              FORMTYPE(*STD)
    
```

**\*NOTE: Program TLAPRINT does NOT require an Override Printer File before the call.**

## Sample RPGLE Freeform Program

```

FCUSTDEMO  IF  E           K DISK
FSCREEN1   CF  E           WORKSTN InDDS (Indicators)

//-----
// Declared parameters to be passed to Barcode400.
//-----

D  Lblnam      S           8      INZ ('SAMPMRG ')
D  Across     S           2P 0    INZ (01)
D  Lbldev     S          10      INZ ('PRT01      ')
D  Lblqty     S           4P 0
D  Demand     S           1      INZ ('D')
D  PerSet     S           4P 0    INZ (0001)

//-----
// The Data structure must be 1024 or 4096 bytes long.
// Holds variable data being passed to the label print program.
//-----

D MrgDta      DS          1024
D  Cust#      1          6S 0
D  Cname      7          31
D  Addr1     32          56
D  Addr2     57          81
D  City      82          95
D  State     96          97
D  Zip1      98          102
D  Zip2     103          106
D  Phone    107          116S 0
D  Exten    117          120S 0
D  Faxno    121          130S 0
D  Name1    131          144
D  Name2    145          158
D  Filler   1024         1024

D Indicators  DS
D  CancelKey          1N  overlay (Indicators:03)
D  ReturnKey          1N  overlay (Indicators:12)
D  CustError          1N  overlay (Indicators:30)
D  QtyError           1N  overlay (Indicators:40)

//-----
// Prototype for Barcode400 print driver program.
//-----

D TlaProgram  PR          ExtPgm ('Z4XI1024')
D  LblNam     8
D  Across    2P 0
D  LblDev    10
D  LblQty    4P 0
D  Demand    1
D  MrgDta    1024
D  PerSet    4P 0

//-----
// Main Processing
//-----

```

Fields in the Data Structure being passed to the Labeling System **must not be packed.**

Data Structure must be extended to 1024 or 4096 Bytes. (An entry of '1024-1024 FILLER' would be sufficient)

**Program Name**  
The Program Name is unique for each printer.

See *Appendix A* to determine the specific program name for your printer make and model.

Or

**CALL "TLAPRINT"** determines which Barcode400 program to call automatically, based on the value of LBLDEV. TLAPRINT MUST be used if using the History Maintenance File function (See Page 185).

**\*NOTE: MRGDTA must be 4096.**



Chapter 2 – Printing Labels from RPGLE Freeform Program  
(Sample RPGLE Program Continued)

```
/FREE

      Exfmt SCRFMT;

      If CancelKey = *on or
        ReturnKey = *on;
        *InLr = *on;
      EndIf;

//-----
// Chain to CUSTDEMO file to retrieve data
//-----

      Chain (Scust#) CustR;

      If not %Found;
        CustError = *on;
      Else;
        CustError = *off;
      EndIf;

//-----
// Check QUANTITY entered from screen
//-----

      If Sqty# < 1 or
        Sqty# > 9999;
        QtyError = *on;
      Else;
        QtyError = *off;
      EndIf;

//-----
// Execute $LabelSR subroutine to generate labels
//-----

      If QtyError = *off and
        CustError = *off;
        Lblqty = Sqty#;
        Exsr $LabelSR;
        Scust# = *zeros;
        Sqty# = *zeros;
      EndIf;

//-----
// At Last Record execute the $LabelSR subroutine with LBLQTY = 0
//                                     DEMAND = Y
//
// This will CLOSE the spool file and ALL Barcode400 files.
// No label will be printed since LBLQTY is 0.
//-----

      If *InLr = *on;
        Lblqty = *zeros;
        Demand = 'Y';
        Exsr $LabelSR;
      EndIf;
```

## Chapter 2 – Printing Labels from RPGLE Freeform Program

```
//*****  
Begsr $LabelSR;  
//*****  
  
// Barcode400 print driver program  
  
    CallP TlaProgram    (LblNam   :  
                        Across   :  
                        LblDev    :  
                        LblQty    :  
                        Demand    :  
                        MrgDta    :  
                        PerSet    );  
  
Endsr;  
/END-FREE**
```

**End of Program**

# Printing Labels from Cobol Program

**NOTE:** This section of the manual is intended for programmers.

## Introduction

Sometimes it may be desirable to call the labeling software from within an existing application program. Using the instructions that follow you will see that very little effort is required to accomplish this task. Once the proper code has been placed within your application program and compiled, the label format may be changed as often as you like without recompiling your program. Anyone skilled with the labeling software can now make changes to the label format without the assistance of the programming staff.

**\*NOTE:** When printing labels in this method Fill Zone data may not be used.

**A sample Cobol program is at the end of this section. The source for the sample program can be found in the TLABARCODE library in source member QACBLSRC.**

### Perform the following 6 steps to print labels from a Cobol program:

- STEP 1**        **CREATE DDS** corresponding to the Working Storage section inside your Cobol program. The DDS does not need to be compiled.
- STEP 2**        Using Labeling System Menu Option #5, (**RETRIEVE the DDS for the Data Structure**). The labeling system will use this information to process the data structure passed to it when the label print program is called.
- STEP 3**        Create the label format using Menu option #1. Associate the DDS retrieved in step 2 to this label format.
- STEP 4**        Define the “**Working-Storage Section**” inside your program. This is the section of the program that contains all the fields that are going to be printed on the label format.

```

0040.00      *****
0041.00      * VARIABLE DATA (MRGDTA) LENGTH MUST EQUAL 1024.
0042.00      *****
0043.00      01      MRGDTA.
0044.00      05      CUST          PIC 9(06).
0045.00      05      CNAME        PIC X(25).
0046.00      05      ADDR1        PIC X(25).
0047.00      05      ADDR2        PIC X(25).
0048.00      05      CITY         PIC X(14).
0049.00      05      STATE        PIC X(02).
0050.00      05      ZIP1         PIC X(05).
0051.00      05      ZIP2         PIC X(04).
0052.00      05      PHONE        PIC 9(10).
0053.00      05      EXTEN        PIC 9(04).
0054.00      05      FAXNO        PIC 9(10).
0055.00      05      NAME1        PIC X(14).
0056.00      05      NAME2        PIC X(14).
0057.00      * PAD VARIABLE DATA (MRGDTA) OUT TO 1024 BYTES.
0058.00      05      FILLER       PIC X(866).

```

## Chapter 2 – Printing Labels from COBOL Program

**STEP 5** Place a “CALL” statement into the Cobol Program.

```
0082.00          CALL-TLABARCODE.
0083.00          CALL "Z4XI1024" USING
0084.00          LBLNAME
0085.00          LBLACR
0086.00          LBLDEV
0087.00          LBLQTY
0088.00          DEMAND
0089.00          MRGDTA
0090.00          PERSET.
```

**Program Name**  
See [Appendix A](#) to determine the program name for your printer.

### PROGRAM NAME:

The Program Name used in the CALL statement is unique for each printer. [Appendix A](#) has a complete list of program names and associated printers.

### PARMS:

<b>LBLNAM</b>	PIC X(8)	Name of label to be printed.
<b>ACROSS</b>	PIC 99 COMP-3	Number of labels across the form.
<b>LBLDEV</b>	PIC X(10)	Name of the output queue.
<b>LBLQTY</b>	PIC 9999 COMP-3	Number of labels to print.
<b>DEMAND</b>	PIC X	<b>‘D’</b> - Will close just the spool file. Labels will print immediately. <b>‘Y’</b> - Will close the label print program. Labels will print immediately. <b>‘N’</b> - Will keep program and spool file open. Labels will not print until job is ended.
<b>MRGDTA</b>		Data Structure holding variable data. Can be 1024 or 4096 bytes long. If the data structure is 4096, change the called program from 1024 to 4096. For example: Z4XI1024 to Z4XI4096.
<b>PERSET</b>	PIC 9999 COMP-3	Number of labels per set. Use with incrementing numbers.

**NOTE:** If ACROSS, LBLQTY, and PERSET are defined within a Definition specification (D spec) of an RPG ILE program they must be packed.

**STEP 6** Place ‘PRINTER OVERRIDE STATEMENT’ into YOUR CL program to override the print file ‘BCLABELS’. This override must specify CPI (15). The OUTQ, FORM, etc. may also be entered.

*EXAMPLE*      **OVRPRTF FILE(BCLABELS) CPI(15) OUTQ(PRT01) +  
FORMTYPE(\*STD)**

If using Intermec IPL drivers, override the printer file ‘BCLBL132’. This override must specify CPI (10).

*EXAMPLE*      **OVRPRTF FILE(BCLBL132) CPI(10) OUTQ(PRT01) +  
FORMTYPE(\*STD)**

## Sample Cobol Program

```

0001.00      PROCESS  OPTIONS.
0002.00      IDENTIFICATION DIVISION.
0003.00      PROGRAM-ID. TLACOBOL.
0004.00          AUTHOR. TLA.
0005.00          INSTALLATION. T L ASHFORD.
0006.00      ENVIRONMENT DIVISION.
0007.00      CONFIGURATION SECTION.
0008.00      INPUT-OUTPUT SECTION.
0009.00      FILE-CONTROL.
0010.00          SELECT CUSTDEMO1 ASSIGN TO DISK-CUSTDEMO1
0011.00              ORGANIZATION IS INDEXED
0012.00              ACCESS IS DYNAMIC
0013.00              RECORD KEY IS CUST OF RECORD-IN.
0014.00      DATA DIVISION.
0015.00      FILE SECTION.
0016.00      FD CUSTDEMO1 LABEL RECORDS ARE STANDARD.
0017.00      01 RECORD-IN.
0018.00          05 CUST          PIC 9(06) COMP-3.
0019.00          05 CNAME        PIC X(25) .
0020.00          05 ADDR1        PIC X(25) .
0021.00          05 ADDR2        PIC X(25) .
0022.00          05 CITY          PIC X(14) .
0023.00          05 STATE        PIC X(02) .
0024.00          05 ZIP1         PIC X(05) .
0025.00          05 ZIP2         PIC X(04) .
0026.00          05 PHONE        PIC 9(10) COMP-3.
0027.00          05 EXTEN         PIC 9(04) COMP-3.
0028.00          05 FAXNO         PIC 9(10) COMP-3.
0029.00          05 NAME1        PIC X(14) .
0030.00          05 NAME2        PIC X(14) .
0031.00      WORKING-STORAGE SECTION.
0032.00      *****
0033.00      * VARIABLES PASSED TO T.L ASHFORD *
0034.00      *****
0035.00          01 LBLNAME        PIC X(08)          VALUE "SAMPMRG".
0036.00          01 LBLACR        PIC 99          COMP-3 VALUE 1.
0037.00          01 LBLDEV        PIC X(10)          VALUE "PRT01".
0038.00          01 LBLQTY        PIC 9999          COMP-3 VALUE 1.
0039.00          01 DEMAND        PIC X(01)          VALUE "Y".
0040.00      *****
0041.00      * VARIABLE DATA (MRGDTA) LENGTH MUST EQUAL 1024.
0042.00      *****
0043.00          01 MRGDTA.
0044.00              05 CUST          PIC 9(06) .
0045.00              05 CNAME        PIC X(25) .
0046.00              05 ADDR1        PIC X(25) .
0047.00              05 ADDR2        PIC X(25) .
0048.00              05 CITY          PIC X(14) .
0049.00              05 STATE        PIC X(02) .
0050.00              05 ZIP1         PIC X(05) .
0051.00              05 ZIP2         PIC X(04) .
0052.00              05 PHONE        PIC 9(10) .
0053.00              05 EXTEN         PIC 9(04) .
0054.00              05 FAXNO         PIC 9(10) .
0055.00              05 NAME1        PIC X(14) .
0056.00              05 NAME2        PIC X(14) .
0057.00          * PAD VARIABLE DATA (MRGDTA) OUT TO 1024 BYTES.
0058.00              05 FILLER        PIC X(866) .
0059.00          01 PERSET        PIC 9(04) COMP-3 VALUE 1.

```

## Chapter 2 – Printing Labels from COBOL Program

```
0060.00      *****
0061.00      * P R O C E D U R E   D I V I S I O N   *
0062.00      *****
0063.00      PROCEDURE DIVISION.
0064.00      HOUSEKEEPING SECTION.
0065.00      OPEN-FILES.
0066.00          OPEN I-O CUSTDEM01.
0067.00      MAINLINE SECTION.
0068.00      READ-INPUT.
0069.00          MOVE 000001 TO CUST OF RECORD-IN.
0070.00          READ CUSTDEM01 INVALID KEY
0071.00              DISPLAY "READ ERROR" UPON CONSOLE
0072.00              STOP RUN.
0073.00          PERFORM PRINT-LABEL.
0074.00          CLOSE CUSTDEM01.
0075.00          STOP RUN.
0076.00
0077.00
0078.00      PRINT-LABEL SECTION.
0079.00      MOVE-VAR-DATA.
0080.00          MOVE CORR RECORD-IN TO MRGDTA.
0081.00
0082.00      CALL-TLABARCODE.
0083.00          CALL "Z4XI1024" USING
0084.00              LBLNAME
0085.00              LBLACR
0086.00              LBLDEV
0087.00              LBLQTY
0088.00              DEMAND
0089.00              MRGDTA
0090.00              PERSET.
0091.00      PRINT-LABEL-EXIT.
0092.00      EXIT.
```

Numeric fields :

**LBLQTY  
ACROSS  
PERSET**

must COMP-3.

**End of Program**

# Chapter 3

---

## Work with Graphics

### Overview

Producing a graphic on a label format can communicate information just as text or barcode fields, whether by printing a picture of the product a carton contains, or a hazard warning symbol or even a company logo.

In this section – logos, images, pictures, etc. are all referred to as *graphics*. Graphics can be restored from sample images sent directly from T.L. Ashford or uploaded to the IBM i using Barcode400's Logo Transfer feature in the Graphical Label Designer.

Graphics are placed on a label just as text or barcodes, by selecting the image and then location to place it. They are not limited to static data, either. Variable graphics can be added using the value of a merged field or an operator prompted field to determine which graphic image to print.

# Graphics Maintenance Menu

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #4

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Label Design          Create/Edit/Copy/Delete a Label Format
2. Label Printing        Print Labels using Directory
3. Batch Processing      Batch Processing Menu
4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data            Retrieve DDS to be used by Labeling System
6. Incrementing Numbers Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks

8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu          Configure Printers, History Maintenance ...

Selection or command
===> 4
    
```

---

```

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```

After selecting option #4, the following directory screen appears<sup>4</sup>

Options

Restore

```

Work with Logos/Symbols
Position to . . . . .

Type options, press Enter.
3=Copy  4=Delete  7=Rename  9=Save  13=Change Description

Opt  Name      Type      Description of Graphic
---  ---      ---      ---
---  BRIDE      SCAN      BRIDE 203 DPI
---  CHEESE     SCAN      CHEESE 203 DPI
---  FLAME      MANUAL     FLAMMABLE
---  GRAPE      SCAN      GRAPES 203 DPI
---  POISON     MANUAL     SKULL AND CROSSBONE
---  SHOE       SCAN      SHOE 203 DPI
---  UL5       SCAN      UNDRITERS LAB 203 DPI

Bottom

F3=Exit  F5=Refresh  F8=Restore  F11=Alternate Screen
F21=Command Window
    
```

<sup>4</sup> An alternate version of the Logo Directory could be displayed. Pressing the F11 Function, toggles the screen between a single and multi-column display. (See *Alternate Screen*)



## Getting Graphics onto the IBM i

Before a graphic can be printed using Barcode400, it must be placed into a file located on the IBM i. Once the graphic is placed into this centrally located file, **everyone attached to the IBM i has access to it for label printing**. See Label Design Section, in Chapter 1, for the methods of including logos and symbols (graphics) into your label formats. Graphics can be placed onto the IBM i using the following two methods.

### Using the Graphics Transfer Software

Graphics can be converted and placed onto the IBM i using the T.L. Ashford Graphics Transfer Software. This software is an optional function of the Graphical User Interface<sup>5</sup> and allows scanned images such as TIF, PCX, BMP, and JPEG to be used by the Barcode400 Software.

### Restoring Previously Converted and Saved Graphics

With the purchase of Barcode400, T.L. Ashford will convert one Graphic and provide it to the customer free of charge. This Graphic is generally sent as an email attachment or on a media and restored to the IBM i using **Function Key F8** (*Located on the Graphics Directory Screen*). Read more about this function later in the chapter under “Restoring a Graphic”. Additional Graphics can be converted for a fee.

## Graphic Directory Options

Once the graphic has been stored on the IBM i, the “Work with Graphics” Directory can be used for maintenance.

---

<sup>5</sup> Label Formats can be designed using the “Green Screen”(5250 type terminals) or a special Graphical User Interface(GUI). The GUI functions as a client, directly connected to the AS/400. It is included with the standard *BarCode400* software package.

## Copying a Graphic

To Copy a Graphic, place a “3” next to the Graphic(s) you wish to Copy, then **PRESS ENTER**.

Select  
OPTION #3

Work with Logos/Symbols

Position to . . . . . \_\_\_\_\_

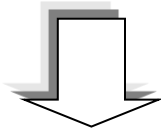
Type options, press Enter.  
 3=Copy    4=Delete    7=Rename    9=Save    13=Change Description

Opt	Name	Type	Logo/Symbol Description
—	BRIDE	SCAN	BRIDE 203 DPI
—	CHEESE	SCAN	CHEESE 203 DPI
—	FLAME	MANUAL	FLAMMABLE
—	GRAPE	SCAN	GRAPES 203 DPI
—	POISON	MANUAL	SKULL AND CROSSBONE
<b>3</b>	SHOE	SCAN	SHOE 203 DPI
—	UL5	SCAN	UNDWRITERS LAB 203 DPI

Bottom

---

F3=Exit    F5=Refresh    F8=Restore    F11=Alternate Screen  
 F21=Command Window



After entering “3” and pressing Enter, the following **COPY SCREEN** appears.

Copy Logos/Symbols

To copy a Logo/Symbol, enter New Name, Description, then press enter.

SHOE	New Name	Type	Logo/symbol Description
	SHOE2	SCAN	This is a copy of SHOE

Bottom

---

F3=Exit    F5=Refresh    F12=Cancel    F21=Command Window

Enter a new **Graphic name** and a new **Description** then... **PRESS ENTER**.

## Deleting a Graphic

To Delete a Graphic, place a “4” next to the Graphic(s) you wish to Delete, then **PRESS ENTER**.

Select  
OPTION #4

Work with Logos/Symbols

Position to . . . . . \_\_\_\_\_

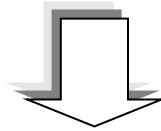
Type options, press Enter.  
 3=Copy    4=Delete    7=Rename    9=Save    13=Change Description

Opt	Name	Type	Logo/Symbol Description
—	BRIDE	SCAN	BRIDE 203 DPI
—	CHEESE	SCAN	CHEESE 203 DPI
—	FLAME	MANUAL	FLAMMABLE
—	GRAPE	SCAN	GRAPES 203 DPI
—	POISON	MANUAL	SKULL AND CROSSBONE
<b>4</b>	SHOE	SCAN	SHOE 203 DPI
—	UL5	SCAN	UNDWRITERS LAB 203 DPI

Bottom

---

F3=Exit    F5=Refresh    F8=Restore    F11=Alternate Screen  
 F21=Command Window



After entering “4” and pressing Enter, the following **DELETE SCREEN** appears.

Confirm Delete of Logos/Symbols

Press Enter to confirm your choices for Delete.  
 Press F12=Cancel to return to change you

Name	Type	Logo/Symbol Description
SHOE	SCAN	SHOE 203 DPI

Bottom

---

F12=Cancel

**PRESS ENTER** to delete the Graphic. Press **F12 to Cancel** the Delete.

## Renaming a Graphic

To Rename a Graphic, place a “7” next to the Graphic(s) you wish to Rename, and then **PRESS ENTER**.

Select  
OPTION #7

Work with Logos/Symbols

Position to . . . . . \_\_\_\_\_

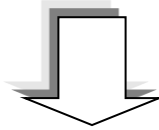
Type options, press Enter.  
3=Copy    4=Delete    7=Rename    9=Save    13=Change Description

Opt	Name	Type	Logo/Symbol	Description
—	BRIDE	SCAN	BRIDE 203	DPI
—	CHEESE	SCAN	CHEESE 203	DPI
—	FLAME	MANUAL	FLAMMABLE	
—	GRAPE	SCAN	GRAPES 203	DPI
—	POISON	MANUAL	SKULL AND CROSSBONE	
<b>7</b>	SHOE	SCAN	SHOE 203	DPI
—	UL5	SCAN	UNDWRITERS LAB 203	DPI

Bottom

---

F3=Exit    F5=Refresh    F8=Restore    F11=Alternate Screen  
F21=Command Window



After entering “7” and pressing Enter, the following **RENAME SCREEN** appears.

Rename Logos/Symbols

To rename a Logo/Symbol, type the New Name, then press enter.

	New Name	Type	Logo/Symbol	Description
SHOE	SHOE2	SCAN	SHOE 203	DPI

Bottom

F3=Exit    F5=Refresh    F12=Cancel

Enter a new **Graphic name and Description** then... **PRESS ENTER**.

## Saving a Graphic

In addition to saving a graphic to media or a save file, graphics can be transferred directly to another IBM i. If this is an option you wish to use, *See Chapter 8 – Transfer Logos*, otherwise -

To Save a Graphic, place a “9” next to the Graphic(s) you wish to Save, then **PRESS ENTER**.

Select  
OPTION #9

Work with Logos/Symbols

Position to . . . . . \_\_\_\_\_

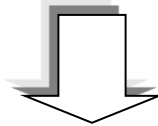
Type options, press Enter.  
 3=Copy    4=Delete    7=Rename    9=Save    13=Change Description

Opt	Name	Type	Logo/Symbol	Description
—	BRIDE	SCAN	BRIDE 203 DPI	
—	CHEESE	SCAN	CHEESE 203 DPI	
—	FLAME	MANUAL	FLAMMABLE	
—	GRAPE	SCAN	GRAPES 203 DPI	
—	POISON	MANUAL	SKULL AND CROSSBONE	
<b>9</b>	SHOE	SCAN	SHOE 203 DPI	
—	UL5	SCAN	UNDWRITERS LAB 203 DPI	

Bottom

---

F3=Exit    F5=Refresh    F8=Restore    F11=Alternate Screen  
 F21=Command Window



After entering “9” and pressing Enter, the following SAVE SCREEN appears.

Save Logos / Symbols

Type choice, press Enter.

Device . . . . . \_\_\_\_\_    Name, \*SAVF  
 SAVE FILE NAME . . . . . \_\_\_\_\_    NAME

F3=Exit    F10=Additional Parameters

Enter a valid **IBM i Device Name** (or *Save File Name*, if using \*SAVF for the device). If a Save File name is used, the Save File will be created in the TLAWORK library. Press **ENTER** to save the Graphic.

Pressing **F10** (Additional Parameters) will allow the user to select the Target Release of OS/400.

## Restoring a Graphic

In addition to saving and restoring a graphic from media or a save file, graphics can be transferred directly to another IBM i. If this is an option you wish to use, *See Chapter 8 – Transfer Logos*, otherwise -

To Restore a Graphic press the **F8 Function Key**.

Press F8

```

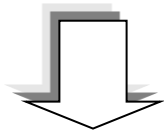
Work with Logos/Symbols
                Position to . . . . . _____

Type options, press Enter.
  3=Copy    4=Delete    7=Rename    9=Save    13=Change Description

Opt  Name      Type      Logo/Symbol Description
---  ---      ---      ---
---  BRIDE     SCAN     BRIDE 203 DPI
---  CHEESE    SCAN     CHEESE 203 DPI
---  FLAME     MANUAL    FLAMMABLE
---  GRAPE     SCAN     GRAPES 203 DPI
---  POISON    MANUAL    SKULL AND CROSSBONE
---  SHOE     SCAN     SHOE 203 DPI
---  UL5      SCAN     UNDRITERS LAB 203 DPI

Bottom

F3=Exit    F5=Refresh    F8=Restore    F11=Alternate Screen
F21=Command Window
    
```



After pressing F8, the first entry field of the RESTORE SCREEN appears.

```

Restore Label Formats/Logos (TLARSTCM1)

Type choices, press Enter.

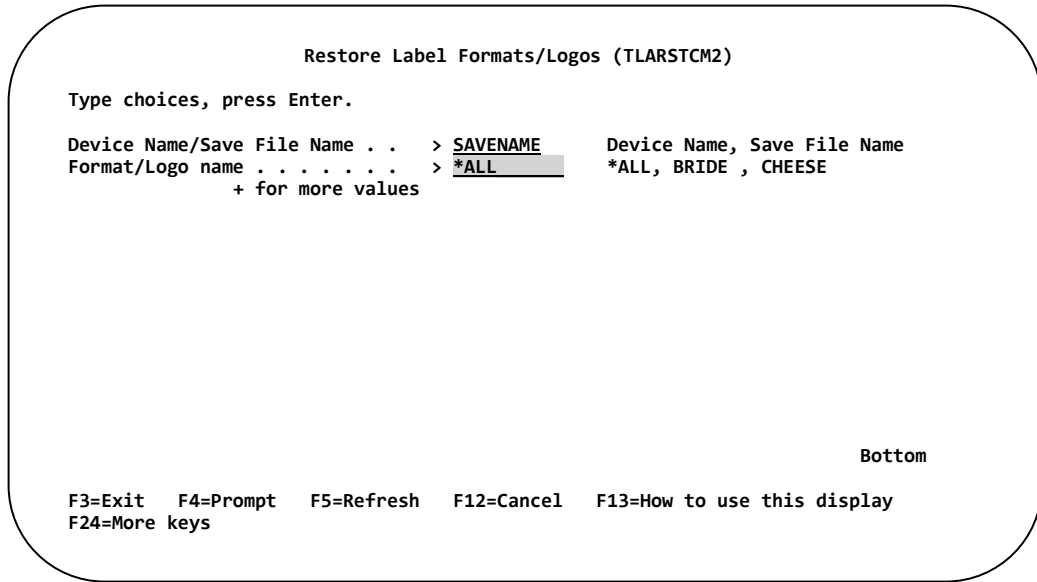
Device Name/Save File Name . . . _____ Device Name, Save File Name

Bottom

F3=Exit    F4=Prompt    F5=Refresh    F12=Cancel    F13=How to use this display
F24=More keys
    
```

**Enter a valid IBM i Device or Save File name.** If using a save file, the save file must be located in library TLAWORK. Press **F3** to Exit and not perform the restore operation.

After pressing **ENTER**, the second entry field of the RESTORE SCREEN appears.



Enter the name of the graphic you wish to restore in the Format/Logo name field or use the default value **\*ALL** to restore all the graphics from the media or save file. To display the graphics located in the save file or on the media, press **F4** while the cursor is in the Format/Logo name.

If the graphic name already exists in the label software, you will be prompted on whether you wish to continue with the restore operation:

SHOE already on the system. Delete Yes(Y) No(N) ?

If you continue with the restore operation (**Y**), the existing graphic will be deleted and replaced. Otherwise, enter an **N** to cancel the transfer.

## Changing the Description of a Graphic

To Change the Description of a Graphic, place a “13” next to the names of the Graphics you wish to Change, and then **PRESS ENTER**.

Select  
OPTION #13

Work with Logos/Symbols

Position to . . . . . \_\_\_\_\_

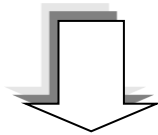
Type options, press Enter.  
3=Copy    4=Delete    7=Rename    9=Save    13=Change Description

<u>Opt</u>	<u>Name</u>	<u>Type</u>	<u>Logo/Symbol</u>	<u>Description</u>
—	BRIDE	SCAN	BRIDE 203	DPI
—	CHEESE	SCAN	CHEESE 203	DPI
—	FLAME	MANUAL	FLAMMABLE	
—	GRAPE	SCAN	GRAPES 203	DPI
—	POISON	MANUAL	SKULL AND CROSSBONE	
<u>13</u>	SHOE	SCAN	SHOE 203	DPI
—	UL5	SCAN	UNDWRITERS LAB 203	DPI

Bottom

---

F3=Exit    F5=Refresh    F8=Restore    F11=Alternate Screen  
F21=Command Window



After entering “13” and pressing ENTER the CHANGE SCREEN appears.

Change Logo/Symbol Description

Type choices, press Enter.

Logo/Symbol Name . . . . . SHOE  
Description . . . . . SHOE 203 DPI

Bottom

---

F3=Exit    F5=Refresh    F12=Cancel    F21=Command Window

Enter a new Graphic Description then... **PRESS ENTER**.



# Chapter 4

---

## Merge Data

### Overview

Merge Data in this system refers primarily to information retrieved from your ***IBM i data file***, and then “merged” into a label format. Barcode400 refers to data files as Merge Files. Both Physical Files (PF) and Logical Files (LF) can be used by this system.

Merge Data is used when calling the print program from within your application program. The information to be printed is placed into a Data Structure or Working Storage, and then passed as a parameter to the print program. (*See Chapter 2 - RPG and Cobol sample programs*)

Before Barcode400 can use this “Merge Data”, it must have a current copy of the Data Description Specifications (DDS) associated with the file or Data Structure you wish to use.

**\*NOTE:** *The ' is a reserved character and may not be used within a field.*

The screens illustrated on the following pages are used to retrieve the DDS.

**Your DDS and Data Files are never updated by Barcode 400.**

## Merge Data Directory Options

The Merge Data “**DDS Currently Used by the Labeling System**” directory is an interface that facilitates the Retrieving of DDS to be used by Barcode400. In addition, other maintenance features such as updating, deleting, and displaying previously retrieved DDS’s can be accomplished from this directory. The following pages describe how to perform each of these operations.

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #5

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Label Design          Create/Edit/Copy/Delete a Label Format
2. Label Printing        Print Labels using Directory
3. Batch Processing      Batch Processing Menu

4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data            Retrieve DDS to be used by Labeling System
6. Incrementing Numbers Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks

8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu          Configure Printers, History Maintenance ...

Selection or command
===> 5

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```

After selecting option #5, the following directory screen appears.

Options

Add DDS

```

Merge Data
DDS currently used by Labeling System
Position To... _____

Type options, press Enter.
4=Remove from list  5=Display  6=Update  8=View Labels

File Name  Record Fmt  Library  SrcFile  Pgm#  Description
_ CUSTDEMO  CWSTR    PF TLBARCODE QDDSSRC  I F99999  HEADER FILE
_ SAMPLE   SAMP1     PF ITEMMAST          F00030  ITEM MASTER FILE

F3=Exit  F6=Add to above list
    
```

## Retrieving DDS to be Used by the Labeling System

To Retrieve or Add a new DDS to the Labeling System, press the “F6” Function Key from within the Merge File Directory.

Press **F6**

```

Merge Data
DDS currently used by Labeling System

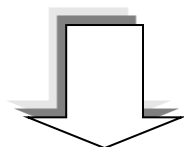
Type options, press Enter.
4=Remove from list 5=Display 6=Update 8=View Labels

Position To... _____

File Name Record Fmt Library SrcFile Pgm# Description
_ CUSTDEMO CUSTR PF TLABARCODE QDSSRC I F99999 HEADER FILE
_ SAMPLE SAMP1 PF ITEMMAST F00030 ITEM MASTER FILE

F3=Exit F6=Add to above list

```



The following DDS RETRIEVAL SCREEN appears.

```
Retrieve DDS for use by Labeling System

File name..... CUSTDEMO
Record format name..... CISTR
File type(PF,LF,DS).... PF

Location of DDS:
Library ..... TLABARCODE
DDS Source file..... QDDSSRC < *Optional

NOTE: The DDS Source File field may be left blank if you
wish to retrieve the DDS from the file itself. Otherwise
the DDS Source file will be used.

F12=Previous
```

**Fill in the prompts:**

**File Name** This is the name of the Data File or DDS containing the information to print on the label format. The file can be physical, logical, or a data structure.

**Record Format Name** Enter the name of the record format.

**File Type (PF,LF,DS)** PF = Physical File  
LF= Logical File.  
DS= Data Structure\*.

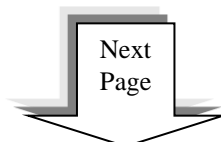
*\*NOTE: While the DS type allows for more flexibility in your file structure and does not require an RPG compiler on the System, label formats using this Merge File can only be printed using a Cobol or RPG program. See Chapter 2 – Printing from RPG for program examples.*

**Location of DDS**

**Library** Library containing the DDS Source File.

**DDS Source File** Source File where the DDS resides. The default is QDDSSRC. If this field is blank, then Barcode400 will retrieve the file layout from the Data File.

Then... **PRESS ENTER**



The following **SELECT DESCRIPTIVE FIELD SCREEN** appears.

Key Field

Enter  
D

Select Descriptive field

File..... CUSTDEMO  
Format... CUSTR  
Library.. TLABARCODE

Place a D next a field, Press Enter

M#	Field	Description	Len	D	T	From	Thru
<u>K1</u>	01	CUST#	CUST #	004	0	P	0001 0004
—	02	CNAME	NAME	025	0	A	0005 0029
—	03	ADDR1	ADDRESS LINE 1	025	0	A	0030 0054
—	04	ADDR2	ADDRESS LINE 2	025	0	A	0055 0079
—	05	CITY	CITY	014	0	A	0080 0093
—	06	STATE	STATE	002	0	A	0094 0095
—	07	ZIP1	ZIP CODE	005	0	A	0096 0100
—	08	ZIP2	ZIP CODE +4	004	0	A	0101 0104
—	09	PHONE	PHONE	006	0	P	0105 0110
—	10	EXTEN	EXTENSION	003	0	P	0111 0113
—	11	FAXNO	FAX NO	006	0	P	0114 0119
—	12	NAME1	CONTACT FIRST NAME	014	0	A	0120 0133

More..

F1=Continue F3=Exit F12=Previous

### Descriptive Field

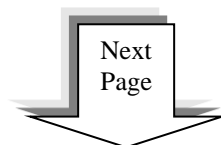
One field must be selected as a Descriptive Field to continue.

A descriptive field is used when printing labels interactively with Option #1 or Option #2 from the Barcode400 menu. When randomly accessing your data file it is sometimes necessary to invoke a scrolling option to find a record. While scrolling through the file, the descriptive field is displayed along with the key field to help identify the record to print. This can be very helpful in the selection of the proper record.

To select a Descriptive Field,

Enter the letter “D” in the column next to the left of a field. Only one Descriptive Field “D” may be assigned and it cannot be placed next to a key field.

**PRESS ENTER** to Continue... *The Screen may be inhibited for a couple of moments.*



## Chapter 4 – Merge Data

The Merge File Directory is redisplayed.

```

                                Merge Data
                                DDS currently used by Labeling System

                                Position To... _____

Type options, press Enter.
  4=Remove from list  5=Display  6=Update  8=View Labels

  File Name  Record Fmt  Library  SrcFile  Pgm#  Description
  - CUSTDEMO  CUSTR    PF TLBARCODE QDSSRC  I F99999  HEADER FILE
  - SAMPLE   SAMP1    PF ITEMMAST          F00030  ITEM MASTER FILE

F3=Exit                                F6=Add to above list
```

Barcode400 can now use this file. The next step is to associate the file to a label and specify the appropriate fields on your label. (See **Chapter 1 - Label Design – Using Mergefile Data**)

## Removing a Previously Retrieved DDS

To Remove a DDS (File), place a “4” next to the File Name you wish to Remove, then **PRESS ENTER**.

Select  
OPTION #4

```

Merge Data
DDS currently used by Labeling System

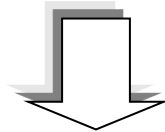
Type options, press Enter.
4=Remove from list  5=Display  6=Update  8=View Labels

Position To... _____

File Name  Record Fmt  Library  SrcFile  Pgm#  Description
4 CUSTDEMO  CUSTR    PF TLABARCODE  QDSSRC  I F99999  HEADER FILE
- SAMPLE    SAMP1    PF ITEMMAST          F00030  ITEM MASTER FILE

F3=Exit                      F6=Add to above list

```



After entering “4” and pressing Enter, the following **CONFIRM DELETE** screen appears.

```

Confirm Delete of Merge File

Press Enter to confirm your choices for 4=Delete.
Press F12 to return to change your choices.

Opt Merge File  Record Fmt  Library
4  CUSTDEMO    CUSTR      TLABARCODE

-----
WARNING These label(s) are currently associated with this Merge File

Label Name  Description
SAMPLE     SAMPLE ADDRESS LABEL- USING FILL ZONES
SAMPMRG    SAMPLE USING DEMO MERGEFILE

F3=Exit                      F6=Print

```

The software will warn if formats are currently using the file set to be deleted. **PRESS ENTER** to confirm the delete of the DDS. Press **F12** to cancel the Delete.

## Display a DDS

To Display a DDS, place a “5” next to the appropriate DDS File Name, then press **ENTER**.

Select  
OPTION #5

```

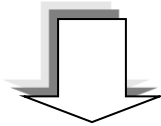
Merge Data
DDS currently used by Labeling System

Type options, press Enter.
4=Remove from list  5=Display  6=Update  8=View Labels

Position To... _____

File Name  Record Fmt  Library  SrcFile  Pgm#  Description
5 CUSTDEMO  CISTR    PF TLABARCODE  QDSSRC  I F99999  HEADER FILE
- SAMPLE    SAMP1    PF ITEMMAST          F00030  ITEM MASTER FILE

F3=Exit                      F6=Add to above list
    
```



After entering “5” and pressing Enter, the following **DISPLAY SCREEN** appears.

```

Display Merge File

File..... CUSTDEMO
Format..... CISTR
Library..... TLABARCODE

D = Description field
M#  Field      Description      Len D I From Thru
K1  01  CUST#      CUST #          004 0 P 0001 0004
D   02  CNAME      NAME            025 0 A 0005 0029
   03  ADDR1      ADDRESS LINE 1  025 0 A 0030 0054
   04  ADDR2      ADDRESS LINE 2  025 0 A 0055 0079
   05  CITY       CITY            014 0 A 0080 0093
   06  STATE      STATE           002 0 A 0094 0095
   07  ZIP1       ZIP CODE        005 0 A 0096 0100
   08  ZIP2       ZIP CODE +4     004 0 A 0101 0104
   09  PHONE      PHONE           006 0 P 0105 0110
   10  EXTEN      EXTENSION       003 0 P 0111 0113
   11  FAXNO      FAX NO          006 0 P 0114 0119
   12  NAME1     CONTACT FIRST NAME 014 0 A 0120 0133
   13  NAME2     CONTACT LAST NAME 014 0 A 0134 0147

Bottom

F3=Exit          D=Description Field  K=Key Fields(s)
    
```

The display screen lists the layout of the DDS. Useful information such as field names, length, decimal positions, type, and buffer positions can be determined.

**PRESS F12** to Cancel and return to the Merge Data directory.



## Updating a Previously Retrieved DDS

Whenever the DDS on the IBM i changes it must be updated within Barcode400. In addition, the fields assigned to the label format must be re-merged onto the format.

To Update a DDS place a “6” next to the File name you wish to Update, then... **PRESS ENTER.**

Enter  
6

```

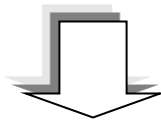
Merge Data
DDS currently used by Labeling System

                                Position To... _____
Type options, press Enter.
  4=Remove from list  5=Display  6=Update  8=View Labels

  File Name  Record Fmt  Library  SrcFile  Pgm#  Description
  6 CUSTDEMO  CUSTR    PF TLABARCODE QDSSRC  I F99999  HEADER FILE
  _ SAMPLE   SAMP1    PF ITEMMAST          F00030  ITEM MASTER FILE

F3=Exit                                F6=Add to above list

```



After entering “6” and pressing Enter, the following **RETRIEVE SCREEN** appears.

```

Retrieve DDS for use by Labeling System

File name..... CUSTDEMO
Record format name..... CUSTR
File type(PF,LF,DS).... PF

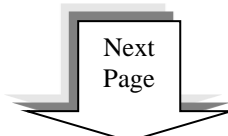
Location of DDS:
Library ..... TLABARCODE
DDS Source file..... QDSSRC < *Optional

NOTE: The DDS Source File field may be left blank if you
wish to retrieve the DDS from the file itself. Otherwise
the DDS Source file will be used.

F12=Previous

```

Make any changes to the highlighted fields shown above, then... **PRESS ENTER.**



The following **SELECT DESCRIPTIVE FIELD SCREEN** appears.

Enter  
D

```

Select Descriptive field

File..... CUSTDEMO
Format... CISTR
Library.. TLABARCODE

Place a D next a field, Press Enter

  M#  Field      Description      Len D I From Thru
  K1  01  CUST#      CUST #          004 0 P 0001 0004
  --  02  CNAME      NAME            025 0 A 0005 0029
  --  03  ADDR1      ADDRESS LINE 1  025 0 A 0030 0054
  --  04  ADDR2      ADDRESS LINE 2  025 0 A 0055 0079
  --  05  CITY       CITY            014 0 A 0080 0093
  --  06  STATE      STATE           002 0 A 0094 0095
  --  07  ZIP1       ZIP CODE        005 0 A 0096 0100
  --  08  ZIP2       ZIP CODE +4     004 0 A 0101 0104
  --  09  PHONE      PHONE           006 0 P 0105 0110
  --  10  EXTEN      EXTENSION       003 0 P 0111 0113
  --  11  FAXNO      FAX NO          006 0 P 0114 0119
  --  12  NAME1     CONTACT FIRST   014 0 A 0120 0133
                                More..

F1=Continue F3=Exit F12=Previous
    
```

You will need to re-select the Descriptive Field. For details about the functions of the Descriptive Field, consult the **Retrieve DDS for Use by the Labeling Software** section (pg 125).

Select the Descriptive Field, by placing the letter “D” in the column next to the left of a field.

**PRESS ENTER** to Continue... *The Screen may be inhibited for a couple of moments.*

The Merge File Directory is redisplayed.

```

Merge Data
DDS currently used by Labeling System

Type options, press Enter.
4=Remove from list 5=Display 6=Update 8=View Labels

Position To... _____

File Name Record Fmt Library SrcFile Pgm# Description
_ CUSTDEMO CISTR PF TLABARCODE QDSSRC I F99999 HEADER FILE
_ SAMPLE SAMP1 PF ITEMMAST F00030 ITEM MASTER FILE

F3=Exit F6=Add to above list
    
```

The file has now been updated. You may need to reassign the fields on label formats that use this file. This is **critical** if fields were deleted, had their order changed, or inserted anywhere other than at the end.

## View Labels

To view a list of labels that use a specific DDS, place an “8” next to the appropriate DDS File Name, then **PRESS ENTER**.

Select  
OPTION #8

```

Merge Data
DDS currently used by Labeling System

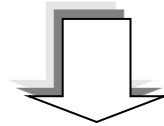
Type options, press Enter.
4=Remove from list 5=Display 6=Update 8=View Labels

Position To... _____

File Name Record Fmt Library SrcFile Pgm# Description
8 CUSTDEMO CUSTR PF TLABARCODE QDSSRC I F99999 HEADER FILE
- SAMPLE SAMP1 PF ITEMMAST F00030 ITEM MASTER FILE

F3=Exit F6=Add to above list

```



After entering “8” and pressing Enter, the **VIEW LABELS SCREEN** appears.

```

Labels Associated to Merge File

Merge File.... CUSTDEMO Total labels: 0002
Record Fmt.... CUSTR
Library..... TLABARCODE

Label Name Description
SAMPLE1 SAMPLE LABEL
SAMPMRG SAMPLE USING DEMO MERGEFILE

F12=Exit

```

**PRESS ENTER** Press **F12** to cancel the Delete.



# Chapter 5

---

## Incrementing Numbers

### Overview

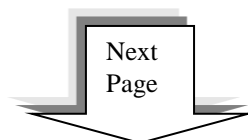
Keeping inventory, tracking packages or numbering boxes on a carton may require creating a value for unique serial numbers or printing the same value on multiple labels.

Incrementing / Decrementing numbers are set up within Barcode400 to allow sequencing of numbers on a label format. Incrementing numbers are referred to in this system as “Control Numbers” because the value is maintained by the system. These values are assigned variable names to access their values, a label design simply refers to that unique name. The value stored is the *next* value used to prevent redundancy.

Control Numbers can have from 1 to 12 digits, count up or down, increment at any value and even reset after each print if needed. The value can be printed as barcodes or enlarged characters.

Prefixes and suffixes may be appended for versatility. For example; a lot number may be appended to the front of an incrementing number for better tracking control.

Unlimited Control Numbers may be setup in Barcode400.



## Incrementing Number Directory Options

The Work with Incrementing Numbers directory is an interface that facilitates all maintenance on Incrementing Numbers. This includes creating, editing, copying, deleting, renaming, and changing the description of Incrementing numbers. The following pages describe how to perform each operation.

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #6

```

>>>>> T.L. Ashford & Associates <<<<<<
                Barcode Labeling Software
                V4.0

Select one of the following:

1. Label Design          Create/Edit/Copy/Delete a Label Format
2. Label Printing        Print Labels using Directory
3. Batch Processing      Batch Processing Menu
4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data            Retrieve DDS to be used by Labeling System
6. Incrementing Numbers  Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks
8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu          Configure Printers, History Maintenance ...

Selection or command
===> 6

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```

After selecting option #6, the following directory screen appears<sup>6</sup>

Options

```

Work with Incrementing#s
                Position to . . . . . _____

Type options, press Enter.
  2=Edit   3=Copy   4=Delete   7=Rename   13=Change Description

Opt  Inc# Name      Incrementing# Description
--   DEMO#          SAMPLE INCREMENTING NUMBER
--   FORD#          INCREMENTING NUMBER FOR FORD MOTOR CO.

Bottom

F3=Exit  F5=Refresh  F6=Create a New Incrementing#  F11=Alternate screen
F21=Command Window
    
```

Create

<sup>6</sup> An alternate version of the Incrementing Number directory could be displayed. Pressing the F11 Function key toggles the screen between a single and multi-column display. (See *Alternate Screen*)

## Creating an Incrementing Number

To create an Incrementing Number, press the “F6” Function Key from within the Work with Incrementing Numbers Directory.

Press F6

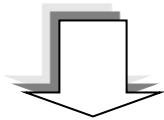
```
Work with Incrementing#s
                                Position to . . . . . _____

Type options, press Enter.
  2=Edit    3=Copy    4=Delete    7=Rename    13=Change Description

Opt  Inc# Name      Incrementing# Description
--   DEMO#          SAMPLE INCREMENTING NUMBER
--   FORD#          INCREMENTING NUMBER FOR FORD MOTOR CO.

Bottom

F3=Exit  F5=Refresh  F6=Create a New Incrementing#  F11=Alternate screen
F21=Command Window
```



After pressing F6, the CREATE AN INCREMENTING NUMBER SCREEN appears.

```
Create a New Incrementing #

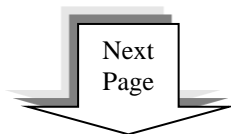
Type choices, press Enter.

Name . . . . . SAMPLE

F3=Exit  F5=Refresh  F12=Cancel  F21=Command Window
```

Enter an **Incrementing Number Name**. An Incrementing Number name may contain up to 10 alphanumeric characters,

*then* **PRESS ENTER.**







## Editing an Incrementing Number

To Edit an Incrementing Number, place a “2” next to the name of the Incrementing Number(s) you wish to Edit, and then **PRESS ENTER**.

Enter  
2

```

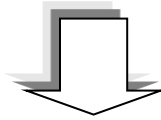
Work with Incrementing#s
                                Position to . . . . . _____

Type options, press Enter.
  2=Edit    3=Copy    4=Delete    7=Rename    13=Change Description

Opt  Inc# Name      Incrementing# Description
  2  DEMO#          SAMPLE INCREMENTING NUMBER
   FORD#          INCREMENTING NUMBER FOR FORD MOTOR CO.

                                Bottom

F3=Exit    F5=Refresh  F6=Create a New Incrementing#  F11=Alternate screen
F21=Command Window
    
```



After entering “2” and pressing Enter, the following INCREMENTING NUMBER EDIT SCREEN appears.

```

Edit an Incrementing #

Type choices, press Enter.

Name . . . . . DEMO#
Incrementing# Description. . . . . SAMPLE INCREMENTING NUMBER

Number of digits in incrementing#. 06
Incrementation value . . . . . 000000000001
Increment(+) Decrement(-) . . . . . ±

Should Incrementing# automatically be RESET TO ONE
after printing a group of labels(Y,N) . . . . . Y

Next# 000000000001

                                Bottom

F3=Exit    F5=Refresh  F12=Cancel  F21=Command Window
    
```

Make any modifications to the Incrementing Number. Once all modifications have been made, **PRESS ENTER** to update and return to the Work with Incrementing Numbers directory.

Press **F3** or **F12** to Exit and NOT make any changes.

## Copying an Incrementing Number

To Copy an Incrementing Number, place a “3” next to the name of the Incrementing Number(s) you wish to Copy, and then **PRESS ENTER**.

Select  
OPTION #3

```

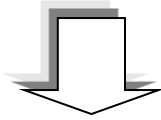
Work with Incrementing#s
                                Position to . . . . . _____

Type options, press Enter.
  2=Edit    3=Copy    4=Delete    7=Rename    13=Change Description

Opt  Inc# Name      Incrementing # Description _____
  3  DEMO#          SAMPLE INCREMENTING NUMBER
   - FORD#          INCREMENTING NUMBER FOR FORD MOTOR CO.

                                                                Bottom

-----
F3=Exit    F5=Refresh    F6=Create a New Incrementing#    F11=Alternate screen
F21=Command Window
    
```



After entering “3” and pressing Enter, the following **COPY SCREEN** appears.

```

Copy Incrementing#s

To copy a Incrementing#, type New Name, Description, then press enter.

DEMO#      New Name      Incrementing# Description
           DEMO#2        This is a copy of DEMO#

                                                                Bottom

F3=Exit    F4=List    F5=Refresh    F12=Cancel    F21=Command Window
    
```

Enter a new **Incrementing Number name** and a new **Description**, then... **PRESS ENTER**.

## Deleting an Incrementing Number

To Delete an Incrementing Number, place a “4” next to the name of the Incrementing Number(s) you wish to Delete, and then **PRESS ENTER**.

Select  
OPTION #4

```

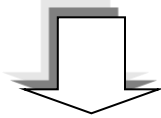
Work with Incrementing #s
                                Position to . . . . . _____

Type options, press Enter.
  2=Edit      3=Copy      4=Delete      7=Rename      13=Change Description

Opt  Inc# Name      Incrementing# Description
  4  DEMO#          SAMPLE INCREMENTING NUMBER
   -  FORD#          INCREMENTING NUMBER FOR FORD MOTOR CO.

                                                                Bottom

-----
F3=Exit      F5=Refresh      F6=Create a New Incrementing#      F11=Alternate screen
F21=Command Window
    
```



After entering “4” and pressing Enter, the following **DELETE SCREEN** appears.

```

Confirm Delete of Incrementing #

Press Enter to confirm your choices for Delete.
Press F12=Cancel to return to change you

Name      Incrementing # Description
DEMO#     SAMPLE INCREMENTING NUMBER

                                                                Bottom

F12=Cancel
    
```

**PRESS ENTER** to confirm and delete the Incrementing Number. Press **F12 to cancel** the Delete.

## Renaming an Incrementing Number

To Rename an Incrementing Number, place a “7” next to the name of the Incrementing Number you wish to Rename, then **PRESS ENTER**

Select  
OPTION #7

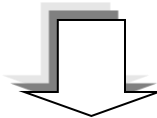
```
Work with Incrementing#s
                                Position to . . . . . _____

Type options, press Enter.
  2=Edit    3=Copy    4=Delete    7=Rename    13=Change Description

Opt  Inc# Name  Incrementing# Description
 7   DEMO#     SAMPLE INCREMENTING NUMBER
   FORD#     INCREMENTING NUMBER FOR FORD MOTOR CO.

Bottom

F3=Exit  F5=Refresh  F6=Create a New Incrementing#  F11=Alternate screen
F21=Command Window
```



After entering “7” and pressing Enter, the following **RENAME SCREEN** appears.

```
Rename Incrementing #s

To rename, type New Name, Description, press enter.

DEMO#      New Name      Incrementing# Description
           DEMO#2      SAMPLE INCREMENTING NUMBER

Bottom

F3=Exit  F5=Refresh  F12=Cancel
```

Enter a new **Incrementing Number name** and **Description**, then... **PRESS ENTER.**

## Change an Incrementing Number Description

To Change the Description of a Incrementing Number, place a “13” next to the name of the Incrementing Numbers whose Description you wish to Change, then **PRESS ENTER**.

Select  
OPTION #13

```

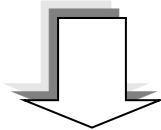
Work with Incrementing#s
                                Position to . . . . . _____

Type options, press Enter.
  2=Edit    3=Copy    4=Delete    7=Rename    13=Change Description

Opt Inc# Name    Incrementing# Description
  DEMO#    SAMPLE INCREMENTING NUMBER
  13 FORD#    INCREMENTING NUMBER FOR FORD MOTOR CO.

                                Bottom

-----
F3=Exit    F5=Refresh    F6=Create a New Incrementing#    F11=Alternate screen
F21=Command Window
    
```



After entering “13” and pressing Enter, the following **CHANGE SCREEN** appears.

```

Change Incrementing # Description

Type choices, press Enter.

Incrementing Number Name. . . . . FORD#
Description . . . . . INCREMENTING NUMBER FOR FORD MOTOR CO.

                                Bottom

F3=Exit    F5=Refresh    F12=Cancel    F21=Command Window
    
```

Enter a new **Incrementing Number Description**, then... **PRESS ENTER**.



# Chapter 6

---

## Work with Paragraphs

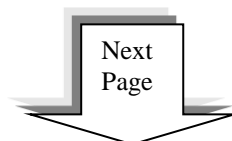
### Overview

Some formats may require paragraphs to be printed on a label; warning messages or a product description for example. Instead of “hard coding” several lines of constant text into the label format, the paragraph maintenance programs may be used to create a single paragraph external to the label format.

As you design your label, you will enter the name of the paragraph, and where you want the upper left hand corner of the information to begin printing. The entire paragraph or portions of the paragraph may be printed starting at a particular line number.

Paragraphs may be variable, by supplying the paragraph name at label print time. This can come from a IBM i data base file (merge field) or entered by the printer operator (fill zone).

*NOTE: In earlier versions of Barcode400, Paragraphs were referred to as Text Blocks or Documents.*



## Paragraph Directory Options

The Work with Paragraphs directory is an interface that facilitates all maintenance on Paragraphs. This includes creating, printing, editing, copying, deleting, renaming, and changing the description of paragraphs. The following pages describe how to perform each of these operations.

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #7

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Label Design          Create/Edit/Copy/Delete a Label Format
2. Label Printing       Print Labels using Directory
3. Batch Processing     Batch Processing Menu
4. Graphics Maintenance Copy/Delete/Rename/Save a Logo
5. Merge Data           Retrieve DDS to be used by Labeling System
6. Incrementing Numbers Setup an Incrementing Control Number
7. Paragraph Maintenance Create/Edit/Copy/Delete Text Blocks
8. Integration Assistant Create source templates for Application Pgm
9. Utility Menu         Configure Printers, History Maintenance ...

Selection or command
===> 7

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=iSeries main menu
    
```

After selecting option #7, the following directory screen appears.<sup>7</sup>

Options

Create

```

Work with Paragraphs
Position to . . . . .

Type options, press Enter.
1=Print      2=Edit      3=Copy      4=Delete      7=Rename
13=Change Description

Opt Paragraph Paragraph Description
-- FORMULA197 BLOCK OF TEXT FOR FORMULA 197
-- SAMPTEXT SAMPLE BLOCK OF TEXT

Bottom

F3=Exit  F5=Refresh  F6=Create a Paragraph  F11=Alternate Screen
F21=Command Window
    
```

<sup>7</sup> An alternate version of the Paragraph directory could be displayed. Pressing the F11 Function key toggles the screen between a single and multi-column display. (See *Alternate Screen*)



## Creating a Paragraph

To create a Paragraph, press the “F6” Function Key from within the Work with Paragraphs Directory.

Press F6

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

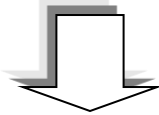
1=Print	2=Edit	3=Copy	4=Delete	7=Rename
13=Change Description				

Opt	Paragraph	Paragraph Description
—	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
—	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    **F6=Create a Paragraph**    F11=Alternate Screen  
 F21=Command Window



After pressing F6, the CREATE A PARAGRAPH SCREEN appears.

Create a Paragraph

Type choices, press Enter.

Name . . . . .

Paragraph Description. . . . .

Bottom

F3=Exit    F4=Prompt    F5=Refresh    F12=Cancel    F21=Command Window

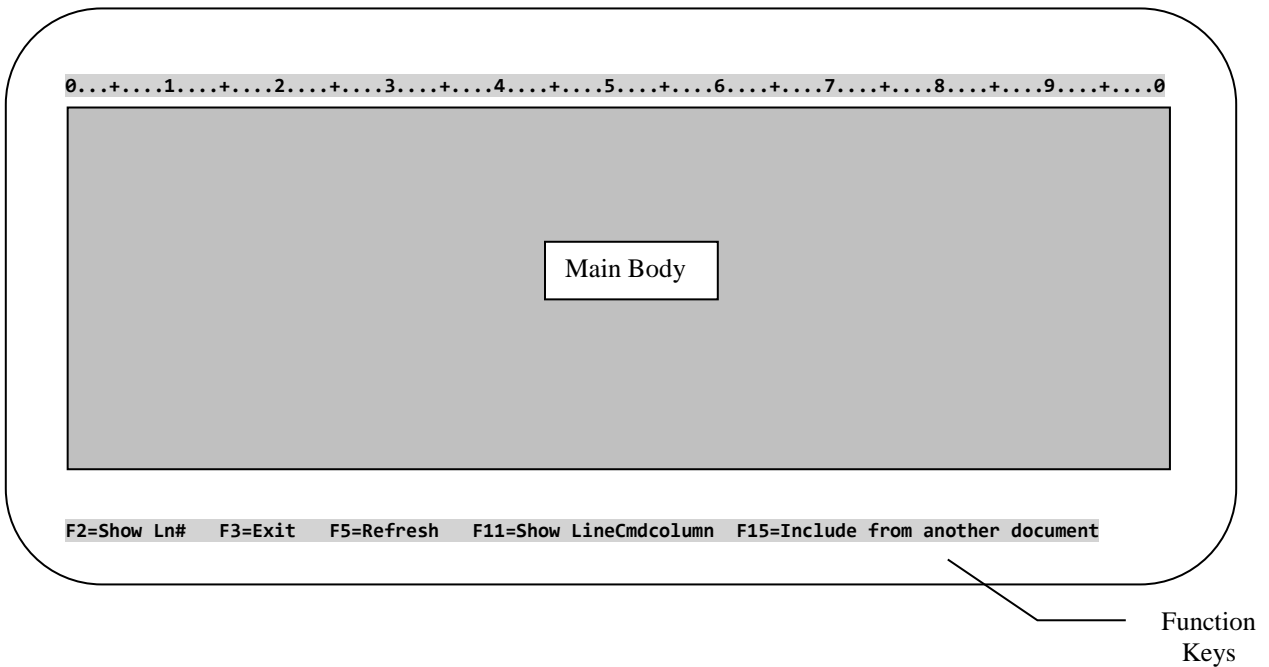
Enter a **Paragraph Name**. A paragraph name may contain up to 10 alphanumeric characters.

Enter a **Paragraph Description**. A paragraph description may contain up to 40 alphanumeric characters.

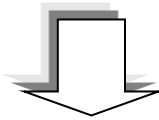
*then* **PRESS ENTER.**



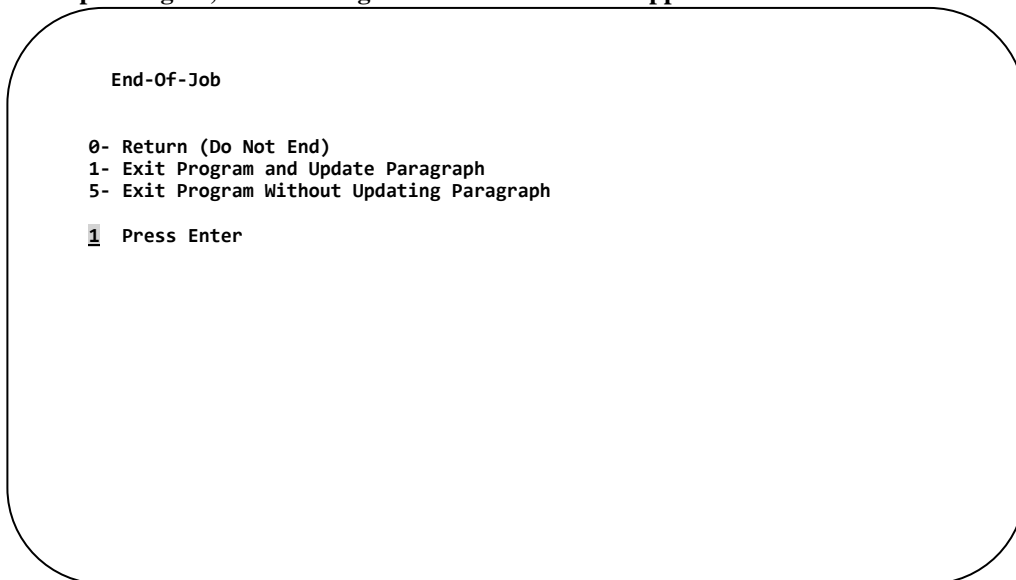
The following PARAGRAPH ENTRY SCREEN appears.<sup>8</sup>



Type the data into the main body of the paragraph. After all text is entered, press **F3** to Exit.



After pressing **F3**, the following End-Of-Job SCREEN appears.



Type a “1” to Exit the program and update the paragraph, then... **PRESS ENTER.**

<sup>8</sup> If the display is configured for 132 columns the Paragraph entry screen will allow for 100 characters per line. If the display is configured for 80 columns, the Paragraph entry screen will allow for 72 characters per line. The default is 100 characters per line and will be used on the following pages.

## Display Line Numbers

To Show Line Numbers within a paragraph, press **F2**. The line numbers will display to the left of the paragraph data. Line numbers may be used within label design to extract lines from a paragraph to print on the label. While the line numbers are displayed on the screen, no editing of the paragraph may occur.

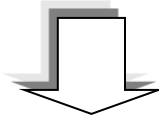
Press **F2**

0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0  
 Some labels require blocks of text to be printed on a label format; for example, warning messages. Instead of "hard coding" these messages into the label format, the text entry program may be used to create the text external to the label format. As you design your label, only a single command is necessary to "pull" the needed text into your label format.

As you design your label, you will enter the name of the text, and where you want the upper left corner of the text to begin printing. The entire document may be printed, a single line only, or a group of lines starting at a particular line number.

Text may be variable, by supplying the document name at label print time. This name can come from a mergefield or entered by a printer operator.

**F2=Show Ln#**    **F3=Exit**    **F5=Refresh**    **F11=Show LineCmdcolumn**    **F15=Include from another document**



After pressing **F2**, the screen is re-displayed with line numbers.

0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0  
 0001 Some labels require blocks of text to be printed on a label format; for example, warning messages.  
 0002 Instead of "hard coding" these messages into the label format, the text entry program may be used  
 0003 to create the text external to the label format. As you design your label, only a single command  
 0004 is necessary to "pull" the needed text into your label format.  
 0005  
 0006 As you design your label, you will enter the name of the text, and where you want the upper left  
 0007 corner of the text to begin printing. The entire document may be printed, a single line only,  
 0008 or a group of lines starting at a particular line number.  
 0009  
 0010 Text may be variable, by supplying the document name at label print time. This name can come from  
 0011 a mergefield or entered by a printer operator.  
 0012  
 0013  
 0014  
 0015  
 0016  
 0017  
 0018  
 0019  
 0020  
 0021  
 0022

Line  
Numbers

**F2=Hide Ln#**    **F3=Exit**    **F5=Refresh**    **F11=Show LineCmdcolumn**    **F15=Include from another document**

To Hide Line Numbers, press Function Key "**F2**" again. No changes can be made to the paragraph while the Line Numbers are displayed on the screen.

## Using the Line Command Column

The Line Command Column is used to perform maintenance functions from within the paragraph entry screen. These functions include; **copying, moving, inserting,** and **deleting** lines or groups of lines. Each of these functions is covered separately in this section.

To display the **LINE COMMAND COLUMN**, press **F11** from within the paragraph entry screen.

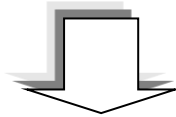
Press F11

0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0  
Some labels require blocks of text to be printed on a label format; for example, warning messages. Instead of "hard coding" these messages into the label format, the text entry program may be used to create the text external to the label format. As you design your label, only a single command is necessary to "pull" the needed text into your label format.

As you design your label, you will enter the name of the text, and where you want the upper left corner of the text to begin printing. The entire document may be printed, a single line only, or a group of lines starting at a particular line number.

Text may be variable, by supplying the document name at label print time. This name can come from a mergefield or entered by a printer operator.

F2=Show Ln# F3=Exit F5=Refresh **F11=Show LineCmdcolumn** F15=Include from another document



After pressing F11, the **COMMAND LINE COLUMN SCREEN** is displayed.

0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0  
Some labels require blocks of text to be printed on a label format; for example, warning messages. Instead of "hard coding" these messages into the label format, the text entry program may be used to create the text external to the label format. As you design your label, only a single command is necessary to "pull" the needed text into your label format.

As you design your label, you will enter the name of the text, and where you want the upper left corner of the text to begin printing. The entire document may be printed, a single line only, or a group of lines starting at a particular line number.

Text may be variable, by supplying the document name at label print time. This name can come from a mergefield or entered by a printer operator.



Line  
Command  
Column

F2=Show Ln# F3=Exit F5=Refresh **F11=Hide LineCmdcolumn** F15=Include from another document











## Include Lines from Another Document

To Include lines from another Document, press Function Key “**F15**”.

The Include feature allows a user to combine parts of other paragraphs or start from an existing paragraph.

Press **F15**

0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0  
 Some labels require blocks of text to be printed on a label format; for example, warning messages. Instead of "hard coding" these messages into the label format, the text entry program may be used to create the text external to the label format. As you design your label, only a single command is necessary to "pull" the needed text into your label format.

As you design your label, you will enter the name of the text, and where you want the upper left corner of the text to begin printing. The entire document may be printed, a single line only, or a group of lines starting at a particular line number.

Text may be variable, by supplying the document name at label print time. This name can come from a mergefield or entered by a printer operator.

F2=Show Ln#   F3=Exit   F5=Refresh   F11=Show LineCmdcolumn   **F15=Include from another document**

After pressing **F15** the **DOCUMENT DIRECTORY** screen is displayed.

Document Directory

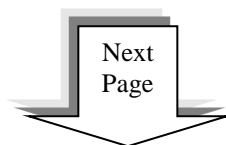
Position to . . . \_\_\_\_\_

1=Select

1 FORMULA197  
 \_ SAMPTXT

F12=Previous

Place a “1” next to the document you wish to include from, then... **PRESS ENTER.**



## Chapter 6 - Work with Paragraphs

The INCLUDE DOCUMENT SCREEN is displayed.

```

                                INCLUDE DOCUMENT          FORMULA197
.....
:  _ =====GENERAL DESCRIPTION (lines 2-13)=====
:  _ FORMULA 197 is a non-flammable product which can be applied without fire
:  _ hazard. Also solvent emissions are almost totally non-existent. This
:  _ product contains ingredients which may be harmful if carelessly or in-
:  _ correctly used. Use, and observe precautions as directed by XYZ Company
:  _ representative. Avoid contact with eyes or prolonged contact with skin.
:  _ CC Do not take internally. Use with adequate ventilation. For accidental
:  _ contact, flush promptly with water; for eyes, continue flushing with
:  _ CC plenty of water and get medical attention.
:  _
:  _
:  _
:  _ =====STORAGE SECTION (lines 15-25)=====
:  _ Keep stored in a dry location. Keep stored where temperatures will not
:  _ exceed 90 degrees Fahrenheit. Keep stored out of reach of children. Lid
:  _ must be tightly sealed. Container must be stored in upright position.
:  _
:  _
.....
F12=Cancel  F15=Show Directory  F21=System Command Line
```

To include a single line from this document, place a **C** next to the line you wish to copy.

To include a group of lines from this document, place a **CC** next to the lines you wish to copy.

Then... **PRESS ENTER**.

The Paragraph Entry screen is re-displayed in Line Command Column mode. The next step is to indicate where you wish to place the lines copied from the previous document.

Place an **"A"** (After) or **"B"** (before) to next to the line you wish to insert the copied lines after or before. Then, **PRESS ENTER**. In this example, the included lines were added after the end of the paragraph.

```

0...+...1...+...2...+...3...+...4...+...5...+...6...+...7...+...8...+...9...+...0
_  Some labels require blocks of text to be printed on a label format; for example, warning messages.
_  Instead of "hard coding" these messages into the label format, the text entry program may be used
_  to create the text external to the label format. As you design your label, only a single command
_  is necessary to "pull" the needed text into your label format.
_
_  As you design your label, you will enter the name of the text, and where you want the upper left
_  corner of the text to begin printing. The entire document may be printed, a single line only,
_  or a group of lines starting at a particular line number.
_
_  Text may be variable, by supplying the document name at label print time. This name can come from
_  a mergefield or entered by a printer operator.
_
_  Do not take internally. Use with adequate ventilation. For accidental
_  contact, flush promptly with water; for eyes, continue flushing with
_  plenty of water and get medical attention.
_
F2=Show Ln#  F3=Exit  F5=Refresh  F11=Hide LineCmdcolumn  F15=Include from another document
```

The Included lines now appear in the current paragraph.

## Printing a Paragraph

To Test Print a Paragraph, place a “1” next to the Paragraph(s) you wish to Print, and **PRESS ENTER**.

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

1=Print	2=Edit	3=Copy	4=Delete	7=Rename
13=Change Description				

**Select**  
OPTION #1

Opt	Paragraph	Paragraph Description
	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
<u>1</u>	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    F6=Create a Paragraph    F11=Alternate Screen  
F21=Command Window



After entering “1”, the following **PRINT PARAGRAPH SCREEN** appears.

Print Paragraph

Block of Text: SAMPTEXT  
Description: SAMPLE BLOCK OF TEXT

Number of Copies . . .	<u>001</u>	
Output Queue . . . . .	<u>PRT01</u>	
Forms Number . . . . .	<u>*STD</u>	
Hold/Save . . . . .	<u>*NO</u>	*YES, *NO, SAVE

LPI (lines per inch) . . . (8,6)	<u>6</u>	
LPP (lines per page) . . . . .	<u>66</u>	
CPI (chars per inch) . . . (10,15)	<u>10</u>	
Print line numbers . . . . . (Y,N)	<u>N</u>	

Enter the IBM i **OUTPUT QUEUE** you wish to print the paragraph to in addition to any other options you want to modify, then... **PRESS ENTER**.

## Editing a Paragraph

To Edit an existing Paragraph, place a “2” next to the Paragraph(s) you wish to Edit, and **PRESS ENTER**.

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

Type options, press Enter.  
 1=Print      2=Edit      3=Copy      4=Delete      7=Rename  
 13=Change Description

Opt	Paragraph	Paragraph Description
	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
<u>2</u>	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    F6=Create a Paragraph    F11=Alternate Screen  
 F21=Command Window

Select  
OPTION #2



After entering “2”, the following **PARAGRAPH EDIT SCREEN** appears.

0...+....1...+....2...+....3...+....4...+....5...+....6...+....7...+....8...+....9...+....0

Some labels require blocks of text to be printed on a label format; for example, warning messages. Instead of "hard coding" these messages into the label format, the text entry program may be used to create the text external to the label format. As you design your label, only a single command is necessary to "pull" the needed text into your label format.

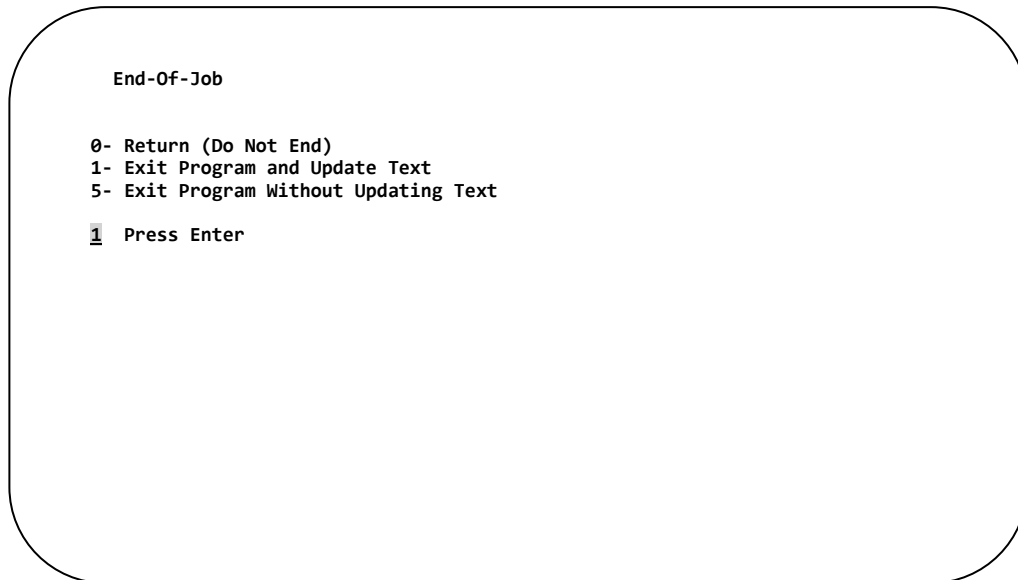
As you design your label, you will enter the name of the text, and where you want the upper left corner of the text to begin printing. The entire document may be printed, a single line only, or a group of lines starting at a particular line number.

Text may be variable, by supplying the document name at label print time. This name can come from a mergefield or entered by a printer operator.

F2=Show Ln#    F3=Exit    F5=Refresh    F11=Show LineCmdcolumn    F15=Include from another document

Make any modifications to the paragraph, see previous sections for editing options. Once all modifications have been made, press **F3** to Exit.

After pressing F3, the following End-Of-Job SCREEN appears.



**PRESS ENTER** to Exit the program and update the paragraph.

## Copying a Paragraph

To Copy a Paragraph, place a “3” next to the Paragraph(s) you wish to Copy, and then **PRESS ENTER**.

Select  
OPTION #3

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

Type options, press Enter.  
1=Print      2=Edit      3=Copy      4=Delete      7=Rename  
13=Change Description

Opt	Paragraph	Paragraph Description
<u>3</u>	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
—	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    F6=Create a Paragraph    F11=Alternate Screen  
F21=Command Window



After entering “3” and pressing Enter, the following **COPY SCREEN** appears.

Copy Paragraph

To copy a Paragraph, type New Name, Description, then press enter.

	New Name	Paragraph Description
FORMULA197	<u>FORMULA200</u>	BLOCK OF TEXT FOR FORMULA 197

Bottom

---

F3=Exit    F5=Refresh    F12=Cancel    F21=Command Window

Enter a new **Paragraph name** and a new **Description**, then... **PRESS ENTER**.

## Deleting a Paragraph

To Delete a Paragraph, place a “4” next to the Paragraph(s) you wish to Delete, and then **PRESS ENTER**.

Select  
OPTION #4

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

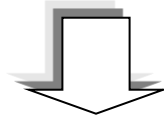
Type options, press Enter.  
1=Print      2=Edit      3=Copy      4=Delete      7=Rename  
13=Change Description

Opt	Paragraph	Paragraph Description
4	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
—	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    F6=Create a Paragraph    F11=Alternate Screen  
F21=Command Window



After entering “4” and pressing Enter, the following **DELETE SCREEN** appears.

Confirm Delete of Paragraph

Press Enter to confirm your choices for Delete.  
Press F12=Cancel to return to change you

Name	Paragraph Description
FORMULA197	BLOCK OF TEXT FOR FORMULA 197

Bottom

---

F12=Cancel

**PRESS ENTER** to Delete the Paragraph. Press **F12** to cancel the Delete.

## Renaming a Paragraph

To Rename a Paragraph, place a “7” next to the Paragraph(s) you wish to Rename, and **PRESS ENTER**.

**Select  
OPTION #7**

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

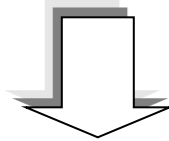
Type options, press Enter.  
1=Print      2=Edit      3=Copy      4=Delete      7=Rename  
13=Change Description

Opt	Paragraph	Paragraph Description
7	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
—	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    F6=Create a Paragraph    F11=Alternate Screen  
F21=Command Window



After entering “7” and pressing Enter, the following **RENAME SCREEN** appears.

Rename Paragraph

To rename, type New Name, Description, press enter.

	New Name	Paragraph Description
FORMULA197	<input type="text"/>	BLOCK OF TEXT FOR FORMULA 197

Bottom

---

F3=Exit      F5=Refresh      F12=Cancel

Enter a new **Paragraph name** and **Description**, then... **PRESS ENTER**.



## Change a Paragraph Description

To Change the Description of a Paragraph, place a “13” next to the appropriate Paragraph(s), and then **PRESS ENTER**.

Select  
OPTION #13

Work with Paragraphs

Position to . . . . . \_\_\_\_\_

Type options, press Enter.

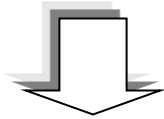
1=Print      2=Edit      3=Copy      4=Delete      7=Rename  
13=Change Description

Opt	Paragraph	Paragraph Description
<u>13</u>	FORMULA197	BLOCK OF TEXT FOR FORMULA 197
—	SAMPTEXT	SAMPLE BLOCK OF TEXT

Bottom

---

F3=Exit    F5=Refresh    F6=Create a Paragraph    F11=Alternate Screen  
F21=Command Window



After entering “13” and pressing Enter, the following **CHANGE SCREEN** appears.

Change Paragraph Description

Type choices, press Enter.

Block of Text Name. . . . . FORMULA197  
Description . . . . . BLOCK OF TEXT FOR FORMULA 197

Bottom

F3=Exit    F5=Refresh    F12=Cancel    F21=Command Window

Enter a new Paragraph Description, then... **PRESS ENTER**.



# Chapter 7

---

## Integration Assistant

**NOTE:** This section of the manual is intended for IBM i programmers.

### Overview

Often for complicated tasks like warehouse management or shipping, barcode labeling is just one facet of a larger application. It may be necessary to integrate label printing into existing applications, while minimizing the complications of creating new source or accessing other programs.

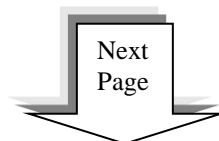
Barcode400's Integration Assistant allows a user to create application source quickly by providing templates for RPGLE, RPGLE Freeform, CLLE and Trigger-based programs.

All that is needed is the type of source and the label design that will be printed from the application.

A source file template is created in our source member TLABARCODE/QSOURCE, using the label format and its merge data structure.

The Source File Templates are NOT complete programs (except for Trigger Source), but a programmer can extract the source elements for use in existing applications, or utilize a source template as a starting point in developing a standalone program.

*See Chapter 2 – Printing From RPG for more information.*



## Chapter 7 – Integration Assistant

At a command line type **LBLMENU**, and then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #8

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Work with Label Formats      Create/Edit/Copy/Delete a Label Format
2. Label Printing               Print Labels using Directory
3. Batch Processing             Batch Processing Menu
4. Work with Graphics           Copy/Delete/Rename/Save a Logo
5. Merge Data                   Retrieve DDS to be used by Labeling System
6. Incrementing Numbers         Setup an Incrementing Control Number
7. Work with Paragraphs         Create/Edit/Copy/Delete Text Blocks
8. Integration Assistant        Create source templates for Application Pgm
9. Utility Menu                 Configure Printers, History Maintenance ...

Selection or command
===> 8

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 Main Menu

```

After selecting Option 8 and pressing Enter, the Integration Assistant Menu appears.

```

Integration Assistant Menu

Select one of the following:

1. RPG Template                Create RPG source to call print driver.
2. RPG Free-Form Template      Create RPG Free-Form source to call print driver
3. CLP Template                Create CLLE source to execute LBLBATCH command.
4. Trigger Template            Create TRIGGER RPGLE source to print labels.

Selection or command
===> _____

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 Main Menu

```

### 1. RPG Template

Select this option to create an RPG ILE source template.

### 2. RPG Free-Form Template

Select this option to create an RPG free-form source template.

### 3. CLP Template

Select this option to create a CL ILE (CLLE) source template.

### 4. Trigger Template

Select this option to create an RPG source template to be executed when a trigger has been assigned to a database file.

Select the type of source to be generated from the above list, and then **PRESS ENTER**.

A popup screen will prompt for the label format to generate the source with.

```

Format Directory
                Position To.. _____

1=Select

  Format  Description
  -----
  — SAMP  VERY BASIC LABEL- USING EXPANDED LETTERS
  — SAMPBAR SAMPLE LABEL USING A BARCODE
  — SAMPFZ SAMPLE ADDRESS LABEL- USING FILL ZONES
  — SAMPLOGO SAMPLE LABEL USING A LOGO
  1 SAMPMRG SAMPLE USING DEMO MERGEFILE
  — SAMPSYS SAMPLE USING SYSTEM DATA (DATE,TIME...)
  — SAMPVBAR SAMPLE USING A VERTICAL BARCODE
  — SAMPVERT SAMPLE LABEL USING VERTICAL PRINT

F3 = Exit
    
```

Place a **1** next to the appropriate label name and **PRESS ENTER**.

All source templates are created in the member TLABARCODE/QSOURCE.

```

Work with Members Using PDM                               S123ABCD

File . . . . . QSOURCE
Library . . . . . TLABARCODE           Position to . . . . . _____

Type options, press Enter.
2=Edit      3=Copy  4=Delete 5=Display      6=Print      7=Rename
8=Display description 9=Save 13=Change text 14=Compile 15=Create module...

  Opt  Member  Type  Text
  ---  ---    ---  ---
  — SAMPMRGCL CLLE  CL Source
  — SAMPMRGR  RPGLE RPG
  — SAMPMRGRF RPGLE Free Fmt
  — SAMPMRGTG RPGLE Trigger

Parameters or command                                     Bottom
===>
F3=Exit      F4=Prompt      F5=Refresh      F6=Create
F9=Retrieve   F10=Command entry F23=More options F24=More keys
    
```

- RPG Template = LABELNAME + R
- RPG Free-Form Template = LABELNAME + F
- CLP Template = LABELNAME + CL
- Trigger Template = LABELNAME + TG

The source files must be moved to another IBM i library to be edited and used in applications.

## Create RPG Source Template

The RPG Template option creates an RPG LE source file using a selected label format to be printed when the compiled program is run.

**Barcode400 Source Template Menu**

Select one of the following:

1. RPG Template	Create RPG source to call print driver.
2. RPG Free-Form Template	Create RPG Free-Form source to call print driver
3. CLP Template	Create CLLE source to execute LBLBATCH command.
4. Trigger Template	Create TRIGGER RPGLE source to print labels.

Selection or command  
 ==> 1

---

F3=Exit F4=Prompt F9=Retrieve F12=Cancel  
 F13=Information Assistant F16=AS/400 Main Menu

From the Source Template Menu, select Option **1**, and **PRESS ENTER**.

Format Directory

Position To.. \_\_\_\_\_

1=Select

Format	Description
— SAMP	VERY BASIC LABEL- USING EXPANDED LETTERS
— SAMPBAR	SAMPLE LABEL USING A BARCODE
— SAMPFZ	SAMPLE ADDRESS LABEL- USING FILL ZONES
— SAMPLOGO	SAMPLE LABEL USING A LOGO
<u>1</u> SAMPMRG	SAMPLE USING DEMO MERGEFILE
— SAMPSYS	SAMPLE USING SYSTEM DATA (DATE,TIME...)
— SAMPVBAR	SAMPLE USING A VERTICAL BARCODE
— SAMPVERT	SAMPLE LABEL USING VERTICAL PRINT

F3 = Exit

At the Format Directory pop-up screen, place a **1** next to the appropriate label name and **PRESS ENTER**.

In this example, the **SAMPMRG** label format was selected. Source template **SAMPMRGR** will be created and placed in the **TLABARCODE/QSOURCE** member.

The source listing is on the following pages. For a detailing explanation of all Barcode400 parameters, see **Printing from RPGLE** in Chapter 2 of this manual.

## Sample RPG LE Source Template

(SAMPMRGR)

```

*-----*
*
*   Label Name:   SAMPMRG
*   Description:
*
*   Created By:   USER1
*   System Name:  S123ABCD
*   Creation Date: 06/23/2008
*   Creation Time: 11.09.31
*
*-----*
*   Insert your files(s) that will be used to populate MergeData.
*-----*
*-----*
*   Barcode400 Parameters
*-----*
D  LblNam      S           8      inz('SAMPMRG')
D  Across     S           2P 0    inz(01)
D  LblDev     S           10     inz('PRT01')
D  LblQty     S           4P 0    inz(0001)
D  Demand    S            1      inz('Y')
D  Perset    S           4P 0    inz(0001)
*-----*
*   Variable Data
*-----*
D  MrgDta     DS           4096
D  Wrk001     0001      0006S 0
D  CNAME      0007      0031
D  ADDR1      0032      0056
D  ADDR2      0057      0081
D  CITY       0082      0095
D  STATE      0096      0097
D  ZIP1       0098      0102
D  ZIP2       0103      0106
D  Wrk002     0107      0116S 0
D  Wrk003     0117      0120S 0
D  Wrk004     0121      0130S 0
D  NAME1      0131      0144
D  NAME2      0145      0158
*-----*
*
*   Main Processing
*-----*
*
*   Place your logic here to populate the MrgDta data structure.
*   The data structure should contain the variable data to be printed
*   on the label.
*
C           exsr      $OvrSR
C           exsr      $LoadWrkSR          Load Work Fields
C           exsr      $LabelSR
C           eval      *inlr = *on
*-----*
*   Call Barcode400 Label Print Program
*-----*
C  $LabelSR  Begsr
C           Call      'Z4XI4096'
C           Parm
C           Parm      Lblnam
C           Parm      Across
C           Parm      Lbldev
C           Parm      Lblqty
C           Parm      Demand
C           Parm      Mrgdta
C           Parm      Perset
C           Endsrr

```

```

*-----
*           Override Barcode400 Printer File
*-----
C      $OvrSR      Begsr
C                               Eval      CmdLen = 80

C*Library List
C                               Monitor
C                               Eval      Cmd = 'ADDLIBLE TLABARCODE'
C                               Call     'QCMDEXC'
C                               Parm      Cmd          80
C                               Parm      CmdLen       15 5
C                               On-Error
C                               EndMon
C*
C*Override Prtf
C                               Monitor
C                               Eval      Cmd = 'OVRPRTF FILE(BCLABELS) +
C                               OUTQ('+ %TRIM( LblDev ) + ') +
C                               FORMTYPE(*STD) OVRSCOPE(*CALLLVL)'
C
C                               Call     'QCMDEXC'
C                               Parm      Cmd          80
C                               Parm      CmdLen       15 5
C                               On-Error
C                               EndMon

C                               Endsr

*-----
*           Move Work Fields
*
* Work fields are used to move Packed fields into unpacked work fields
* in the MrgData Data Structure.
*-----

C      $LoadWrkSR  BegSR

C                               eval      Wrk001 = CUST#
C                               eval      Wrk002 = PHONE
C                               eval      Wrk003 = EXTEN
C                               eval      Wrk004 = FAXNO

C                               EndSR

```



## Create RPG Free-Form Source Template

The RPG Free-Form Template option creates an RPG LE Free-Form source file using a selected label format to be printed when the compiled program is run.

**Barcode400 Source Template Menu**

Select one of the following:

1. RPG Template	Create RPG source to call print driver.
2. RPG Free-Form Template	Create RPG Free-Form source to call print driver
3. CLP Template	Create CLLE source to execute LBLBATCH command.
4. Trigger Template	Create TRIGGER RPGLE source to print labels.

Selection or command  
 ==> 2

---

F3=Exit F4=Prompt F9=Retrieve F12=Cancel  
 F13=Information Assistant F16=AS/400 Main Menu

From the Source Template Menu, select Option 2, and **PRESS ENTER**.

Format Directory

Position To.. \_\_\_\_\_

1=Select

Format	Description
— SAMP	VERY BASIC LABEL- USING EXPANDED LETTERS
— SAMPBAR	SAMPLE LABEL USING A BARCODE
— SAMPFZ	SAMPLE ADDRESS LABEL- USING FILL ZONES
— SAMPLOGO	SAMPLE LABEL USING A LOGO
<u>1</u> SAMPMRG	SAMPLE USING DEMO MERGEFILE
— SAMPSYS	SAMPLE USING SYSTEM DATA (DATE,TIME...)
— SAMPVBAR	SAMPLE USING A VERTICAL BARCODE
— SAMPVERT	SAMPLE LABEL USING VERTICAL PRINT

F3 = Exit

At the pop-up screen, place a **1** next to the appropriate label name and **PRESS ENTER**.

In the example above, the **SAMPMRG** label format will be selected. A source file **SAMPMRGRF** will be generated and placed in the **TLABARCODE/QSOURCE** member.

The source listing is on the following pages. For a detailing explanation of all Barcode400 parameters, see **Printing from RPGLE Free-Form** in Chapter 2 of this manual.

## Sample RPG Free-Form Source Template

(SAMPMRGF)

```

//-----
//
// Label Name:      SAMPMRG
// Description:
//
// Created By:      USER1
// System Name:     S123ABCD
// Creation Date:   06/23/2008
// Creation Time:   12.06.48
//
//-----
// Insert your files(s) that will be used to populate MergeData.
//-----

//-----
// Barcode 400 Parameters
//-----
D  LblNam      S           8      inz('SAMPMRG')
D  Across     S           2P 0    inz(01)
D  LblDev     S           10     inz('PRT01')
D  LblQty     S           4P 0    inz(0001)
D  Demand    S            1      inz('Y')
D  PerSet    S           4P 0    inz(0001)

//-----
// Variable Data
//-----
D  MrgDta     DS          4096
D  Wrk001     0001      0006S 0    Org.Fld = CUST#
D  CNAME      0007      0031
D  ADDR1      0032      0056
D  ADDR2      0057      0081
D  CITY       0082      0095
D  STATE      0096      0097
D  ZIP1       0098      0102
D  ZIP2       0103      0106
D  Wrk002     0107      0116S 0    Org.Fld = PHONE
D  Wrk003     0117      0120S 0    Org.Fld = EXTEN
D  Wrk004     0121      0130S 0    Org.Fld = FAXNO
D  NAME1      0131      0144
D  NAME2      0145      0158

//-----
// ProtoType for Barcode400 print driver program
//-----
D  TlaProgram PR          ExtPgm('Z4XI4096')
D  LblNam      S           8
D  Across     S           2P 0
D  LblDev     S           10
D  LblQty     S           4P 0
D  Demand    S            1
D  MrgDta     DS          4096
D  PerSet    S           4P 0

//-----
// ProtoType for qcmdexec. Used to override printer file.
//-----
D  QcmdExec   PR          ExtPgm('QCMDEXC')
D  Cmd        S           4096   Options(*varsize) const
D  CmdLen     S           15P 5  const

D  Cmd        S           4096   varying

```

**Chapter 7 – Integration Assistant**  
*Sample RPG Free-Form Source Template (Cont.)*

```
//-----  
//           M a i n   P r o c e s s i n g  
//-----  
  
/FREE  
  
// Place your logic here to populate the MrgDta data structure.  
// The data structure should contain the variable data to be printed  
// on the label.  
  
    exsr $OvrSR;  
    exsr $LoadWrk;  
    exsr $LabelSR;  
  
    *inlr = *on;  
  
//-----  
//           C a l l   B a r c o d e 4 0 0   L a b e l   P r i n t   P r o g r a m  
//-----  
  
    Begsr $LabelSR;  
  
        CallP TlaProgram    (LblNam   :  
                            Across   :  
                            LblDev   :  
                            LblQty   :  
                            Demand   :  
                            MrgDta   :  
                            PerSet   );  
  
    Endsr;  
  
//-----  
//           O v e r r i d e   B a r c o d e 4 0 0   P r i n t e r   F i l e  
//-----  
  
    Begsr $OvrSR;  
  
    Monitor;  
    Cmd = 'OVRPRTF FILE(BCLABELS) +  
          OUTQ('+ %TRIM( LblDev ) + ') +  
          FORMTYPE(*STD) OVRSCOPE(*CALLLVL)';  
  
    CallP qCmdExec(%TRIM(Cmd):%LEN(%TRIM(Cmd)));  
    On-Error;  
    EndMon;  
  
    Endsr;  
  
//-----  
//           M o v e   W o r k   F i e l d s  
//  
// Work fields are used to move Packed fields into unpacked work fields  
// in the MrgData Data Structure.  
//-----  
  
    BegSR $LoadWrkSR;  
  
        Wrk001 = CUST#;  
        Wrk002 = PHONE;  
        Wrk003 = EXTEN;  
        Wrk004 = FAXNO;  
  
    EndSR;  
  
/END-FREE
```

## Create CLP Source Template

The CLP Template option creates an CLLE source file using a selected label format to be printed when the compiled program is run. The CL source would call a Barcode400 Batch application (LBLBATCH).

**Barcode400 Source Template Menu**

Select one of the following:

1. RPG Template	Create RPG source to call print driver.
2. RPG Free-Form Template	Create RPG Free-Form source to call print driver
3. CLP Template	Create CLLE source to execute LBLBATCH command.
4. Trigger Template	Create TRIGGER RPGLE source to print labels.

Selection or command  
 ==> 3

---

F3=Exit F4=Prompt F9=Retrieve F12=Cancel  
 F13=Information Assistant F16=AS/400 Main Menu

From the Source Template Menu, select Option 3, and **PRESS ENTER**.

Format Directory

Position To.. \_\_\_\_\_

1=Select

Format	Description
— SAMP	VERY BASIC LABEL- USING EXPANDED LETTERS
— SAMPBAR	SAMPLE LABEL USING A BARCODE
— SAMPFZ	SAMPLE ADDRESS LABEL- USING FILL ZONES
— SAMPLOGO	SAMPLE LABEL USING A LOGO
<u>1</u> SAMPMRG	SAMPLE USING DEMO MERGEFILE
— SAMPSYS	SAMPLE USING SYSTEM DATA (DATE,TIME...)
— SAMPVBAR	SAMPLE USING A VERTICAL BARCODE
— SAMPVERT	SAMPLE LABEL USING VERTICAL PRINT

F3 = Exit

At the pop-up screen, place a **1** next to the appropriate label name and press *Enter*.

In the example above, the **SAMPMRG** label format will be selected. A source file **SAMPMRGCL** will be generated and placed in the **TLABARCODE/QSOURCE** library.

The source listing is on the following pages. For a detailing explanation of all Barcode400 parameters, see **Batch Processing** in Chapter 2 of this manual.

## Sample CLLE Source Template

(SAMPMGCL)

```

/*****
/*
/* Label Name:  SAMPMRG
/* Description:
/*
/* Created By:  USER1
/* System Name: S123ABCD
/* Crt Date:   06/23/2008
/* Crt Time:   13.44.22
/*
/*****

      Pgm

Dcl      Var (&LblName)  Type (*char) Len(8)  Value ('SAMPMRG ')
Dcl      Var (&QtyFld)   Type (*char) Len(10) Value ('          ')
Dcl      Var (&QtyOvr)   Type (*char) Len(4)  Value ('0001')
Dcl      Var (&Outq)     Type (*char) Len(10) Value ('PRT01   ')
Dcl      Var (&FormTyp)  Type (*char) Len(10) Value ('*STD     ')
Dcl      Var (&Across)   Type (*char) Len(2)  Value ('01')
Dcl      Var (&Hold)     Type (*char) Len(4)  Value ('*NO  ')
Dcl      Var (&MrgFile)  Type (*char) Len(10) Value ('CUSTDEMO ')
Dcl      Var (&MrgLib)   Type (*char) Len(10) Value ('TLABARCODE')
Dcl      Var (&MrgMbr)   Type (*char) Len(10) Value ('*FIRST   ')
Dcl      Var (&Select)   Type (*char) Len(10) Value (*ALL)

AddLibl  Lib (TLABARCODE)
MonMsg   MsgID (CPF0000)

LblBatch  LBLNAM (&LblName)  +
          QTYFLD (&QtyFld)   +
          QTYOVR (&QtyOvr)   +
          OUTQ  (&Outq)     +
          FORM  (&FormTyp)   +
          ACROSS (&Across)   +
          HOLD  (&Hold)     +
          MRGFILE (&MrgFile) +
          MRGLIB (&MrgLib)  +
          MRGMBR (&MrgMbr)  +
          SELECT (&Select)

      EndPgm

* * * * * E N D   O F   S O U R C E   * * * * *

```

## Create Trigger Source Template

### Overview

Mostly, labels using merged data are printed from a batch process or from an application that calls Barcode400 interactively. However, it may be advantageous to produce labels using a trigger program.

A trigger is an action or a set of actions that run automatically when a specified change operation is performed on a physical database file. The IBM i monitors the selected database file and then performs the function when a database operation is performed (ADD, UPDATE, DELETE or READ).

Barcode400's Trigger Template option creates an RPG source file that will execute when a trigger is activated. The primary advantage to using triggers with Barcode400 is the automated response of producing a label immediately after a database record is added or updated, without any additional applications being called.

Once a label design has been created, the source can be created using this option, then modified and compiled. Lastly, the trigger has to be assigned to the database file. This is accomplished with the IBM i command: **ADDPFTRG** (Add Physical File Trigger), which determines what the trigger event is (Add or Update), when the trigger occurs, and what program to call.

### Create Trigger Source

From the Source Template Menu, select Option 4.

**Barcode400 Source Template Menu**

Select one of the following:

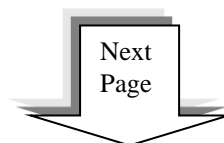
1. RPG Template	Create RPG source to call print driver.
2. RPG Free-Form Template	Create RPG Free-Form source to call print driver
3. CLP Template	Create CLLE source to execute LBLBATCH command.
4. Trigger Template	Create TRIGGER RPGLE source to print labels.

Selection or command  
===> 4

---

F3=Exit F4=Prompt F9=Retrieve F12=Cancel  
F13=Information Assistant F16=AS/400 Main Menu

From the Source Template Menu, select Option 4, and **PRESS ENTER**.



A popup screen will prompt for the Label Format to generate the source for.

Format Directory	
	Position To.. _____
1=Select	
Format	Description
— SAMP	VERY BASIC LABEL- USING EXPANDED LETTERS
— SAMPBAR	SAMPLE LABEL USING A BARCODE
— SAMPFZ	SAMPLE ADDRESS LABEL- USING FILL ZONES
— SAMPLOGO	SAMPLE LABEL USING A LOGO
<u>1</u> SAMPMRG	SAMPLE USING DEMO MERGEFILE
— SAMPSYS	SAMPLE USING SYSTEM DATA (DATE,TIME...)
— SAMPVBAR	SAMPLE USING A VERTICAL BARCODE
— SAMPVERT	SAMPLE LABEL USING VERTICAL PRINT
F3 = Exit	

Place a **1** next to the appropriate label name and **PRESS ENTER**.

In the example above, the **SAMPMRG** label format will be selected. A source file **SAMPMRGTG** will be generated and placed in the **TLABARCODE/QSOURCE** member.

The source listing is on the following pages. You will need to **MODIFY** the source for specific printing parameters and trigger program events. Once complete, compile the program in a different source file.

For a detailed explanation of the **CALL** statement parameters, see **Printing from RPGLE** in Chapter 2 of this manual.

## Adding a Trigger to the Database File

Once the program has been compiled, use the IBM i command **ADDPFTRG** to add the trigger(s) to the database file.

In the examples below, the program **SAMPMRGTG** will print a label (**SAMPMRG**) when a record has been added to the database file **CUSTDEMO** (Example 1) or when it has been updated (Example 2).

Example 1: (INSERT AFTER)

Print a label **AFTER** a record has been **ADDED** to the file.

```
ADDPFTRG FILE(CUSTDEMO) ALWREPCHG(*YES) +
PGM(*LIBL/SAMPMRGTG) TRGTIME(*AFTER) TRGEVENT(*INSERT)
```

Example 2: (UPDATE AFTER)

Print a label **AFTER** a record has been **UPDATED** in the file.

```
ADDPFTRG FILE(CUSTDEMO) ALWREPCHG(*YES) +
PGM(*LIBL/SAMPMRGTG) TRGTIME(*AFTER) TRGEVENT(*UPDATE)
```

A database file can support numerous triggers performing different actions, each based on unique parameter criteria.

## Sample Trigger Source Template (SAMPMRGTG)

```

*-----
*   Label Name:      SAMPMRGTG
*
* PURPOSE: Generic Trigger program to print a label when a record is
*           inserted or updated from a file.
*
*-----
*   Barcode 400 Parameters
*-----
D LblNam      S           8      inz('SAMPMRG')
D Across     S           2P 0    inz(01)
D LblDev     S           10     inz('PRT01')
D LblQty     S           4P 0    inz(0001)
D Demand    S           1       inz('Y')
D Perset     S           4P 0    inz(0001)
D MrgDta     DS          4096
D WkField001 0001      0006S 0
D WkField002 0007      0031
D WkField003 0032      0056
D WkField004 0057      0081
D WkField005 0082      0095
D WkField006 0096      0097
D WkField007 0098      0102
D WkField008 0103      0106
D WkField009 0107      0116S 0
D WkField010 0117      0120S 0
D WkField011 0121      0130S 0
D WkField012 0131      0144
D WkField013 0145      0158
*-----
*   Trigger Buffer and Trigger Buffer Length Declarations
**-----
D TrgBufLen   S           10I 0
*
D TrgBuffer   DS
D TgFile      10
D TgLib       10
D TgMbr       10
D Event       1
D Time        1
D CommitLocklev 1
D Reserve1    3
D Ccsid       10I 0
D Rrn         10I 0
D Reserve2    4
D BefRecOffset 10I 0
D BefRecLen   10I 0
D BefNullOffset 10I 0
D BefNullLen  10I 0
D AftRecOffset 10I 0
D AftRecLen   10I 0
D AftNullOffset 10I 0
D AftNullLen  10I 0

```



Chapter 7 – Integration Assistant  
Sample Trigger Source Template (Cont.)

```

*-----
*
*           Pointers
D  pBefore   S           *
D  pAfter    S           *
*
*           Before Record
D  BeforeDS  E DS       Extname (CUSTDEMO)
D                                     Based(pBefore)
D                                     Qualified
*
*           After Record
D  AfterDS   E DS       Extname (CUSTDEMO)
D                                     Based(pAfter)
*
*           Event Values
D  Insert    C           '1'
D  Delete    C           '2'
D  Update    C           '3'
D  Read      C           '4'
*
*           Time Values
D  After     C           '1'
D  Before    C           '2'
*-----
*
* Two parameters are passed automatically when the trigger fires.
* Trigger buffer (TrgBuffer) and Trigger buffer length (TrgBufLen)
*-----
C      *Entry      PList
C                                     Parm          TrgBuffer
C                                     Parm          TrgBufLen

C* Map Trigger Buffer into BeforeDS & AfterDS
C      eval      pBefore = %ADDR(TrgBuffer)
C                                     + BefRecOffset
C      eval      pAfter  = %ADDR(TrgBuffer)
C                                     + AftRecOffset
C* Fields from the file now have data.

C* Trigger Time MUST be After & Event MUST be Insert or Update to print.
C      If        Time = After
C      If        Event = Insert or
C      If        Event = Update
C      exsr      LoadMrgSR
C      exsr      OvrSR
C      exsr      PrintSR
C      EndIf
C      EndIf

C      eval      *inlr = *on
C*=====
C      PrintSR   Begsr
C*=====
C* Call Barcode400 Label Print Program

C      Call      'Z4XI4096'
C      Parm      Lblnam
C      Parm      Across
C      Parm      Lbldev
C      Parm      Lblqty
C      Parm      Demand
C      Parm      Mrgdta
C      Parm      Perset

C      Endsrr

```

```

C*=====
C   OvrSR          Begsr
C*=====
C* Override Barcode400 Printer File

C           Eval          CmdLen = 80

C*Library List
C           Monitor
C           Eval          Cmd = 'ADDLIBLE TLABARCODE'
C           Call          'QCMDEXC'
C           Parm          Cmd          80
C           Parm          CmdLen      15 5
C           On-Error
C           EndMon

C*Override Prtf
C           Monitor
C           Eval          Cmd = 'OVRPRTF FILE(BCLABELS) +
C           OUTQ('+ %TRIM( LblDev ) + ') +
C           FORMTYPE(*STD) OVRSCOPE(*CALLLVL) '
C           Call          'QCMDEXC'
C           Parm          Cmd          80
C           Parm          CmdLen      15 5
C           On-Error
C           EndMon

C           EndsR
C*=====
C   LoadMrgSR     BegSR
C*=====

C           eval          WkField001 = CUST#
C           eval          WkField002 = CNAME
C           eval          WkField003 = ADDR1
C           eval          WkField004 = ADDR2
C           eval          WkField005 = CITY
C           eval          WkField006 = STATE
C           eval          WkField007 = ZIP1
C           eval          WkField008 = ZIP2
C           eval          WkField009 = PHONE
C           eval          WkField010 = EXTEN
C           eval          WkField011 = FAXNO
C           eval          WkField012 = NAME1
C           eval          WkField013 = NAME2

C           EndSR

```

# Chapter 8

---

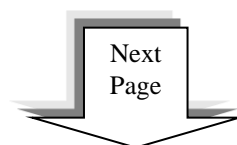
## Utility Menu

### Overview

Additional functions of the Barcode400 Labeling Software are available in the Utility Menu.

Users can assign printers to output queues in the **Configure Printers** option. Label format history files can be created, viewed or reprinted in **History Maintenance**. **Download Fonts** installs additional font types to select printers that can then be accessed for label design. Reports detailing the list of available formats, or label designs that use merge data or formats using Graphics can be printed out from **Format Listing**.

Label formats and logos can be copied from one IBM i unit or partition to another, using the **Transfer Formats** and **Transfer Logos** options.



## 8 – Utility Menu

At a command line type **LBLMENU** and then **PRESS ENTER** to display the Barcode400 Main Menu.

Select  
OPTION #9

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Work with Label Formats      Create/Edit/Copy/Delete a Label Format
2. Label Printing               Print Labels using Directory
3. Batch Processing             Batch Processing Menu
4. Work with Graphics           Copy/Delete/Rename/Save a Logo
5. Merge Data                   Retrieve DDS to be used by Labeling System
6. Incrementing Numbers         Setup an Incrementing Control Number
7. Work with Paragraphs         Create/Edit/Copy/Delete Text Blocks
8. Integration Assistant        Create source templates for Application Pgm
9. Utility Menu                  Configure Printers, History Maintenance ...

Selection or command
===> 9

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 Main Menu

```

After selecting option #9, the **UTILITY** menu appears.

```

MNUUTL                      Utility Menu

Select one of the following:

1. Configure Printers          Associate printer types with Output Queues
2. History Maintenance         Setup, View, Re-print, and Manage History Files
3. Download Fonts              Download Fonts to Thermal Printers
4. Format Listing               Print label format reports
5. Transfer Formats            Transfer label formats to remote iSeries.
6. Transfer Logos              Transfer logos to remote iSeries.

Selection or command
===>

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu

```

Select the desired Option number and then **PRESS ENTER**.





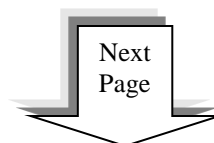
# History Maintenance

## Overview

It may be necessary to recall a specific label that has already been printed. Knowing when or where a format was last printed can determine if a shipment was already labeled or needs to be. Also, if a label gets damaged or lost, an extra copy will have to be printed – but what if the file has already been processed?

The History Maintenance program creates a file that stores records and associated system data logged for a specified label format. The History File can be displayed, searched, printed as a report, or records can be reprinted. History Files can be deactivated and re-activated as desired or deleted when no longer needed.

***\*NOTE:** History Files are archived records of printed labels; they do not interfere or access your merged data files.*



## 8 – Utility Menu

From the Barcode400 Utility Menu, select Option 2.

Select  
OPTION #2

```

MNUUTL                               Utility Menu

Select one of the following:

1. Configure Printers      Associate printer types with Output Queues
2. History Maintenance    Setup, View, Re-print, and Manage History Files
3. Download Fonts         Download Fonts to Thermal Printers
4. Format Listing         Print label format reports
5. Transfer Formats       Transfer label formats to remote iSeries.
6. Transfer Logos        Transfer logos to remote iSeries.

Selection or command
===> 2

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```

After selecting Option 2 and pressing **ENTER**, the History Maintenance screen appears.

Options

```

13:41:28                               History Maintenance                               8/15/14

Position to.. _____

1=Activate    2=Properties    4=Delete File    5=Display    6=Reprint Label
7=List        8=Delete Records  9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
-    CUSTLBLPF    NONACT  CUSTLBL  06/12/14  06/14/14  USER1    20
-    SAMPMRGPF    ACTIVE  SAMPMRG  06/15/14

Bottom

F3=Exit  F5=Refresh  F6=Create History File
    
```

The History Maintenance screen displays the following parameters:

<b>History File:</b>	Name of the file storing the label history.
<b>Status:</b>	Indicates if the History File is Activated or DeActivated.
<b>Label Format:</b>	Name of the label format being archived.
<b>Beginning Date:</b>	Date the file was last activated.
<b>Ending Date:</b>	Date the file was deactivated. <i>This will not appear if file is active.</i>
<b>User :</b>	Name of the user who <i>last activated</i> the History File.
<b>Total Records:</b>	Number of records currently in the History File.



## Creating a History File

To create a new history file, press **F6** from the History Maintenance screen.

```

6/12/14                Create History File                09:33:19
Type Choices, press Enter.
Format Name . . . . . : _____ Name, F4=Select
    
```

From the Create History File screen, enter the name of the label format you want to archive information from. To select from your Label Directory, press **F4**. The Format Directory pop-up appears.

Interactively printing labels that use a History File requires calling the TLAPRNT program, see *Chapter 2 – Printing from RPGLE or Chapter 2 – Printing from RPG Freeform*.

**\*WARNING\*** - Once a History File has been created, you will **NOT** be able to alter or update the format. Any future changes would require creating a copy of the format and altering the copy for future use.

**\*NOTE:** A History File **CANNOT** be created for a format with more than 1 incrementing number.

```

                                Format Directory
                                Position To.. _____
1=Select
__ Format   Description
__ SAMPA   A VERY BASIC LABEL
__ SAMPLE  SAMPLE LABEL DESIGN
1 SAMPMRG BASIC LABEL WITH MERGE DATA
                                More...
F3 = Exit
    
```

Place a **1** next to the name of the format to record a history file, and **PRESS ENTER**. The History Maintenance directory returns.

```

13:41:28                History Maintenance                8/15/14
                                Position to.. _____
1=Activate  2=Properties  4=Delete File  5=Display  6=Reprint Label
7=List      8=Delete Records 9=DeActivate
Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
-   CUSTLBLPF     NONACT  CUSTLBL  06/12/14  06/14/14  USER1     20
-   SAMPMRGPF     ACTIVE  SAMPMRG  06/15/14                USER1
                                Bottom
F3=Exit  F5=Refresh  F6=Create History File
    
```

The new history file has been added to the directory. The file is automatically named; using the label format name plus 'PF' and Beginning Date is set to the current system day.

## Activate / DeActivate History

When created, a History File is automatically *activated*. This means any time the selected label format is printed, a record is added to the history. Those records can be displayed, searched, organized or reprinted.

The directory shows which history files are activated (ACTIVE) and deactivated (NONACT) and when a file was last activated (Beg. Date).

```

13:41:28                      History Maintenance                      8/15/14

                                Position to.. _____

1=Activate   2=Properties      4=Delete File  5=Display   6=Reprint Label
7=List       8=Delete Records  9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
-      CUSTLBLPF      NONACT   CUSTLBL   06/12/14   06/14/14   USER1     20
-      SAMPMRGPF      ACTIVE   SAMPMRG   06/15/14
    
```

Bottom

F3=Exit F5=Refresh F6=Create History File

A history file can be *deactivated* any time by placing a **9** next to the appropriate file. **PRESS ENTER.**

The history is NOT deleted, but no new records will be added to that history file. The directory also displays when a deactivated file was stopped (End Date).

A deactivated file can be *re-activated* anytime, by placing a **1** next to the appropriate file name and then **PRESS ENTER.**

```

13:41:28                      History Maintenance                      8/15/14

                                Position to.. _____

1=Activate   2=Properties      4=Delete File  5=Display   6=Reprint Label
7=List       8=Delete Records  9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
-      CUSTLBLPF      ACTIVE   CUSTLBL   06/15/14
-      SAMPMRGPF      ACTIVE   SAMPMRG   06/15/14
    
```

Bottom

F3=Exit F5=Refresh F6=Create History File

When a file is re-activated, the Status changes to ACTIVE, the Beginning Date changes to the current date and the End Date value is deleted.

## View History Properties

To view more detailed parameters of existing history files, place a **2** in the prompt next to the file name and **PRESS ENTER**.

The History File Properties screen appears.

```

6/12/14      History Properties for SAMPMRGPF      09:54:28

Format Name . . . . . : SAMPMRG
Merge File. . . . . : CUSTDEMO
Record Format. . . . . : CUSTR
Library. . . . . : TLABARCODE

Start Date. . . . . : 06/12/14
Status . . . . . : ACTIVE

Total Records . . . . . : 00000000
Created by . . . . . : USER1

To Continue, Press ENTER
  
```

The screen displays the same basic data as the directory, but also Merge File information.

To return to the History Maintenance menu, **PRESS ENTER**.

## Delete History File

To remove a history file completely, place a **4** next to the appropriate History File name and **PRESS ENTER**. The following pop-up screen will appear.

```

Delete History File

Delete history file for SAMPMRG...(Y/N):  N
File SAMPMRGPF will be deleted.

F3=Exit
  
```

Enter '**Y**' in the Prompt and **PRESS ENTER** to delete the history file, or press **F3** to cancel.

## Display History File

The History Maintenance allows a user to view a history file.

```

13:41:28                History Maintenance                8/15/14

                                Position to.. _____

1=Activate    2=Properties    4=Delete File    5=Display    6=Reprint Label
7=List        8=Delete Records  9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User_____  Tot. Rec
  5    CUSTLBLPF      NONACT   CUSTLBL   06/12/14  06/14/14  USER1          20
  5    SAMPMRGPF      ACTIVE   SAMPMRG   06/15/14                USER1           2
    
```

From the History Maintenance screen, select the file to display by placing a **5** next to the appropriate history file name and **PRESS ENTER**.

The Display Report screen appears, listing the archived records.

```

                                Display Report

Position to line . . . . . _____  Report width . . . . . : 400
Shift to column . . . . . _____

Line  . . . . .1. . . . .2. . . . .3. . . . .4. . . . .5. . . . .6. . . . .7. . . . .8. . . . .9. . . . .10. . .
RCDSEQ  PRT_DATE  PRT_TIME  CUST#  CNAME          ADDR1          ADDR2
000001   1  2008-08-14  09.41.32    1  DOE INC.       1623 MAIN STREET  SUITE
000002   2  2008-08-14  09.41.33    2  SNOW INC.      147A WOODLAND DRIVE
    
```

Users can scroll (**Page Down**) through longer results and reposition to the right (**F20**) to see additional field values. Also, the user can jump to specific line numbers or column positions, using prompts on the screen.

Press **F12** or **F3** to exit back to the History Maintenance menu.

## Reprint History File

The History Maintenance allows a user to search records in the History File and reprint labels using the historical data.

```

13:41:28                History Maintenance                8/15/14
                                Position to.. _____

1=Activate    2=Properties    4=Delete File    5=Display    6=Reprint Label
7=List        8=Delete Records 9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
-      CUSTLBLPF      NONACT   CUSTLBL   06/12/14  06/14/14  USER1     20
-      SAMPMRGPF      ACTIVE   SAMPMRG   06/15/14
  
```

From the History Maintenance screen, select the file to display by placing a **6** next to the appropriate history file name and **PRESS ENTER**. The following pop-up may appear.

Retrieving Data, One Moment Please.

Displaying the History File may take a moment. Then, the Reprint Label screen appears.

```

                                Reprint Label SAMPMRG
1=Reprint Label  4=Delete Record  5=Display Record  Control...: _____
Scan.....: _____

RCDSEQ  PRT_DATE  PRT_TIME  CUST#  CNAME                ADDR1                ADDR2
- 0000001  2008-06-12  13.54.58  000001  DOE INC.            1623 MAIN STREET     SUITE 300
- 0000002  2008-06-12  13.54.59  000003  SMITH INC.          147A WOODLAND DRIVE

F3=Exit  F7=Modify Field View
                                Bottom
  
```

*\*NOTE: The Reprint Screen requires 132 column-widths to display.*

To locate a specific record, enter a search value in the Scan prompt and **PRESS ENTER**. This value is case-sensitive.

To confirm the record is the correct one, the complete record can be displayed, by placing a **5** next to the record and then **PRESS ENTER**

The individual record can also be deleted from the History File. Place a **4** next to the record and then **PRESS ENTER**.

*\*NOTE: To delete a record, the history file must be **DeActivated** first.*

## Reprint Label

Place a **1** next to the record(s) you wish to reprint. Once the record is selected, **PRESS ENTER**.

The Reprint Label pop-up appears.

```
0000001      Reprint Label

                Quantity..... 0001
                Output Queue..... PRINTER1_____

F3=Exit
```

Enter the Quantity of labels to reprint and the Output Queue to print to, and then **PRESS ENTER**.

## Reprint Label Using Incrementing Numbers

If your format uses an Incrementing Number (C! or R!), there will only be **1** record written to the History File. For reprinting, the user will be prompted for the value range of the incrementing number to reprint.

*\*NOTE: If the label contains more than 1 incrementing number, a reprint will NOT be possible.*

```
RcdSeq      Reprint Label
0000004

                Output Queue..... ZEBR4M_____
                Quantity..... 0001
                Starting Number.. 000034
                Ending Number.... 000043

F3=Exit
```

Enter the Quantity of labels to reprint, the Starting and Ending Incrementing Number values and the Output Queue to print to, and then **PRESS ENTER**.

If the Starting or Ending number is not inside the incrementing number range for that record, you will receive an error message and be prompted to fill in a valid value.

## Modify Field View

To more easily produce a list of records to reprint, the Field View can be modified by pressing the **F7** key. Modify Field View screen will appear.

```

                                Modify Field View

File.....: SAMPMRGPF                Label Name..: SAMPMRG
Record Format..: QTLAREC

Select sequence of fields (1-99), Press Enter

Sequence  Field      Description                Length  Type
-----
   PRT_DATE  PRINT DATE                10     DATE
   PRT_TIME  PRINT TIME                 8     TIME
   1  CUST#    CUST #                    6,0    ZONE
   2  CNAME   NAME                      25     CHAR
   ADDR1    ADDRESS LINE 1            25     CHAR
   ADDR2    ADDRESS LINE 2            25     CHAR
   3  CITY    CITY                      14     CHAR
   STATE    STATE                     2     CHAR
   ZIP1     ZIP CODE                   5     CHAR
   ZIP2     ZIP CODE +4                4     CHAR
   4  PHONE   PHONE                     10,0   ZONE
   EXTEN    EXTENSION                  4,0    ZONE
   FAXNO    FAX NO                     10,0   ZONE
   NAME1    CONTACT FIRST NAME        14     CHAR
   NAME2    CONTACT LAST NAME         14     CHAR

F3=Exit
    
```

Select columns to display, using numbers to determine the order they appear, and **PRESS ENTER**. The changed view will appear, in the column order selected.

```

                                Reprint Label SAMPMRG

1=Reprint Label  4=Delete Record  5=Display Record      Control...: _____
Scan.....: _____

RCDSEQ  CUST#  CNAME                CITY                PHONE
- 000001 00001  DOE INC.            ANYTOWN            123-456-7890
- 000002 00002  SMITH INC.          CONSUMERVILLE      987-654-3210

F3=Exit  F7=Modify Field View

                                Bottom
    
```

## Print List

History Maintenance also allows a user to produce a detailed list of all the archived records in the file. This list can then be printed as a report.

```

13:41:28                History Maintenance                8/15/14

                                Position to.. _____

1=Activate   2=Properties   4=Delete File   5=Display   6=Reprint Label
7=List       8=Delete Records 9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
-      CUSTLBLPF      NONACT   CUSTLBL   06/12/14  06/14/14  USER1     20
7      SAMPMRGPF      ACTIVE   SAMPMRG   06/15/14                USER1      2
    
```

From the History Maintenance screen, select the file to display by placing a **7** next to the appropriate history file name and **PRESS ENTER**.

The History File Output Queue pop-up appears.

```

                History File Output Queue

                Output Queue..... _____

                F3=Exit
    
```

Enter the name of the Output Queue to direct the list to and then **PRESS ENTER**. Or, press **F3** to cancel.

### Sample Print List Report

```

                                FILE      LIBRARY  MEMBER   FORMAT
                                SAMPMRGPF  TLAHISTORY  SAMPMRGPF  QTLAREC
                                DATE . . . . . 08/18/14
                                TIME . . . . . 15:58:28

08/18/14 15:58:28                                PAGE 1
RCDSEQ  PRT_DATE  PRT_TIME  CUST#  CNAME                ADDR1                ADDR2
1      2008-06-12 13.54.58  000001  DOE INC.             1623 MAIN STREET     SUITE 300
2      2008-06-12 13.54.59  000002  SMITH INC.           147A WOODLAND DRIVE
    
```



## Delete Records

To help control and maintain the History File, selected records can be deleted. Records are selected for deletion based on the Print Date.

```

13:41:28                History Maintenance                8/15/14

                                Position to.. _____

1=Activate    2=Properties    4=Delete File    5=Display    6=Reprint Label
7=List        8=Delete Records 9=DeActivate

Opt  History File  Status  Lbl Fmt  Beg.Date  End Date  User      Tot. Rec
 8     CUSTLBLPF      ACTIVE   CUSTLBL   06/15/14                USER1      20
-     SAMPMRGPF      ACTIVE   SAMPMRG   06/15/14                USER1       2

                                Bottom

F3=Exit  F5=Refresh  F6=Create History File
  
```

To delete records from a history file, place an **8** next to the appropriate History File name and **PRESS ENTER**. The following pop-up screen will appear.

```

                Delete Records by Print Date

From Date..... 08 / 10 / 2008  MM/DD/YYYY
To Date.....    08 / 15 / 2008  MM/DD/YYYY

F3=Exit
  
```

Select the starting (From) and ending (To) dates for the range of records to delete and then **PRESS ENTER**, or press **F3** to cancel and close the pop-up.

*\*NOTE: To delete an individual record, use the Delete Record option under Label Reprint.*

You will be prompted to confirm the deletion; type 'Y' and **PRESS ENTER** to continue or 'N' to cancel.

*\*WARNING\*: Once the range has been selected and the **ENTER** key has been pressed, the records will be **PERMANENTLY** deleted from the History File. They cannot be restored.*

*NOTE: History Files are archived records of labels; they do not interfere or access merged data files.*

# Download Fonts

Barcode400 supports additional fonts that can be downloaded directly to many supported printer models.

Select  
OPTION #3

```
MNUUTL                                Utility Menu

Select one of the following:

1. Configure Printers      Associate printer types with Output Queues
2. History Maintenance    Setup, View, Re-print, and Manage History Files
3. Download Fonts         Download Fonts to Thermal Printers
4. Format Listing          Print label format reports
5. Transfer Formats       Transfer label formats to remote iSeries.
6. Transfer Logos         Transfer logos to remote iSeries.

Selection or command
===> _____

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
```

The Font Download screen is displayed.

```
TLFNTMNU                                Font Download Menu

Select one of the following:

1. Datamax Thermal Printer
2. Monarch Thermal Printer
3. Printronix Thermal Printer (PGL)
4. Zebra Thermal Printer

Selection or command
===> _____

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
```

Select the brand of printer from the above menu. A Download Font pop up screen will appear. Each pop-up screen is unique to the printer brand options. Once the prompts have been selected, **PRESS ENTER**.

Each brand of printer will have different requirements for storage and use of Downloadable Fonts. Be sure your printer meets those requirements before attempting download.

See APPENDIX B for more details and sample fonts.

## Print Format List

Barcode400 can print a complete list of the formats currently available in the Label Format Directory. Also, users can print a report listing those formats using Merge Data files (M<sub>i</sub>) and the files each format is using or a report specifically listing formats that use Logos (L<sub>i</sub>).

These additional reports can assist in isolating which formats may be affected by a file change or which ones are no longer needed.

Select  
OPTION #4

```

MNUUTL                      Utility Menu

Select one of the following:

1. Configure Printers      Associate printer types with Output Queues
2. History Maintenance    Setup, View, Re-print, and Manage History Files
3. Download Fonts         Download Fonts to Thermal Printers
4. Format Listing          Print label format reports
5. Transfer Formats       Transfer label formats to remote iSeries.
6. Transfer Logos        Transfer logos to remote iSeries.

Selection or command
===> _____

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu

```

After typing '4' and pressing **ENTER**, the Report Menu appears.

```

TLRPTMNU                    Barcode400 Report Menu

Select one of the following:

1. Print Label Format Report
2. Print Label Formats that use MergeData
3. Print Label Formats that use Logos

Selection or command
===> _____

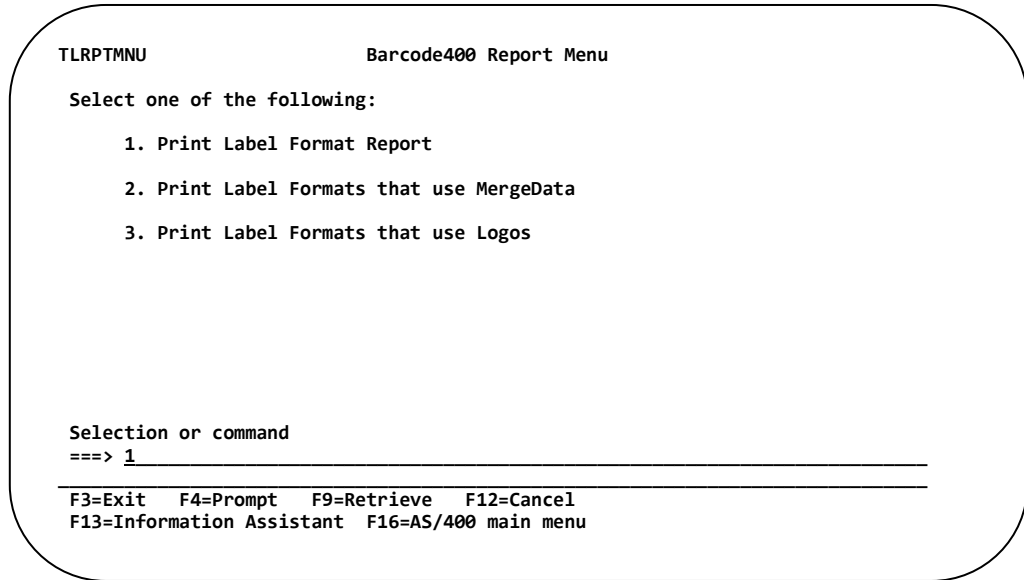
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu

```

Select one of the three report options listed and **PRESS ENTER**.

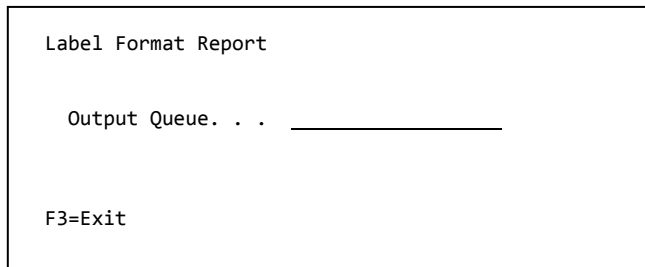
## Print Label Format Report

The first option prints a complete list of all label formats in the directory.



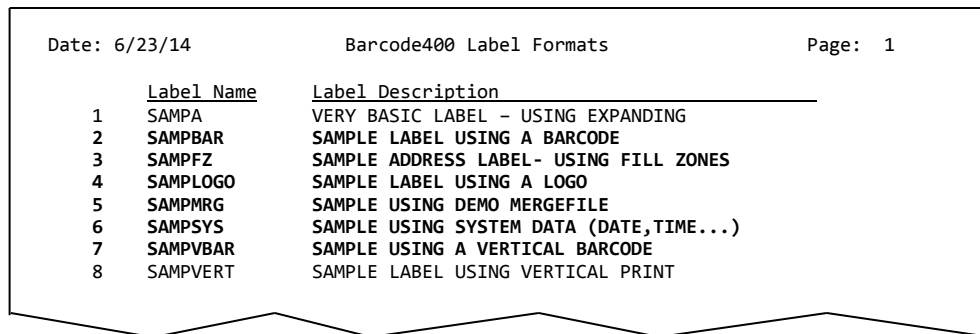
Select Option **1** and **PRESS ENTER**.

The Label Format Report popup appears.



The screen will prompt for an output queue to print the report. Normally, a printer used for publishing standard documents would be the best option. Enter the printer name or press **F3** to cancel.

Ex. Label Format Report -



## Print Label Formats with Merge Data Report

The second option prints a list of all label formats in the directory using merged data and the files used.

```

TLRPTMNU                               Barcode400 Report Menu

Select one of the following:

    1. Print Label Format Report
    2. Print Label Formats that use MergeData
    3. Print Label Formats that use Logos

Selection or command
===> 2

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
  
```

Select Option **2** and **PRESS ENTER**.

The Formats with Merge Files popup appears.

```

Format With Merge Files

Output Queue. . . _____

F3=Exit
  
```

The screen will prompt for an output queue to print the report. Enter the printer name or press **F3** to cancel.

*Ex. Merge Label Formats Report*

	<u>Label Name</u>	<u>Merge File</u>	<u>Record Fmt</u>	<u>Library</u>	<u>Program #</u>
01	SAMPMRG	CUSTDEMO	CUSTR	TLABARCODE	F00115
02	SAMPLE	CUSTDEMO	CUSTR	TLABARCODE	F00115
03	ITEMLABEL	ITEMMASTER	ITEMMSTA	INVENTORY	F00124

## Print Label Formats that Use Logos Report

The third option prints list of all label formats in the directory that use logos on them.

```
TLRPTMNU                Barcode400 Report Menu

Select one of the following:

  1. Print Label Format Report
  2. Print Label Formats that use MergeData
  3. Print Label Formats that use Logos

Selection or command
===> 3

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
```

Select Option **3** and **PRESS ENTER**.

The Formats with Logos popup appears.

```
Format With Logos

Output Queue. . . _____

F3=Exit
```

The screen will prompt for an output queue to print the report.

Enter the name of the printer, and **PRESS ENTER** or press **F3** to cancel.

*Ex. Logo Label Formats Report*

<u>Label Name</u>	<u>Logo Name</u>
1 BC400PO	01 TWENTY5
	02 STAR61
2 COMMON	01 BC400
	02 EPCS
	03 ALIEN64
3 SAMPLOGO	01 SHOE

Unlike the Merge Label Report, the Logo Report lists not only the label name that uses a graphic, but it also lists each graphic used on that format. The logo names are in the order they are placed on the label.

# Transfer Label Formats to Remote iSeries

Label designs can be transferred directly to another IBM i, either as a back-up option, for system mirroring or graduating a label from a test environment CPU to a production unit.

	MNUUTL	Utility Menu
<b>Select OPTION</b>	Select one of the following:	
	1. Configure Printers	Associate printer types with Output Queues
	2. History Maintenance	Setup, View, Re-print, and Manage History Files
	3. Download Fonts	Download Fonts to Thermal Printers
	4. Format Listing	Print Label Format Reports
	5. Transfer Formats	Transfer label formats to remote iSeries.
	6. Transfer Logos	Transfer logos to remote iSeries.
	Selection or command	
	===> 5	
	F3=Exit F4=Prompt F9=Retrieve F12=Cancel	
	F13=Information Assistant F16=AS/400 main menu	

After typing '5' and pressing **ENTER**, the Transfer Labels screen appears.

Release: V5R4M0	Transfer Labels To Remote iSeries	System: S123ABCD
Type choices, press Enter.		
Local iSeries IP Address . . .	123.1.12.123	
Remote iSeries . . . . .	_____	IP Address, Host Name
User . . . . .	_____	
Password . . . . .	.....	
Label Format Name. . . . .	_____	Name, F4=Select
F3=Exit		

Fill in the prompts:

**Remote iSeries IP Address or System Name -** System name or internet address of the IBM i the label format is being transferred to.

**User Name** User ID Name on the Remote System.  
**Password** User Name Password

**Label Format Name\*** - The name of the label format to transfer.  
*\*NOTE: Only one format can be transferred at a time.*

If you do not know the name of the format, press **F4**...

## 8 – Utility Menu

After pressing **F4**, a pop-up of the Format Directory appears.

```
Format Directory
                                Position To.. _____
1=Select
Format  Description
---
SAMPA  VERY BASIC LABEL- USING EXPANDED LETTERS
---
SAMPBAR SAMPLE LABEL USING A BARCODE
---
SAMPFZ  SAMPLE ADDRESS LABEL- USING FILL ZONES
---
SAMPLOGO SAMPLE LABEL USING A LOGO
1  SAMPMRG SAMPLE USING DEMO MERGEFILE
---
SAMPSYS SAMPLE USING SYSTEM DATA (DATE,TIME...)
---
SAMPVBAR SAMPLE USING A VERTICAL BARCODE
---
SAMPVERT SAMPLE LABEL USING VERTICAL PRINT
F3 = Exit
```

Select the format to be transferred by placing a '1' in the prompt and then **PRESS ENTER**. The Transfer Label screen will reappear with the name prompt populated.

```
Release: V5R4M0      Transfer Labels To Remote iSeries      System: S123ABCD

Type choices, press Enter.

Local iSeries IP Address . . . 123.1.12.123
Remote iSeries . . . . . 123.12.123.12 IP Address, Host Name
User . . . . . USER1
Password . . . . . .....

Label Format Name. . . . . SAMPLE Name, F4=Select

F3=Exit
```

Once the other prompts are complete, press **ENTER**. You may receive the following pop-up.

```
Restore Message

Label Exists on remote iSeries

Replace existing Label..(Y,N) Y

F3=Exit
```

If the label format being transferred already existing on the receiving CPU, the software will prompt to replace the existing label. If this is the intent, then type **Y**, and **PRESS ENTER**.

When transfer is complete, the message ' ( **SAMPLE** ) **successfully transferred** ' will appear.

Otherwise, enter **N** to return to the previous screen to choose another label or cancel.



# Transfer Logos to Remote iSeries

Graphics can be transferred directly to another IBM i, either as a back-up option, for system mirroring or graduating a label from a test environment CPU to a production unit.

Select  
OPTION #6

```

MNUUTL                                Utility Menu

Select one of the following:

1. Configure Printers                Associate printer types with Output Queues
2. History Maintenance              Setup, View, Re-print, and Manage History Files
3. Download Fonts                   Download Fonts to Thermal Printers
4. Format Listing                   Print Label Format Reports
5. Transfer Formats                 Transfer label formats to remote iSeries.
6. Transfer Logos                   Transfer logos to remote iSeries.

Selection or command
===> 6

-----
F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu

```

After typing '6' and pressing **ENTER**, the Transfer Logos screen appears.

```

Release: V5R4M0           Transfer Logos To Remote iSeries           System: S123ABCD

Type choices, press Enter.

Local iSeries IP Address . . . 123.1.12.123
Remote iSeries . . . . . _____ IP Address, Host Name
  User . . . . . _____
  Password . . . . . .....

Logo Name . . . . . _____ Name, F4=Select

F3=Exit

```

Fill in the prompts:

**Remote iSeries IP Address or System Name -** System name or internet address of the IBM i the graphic is being transferred to.

**User Name** User ID Name on the Remote System.  
**Password** User Name Password

**Logo Name\* -** The name of the graphic to transfer.  
*\*NOTE: Only one graphic can be transferred at a time.*

If you do not know the name of the graphic, press **F4**...

## 8 – Utility Menu

After pressing **F4**, a pop-up of the Logo Directory appears.

```
Logo Directory
Position To.. _____
1=Select
Format Description
— BRIDE BRIDE 203 DPI
— CAKE CAKE 203 DPI
— CHEESE CHEESE 203 DPI
— GRAPE GRAPES 203 DPI
— SHOE SHOE 203 DPI
— UL5 UNDERWRITERS LAB 203 DPI
F3 = Exit
```

Select the graphic to be transferred by placing a '1' in the prompt and then **PRESS ENTER**. The Transfer Logo screen will reappear with the name prompt populated.

```
Release: V5R4M0      Transfer Logos To Remote iSeries      System: S123ABCD
Type choices, press Enter.
Local iSeries IP Address . . . 123.1.12.123
Remote iSeries . . . . . 123.12.123.12      IP Address, Host Name
User . . . . . USER1
Password . . . . .
Logo Name . . . . . SAMPLE      Name, F4=Select
F3=Exit
```

Once the other prompts are complete, press **ENTER**. You may receive the following pop-up.

```
Restore Message
Logo Exists on remote iSeries
Replace existing Label..(Y,N) Y
F3=Exit
```

If the graphic being transferred already existing on the receiving CPU, the software will prompt to replace the existing label. If this is the intent, then type **Y**, and **PRESS ENTER**.

When transfer is complete, the message ' ( **SAMPLE** ) **successfully transferred** ' will appear.

Otherwise, enter **N** to return to the previous screen to choose another graphic or cancel.

# Appendix A - Program Names

## Program Names- Printer Types

This chart details the appropriate printer type, program name and workstation customization objects to use, based on the brand and model of printer.

Please note that if your label uses our History Maintenance File (*See Chapter 8 – Utility Menu*), you must call our **TLAPRINT** program instead.

*\*\*If the data structure exceeds 1024 bytes, fill the data structure to 4096 bytes and call program xxxx4096.*

Printer Manufacturer/Model	Printer Type	Program Name**	Customizing Object
Adobe Acrobat Printer	TLAPDF	SPDF1024	N/A
Analog Technologies 2020, 8020, 8220, 8045E	ATC20	ATCL1024	MAGNWSCST
Analog Technologies 8030, Laser	ATC30	ATCL1024	MAGNWSCST
Analog Technologies Codajet Print Server	ATCIP	MAGL1024	MAGNWSCST
Argox A50, A150, A200, OS-2030T, OS-204DT, OS-214TT, OS-314TT, R-400, R-600, X-1000, X-2000, X-3000	ELTRON	ELT21024	ELT2WSCST
Argox G-6000 with CableNet UNA	FARGP1	FRPG1024	FRPGWSCST
Argox G-6000 with I-O Corp. Interface	FARGP2	FRPG1024	FRPGWSCST
Argox G-6000 with TCPIP	FARGP3	FRPG1024	FRPGWSCST
Automated Packaging Systems AB-150, AP0125	ATS125	FRGP1024	FRPGWSCST
Avery-Dennison 6404, 6405, 6405-RFID, 6408, 8045E, TTX-450, TTX-650, TTX-950, TTX-1050, TTX-720 (Print /Apply), TDI Tag Printer	NOVEXX	NOVX1024	NOVXWSCST
Avery-Soabar SPX-360 with CableNet UNA	FARGO1	FRGL1024	FRGLWSCST
Avery-Soabar SPX-360 with I-O Corp Interface	FARGO2	FRGL1024	FRGLWSCST
Avery-Soabar SPX-360 with TCPIP	FARGO3	FRGL1024	FRGLWSCST
Avery-Soabar SPX-362 with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
Avery-Soabar SPX-362 with I-O Corp Interface	FARGP2	FRGP1024	FRGPWSCST
Avery-Soabar SPX-362 with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Citizen CLP-521, CLP-621, CLP-1001, CLP-2001, CLP-6001, CLP-6002, CLP-7001, CLP-7002, CLP-7201, CLP-7401, CLP-8301 w/ CableNet	FARGP1	FRGP1024	FRGPWSCST
Citizen CLP-521, CLP-621, CLP-1001, CLP-2001, CLP-6001, CLP-6002, CLP-7001, CLP-7002, CLP-7201, CLP-7401, CLP-8301 w/ IO Interface	FARGP2	FRGP1024	FRGPWSCST
Citizen CLP-521, CLP-621, CLP-1001, CLP-2001, CLP-6001, CLP-6002, CLP-7001, CLP-7002, CLP-7201, CLP-7401, CLP-8301 w/ TCPIP	FARGP3	FRGP1024	FRGPWSCST
C-Ittoh CIE250, CIE300, CIE400, CIE500, CIE600, CIE800, CIE1000	CIEQMS	MAGL1024	MAGLWSCST
C-Ittoh S4 with CableNet UNA	ALGRO1	FRGP1024	FRGPWSCST
C-Ittoh S4 with I-O Corp Interface	ALGRO2	FRGP1024	FRGPWSCST
C-Ittoh S4 with TCPIP	ALGRO3	FRGP1024	FRGPWSCST
C-Ittoh T4 with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
C-Ittoh T4 with I-O Corp Interface	FARGP2	FRGP1024	FRGPWSCST
C-Ittoh T4 with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Data South 300 TX, 600 TX	BC600	MAGL1024	MAGNWSCST
DataMax E-Class, DMX-400, S-Class with CableNet UNA	ALGRO1	FRGP1024	FRGPWSCST
DataMax E-Class, DMX-400, S-Class with I-O Corp Interface	ALGRO2	FRGP1024	FRGPWSCST
DataMax E-Class, DMX-400, S-Class with TCPIP	ALGRO3	FRGP1024	FRGPWSCST
DataMax DMX-430, 600, 800 with CableNet UNA	DMAX1	FRGP1024	FRGPWSCST
DataMax DMX-430, 600, 800 with I-O Corp Interface	DMAX2	FRGP1024	FRGPWSCST
DataMax DMX-430, 600, 800 with TCPIP	DMAX3	FRGP1024	FRGPWSCST
DataMax A-Class, H-Class, I-Class, M-Class, W-Class w/ CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
DataMax A-Class, H-Class, I-Class, M-Class, W-Class w/I-O Interface	FARGP2	FRGP1024	FRGPWSCST

## Appendix A – Program Names

Printer Manufacturer/Model	Printer Type	Program Name**	Customizing Object
DataMax A-Class, H-Class, I-Class, M-Class, W-Class with TCPIP	FARGP3	FRGP1024	FRGPWSCST
DataMax Ovation with CableNet UNA	BANDT1	FRGP1024	FRGPWSCST
DataMax Ovation with I-O Corp Interface	BANDT2	FRGP1024	FRGPWSCST
DataMax Ovation with TCPIP	BANDT3	FRGP1024	FRGPWSCST
DataMax Prodigy Max with CableNet UNA	DPMAX1	FRGP1024	FRGPWSCST
DataMax Prodigy Max with I-O Corp Interface	DPMAX2	FRGP1024	FRGPWSCST
DataMax Prodigy Max with TCPIP	DPMAX3	FRGP1024	FRGPWSCST
Decision Data with Magnum Graphics	DDMAGN	MAGL1024	MAGNWSCST
Eltron/RJS Companion 2231, Eclipse, HT146, LP2122, LP2142, LP2622, LP2642, LP2742, LP2824, LP2844, ORION, P2222, P2242, STRATUS, TLP2722, TLP2046, TLP2344, TLP2642, TLP2722, TLP2742, TLP2746, TLP2824, TLP2844	ELTRON	ELT21024	ELT2WSCST
Eltron/RJS QB440, QB450 with CL+	QB440	RJS21024	RJS2WSCST
Eltron/RJS 240, 260 with CL+	RJS260	RJS61024	RJS6WSCST
Eltron/RJS 285 with CL+	RJS285	RJS61024	RJS6WSCST
Esselte Meto Bandit, EM450, V40, V65, V85 with CableNet UNA	BANDT1	FRGP1024	FRGPWSCST
Esselte Meto Bandit, EM450, V40, V65, V85 with I-O	BANDT2	FRGP1024	FRGPWSCST
Esselte Meto Bandit, EM450, V40, V65, V85 with TCPIP	BANDT3	FRGP1024	FRGPWSCST
Facit MP-4	CT40	CT401024	CT40WSCST
Facit MP-6	CT60	CT601024	CT60WSCST
Facit Continuous Forms Laser	PTXQMS	MAGL1024	MAGNWSCST
Fargo Allegro with CableNet UNA	ALGRO1	FRGP1024	FRGPWSCST
Fargo Allegro with CableNet I-O Interface	ALGRO2	FRGP1024	FRGPWSCST
Fargo Allegro with TCPIP	ALGRO3	FRGP1024	FRGPWSCST
Fargo Prodigy with CableNet UNA	FARGO1	FRGL1024	FRGLWSCST
Fargo Prodigy with CableNet I-O Interface	FARGO2	FRGL1024	FRGLWSCST
Fargo Prodigy with TCPIP	FARGO3	FRGL1024	FRGLWSCST
Fargo Prodigy Plus with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
Fargo Prodigy Plus with CableNet I-O	FARGP2	FRGP1024	FRGPWSCST
Fargo Prodigy Plus with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Genicom 3811, 3812, 3842, 4492, 4592, 4812, 4842, 4912, 4942	GENCOM	MAGL1024	MAGNWSCST
Genicom 6241, 6241-LL, 6321, 6322-DT, 6341, 6342, 6342-DT, 6342-H, 6441, 6442	ELTRON	ELT21024	ELT2WSCST
Genicom 6451, 6451V, 6481	QB440	RJS21024	RJS2WSCST
Genesis 9300 Print & Apply with CableNet UNA	FARGO1	FRGL1024	FRGLWSCST
Genesis 9300 Print & Apply with I-O Corp Interface	FARGO2	FRGL1024	FRGLWSCST
Genesis 9300 Print & Apply with TCPIP	FARGO3	FRGL1024	FRGLWSCST
Genesis 9500 Print & Apply with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
Genesis 9500 Print & Apply with I-O Corp Interface	FARGP2	FRGP1024	FRGPWSCST
Genesis 9500 Print & Apply with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Godex EZ-1100, EZ-1200, EZ-1300	ELTRON	ELT21024	ELT2WSCST
Godex DT2, DT4, EZ1105, EZ1305, HD90, EZ2200, EZ2300, EZ6200, EZ6300	Z140XI	Z4XI1024	Z4XIWSCST
Hewlett-Packard (HP) Laser (AFP Driver)	HPLASR	HP5P1024	Z4XIWSCST
IBI Continuous Forms Laser with Code V	IBI	IBIL1024	MAGNWSCST
IBM 4400-04, 5500-R40, 6700-04 with PGL 203 dpi (4")	IBM204	PGLT1024	PGLTWSCST
IBM 4400-06, 5500-R60, 6700-06 with PGL 203 dpi (6")	IBM206	PGLT1024	PGLTWSCST
IBM 4400-08, 5500-R80, 6700-08 with PGL 203 dpi (8")	IBM208	PGLT1024	PGLTWSCST
IBM 4400-04, 5500-R40, 6700-04 with PGL 300 dpi (4")	IBM304	PGLT1024	PGLTWSCST
IBM 4400-06, 5500-R60, 6700-06 with PGL 300 dpi (6")	IBM306	PGLT1024	PGLTWSCST
IBM 4400-08, 5500-R80, 6700-08 with PGL 300 dpi (8")	IBM308	PGLT1024	PGLTWSCST
IBM 6400, 6500 Series with Code V	PTXIGP	MAGL1024	MAGNWSCST

**Appendix A – Program Names**

<b>Printer Manufacturer/Model</b>	<b>Printer Type</b>	<b>Program Name**</b>	<b>Customizing Object</b>
IBM 7516, 7517 Thermal	IBMZEB	ZEB41024	ZEB4WSCST
Inducomp N-454 with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
Inducomp N-454 with I/O Corp Interface	FARGP2	FRGP1024	FRGPWSCST
Inducomp N-454 with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Intermec 3100 with CableNet UNA	ALGRO1	FRGP1024	FRGPWSCST
Intermec 3100 with I-O Corp Interface	ALGRO2	FRGP1024	FRGPWSCST
Intermec 3100 with TCPIP	ALGRO3	FRGP1024	FRGPWSCST
Intermec 3240, 3440, 4440	IT3440	IT401024	IT40WSCST
Intermec 3400a-d, 3600, 4100, 4400, 7421, 7422 (Legacy Models)	IT4400	IT441024	IT44WSCST
Intermec 3400e (203 dpi)	I3400E	IT201024	IT20WSCST
Intermec 3400e (300 dpi)	IT300	IT301024	IT30WSCST
Intermec 3400e (400 dpi)	IT400	IT401024	IT40WSCST
Intermec 4420	IT4420	IT201024	IT20WSCST
Intermec 4000 with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
Intermec 4000 with I-O Corp Interface	FARGP2	FRGP1024	FRGPWSCST
Intermec 4000 with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Intermec 4630 (300 dpi)	IT4630	IT301024	IT30WSCST
Intermec 4830 (300 dpi)	IT4830	IT301024	IT30WSCST
Intermec PB50	ITPB50	Z4XI1024	Z4XIWSCST
Intermec PC41	ITPC41	ELT21024	ELT2WSCST
Intermec PD41, PD42	ITPD41	IT201024	IT20WSCST
Intermec PF2i	ITPFZ2I	IT201024	IT20WSCST
Intermec PF4, PF4i	ITPF4I	IT201024	IT20WSCST
Intermec PF8D, PF8T w/EPL	ITPF8D	ELT21024	ELT2WSCST
Intermec PL4i	ZQL420	Z4XI1024	Z4XIWSCST
Intermec PM4i, PM43	ITPM4I	IT201024	IT20WSCST
Intermec PX4i, PX6i	ITPX4I	IT201024	IT20WSCST
Mannesman Tally 645, 661, 6045, 6065, 6090, 6091, 6140, 6180	MT661	MAGL1024	MAGNWSCST
Microplex Solid Series F24, F32, F60, F80, F98	IGPPGL	MAGL1024	MAGNWSCST
Monarch 5170	CT60	CT601024	CT60WSCST
Monarch 9445, 9474	MN9474	MN741024	MN74WSCST
Monarch 9446, 9490	MN9446	MN461024	MN46WSCST
Monarch 9411, 9412, 9413, 9414, 9813	MN9813	MN131024	MN13WSCST
Monarch 9800, 9805, 9820, 9830, 9835, 9850, 9860	MN9835	MN981024	MN98WSCST
Monarch 9840, 9855	MN9840	MN831024	MN83WSCST
Novexx Tiger, Lion, Puma, Ocelot, Chess	NOVEXX	NOVX1024	NOVXWSCST
Paxar 520, 540	Z140XI	Z4XI1024	Z4XIWSCST
Printek 4003, 4500, 4503, 8003 with Imager Plus	PTEK	MAGL1024	MAGNWSCST
Printronix L1016 Laser with VGL	L1016	MAGL1024	MAGNWSCST
Printronix L1024 Laser with VGL	L1024	MAGL1024	MAGNWSCST
Printronix L1524 Laser with VGL	L1524	MAGL1024	MAGNWSCST
Printronix Dot Matrix with IGP/VGL	PTXIGP	MAGL1024	MAGNWSCST
Printronix Dot Matrix with QMS	PTXQMS	MAGL1024	MAGNWSCST
Printronix T1006 Thermal with VGL	T1006	VGLT1024	VGLTWSCST
Printronix T2204 with SGL	ELTRON	ELT21024	ELT2WSCST
Printronix T3204 with PGL	PX5204	PGLT1024	PGLTWSCST
Printronix T3306 (DPL) with CableNet UNA	DMAX1	FRGP1024	FRGPWSCST
Printronix T3306 (DPL) with I-O Corp Interface	DMAX2	FRGP1024	FRGPWSCST
Printronix T3306 (DPL) with TCPIP	DMAX3	FRGP1024	FRGPWSCST
Printronix T3306 with IPL	IT4630	IT301024	IT30WSCST
Printronix T3306 with VGL	T1006	VGLT1024	VGLTWSCST
Printronix 4204 with PGL	PX4204	PGLT1024	PGLTWSCST

## Appendix A – Program Names

Printer Manufacturer/Model	Printer Type	Program Name**	Customizing Object
Printronix SL5204, T5204 with PGL (203 dpi / 4")	PX5204	PGLT1024	PGLTWSCST
Printronix SL5206, T5206 with PGL (203 dpi / 6")	PX5206	PGLT1024	PGLTWSCST
Printronix SL5208, T5208 with PGL (203 dpi / 8")	PX5208	PGLT1024	PGLTWSCST
Printronix SL5304, T5304 with PGL (300 dpi / 4")	PX5304	PGLT1024	PGLTWSCST
Printronix SL5306, T5306 with PGL (300 dpi / 6")	PX5306	PGLT1024	PGLTWSCST
Printronix SL5308, T5308 with PGL (300 dpi / 8")	PX5308	PGLT1024	PGLTWSCST
RJS 260, 285 with ZPL	RJSZEB	RJSZ1024	RJSZWSCST
RJS 240, 260, 285 with CL+	RJS260	RJS61024	RJS6WSCST
RJS QB440	QB440	RJS61024	RJS6WSCST
RJS QB450	QB450	RJS21024	RJS2WSCST
Sato M8400	S8400	SATO1024	SATOWSCST
Sato M8400 S	S8400S	SATO1024	SATOWSCST
Sato M8400 RV, RVe, 84PRO	SATO24	SATP1024	SATPWSCST
Sato M8450	S8450	SAT51024	SAT5WSCST
Sato M8460 RV	S8460	SATO1024	SATOWSCST
Sato M8485 (Print and Apply)	S8485L	SATP1024	SATPWSCST
Sato CL408, CL408e	SCL408	SATO1024	SATOWSCST
Sato CL608, CL608e	SCL608	SATO1024	SATOWSCST
Sato CL412, CL412e	SCL412	SAT51024	SAT5WSCST
Sato CL612, CL612e	SCL612	SAT51024	SAT5WSCST
Sato CT400	SCT400	SATL1024	SATOWSCST
Sato CT410	SCT410	SATL1024	SAT5WSCST
Sato GT408	SGT408	SATP1024	SATOWSCST
Sato CG208, CG408	SCG408	SATO1024	SATOWSCST
Sato CG212, CG412	SCG412	SAT51024	SAT5WSCST
Sato CX200, CX208, CX400	SCX200	SATP1024	SATOWSCST
Sato XL400	SXL400	SATL1024	SATOWSCST
Sato XL410	SXL410	SATL1024	SAT5WSCST
Standard Register PT560	CT60	CT601024	CT60WSCST
TEC B-402	CT40	CT401024	CT40WSCST
TEC B-602	CT60	CT601024	CT60WSCST
TEC B-472, SX4	TEC472	TEC21024	TEC2WSCST
TEC B-452, B-572, B-672, B-872, SX5	TEC572	TEC31024	TEC3WSCST
Tharo Apollo 3	APOLL3	APO31024	APO3WSCST
Tharo Freedom, 112+ with CableNet UNA	FARGP1	FRGP1024	FRGPWSCST
Tharo Freedom, 112+ with I-O Interface	FARGP2	FRGP1024	FRGPWSCST
Tharo Freedom, 112+ with TCPIP	FARGP3	FRGP1024	FRGPWSCST
Willet 2610/8 Print & Apply	S8400S	SATO1024	SATOWSCST
Zebra 140, 142, A300, S300, S500, T300	ZEB140	ZEB41024	ZEB4WSCST
Zebra 105S, 105SE, 105SL, 110XI, 140XI, 140XI II, 140XI III, 160S, 160SE, 220XI, 220XI II, 220XI III, DA402, GK420, GX420, S400, S600, Z4000, Z6000, Z4M, Z6M, ZM400, ZM600, 2824-Z, 2844-Z	Z140XI	Z4XI1024	Z4XIWSCST
Zebra QL320	QL320Z	Z4XI1024	Z4XIWSCST
Zebra QL420, RW420	QL420Z	Z4XI1024	Z4XIWSCST
Zebra R4M, R110XI (RFID)	ZR110	Z4XI1024	Z4XIWSCST
Zebra 90, 90A, 91, 92, 95 (Not XI series)	ZEB90	ZEB91024	ZEB9WSCST
Zebra 105 (Not S, SE, SL series)	ZEB105	ZEB51024	ZEB5WSCST
Zebra 90XI, 90XI II, 105SL, 170XI, 170XI II, 3844-Z, 3824-Z, GX430, ZM400+, ZM600+	ZEB170	Z7XI1024	Z7XIWSCST
Zebra R170XI (RFID)	ZR170	Z7XI1024	Z7XIWSCST
Zebra HT146, 2824, 2844, 2443, 2684, 2722, 2742, 2746	ELTRON	ELT21024	ELT2WSCST
Zebra ZE500, 110PAX, 170PAX (203 dpi)	ZPAX2R	Z4XI1024	Z4XIWSCST
Zebra ZE500, 110PAX, 170PAX (300 dpi)	ZPAX3R	Z7XI1024	Z7XIWSCST

# Appendix B – Lookup Codes (Fonts)

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## Appendix B – Lookup Codes (Fonts)

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Monospaced Vector Fonts Bold (F801-F810) .....	B41
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**Appendix B – Lookup Codes (Fonts)**

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# Font Expansion

See the following pages in this Appendix for a list of fonts for your printer.

Enter the desired Font in the Lookup prompt. All information in the Prefix, Data and Suffix fields will print using the same font for that object. To use different fonts, objects must be defined separately.

SpclTn	Down	Over	hh	ww	Data	SAMPFONT	
01	F903	0010	0075	01 01	EXPANSION EXAMPLE		
02	F903	0040	0020	01 01	ZD11		
03	ZD11	0040	0080	00 00	ABCDEFGHJKLMNO		
04	ZD21	0060	0020	01 01	ZD21		
05	ZD21	0060	0080	00 00	ABCDEFGHJKLMNO		
06	F903	0090	0020	01 01	ZD22		
07	ZD22	0090	0080	00 00	ABCDEFGHJKLMNO		
08	F903	0110	0020	01 01	ZD32		
09	ZD32	0110	0080	00 00	ABCDEFGHJKLMNO		

Down	Over	hh	ww	Data		
0040	0080	—	—	ABCDEFGHJKLMNO		
iit.	iit.	it	it	Prefix _____	Suffix _____	

Barcode Type or Lookup....	ZD11		
Line Set(BOX,HLIN,VLIN)...	—		
Extended Char Set(E)..	—		
VERTICAL PRINT=VD..	—		
Tone.....	—		
Descenders(Y,N)....	—		
Field Length..	—	Justify	—
	iit	(L,R,C)	

Cmd1	MrgData
Cmd2	FillZns
Cmd3	End
Cmd4	DeleteIn
Cmd5	ChangeIn
Cmd8	LowerCse
Cmd9	LblSize
Cmd24	MoreKeys
HELP	Assist.

## Expanding Fonts

**Bitmap Fonts** (See Examples B15-B71) Use the last two digits of the font code for expansion. The base font height and width can be expanded up to 9 times. For example, the ZD font shown above can range from ZD11 to ZD99. The third digit of the font code resizes the height while the fourth resizes the width.

See Example below.

**Expansion Example**

<b>ZD11</b>	ABCDEFGHIJKLMNO
<b>ZD21</b>	ABCDEFGHIJKLMNO
<b>ZD22</b>	ABCDEFGHIJKLMNO
<b>ZD32</b>	ABCDEFGHIJKLMNO

Fonts Can Be Expanded 9 Times (Example: ZD99)

Titles Using  
F903 Font

**Vector Fonts** (F901-F910) Use the HH and WW fields for font expansion. The HH and WW fields must have 01 which indicates the base font size.

**Downloaded Fonts** (PBxx – PGxx) where xx is the point size to print. The HH and WW fields must have 01 which indicates the base font size. **Cannot** be expanded.

\*The term *Lookup* in earlier versions referred to a book that was used to lookup a font.

# Special Formatting

A label may require a human readable field to have a calculated check digit in conjunction with a barcode value. Special Formatting will perform a check digit function to a field and format the results with needed spaces. Data will be formatted according to one of three specifications; UCC/SCC, GTIN/UPC, and UPS.

## Change the first position of the lookup code to an asterisk (\*)

*\*NOTE: Some printers do not provide the parenthesis around the Application Identifier (00). In those cases, the parenthesis should be placed on the label as a separate instruction on the label format design.*

**UCC/SSCC** 19 digits in the data field, using sample lookup code **\*D32** . The labeling software will print a total of 20 digits spaced according to GS-1/UCC-EAN SSCC-18 specifications. The 20th digit is a Mod10 check digit

### Label Design

Down	Over	hh	ww	Data
50	50			000001234555555555
ii.	ii.	it	it	Prefix _____ Suffix _____
Barcode Type or Lookup....				<u>*D32</u>

### Printed Results

(00)0 0012345 55555555 8

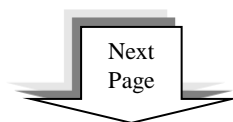
**GTIN/UPC** 13 digits in the data field, using sample lookup code **\*D32** . The labeling software will print a total of 14 digits spaced according to GS-1 GTIN/UPC specifications. The 14th digit is a Mod10 check digit.

### Label Design

Down	Over	hh	ww	Data
50	50			1001234567890
ii.	ii.	it	it	Prefix _____ Suffix _____
Barcode Type or Lookup....				<u>*D32</u>

### Printed Results

1 00 12345 67890 2



## Appendix B – Lookup Codes (Fonts)

### UPS

17 characters in the data field, using sample lookup code \*D32. The labeling software will print a total of 18 digits spaced according to UPS specifications. The 18th digit is a special Mod10 check digit.

#### *Label Design*

Down	Over	hh	ww	Data
<u>50</u>	<u>50</u>	<u>  </u>	<u>  </u>	<u>1Z1235E0011234567</u>
ii.	ii.	it	it	Prefix _____ Suffix _____
Barcode Type or Lookup.... <u>*D32</u>				

#### *Printed Results*

1Z 123 5E0 01 1234 5675

# Download Fonts

Barcode400 supports True Type fonts downloaded to a select list of printers.

Fonts are stored to flash memory, so they will remain stored in the printer, even if the printer is turned off. To download a font to a printer, use the Download Fonts function in the Utility Menu.

At a command line type **LBLMENU**, then **PRESS ENTER** to display the Barcode400 Main Menu.

Select Option **9** (Utility Menu), then **PRESS ENTER**.

Select  
OPTION #9

```

>>>>> T.L. Ashford & Associates <<<<<<
Barcode Labeling Software
V4.0

Select one of the following:

1. Work with Label Formats      Create/Edit/Copy/Delete a Label Format
2. Label Printing               Print Labels using Directory
3. Batch Processing             Batch Processing Menu
4. Work with Graphics           Copy/Delete/Rename/Save a Logo
5. Merge Data                  Retrieve DDS to be used by Labeling System
6. Incrementing Numbers         Setup an Incrementing Control Number
7. Work with Paragraphs        Create/Edit/Copy/Delete Text Blocks

8. Integration Assistant        Create source templates for Application Pgm
9. Utility Menu                 Configure Printers, History Maintenance...

Selection or command
===> 9

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```

From the Utility Menu, select Option **3** (Download Fonts) and **PRESS ENTER**.

Select  
OPTION #3

```

MNUUTL                      Utility Menu

Select one of the following:

1. Configure Printers          Associate printer types with Output Queues
2. History Maintenance         Setup, view, re-print, and manage history files
3. Download Fonts              Download fonts to thermal printers
4. Format Listing              Print label format reports.
5. Transfer Formats            Transfer label formats to remote iSeries.
6. Transfer Logos              Transfer logos to remote iSeries.

Selection or command
===> 3

F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel
F13=Information Assistant  F16=AS/400 main menu
    
```



## Download Datamax Fonts

For Datamax, type '1' and **PRESS ENTER**. The following Download Datamax Fonts pop-up will appear.

```

Download Datamax Fonts
Output Queue. . . _____
Memory Location . G          G = Flash 256
                              X = Flash 256
Font . . . . . _____    ARIALN = Arial Narrow
                              ARIALNB = Arial Narrow Bold
                              COUR = Courier New
                              LHANDW = Lucida Handwriting
                              FRABK = Franklin Gothic Book
                              TIMES = Times
                              *ALL = All Above
F3=Exit
    
```

Fill in the above prompts:

**Output Queue** – Name of the printer to receive the downloaded fonts.

**Memory Location** – **G** = Plug-in Flash Memory (256k) (\*Default)  
**X** = Plug-in Flash Memory (256k)

**Font** – Letter style to download, or use \*ALL to download. See **Appendix B** for sample fonts.

---

## Download Monarch Fonts

For Monarch, type '2' and **PRESS ENTER**. The following Download Monarch Fonts pop-up will appear.

```

Download Monarch Fonts
Output Queue. . . _____
Memory Location . F          F = Flash
                              R = Ram
Font . . . . . _____    ARIALN = Arial Narrow
                              ARIALNB = Arial Narrow Bold
                              COUR = Courier New
                              LHANDW = Lucida Handwriting
                              FRABK = Franklin Gothic Book
                              TIMES = Times
                              *ALL = All Above
F3=Exit
    
```

Fill in the above prompts:

**Output Queue** – Name of the printer to receive the downloaded fonts.

**Memory Location** – **F** = Flash ROM Memory (\*Default)  
**R** = Non-Volatile Onboard Ram

**Font** – Letter style to download, or use \*ALL to download. See **Appendix B** for sample fonts.

## Appendix B – Lookup Codes (Fonts)

### Download Printronix / IBM Fonts

For Printronix or IBM PGL models, type '3' and **PRESS ENTER**. The following Download Printronix Fonts pop-up will appear.

```
                                Download Printronix Fonts

Output Queue. . . _____

Font . . . . . _____      ARIALN = Arial Narrow
                               ARIALNB = Arial Narrow Bold
                               COUR   = Courier New
                               LHANDW = Lucida Handwriting
                               FRABK  = Franklin Gothic Book
                               TIMES  = Times
                               TIMESB = Times Roman Bold
                               *ALL   = All Above

F3=Exit
```

Fill in the above prompts:

**Output Queue** – Name of the printer to receive the downloaded fonts.

**Font** – Letter style to download, or use \*ALL to download.

---

### Download Zebra Fonts

For Zebra, type '4' and **PRESS ENTER**. The following Download Zebra Fonts pop-up will appear.

```
                                Download Zebra Fonts

Output Queue. . . _____

Memory Location . E          E = Internal Flash
                               B = Memory Card

Font . . . . . _____      ARIALN = Arial Narrow
                               ARIALNB = Arial Narrow Bold
                               COUR   = Courier New
                               LHANDW = Lucida Handwriting
                               FRABK  = Franklin Gothic Book
                               TIMES  = Times
                               *ALL   = All Above

F3=Exit
```

Fill in the above prompts:

**Output Queue** – Name of the printer to receive the downloaded fonts.

**Memory Location** – **E** = Internal Flash ROM Memory (\*Default)  
**B** = Installed PCMCIA Memory Card

**Font** – Letter style to download, or use \*ALL to download.



## Downloadable Fonts

(Arial Narrow, Arial Narrow Bold, Lucida Handwriting, Franklin Gothic Book, Courier, Times Roman)

### Arial Narrow Fonts

**PBxx** where xx is the point size to print (Ex. 7-point Arial Narrow font = **PB07**). All available point sizes are not shown. See **Download** instructions at the beginning of this section.

PB06-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PB08-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PB10-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PB12-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567abcdefghijklmnopqrstuvwxyz

PB14-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopqrstuvwxyz

PB18-18pt ABCDEFGHIJKLM0123456abcd

PB24-24pt ABCDE12345abcdefg

PB30-30pt ABCDE123abcd

PB36-36pt ABC123abc

PB48-48pt ABC123abc

### Arial Narrow Bold Fonts

**PCxx** where xx is the point size to print. (Ex. 7-point Arial Narrow Bold = **PC07**). All available point sizes are not shown. See **Download** instructions at the beginning of this section..

PC08-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PC10-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PC12-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567abcdefghijklmnopqrstuvwxyz

PC14-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopqrstuvwxyz

PC18-18pt ABCDEFGHIJKLM0123456abcd

PC24-24pt ABCDE12345abcdefg

PC30-30pt ABCDE123abcd

PC36-36pt ABC123abc

PC48-48pt ABC123abc

Appendix B – Lookup Codes (Fonts)

**Lucida Handwriting Fonts**

**PDxx** where xx is the point size to print. (Ex. 7-point Lucida Handwriting = **PD07**). All available point sizes are not shown. See **Download** instructions at the beginning of this section..

*PD06-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#%&'()*  
*PD08-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz@#%&'?*  
*PD10-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz*  
*PD12-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz*  
*PD14-14pt ABCDEFGHIJKLO123456789abcdefghijklmnopqrstuvwxyz*  
*PD18-18pt ABCDEFGHIJ0123abcdefghijklmnopqrstuvwxyz*  
*PD24-24pt ABCDE0123abcde*  
*PD30-30pt ABCDE12ab*  
*PD36-36pt ABC12ab*  
*PD48-48pt ABC*

**Franklin Gothic Book Fonts**

**PExx** where xx is the point size to print. (Ex. 7-point Franklin Gothic Book = **PE07**). All available point sizes are not shown. See **Download** instructions at the beginning of this section..

*PE06-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#%&'()*  
*PE08-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#%&'()*  
*PE10-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz*  
*PE12-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz*  
*PE14-14pt ABCDEFGHIJKLMNOP123456789abcdefghijklmnopqrstuvwxyz*  
*PE18-18pt ABCDEFGHIJKLO123456789abcdefghijklmnopqrstuvwxyz*  
*PE24-24pt ABCDE123456789abcde*  
*PE30-30pt ABCDE123abcde*  
*PE36-36pt ABC0123abc*  
*PE48-48pt ABCabc*

**Courier Fonts**

**PFxx** where xx is the point size to print. (Ex. 7-point Courier font = **PF07**).

All available point sizes are not shown. See **Download** instructions at the beginning of this section..

PF06-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#%&'()\*

PF08-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#%&'()\*

PF10-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PF12-12pt ABCDEFGHIJKLMNOPQR0123456789abcdefghijklmnopqr

PF14-14pt ABCDEFGHIJKLMN123456789abcdefghijklmnop

PF18-18pt ABCDEFGH0123456789abcdefgh

PF24-24pt ABCD123456789abcd

PF30-30pt ABCD0123abcd

PF36-36pt AB0123ab

PF48-48pt ABab

**Times New Roman Fonts**

**PGxx** where xx is the point size to print. (Ex. 7-point Times New Roman = **PG07**).

All available point sizes are not shown. See **Download** instructions at the beginning of this section..

PG06-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

PG08-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnop

PG10-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

PG12-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789

PG14-14pt ABCDEFGHIJKLMNOPQRST0123456789

PG18-18pt ABCDEFGHIJKLM0123456789

PG24-24pt ABCDEFGH01234567

PG30-30pt ABCDEF123456

PG36-36pt ABCD12345

PG48-48pt ABCD

Appendix B – Lookup Codes (Fonts)

**Avery 300 dpi Fonts**

(6404, 6405, 6405-RFID, S-262, S-462, TTX450, TTX650, TTX850, TTX950, TTX1050)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<b>FONT</b>	<b>CPI</b>	
<b>NK11</b>	<b>28.8</b>	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@
<b>NA11</b>	<b>23.2</b>	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@
<b>NB11</b>	<b>18.0</b>	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@
<b>NC11</b>	<b>14.8</b>	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@
<b>NF11</b>	<b>14.0</b>	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@</b>
<b>ND11</b>	<b>11.2</b>	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@
<b>NG11</b>	<b>10.6</b>	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@</b>
<b>NE11</b>	<b>7.6</b>	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@
<b>NH11</b>	<b>7.4</b>	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@</b>
<b>NI11</b>	<b>6.6</b>	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890!@</b>
<b>NJ11</b>	<b>4.5</b>	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRST abcdefghijklmnopqrst 1234567890!@</b>

## Avery 300 dpi Fonts

(6404, 6405, 6405-RFID, S-262, S-462, TTX450, TTX650, TTX850, TTX950, TTX1050)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

F901-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F902-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F903-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg

F904-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefgh

F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F906-18pt ABCDEFGHIJKLM0123456abcd

F907-24pt ABCDE12345abcdefg

F908-24pt ABCDE123abcd

F909-36pt ABC123abc

F910-48pt ABCD

### Times Roman Fonts (F701-F710)

*Using this font will result in Slower Processing.*

Times- 6pt

Times- 8pt

Times- 10pt

Times- 12pt

Times- 14pt

Times- 18pt

Times- 24pt

Times- 30pt

Times- 36pt

Times- 48pt

Appendix B – Lookup Codes (Fonts)

**Citizen Fonts**

(CLP-1001, 2001, 6001, 6002, 7001, 7002, 7401, 7402, 8301)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>? .
F111	22.5	ABCDEFGHIJKLMNPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>? .
F211	17.0	ABCDEFGHIJKLMNPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&* .
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789!@#\$%^&*()_+ :
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789!@#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789!@#\$%
F611 UPPERCASE ONLY	5.9	<b>ABCDEFGHIJKLMNPQRSTUVWXYZ 0123456789!@#\$%^&amp;*()_+</b>

**Vector Fonts**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789abcdefghij
- F902-8pt ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789abcdefghij
- F903-10pt ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789abcdefgh
- F904-12pt ABCDEFGHIJKLMNPQRST1234567abcdefgh
- F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl
- F906-18pt ABCDEFGHIJKLM0123456abcd
- F907-24pt ABCDE12345abcdefg
- F908-30pt ABCDE123abcd
- F909-36pt ABC123abc
- F910-48pt ABCD

### C. Itoh T4 Fonts

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

#### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()_+<>?;
F111	22.5	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()_+<>?;
F211	17.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#\$%&*()+:;
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#\$%
F611 UPPERCASE ONLY	5.9	ABCDEFGHIJKLMNQRSTUVWX 0123456789#\$%&*() +<>

#### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901 – 6pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghijklmnopqrstuvwxyz**
- F902 – 8pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghijklmnopqrstuvwxyz**
- F903 – 10pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghi**
- F904 – 12pt ABCDEFGHIJKLMNQRST1234567abcdefghijklmn**
- F905 – 14pt ABCDEFGHIJKLM1234567abcdefghijklmnop**
- F906 – 18pt ABCDEFGHIJKLM0123456abcd**
- F907 – 24pt ABCDE12345abcdefg**
- F908 – 30pt ABCDE123abcd**
- F909 – 36pt ABC123abc**
- F910 – 48pt ABCD**

Appendix B – Lookup Codes (Fonts)

**Datamax/Fargo Fonts**

(Allegro, Prodigy+, Prodigy Max, DMX400, DMX600, DMX800, E4203, E4204, E4304, I4206, I4208, I4210, M4206, M4208, M4210, M4306, ST/SV 3210, ST/SV 3306, W6208, W6308, W8306, Ovation)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNOPSFRANCYzabcdefgijklmnopqrstuwxz0123456789!@#%&*()_+<>? .
F111	22.5	ABCDEFGHIJKLMNOPSFRANCYzabcdefgijklmnopqrstuwxz0123456789!@#%&*()_+<>? .
F211	17.0	ABCDEFGHIJKLMNOPSFRANCYzabcdefgijklmnopqrstuwxz0123456789!@#%&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNOPSFRANCYz0123456789!@#%&*()_+ :
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNOPSFRANCYz0123456789!@#%&*()
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNOPSFRANCYz0123456789!@#%&*()
F611 UPPERCASE ONLY	5.9	<b>ABCDEFGHIJKLMNOPSFRANCY 0123456789!@#%&amp;*()_+ :</b>

**Vector Fonts**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F902-8pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F903-10pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F904-12pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F905-14pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F906-18pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F907-24pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F908-30pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F909-36pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz
- F910-48pt ABCDEFGHIJKLMNOPSFRANCYz0123456789abcdefghijklmnopqrstuvwxyz



## Dot Matrix (with Magnum Graphics) Fonts

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
S17	17.14	ABCDEF GHI JKLMNOPQRSTUUVW abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
S15	15.0	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
3X7	15.0	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
S13	13.33	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
S12	12.0	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
4X7	12.0	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
S10	10.0	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$
OCRA		ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$

### Expandable Height and Width

*Entry in the height and width fields, no entry is made in the barcode type or lookup field.*

01 X 01	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$&*()_+<>?:;
02 X 01	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789@#%\$&*()_+<>?:;
02 X 02	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstu vwxyz 0123456789@#%\$&*()_+
03 X 02	ABCDEF GHI JKLMNOPQRSTUUVWXYZ abcdefghijklmnopqrstu vwxyz
04 X 03	ABCDEF GHI JK abcdef 9 0123456789@#%\$&*()

Appendix B – Lookup Codes (Fonts)

**Eltron Fonts**

(LP2122, LP2142, LP2622, LP2642, LP2742, LP2824, LP2844, P2242, TLP2046, TLP2344, TLP2642, TLP2742, TLP2746, TLP2824, TLP2844, TLP3642)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	
EB11	20.3	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnop <strong>st</strong> uvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
ED11	16.9	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnop <strong>st</strong> uvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
EH11	14.5	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnop <strong>st</strong> uvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
EL11	12.5	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnop <strong>st</strong> uvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
EG11	5.6	<b>ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ</b> <b>0123456789#%&amp;-+ : / . ,</b>

## Esselte Meto Fonts (Bandit, V65, V60)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>? .
F111	22.5	ABCDEFGHIJKLMNPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>? .
F211	17.0	ABCDEFGHIJKLMNPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789!@#\$%^&*()+:
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789!@#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789!@#\$%
F611 UPPERCASE ONLY	5.9	ABCDEFGHIJKLMNPQRSTUVWXYZ 0123456789!@#\$%^&*()+

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789abcdefghij
- F902-8pt ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789abcdefghij
- F903-10pt ABCDEFGHIJKLMNPQRSTUVWXYZ0123456789abcdefg
- F904-12pt ABCDEFGHIJKLMNPQRST1234567abcdefgh
- F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl
- F906-18pt ABCDEFGHIJKLM0123456abcd
- F907-24pt ABCDE12345abcdefg
- F908-30pt ABCDE123abcd
- F909-36pt ABC123abc
- F910-48pt ABCD

Appendix B – Lookup Codes (Fonts)

**Fargo Prodigy Fonts**

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
F111	22.5	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
F211	17.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()+:;
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F611 UPPERCASE ONLY	5.9	ABCDEFGHIJKLMNQRSTUWX 0123456789!@#\$%^&*()+

**Expandable Height (HH) and Width (WW)**

*Entry in the height and width fields, no entry is made in the barcode type or lookup field.*

01 X 01	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
02 X 01	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
02 X 02	ABCDEFGHIJKLMNQRSTUV abcdefghijklmnopqrstuv 0123456789!@#\$%^&*()_+
03 X 02	ABCDEFGHIJKLMNQRSTUV abcdefghijklmnopqrstuv
04 X 03	ABCDEFGHI I a b c d e 0 1 2 3 4 5 6 7 8 9 ! @ # \$

## Genicom Fonts

(6241, 6321, 6322, 6341, 6342, 6442, 6451, 6481)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	
<b>EB11</b>	<b>20.3</b>	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#\$%^&*()-_+=;:,.<>/?
<b>ED11</b>	<b>16.9</b>	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#\$%^&*()-_+=;:,.<>/?
<b>EH11</b>	<b>14.5</b>	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#\$%^&*()-_+=;:,.<>/?
<b>EL11</b>	<b>12.5</b>	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#\$%^&*()-_+=;:,.<>/?
<b>EG11</b>	<b>5.6</b>	<b>ABCDEFGHIJKLMNOPQRSTUVWXYZ</b> <b>0123456789#\$%&amp;-+ : / . ,</b>

## HP/AFP-Compatible Fonts

### Helvetica

**PHxx** where xx is the point size to print. (Ex. 7-point Helvetica = **PH07**).

All available point sizes are not shown. See **Expansion** instructions at start of this section.

PH06 6pt ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890-!@#\$%^&\*()

PH08 8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890abcdefghijklmnopqrstuvwxyz-!@#&

PH10 10 ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890abcdefghijklmnopqrstuvwxyz

PH12 12pt ABCDEFGHIJKLMNOP1234567890abcdefghijklmnopqrstuvwxyz

PH14 14pt ABCDEFGHIJKLM1234567890abcdefghijklmnopqrstuvwxyz

PH18 18pt ABCDEFGHIJKL12345abcdefghijklmnopqrstuvwxyz

PH24 24pt ABCDE12345abcdefgh

PH30 30pt ABCDE123abcd

PH36 36pt ABC123abc

PH48 48pt ABCD

### Times Roman

**PGxx** where xx is the point size to print. (Ex. 7-point Times New Roman = **PG07**).

All available point sizes are not shown. See **Expansion** instructions at start of this section

PG06 6pt ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890-!@#\$%^&\*()

PG08 8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890abcdefghijklmnopqrstuvwxyz-!@#&

PG10 10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890abcdefghijklmnopqrstuvwxyz

PG12 12pt ABCDEFGHIJKLMNOP1234567890abcdefghijklmnopqrstuvwxyz

PG14 14pt ABCDEFGHIJKLM1234567890abcdefghijklmnopqrstuvwxyz

PG18 18pt ABCDEFGHIJKL12345abcdefghijklmnopqrstuvwxyz

PG24 24pt ABCDE12345abcdefghi

PG30 30pt ABCDE123abcd

PG36 36pt ABC123abc

PG48 48pt ABCD

## HP/AFP-Compatible Laser Fonts

Courier

Monospaced Vector Fonts (V601-V610)

*These fonts CANNOT be expanded.*

V601 - 6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

V602 - 8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

V603 - 10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

V604 - 12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789

V605 - 14pt ABCDEFGHIJKLMNOPQRST0123456789

V606 - 18pt ABCDEFGHIJKL012345678

V607-24pt ABCDEFG01234567

V608-30pt ABCDE123456

V609-36pt ABC12345

V610-48pt ABC

Franklin Gothic

Proportional Spaced Vector Fonts (V501-V510)

*These fonts CANNOT be expanded.*

V501 - 6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

V502 - 8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

V503 - 10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abc

V504 - 12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789

V505 - 14pt ABCDEFGHIJKLMNOPQRST0123456789

V506 - 18pt ABCDEFGHIJKL012345678

V507-24pt ABCDEFG01234567

V508-30pt ABCDE123456

V509-36pt ABC12345

V510-48pt ABC

Appendix B – Lookup Codes (Fonts)

**IBM 4400, 5500, 6700 Series (with PGL) Fonts**

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Monospaced Fonts

*Monospaced fonts can be expanded, refer to the beginning of this section.*

**F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnop**

**F804-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnop**

**F805-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopghijkl**

**F806-18pt ABCDEFGHIJKLM0123456abcdefghijklmnop**

**F807-24pt ABCDE12345abcdefghijklmnop**

**F808-24pt ABCDE123a**

**F809-36pt ABC12a**

**F810-48pt AB**

Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section.*

**F901-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F902-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F903-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnop**

**F904-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnop**

**F905-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopghijkl**

**F906-18pt ABCDEFGHIJKLM0123456abcdefghijklmnop**

**F907-24pt ABCDE12345abcdefghijklmnop**

**F908-24pt ABCDE123abcd**

**F909-36pt ABC123abc**

**F910-48pt ABCD**



## IBM 4400, 5500, 6700 Series (with PGL) Fonts

### Downloadable Fonts

The following additional True Type fonts are available on some IBM Thermal Printer models. See the **Download Fonts** at the beginning of this section.

Arial

Arial Narrow Bold

Courier New

Franklin Gothic Book

*Lucida Handwriting*

Times New Roman

Appendix B – Lookup Codes (Fonts)

**Inducomp N-454 Fonts**

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()_+<>? .
F111	22.5	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()_+<>? .
F211	17.0	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()+:
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F611 UPPERCASE ONLY	5.9	<b>ABCDEFGHIJKLMNQRSTUWX 0123456789!@#\$%^&amp;*()+</b>

**Vector Fonts**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij
- F902-8pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij
- F903-10pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefg
- F904-12pt ABCDEFGHIJKLMNQRST1234567abcdefgh
- F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl
- F906-18pt ABCDEFGHIJKLM0123456abcd
- F907-24pt ABCDE12345abcdefg
- F908-30pt ABCDE123abcd
- F909-36pt ABC123abc
- F910-48pt ABCD

## Intermec 3100/4000 Fonts

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#*%&*()_+<>? .
F111	22.5	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#*%&*()_+<>? .
F211	17.0	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#*%&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#*%&*()+:
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#*%&*()
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#*%&*()
F611 UPPERCASE ONLY	5.9	ABCDEFGHIJKLMNQRSTUWX 0123456789#*%&*()+

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

F901-6pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij

F902-8pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij

F903-10pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefg

F904-12pt ABCDEFGHIJKLMNQRST1234567abcdefgh

F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F906-18pt ABCDEFGHIJKLM0123456abcd

F907-24pt ABCDE12345abcdefg

F908-30pt ABCDE123abcd

F909-36pt ABC123abc

F910-48pt ABCD





## Intermec 203 dpi Fonts (IPL)

(3240, 3400e, 4420, PF2i, PF4, PM4i, PX4i, PX6i)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	Pt.	BOLD BITMAP FONTS
IN11	20.3	6	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:"{}.,/
IO11	15.6	8	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:"{}.,/
IP11	12.7	10	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:"{}.,/
IQ11	10.1	12	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:"{}.,/
IR11	7.8	16	ABCDEFGHIJKLMNOPQabcdefghijklmnopq 1234567890!@#%&*()_+<>?:"{}.,/
IS11	6.1	20	ABCDEFGHIJKLabcdefghijklmn 1234567890!@#%&*()_+<>?:
IT11	5.2	24	ABCDEFGHIJKabcdefghijklmnop 1234567890!@#%&*()
IU11	4.1	30	ABCDEFGabcdefghijklmnop 1234567890!@#%&*
IV11	3.4	36	ABCDEFabcdefghijklmnop 1234567890!@#\$

**Intermec 203 dpi Fonts (IPL)**

(3240, 3400e, 4420, PF2i, PF4, PM4i, PX4i, PX6i)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Proportional Spaced Vector Fonts (F701-F710)***Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.***F701-6pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**F702-8pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**F703-10pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg**F704-12pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567abcdefgh**F705-14pt** ABCDEFGHIJKLM1234567abcdefghijkl**F706-18pt** ABCDEFGHIJKLM0123456ab**F707-24pt** ABCDE12345abcd**F708-30pt** ABCDE123a**F709-36pt** ABC12a**F710-48pt** AB**Monospaced Vector Fonts Bold (F801-F810)***Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.***F801-6pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**F802-8pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**F803-10pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg**F804-12pt** ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567abcdefgh**F805-14pt** ABCDEFGHIJKLM1234567abcdefghijkl**F806-18pt** ABCDEFGHIJKLM0123456ab**F807-24pt** ABCDE12345abcd**F808-30pt** ABCDE123a**F809-36pt** ABC12a**F810-48pt** AB

## Intermec 203 dpi Fonts (IPL)

(3240, 3400e, 4420, PF2i, PF4, PM4i, PX4i, PX6i)

Proportional Vector Fonts Bold (F901-F910)

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

F901 - 06pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#\$%^&?()  
F902 - 08pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz  
F903 - 10pt ABCDEFGHIJKLMNOPQR0123456789abcdefghijklmnopqrstuvwxyz  
F904 - 12pt ABCDEFGHIJKLMNOP00123456789abcdefghijklmnop  
F905 - 14pt ABCDEFGHIJKLM123456789abcdefghijklm  
F906 - 18pt ABCDEFGHI123456789abcdefghi  
F907 - 24pt ABCDE1234567abcde  
F908 - 30pt ABCD1234abcd  
F909 - 36pt ABC123abc  
F910 - 48pt ABabc





Appendix B – Lookup Codes (Fonts)  
**Intermec 300 dpi Fonts (IPL)**  
 (3400e, 4630, 4830)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	<u>Pt.</u>	<b>BOLD BITMAP FONTS</b>
IN11	20.3	6	ABCDEFGHIJKLMN <strong>OPQRSTUVWXYZ</strong> abcdefghijklmnopqrstuvwxy 1234567890!@#% <sup>^</sup> &*()_+<>?:"{}.,/
IO11	15.6	8	ABCDEFGHIJKLMN <strong>OPQRSTUVWXYZ</strong> abcdefghijklmnopqrstuvwxy 1234567890!@#% <sup>^</sup> &*()_+<>?:"{}.,/
IP11	12.7	10	ABCDEFGHIJKLMN <strong>OPQRSTUVWXYZ</strong> abcdefghijklmnopqrstuvwxy 1234567890!@#% <sup>^</sup> &*()_+<>?:"{}.,/
IQ11	10.1	12	ABCDEFGHIJKLMN <strong>OPQRSTUVWXYZ</strong> abcdefghijklmnopq 1234567890!@#% <sup>^</sup> &*()_+<>?:"{}.,/
IR11	7.8	16	ABCDEFGHIJKLMN <strong>OPQ</strong> abcdefghijklmnop 1234567890!@#% <sup>^</sup> &*()_+<>?:"{}.,/
IS11	6.1	20	ABCDEFGHIJKLM <strong>abcdefghijklmn</strong> 1234567890!@#% <sup>^</sup> &*()_+<>?:
IT11	5.2	24	ABCDEFGHIJK <strong>abcdefghij</strong> 1234567890!@#% <sup>^</sup> &*()
IU11	4.1	30	ABCDEFGHI <strong>G</strong> abcdefghijklmnop 1234567890!@#% <sup>^</sup> &
IV11	3.4	36	ABCDEF <strong>efgh</strong> 1234567890!@#\$

**Intermec 300 dpi Fonts (IPL)**

(3400e, 4630, 4830)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Proportional Spaced Vector Fonts (F701-F710)**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

F701-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F702-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F703-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg

F704-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ01234567abcdefgh

F705-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F706-18pt ABCDEFGHIJKLM0123456ab

F707-24pt ABCDE12345abcd

F708-30pt ABCDE123a

F709-36pt ABC12a

F710-48pt AB

**Monospaced Vector Fonts Bold (F801-F810)**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg

F804-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ01234567abcdefgh

F805-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F806-18pt ABCDEFGHIJKLM0123456ab

F807-24pt ABCDE12345abcd

F808-30pt ABCDE123a

F809-36pt ABC12a

F810-48pt AB

Appendix B – Lookup Codes (Fonts)

**Intermec 300 dpi Fonts (IPL)**

(3400e, 4630, 4830)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Proportional spaced Vector Fonts Bold (F901-F910)**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

F901 - 06pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#\$%^&'()\*

F902 - 08pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

F903 - 10pt ABCDEFGHIJKLMNOPQR0123456789abcdefghijklmnopqr

F904 - 12pt ABCDEFGHIJKLMNOP00123456789abcdefghijklmnop

F905 - 14pt ABCDEFGHIJKLM123456789abcdefghijklmnop

F906 - 18pt ABCDEFGHI123456789abcdefghi

F907 - 24pt ABCDE1234567abcde

**F908 - 30pt ABCD1234abcd**

**F909 - 36pt ABC123abc**

**F910 - 48pt ABabc**

## Intermec 406 dpi Fonts (IPL)

(3240, 3400e, 4420, 4440, PF4, PM43, PM4i, PX4i, PX6i)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	Pt.	STANDARD BITMAP FONTS
IA11	33.8		<small>AAAAA BBBBB CCCCC DDDDD EEEEEE FFFFFF GGGGG HHHHH IIIII JJJJJ KKKKK LLLLL MMMMM NNNNN OOOOO PPPPP QQQQQ RRRRR SSSSS TTTTT UUUUU VVVVV WWWWW XXXXX YYYYY ZZZZZ _+&lt;&gt;?:"{} , . /</small>
IG11	15.6	8	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstu <strong>vw</strong> xyz 1234567890!@#% <sup>^</sup> &*()_+<>?:"{} , . /
IK11	12.7	10	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopqrstu <strong>vw</strong> xyz 1234567890!@#% <sup>^</sup> &*()_+<>?:"{} , . /
IH11	10.1	12	ABCDEFGHIJKLMN <strong>OP</strong> QRSTUVWXYZabcdefghijklmnopq 1234567890!@#% <sup>^</sup> &*()_+<>?:"{} , . /
IL11	7.8	16	ABCDEFGHIJKLMN <strong>OP</strong> abcdefghijklmnopq 1234567890!@#% <sup>^</sup> &*()_+<>?:"{} , . /
II11	6.2	20	ABCDEFGHIJKLM <strong>NO</strong> abcdefghijklmnop 1234567890!@#% <sup>^</sup> &*()_+<>?:
IM11	5.2	24	ABCDEFGHIJK <strong>LM</strong> abcdefghijklmnop 1234567890!@#% <sup>^</sup> &*()_+

## Intermec 406 dpi Fonts (IPL)

(3240, 3400e, 4420, 4440, PF4, PM43, PM4i, PX4i, PX6i)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bold Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	<u>Pt.</u>	<b>BOLD BITMAP FONTS</b>
IN11	20.3	6	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:'{}.,/
IO11	15.6	8	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:'{}.,/
IP11	12.7	10	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:'{}.,/
IQ11	10.1	12	ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&*()_+<>?:'{}.,/
IR11	7.8	16	ABCDEFGHIJKLMNOPQabcdefghijklmnop 1234567890!@#%&*()_+<>?:'{}.,/
IS11	6.1	20	ABCDEFGHIJKLabcdefghijklmnop 1234567890!@#%&*()_+<>?:'{}.,/
IT11	5.2	24	ABCDEFGHIJKabcdefghijklmnop 1234567890!@#%&*()
IU11	4.1	30	ABCDEFGabcdefghijklmnop 1234567890!@#%&*
IV11	3.4	36	ABCDEFabcdefghijklmnop 1234567890!@#\$

**Intermec 406 dpi Fonts (IPL)**

(3240, 3400e, 4420, 4440, PF4, PM43, PM4i, PX4i, PX6i)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.  
*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

**Proportional Spaced Vector Fonts (F701-F710)**

F701-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F702-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F703-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg

F704-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567abcdefgh

F705-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F706-18pt ABCDEFGHIJKLM0123456ab

F707-24pt ABCDE12345abcd

F708-30pt ABCDE123a

F709-36pt ABC12a

F710-48pt AB

**Monospaced Vector Fonts Bold (F801-F810)**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg

F804-12pt ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567abcdefgh

F805-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F806-18pt ABCDEFGHIJKLM0123456ab

F807-24pt ABCDE12345abcd

F808-30pt ABCDE123a

F809-36pt ABC12a

F810-48pt AB

Appendix B – Lookup Codes (Fonts)

**Intermec 406 dpi Fonts (IPL)**

(3240, 3400e, 4420, 4440, PF4, PM43, PM4i, PX4i, PX6i)

Proportional Vector Fonts Bold (F901-F910)

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

F901 - 06pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz!@#\$%^&'()\*  
F902 - 08pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz  
F903 - 10pt ABCDEFGHIJKLMNOPQR0123456789abcdefghijklmnopqrstuvwxyz  
F904 - 12pt ABCDEFGHIJKLMNOP00123456789abcdefghijklmnop  
F905 - 14pt ABCDEFGHIJKLM123456789abcdefghijklmnop  
F906 - 18pt ABCDEFGHI123456789abcdefghi  
F907 - 24pt ABCDE1234567abcde  
F908 - 30pt ABCD1234abcd  
F909 - 36pt ABC123abc  
F910 - 48pt ABabc



## Monarch Fonts

(9820, 9830, 9835, 9840, 9845, 9850, 9855-RFID, 9860)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
MB11	25.2	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%^&*()_+<>? ::
MJ11	23.5	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%^&*()
MK11	14.0	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%
MM11	12.0	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%^&*() + < > ? ::
MD11	11.9	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%^&*()_+<>? ::
ML11	10.5	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%^&*()_+<>? ::
MN11	9.0	ABCDEFGHIJKLMNQRSTUvwxyz0123456789!@#\$%^&*()_+<>? ::
MO11	6.2	ABCDEFGHIJKLMNQRSTUvwxyz abcdefghijklmnopqr0123456789!@#\$
MI11 Uppercase Only	7.5	ABCDEFGHIJKLMNQRSTUvwxyz 0123456789!@#\$%^&*()_+<>? ::

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

F901-6pt ABCDEFGHIJKLMNQRSTUvwxyz0123456789abcdefghi|

F902-8pt ABCDEFGHIJKLMNQRSTUvwxyz0123456789abcdefghi|

F903-10pt ABCDEFGHIJKLMNQRSTUvwxyz0123456789abcdefg

F904-12pt ABCDEFGHIJKLMNQRST1234567abcdefgh

F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F906-18pt ABCDEFGHIJKLM0123456abcd

F907-24pt ABCDE12345abcdefg

F908-30pt ABCDE123abcd

F909-36pt ABC123abc

F910-48pt ABCD

## Novexx 300 dpi Fonts

(Chess Series, Lion, Ocelot, Puma, Tiger, Tiger XXL)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	
NK11	28.8	ABCDEFGHIJKLMN <sup>OP</sup> QRSTUV <sup>W</sup> XYZabcde <sup>f</sup> ghijklm <sup>no</sup> pqrst <sup>u</sup> v <sup>w</sup> xyz 1234567890!@
NA11	23.2	ABCDEFGHIJKLMN <sup>OP</sup> QRSTUV <sup>W</sup> XYZabcde <sup>f</sup> ghijklm <sup>no</sup> pqrst <sup>u</sup> v <sup>w</sup> xyz 1234567890!@
NB11	18.0	ABCDEFGHIJKLMN <sup>OP</sup> QRSTUV <sup>W</sup> XYZabcde <sup>f</sup> ghijklm <sup>no</sup> pqrst <sup>u</sup> v <sup>w</sup> xyz 1234567890!@
NC11	14.8	ABCDEFGHIJKLMN <sup>OP</sup> QRSTUV <sup>W</sup> XYZabcde <sup>f</sup> ghijklm <sup>no</sup> pqrst <sup>u</sup> v <sup>w</sup> xyz 1234567890!@
NF11	14.0	<b>ABCDEFGHIJKLMN<sup>OP</sup>QRSTUV<sup>W</sup>XYZabcde<sup>f</sup>ghijklm<sup>no</sup>pqrst<sup>u</sup>v<sup>w</sup>xyz 1234567890!@</b>
ND11	11.2	ABCDEFGHIJKLMN <sup>OP</sup> QRSTUV <sup>W</sup> XYZabcde <sup>f</sup> ghijklm <sup>no</sup> pqrst <sup>u</sup> v <sup>w</sup> xyz 1234567890!@
NG11	10.6	<b>ABCDEFGHIJKLMN<sup>OP</sup>QRSTUV<sup>W</sup>XYZabcde<sup>f</sup>ghijklm<sup>no</sup>pqrst<sup>u</sup>v<sup>w</sup> 1234567890!@</b>
NE11	7.6	ABCDEFGHIJKLMN <sup>OP</sup> QRSTUV <sup>W</sup> XYZabcde <sup>f</sup> ghijkl 1234567890!@
NH11	7.4	<b>ABCDEFGHIJKLMN<sup>OP</sup>QRSTUV<sup>W</sup>XYZabcde<sup>f</sup>ghij 1234567890!@</b>
NI11	6.6	<b>ABCDEFGHIJKLMN<sup>OP</sup>QRSTUV<sup>W</sup>XYZ abcde<sup>f</sup>ghijklm<sup>no</sup>pqrst<sup>u</sup>v<sup>w</sup>xyz 1234567890!@</b>
NJ11	4.5	<b>ABCDEFGHIJKLMN<sup>OP</sup>QRST abcde<sup>f</sup>ghijklm<sup>no</sup>pqrst 1234567890!@</b>

## Novexx 300 dpi Fonts

(Chess Series, Lion, Ocelot, Puma, Tiger, Tiger XXL)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

F901-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F902-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij

F903-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg

F904-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefgh

F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl

F906-18pt ABCDEFGHIJKLM0123456abcd

F907-24pt ABCDE12345abcdefg

F908-24pt ABCDE123abcd

F909-36pt ABC123abc

F910-48pt ABCD

### Times Roman Fonts (F701-F710)

*Using this font will result in Slower Processing.*

Times- 6pt

Times- 8pt

Times- 10pt

Times- 12pt

Times- 14pt

Times- 18pt

Times- 24pt

Times- 30pt

Times- 36pt

Times- 48pt

Appendix B – Lookup Codes (Fonts)

**Printronix Fonts - Dot Matrix (with PGL)**

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	
S17	17 . 14	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VW</sup> XYZabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
S15	15 . 0	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
3X7	15 . 0	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
S13	13 . 33	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
S12	12 . 0	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
4X7	12 . 0	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
S10	10 . 0	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$
OCRA		ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$

**Expandable Height and Width**

*Entry in the height and width fields, no entry is made in the barcode type or lookup field.*

01 X 01	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$&*()_+<>?:;
02 X 01	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Zabc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$&*()_+<>?:;
02 X 02	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Z abc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz 0123456789@#%\$&*()_+
03 X 02	ABCDEFGHIJKLMN <sup>OP</sup> QRSTU <sup>VWXY</sup> Z abc <sup>defghijklm</sup> no <sup>pqrstuvw</sup> xyz
04 X 03	ABCDEFGHIJKabc <sup>defgh</sup> 9 0123456789@#%\$&*()

## Printronic Fonts - Dot Matrix (with PGL)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Monospaced Fonts

*Monospaced fonts can be expanded, refer to the beginning of this section.*

**F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopq**

**F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopq**

**F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopq**

**F804-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnopq**

**F805-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopq**

**F806-18pt ABCDEFGHIJKLM0123456abcdefghijklmnopq**

**F807-24pt ABCDE12345abcdefghijklmnopq**

**F808-24pt ABCDE123a**

**F809-36pt ABC12a**

**F810-48pt AB**

Appendix B – Lookup Codes (Fonts)

**Printronic Fonts (Thermal with PGL)**

(T3204, T3306, T3308, T4204, T5204, T5204r, T5206, T5206r, T5208, T5208r, T5304, T5304r, T5306, T5306r, T5308, T5308r, SL5204, SL5206, SL5208, SL5304, SL5306, SL5308)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Monospaced Fonts

*Monospaced fonts can be expanded, refer to the beginning of this section.*

**F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F804-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnop**

**F805-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopghijkl**

**F806-18pt ABCDEFGHIJKLM0123456abcdefghijklmnop**

**F807-24pt ABCDE12345abcdefghijklmnop**

**F808-24pt ABCDE123a**

**F809-36pt ABC12a**

**F810-48pt AB**

Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section.*

**F901-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F902-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F903-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F904-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnop**

**F905-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopghijkl**

**F906-18pt ABCDEFGHIJKLM0123456abcdefghijklmnop**

**F907-24pt ABCDE12345abcdefghijklmnop**

**F908-24pt ABCDE123abcd**

**F909-36pt ABC123abc**

**F910-48pt ABCD**

## Printronix Fonts (Thermal with PGL)

(T3204, T3306, T3308, T4204, T5204, T5204r, T5206, T5206r, T5208, T5208r, T5304, T5304r, T5306, T5306r, T5308, T5308r, SL5204, SL5206, SL5208, SL5304, SL5306, SL5308)

### Downloadable Fonts

The following additional True Type fonts are available on some Printronix (Thermal with PGL) Printer models. See the **Download Fonts** at the beginning of this section.

Arial

Arial Narrow Bold

Courier New

Franklin Gothic Book

*Lucida Handwriting*

Times New Roman

Appendix B – Lookup Codes (Fonts)

**RJS260/285 Fonts**

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
RA11	28.5	ABCDEFGHIJKLMN0PQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;:*
RB11	25.0	ABCDEFGHIJKLMN0PQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;:*
RS11	22.5	ABCDEFGHIJKLMN0PQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;:*
RM11	15.5	ABCDEFGHIJKLMN0PQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;:*
RL11	12.7	ABCDEFGHIJKLMN0PQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;:*
OCRA Uppercase Only	10.8	ABCDEFGHIJKLMN0PQRSTUWXYZ 0123456789!@#\$%^&*()_+<>?;:*
OCRB	10.2	ABCDEFGHIJKLMN0PQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;:*

Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMN0PQRSTUWXYZ0123456789!@#\$%^&\*()\_+<>?;:\*
- F902-8pt ABCDEFGHIJKLMN0PQRSTUWXYZ0123456789!@#\$%^&\*()\_+<>?;:\*
- F903-10pt ABCDEFGHIJKLMN0PQRSTUWXYZ0123456789!@#\$%^&\*()\_+<>?;:\*
- F904-12pt ABCDEFGHIJKLMN0PQRST1234567!@#\$%^&\*()\_+<>?;:\*
- F905-14pt ABCDEFGHIJKLM1234567!@#\$%^&\*()\_+<>?;:\*
- F906-18pt ABCDEFGHIJKLM0123456!@#\$%^&\*()\_+<>?;:\*
- F907-24pt ABCDE12345!@#\$%^&\*()\_+<>?;:\*
- F908-30pt ABCDE123!@#\$%^&\*()\_+<>?;:\*
- F909-36pt ABC123!@#\$%^&\*()\_+<>?;:\*
- F910-48pt ABCD!@#\$%^&\*()\_+<>?;:\*



## Sato 203 dpi Fonts

(CL408, CL408e, CL608, CL608e, CX, M8400, M8400S, M8400RV, M84PRO, XL-400)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

<u>FONT</u>	<u>CPI</u>	
FM11	13.9	ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghi jklmnopqrstuvwxy z0123456789!@#%&*()_+<>?[]:;
FS11	20.0	ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghi jklmnopqrstuvwxy z0123456789!@#%&*()_+<>?[]:;
FU11	29.0	ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghi jklmnopqrstuvwxy z0123456789!@#%&*()_+<>?[]:;
FK11	10.0	ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghi jklmnopqr stuvwxy0123456789!@#%&*()_+<>?[]:;
FL11	6.1	<b>ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqr stuvwxyz0123456789! @#%&amp;*()_+&lt;&gt;?[]:;</b>
OCRA Upper case Only	10.8	ABCDEFGHIJKLMN OPQRSTUVWXYZ 0123456789\$

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

**F901-0pt ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789abcdefghijklmnop**  
**F902-8pt ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789abcdefghijklmnop**  
**F903-10pt ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789abcdefg**  
**F904-12pt ABCDEFGHIJKLMN OPQRST1234567abcdefghijklmnop**  
**F905-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopijkl**  
**F906-18pt ABCDEFGHIJKLM0123456abcd**  
**F907-24pt ABCDE12345abcdefg**  
**F908-30pt ABCDE123abcd**  
**F909-36pt ABC123abc**  
**F910-48pt ABCD**

Appendix B – Lookup Codes (Fonts)

**Sato 203 dpi Fonts**

(CL408, CL408e, CL608, CL608e, CX, M8400, M8400S, M8400RV, M84PRO, XL-400)

Monospaced Fonts

*Monospaced fonts can be expanded, refer to the beginning of this section.*

**F801–6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqj**

**F802–8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqj**

**F803–10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqj**

**F804–12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnopqj**

**F805–14pt ABCDEFGHIJKLM1234567abcdefghijklmnopqjkl**

**F806–18pt ABCDEFGHIJKL0123456abcdefghijklmnopqj**

**F807–24pt ABCDE12345abcdefghijklmnopqj**

**F808–30pt ABC123abcdefghijklmnopqj**

**F809–36pt AB12abcdefghijklmnopqj**

**F810–48pt AB**

## Sato 300 dpi Fonts

(M8450, M8485, SCL412, SCL412e, SCL612, SCL612e, XL410)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

FONT	CPI	
FU11	29. 0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()_+<>?[];
FS11	20. 0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()_+<>?[];
FM11	13. 9	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()_+<>?[];
FK11	10. 0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#%&*()_+<>?[];
FL11	6. 1	ABCDEFGHIJKLMNQRSTUWXYZ abcdefghijklmnopqrstuvwxyz 0123456789!@#%&*()_+<>?[];
OCRA Uppercase Only	10. 8	ABCDEFGHIJKLMNQRSTUWXYZ 0123456789;

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

F901-6pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghijklmnopqrstuvwxyz

F902-8pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghijklmnopqrstuvwxyz

F903-10pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghi

F904-12pt ABCDEFGHIJKLMNQRST1234567abcdefghijklmn

F905-14pt ABCDEFGHIJKLM1234567abcdefghijklmnop

F906-18pt ABCDEFGHIJKLM0123456abcd

F907-24pt ABCDE12345abcdefg

F908-30pt ABCDE123abcd

F909-36pt ABC123abc

F910-48pt ABCD

Appendix B – Lookup Codes (Fonts)

**Sato 300 dpi Fonts**

(M8450, M8485, SCL412, SCL412e, SCL612, SCL612e, XL410)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Monospaced Fonts

*Monospaced fonts can be expanded, refer to the beginning of this section.*

F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcde fghij

F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcde fghij

F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefgh

F804-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefgh

F805-14pt ABCDEFGHIJKLM1234567abcdefghijk

F806-18pt ABCDEFGHIJKL0123456abcd

F807-24pt ABCDE12345abcde

F808-30pt ABC123abc

F809-36pt AB12ab

F810-48pt AB

## Soabar SPX360 Fonts

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
F111	22.5	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
F211	17.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()+:;
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F611 UPPERCASE ONLY	5.9	ABCDEFGHIJKLMNQRSTUWX 0123456789!@#\$%^&*()+

### Expandable Height (HH) and Width (WW)

*Entry in the height and width fields, no entry is made in the barcode type or lookup field.*

01 X 01	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
02 X 01	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>?;
02 X 02	ABCDEFGHIJKLMNQRSTU abcdefghijklmnopqrstu vwxyz0123456789!@#\$%^&*()_+
03 X 02	ABCDEFGHIJKLMNQRSTU abcdefghijklmnopqrstu vwxyz0123456789!@#\$%^&*()_+
04 X 03	ABCDEFGHI a b c d e 0 1 2 3 4 5 6 7 8 9 ! @ # \$

Appendix B – Lookup Codes (Fonts)

**Soabar SPX362 Fonts**

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

**Bitmap Fonts**

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33 . 0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>? .
F111	22 . 5	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&*()_+<>? .
F211	17 . 0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%^&* .
F311 UPPERCASE ONLY	12 . 9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%^&*()_+ :
F411 UPPERCASE ONLY	9 . 8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F511 UPPERCASE ONLY	9 . 8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789!@#\$%
F611 UPPERCASE ONLY	5 . 9	<b>ABCDEFGHIJKLMNQRSTUWX 0123456789!@#\$%^&amp;*()_+</b>

**Vector Fonts**

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij
- F902-8pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij
- F903-10pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefg
- F904-12pt ABCDEFGHIJKLMNQRST1234567abcdefgh
- F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl
- F906-18pt ABCDEFGHIJKLM0123456abcd
- F907-24pt ABCDE12345abcdefg
- F908-30pt ABCDE123abcd
- F909-36pt ABC123abc
- F910-48pt ABCD

## TEC B-402, B602 Fonts

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
FA 11	33.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*
F0 11	26.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*
FN 11	13.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*
FL 11	6.1	<b>ABCDEFGHIJKLMNQRSTUWXYZ abcdefghijklmnopqrstuvwxyz 0123456789!@#%&amp;*</b>
OCRA	10.8	ABCDEFGHIJKLMNQRSTUWXYZ 0123456789\$
OCRB	10.2	ABCDEFGHIJKLMNQRSTUWXYZ 0123456789\$

### Expandable Height (HH) and Width (WW)

*Entry in the height and width fields, no entry is made in the barcode type or lookup field.*

01 X 01	<b>ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&amp;^*()_+&lt;&gt;?:;</b>
02 X 01	<b>ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&amp;^*()_+&lt;&gt;?:;</b>
02 X 02	<b>ABCDEFGHIJKLMNQRSTU vwxyz 0123456789!@#%&amp;^*()_+</b>
03 X 02	<b>ABCDEFGHIJKLMNQRSTU vwxyz</b>
04 X 03	<b>ABCDEFGHI I a b c d e 0 1 2 3 4 5 6 7 8 9 ! @ # \$</b>

## TEC 203 dpi Fonts

(B-472, SX-4)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

<b>FONT</b>	<b>CPI</b>	
TA11	16.7	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TB11	13.2	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TC11	13.2	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TD11	11.7	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TE11	9.8	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TF11	12.0	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TG11	21.1	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TH11	14.6	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TI11	12.3	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TJ11	11.9	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TK11	9.9	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TL11	12.7	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TM11	8.6	<b>ABCDEFGHIJKLMN OPQRSTUVWXYZABCDEFGHIJKL 1234567890!@#%&amp;^*()_+&lt;&gt;?:"{}.,/;</b>
TN11	20.2	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TO11	21.2	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TP11	14.8	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TQ11	14.8	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;
TR11	12.8	ABCDEFGHIJKLMN OPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#%&^*()_+<>?:"{}.,/;



**TEC 203 dpi Fonts**

(B-472, SX-4)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

## Monospaced Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section.*

**F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz**

**F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnop**

**F804-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnop**

**F805-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopghijkl**

**F806-18pt ABCDEFGHIJKLM0123456ab**

**F807-24pt ABCDE12345abcd**

**F808-24pt ABCDE123a**

**F809-36pt ABC12a**

**F810-48pt AB**

Appendix B – Lookup Codes (Fonts)

**TEC 203 dpi Fonts**

(B-472, SX-4)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section.*

**F901-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**

**F902-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**

**F903-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg**

**F904-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefgh**

**F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl**

**F906-18pt ABCDEFGHIJKLM0123456abcd**

**F907-24pt ABCDE12345abcdefg**

**F908-24pt ABCDE123abcd**

**F909-36pt ABC123abc**

**F910-48pt ABCD**

# TEC 300 dpi Fonts

(B-452, B-572, B-672, B-872, SX-5)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

## Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

<b>Tg11</b>	<b>31.2</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Th11</b>	<b>21.5</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Ti11</b>	<b>18.2</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tj11</b>	<b>17.6</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tk11</b>	<b>14.6</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tl11</b>	<b>18.8</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tm11</b>	<b>12.7</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tn11</b>	<b>29.9</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>To11</b>	<b>31.3</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tp11</b>	<b>21.9</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tq11</b>	<b>21.8</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>
<b>Tr11</b>	<b>18.9</b>	<b>ABCDEF GHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 1234567890!@#\$%^&amp;*()_+&lt;&gt;?:"{}.,/;</b>

Appendix B – Lookup Codes (Fonts)

**TEC 300 dpi Fonts**

(B-452, B-572, B-672, B-872, SX-5)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

Monospaced Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section.*

**F801-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopghij**

**F802-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopghij**

**F803-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopgh**

**F804-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefghijklmnopgh**

**F805-14pt ABCDEFGHIJKLM1234567abcdefghijklmnopghijkl**

**F806-18pt ABCDEFGHIJKLM0123456ab**

**F807-24pt ABCDE12345abcd**

**F808-24pt ABCDE123a**

**F809-36pt ABC12a**

**F810-48pt AB**

## Tec 300 dpi Fonts

(B-452, B-572, B-672, B-872, SX-5)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section.*

**F901-6pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**

**F902-8pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghij**

**F903-10pt ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefg**

**F904-12pt ABCDEFGHIJKLMNOPQRST1234567abcdefgh**

**F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl**

**F906-18pt ABCDEFGHIJKLM0123456abcd**

**F907-24pt ABCDE12345abcdefg**

**F908-24pt ABCDE123abcd**

**F909-36pt ABC123abc**

**F910-48pt ABCD**

## Tharo Fonts

(112+)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

FONT	CPI	
F011	33.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopstuvwxyz0123456789!@#\$%^&*()_+<>?;
F111	22.5	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopstuvwxyz0123456789!@#\$%^&*()_+<>?;
F211	17.0	ABCDEFGHIJKLMNQRSTUWXYZabcdefghijklmnopstuvwxyz 0123456789!@#\$%^&*
F311 UPPERCASE ONLY	12.9	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#\$%&*()+:;
F411 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#\$%
F511 UPPERCASE ONLY	9.8	ABCDEFGHIJKLMNQRSTUWXYZ0123456789#\$%
F611 UPPERCASE ONLY	5.9	ABCDEFGHIJKLMNQRSTUVWX 0123456789#\$%&*() +<>

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

- F901-6pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij
- F902-8pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefghij
- F903-10pt ABCDEFGHIJKLMNQRSTUWXYZ0123456789abcdefg
- F904-12pt ABCDEFGHIJKLMNQRST1234567abcdefgh
- F905-14pt ABCDEFGHIJKLM1234567abcdefghijkl
- F906-18pt ABCDEFGHIJKLM0123456abcd
- F907-24pt ABCDE12345abcdefg
- F908-30pt ABCDE123abcd
- F909-36pt ABC123abc
- F910-48pt ABCD

## Zebra 203 dpi Fonts

(Stripe, 105, 105SE, 105SL, 110XI, 130, 140, 140XI, 160S, 220XI, A300, DA402, S300, S400, S500, S600, PA400, PT400, QL, RW, R110XI, R4M, T300, Z4000, Z6000, Z4M, Z6M, ZM400)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

<u>FONT</u>	<u>CPI</u>	
ZB11	22.6	ABCDEFGHIJKLMN0PQRSTUVWXYZ0123456789!@#\$%&*()_+<>?:;
ZD11	17.0	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789!@#\$%&*()_+<>
ZI11	12.7	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#\$%&*()_+<>?:;
ZK11	4.2	ABCDEFGHIJKLMN0PQR abcdefghijklmnopqr 0123456789!@#\$%&*()
OCRA Uppercase Only	10.8	ABCDEFGHIJKLMN0PQRSTUVWXYZ 0123456789!@#\$%&*()_+<>?:;
OCRB	10.2	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#\$%&*()_+<>?:;

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster.*

**F901 – 6pt** ABCDEFGHIJKLMN0PQRSTUVWXYZ0123456789abcdefghijklmnopqrstu

**F902 – 8pt** ABCDEFGHIJKLMN0PQRSTUVWXYZ0123456789abcdefghijklmnopqrstu

**F903 – 10pt** ABCDEFGHIJKLMN0PQRSTUVWXYZ0123456789abcdefghijklmnop

**F904 – 12pt** ABCDEFGHIJKLMN0PQRST1234567abcdefghijklmnop

**F905 – 14pt** ABCDEFGHIJKLM1234567abcdefghijklmnop

**F906 – 18pt** ABCDEFGHIJKLM0123456abcd

**F907 – 24pt** ABCDE12345abcdefg

**F908 – 30pt** ABCDE123abcd

**F909 – 36pt** ABC123abc

**F910 – 48pt** ABCD

## Appendix B – Lookup Codes (Fonts)

### Downloadable Fonts

The following additional True Type fonts are available on some Zebra Thermal Printer models. See the **Download Fonts** at the beginning of this section.

Arial

Arial Narrow Bold

Courier New

Franklin Gothic Book

*Lucida Handwriting*

Times New Roman



## Zebra 300 dpi Fonts

(90xi, 105SL, 170, 170XI, GX430, R170XI, LP3844-Z, Z4M, Z6M, ZM400, ZM600, ZT230, PAX3)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than vector fonts.*

FONT	CPI	
ZF11	50.8	ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789!@#\$%&*()_+<>?:;
ZG11 Uppercase Only	33.8	ABCDEFGHIJKLMN OPQRSTUVWXYZ!@#\$%&*()_+<>?:;
ZO11	25.4	ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789!@#\$%&*()_+<>?:;
ZJ11	18.6	ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789!@#\$%&*()_+<>?:;
ZL11	6.4	ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789!@#\$%&*()_+<>?:;
OCRA Uppercase Only	10.8	ABCDEFGHIJKLMN OPQRSTUVWXYZ 0123456789!@#\$%&*()_+<>?:;
OCRB	10.2	ABCDEFGHIJKLMN OPQRSTUVWXYZ 0123456789!@#\$%&*()_+<>?:;

### Vector Fonts

*Vector fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

**F901 – 6pt** ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

**F902 – 8pt** ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

**F903 – 10pt** ABCDEFGHIJKLMN OPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz

**F904 – 12pt** ABCDEFGHIJKLMN OPQRST1234567abcdefghijklmnopqrstuvwxyz

**F905 – 14pt** ABCDEFGHIJKLM1234567abcdefghijklmnopqrstuvwxyz

**F906 – 18pt** ABCDEFGHIJKLM0123456abcd

**F907 – 24pt** ABCDE12345abcdefg

**F908 – 30pt** ABCDE123abcd

**F909 – 36pt** ABC123abc

**F910 – 48pt** ABCD

## Appendix B – Lookup Codes (Fonts)

### Downloadable Fonts

The following additional True Type fonts are available on some Zebra Thermal Printer models. See the **Download Fonts** at the beginning of this section.

Arial

Arial Narrow Bold

Courier New

Franklin Gothic Book

*Lucida Handwriting*

Times New Roman

## Zebra Fonts

(HT146, LP2824, LP2844, TLP2824, TLP2844, 2443, 2684, 2722, 2742, 2746)

The Printout below shows the base value of each font. Refer to the beginning of this section for font usage.

### Bitmap Fonts

*Bitmap fonts can be expanded, refer to the beginning of this section. Note: Bitmap fonts generally process faster than Vector Fonts.*

<u>FONT</u>	<u>CPI</u>	
<b>EB11</b>	<b>20.3</b>	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
<b>ED11</b>	<b>16.9</b>	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
<b>EH11</b>	<b>14.5</b>	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
<b>EL11</b>	<b>12.5</b>	ABCDEFGHIJKLMN0PQRSTUVWXYZabcdefghijklmnopqrstuvwxyz 0123456789!@#%&*()-_+=;:,.<>/?
<b>EG11</b>	<b>5.6</b>	<b>ABCDEFGHIJKLMN0PQRSTUVWXYZ 0123456789#\$%&amp;-+ : / . ,</b>



# Appendix C

## Two Dimensional Barcodes

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<b>UPS MAXICODE BARCODE.....</b>	<b>C3</b>
General Restrictions .....	C3
Currently Supported .....	C3
Selecting The Barcode Type For UPS Maxi Code .....	C4
Specifying The Data .....	C5
Mode Selection.....	C5
Example: Using Merge Data .....	C6
Changing The Data.....	C7
<b>PDF-417 BARCODE.....</b>	<b>C9</b>
General Restrictions .....	C9
Currently Supported .....	C9
Selecting The Barcode Type For PDF-417 .....	C9
Specifying Data - Using The Data Field.....	C10
Changing PDF-417 Default Attributes .....	C11
Specifying The Data - Using The Extended Data Field .....	C13
Changing PDF-417 Attributes and Data.....	C18
<b>DATA MATRIX BARCODE.....</b>	<b>C19</b>
General Restrictions .....	C19
Currently Supported .....	C19
Selecting The Barcode Type For Data Matrix .....	C19
Specifying Data - Using The Data Field.....	C20
Changing Data Matrix Default Attributes .....	C21
Specifying The Data - Using The Extended Data Field .....	C22
Changing Data Matrix Attributes and Data .....	C25
<b>QR CODE BARCODE .....</b>	<b>C27</b>
General Restrictions .....	C27
Currently Supported .....	C27
Selecting The Barcode Type For QR Code .....	C27
Specifying Data - Using The Data Field.....	C28
Changing QR Code Default Attributes.....	C30
Specifying The Data - Using The Extended Data Field .....	C30
Changing QR Code Attributes and Data .....	C33

## Appendix C – Two Dimensional Barcodes

# UPS MAXICODE BARCODE



## Introduction

United Parcel Service created the MaxiCode in 1992 for automated sortation. This symbol can encode 93 characters in a single 1” square ‘bulls-eye’ symbol. Unlike other barcode encoding, the MaxiCode has a rigid structure for the required fields. The incorporated data includes information about the package, service used, the shipper and the shipping information for the receiver.

## General Restrictions

1. Incrementing numbers may not be used with the UPS MaxiCode symbol.
2. Text blocks T<sub>i</sub> may not be used with the MaxiCode symbol.
3. Array’s A<sub>i</sub> may not be used with the MaxiCode symbol.

## Selecting the Barcode Type for UPS Maxicode

From within the label design, define a print location of the Maxicode symbol on the label using the **down** and **over** fields.

Type **BNX** in the barcode type or lookup field to indicate the Maxicode symbology.

Down	Over	hh	ww	Data		
<u>100</u>	<u>0010</u>	__	__			
iit.	iit.	it	it	Prefix	_____	Suffix _____
Barcode Type or Lookup....	<b>BNX</b>					Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...	_____					Cmd2 FillZns
Extended Char Set(E)..	__					Cmd3 End
VERTICAL PRINT=VD..	__					Cmd4 Deleteln
Tone.....	__					Cmd5 Changeln
Descenders(Y,N)....	__					Cmd8 LowerCse
Field Length..	__	Justify	__			Cmd9 LblSize
	iit	(L,R,C)				Cmd24 MoreKeys
						HELP Assist.



## Specifying the Data

Data to be encoded in the Maxicode Barcode is entered into the Maxicode data field. Tab to the data field and type **MAXI!** and **PRESS ENTER**.

```

Down Over  hh ww  Data
 100 0010  _ _  MAXI!
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup.... BNX
Line Set(BOX,HLIN,VLIN)... _____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. _ Justify _
                iit (L,R,C)

Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 Deleteln
Cmd5 ChangeIn
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
    
```

The Maxicode Data String Setup screen will be displayed.

```

MAXICODE DATASTRING SETUP

Maxicode# 01 Mode(2=US 3=NON-US) _

Fields:
(join)ClassCountryPostalcode . . _____
Class(3n) Country(3n) Postal Code(US-9n / Int-6an)

Tracking Number . . . (10 11,an) _____
SCAC . . . . . (UPSN) _____
UPS Shipping Number . . . (6an) _____
Julian Day Of Pickup . . (3n) _____
Shipment ID Number . . . (1-30an) _____ OPT
Package Number . . (1-3n/1-3n) _____
Package Weight . . . . (1-3n) _____
Address Validation . . . (1a) _____
Ship to- Street . . . (1-35an) _____ OPT
Ship to- City . . . . (1-20an) _____
Ship to- State . . . . . (2a) _____

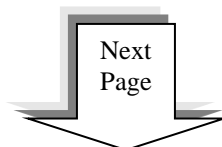
note: fields are longer than required to accomodate mergedata syntax.
    
```

The **Maxicode #** is displayed at the top left corner of the screen. Since several Maxicode symbols can be placed on a label format, each symbol is assigned a unique number. The Maxicode# will be used when it is necessary to edit the symbol's contents.

## Mode Selection

Mode 2 (US)      United States Maxicode  
Mode 3 (Non-US)    International Maxicode

The Postal code field must be **9** digits.  
 The Postal code field must be **6** characters.



## Example: Using Merge Data

In the following example, Merge fields (variable data) are used to supply class of service, country code, postal code (9 digits for US shipments; 6 characters for International), tracking number, UPS shipping number, Julian ship date, package in shipment, weight, address validation, ship to city, and ship to state.

```

MAXICODE DATASTRING SETUP

Maxicode# 01   Mode(2=US 3=NON-US) 2

Fields:
(join)ClassCountryPostalcode . . . M:01M:02M:03
      Class(3n) Country(3n) Postal Code(US-9n / Int-6an)

Tracking Number . . . (10 11,an) 1ZM:04
SCAC . . . . . (UPS) UPSN
UPS Shipping Number . . . (6an) M:05
Julian Day Of Pickup . . (3n) M:06
Shipment ID Number . . (1-30an)
Package Number . . (1-3n/1-3n) M:07
Package Weight . . . . (1-3n) M:08
Address Validation . . . (1a) M:09
Ship to- Street . . . (1-35an)
Ship to- City . . . . (1-20an) M:10
Ship to- State . . . . . (2a) M:11

note: fields are longer than required to accomodate mergedata syntax.
```

The table below lists the Merge field #, description, and the field lengths of each merge field.

	<u>Mergefield #</u>	<u>Description</u>	<u>Field Length</u>	
<b>Primary</b> Message	M:01	Class Of Service	3	Mandatory
	M:02	Country Code	3	Mandatory
	M:03	<b>Postal Code*</b>	6 or 9	Mandatory
<hr style="border-top: 1px dashed black;"/>				
<b>Secondary</b> Message	1ZM:04	Tracking Number**	8	Mandatory
	UPSN <i>constant</i>	SCAC	4	Mandatory
	M:05	UPS Shipping Number	6	Mandatory
	M:06	Julian Ship Date	3	Mandatory
		Shipment ID Number	30	Optional
	M:07	Package In Shipment	3/3	Mandatory
	M:08	Weight	3	Mandatory
	M:09	Address Validation (Y,N)	1	Mandatory
		Ship To Street	35	Optional
	M:10	Ship To City	20	Mandatory
M:11	Ship To State	2	Mandatory	

\* **Mode 2** the postal code must be 9 digits. **Mode 3** the postal code must be 6 characters.

\*\*Tracking Number must include the 1Z as a constant prefix.

The total combined length of the secondary message should **not** exceed 78 characters.

## Changing the Data

While editing the Maxicode line, tab to the data field and place a question mark (?) after the two digit number following **MAXI**; and **PRESS ENTER**.

Down	Over	hh	ww	Data	
<u>0100</u>	<u>0010</u>	__	__	<u>MAXI</u> <u>01?</u>	
iit.	iit.	it	it	Prefix	Suffix
Barcode Type or Lookup...	<u>BNX</u>			Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)...	_____			Cmd2	FillZns
Extended Char Set(E)..	_			Cmd3	End
VERTICAL PRINT=VD..	__			Cmd4	DeleteIn
Tone.....	__			Cmd5	ChangeIn
Descenders(Y,N)....	_			Cmd8	LowerCse
Field Length..	__	Justify	_	Cmd9	LblSize
	iit	(L,R,C)		Cmd24	MoreKeys
				HELP	Assist.

The Maxicode Data string setup screen will be displayed.

**MAXICODE DATASTRING SETUP**

Maxicode# 01 Mode(2=US 3=NON-US) 2

Fields:

(join)ClassCountryPostalcode . . .	<u>M</u> <u>01</u> <u>M</u> <u>02</u> <u>M</u> <u>03</u>	
Class(3n) Country(3n) Postal Code(US-9n / Int-6an)		
Tracking Number . . . (10 11,an)	<u>1Z</u> <u>M</u> <u>04</u>	
SCAC . . . . . (UPSN)	<u>UPSN</u>	
UPS Shipping Number . . . (6an)	<u>M</u> <u>05</u>	
Julian Day Of Pickup . . (3n)	<u>M</u> <u>06</u>	
Shipment ID Number . . .(1-30an)	_____	OPT
Package Number . . (1-3n/1-3n)	<u>M</u> <u>07</u>	
Package Weight . . . . (1-3n)	<u>M</u> <u>08</u>	
Address Validation . . . (1a)	<u>M</u> <u>09</u>	
Ship to- Street . . . (1-35an)	_____	OPT
Ship to- City . . . . (1-20an)	<u>M</u> <u>10</u>	
Ship to- State . . . . . (2a)	<u>M</u> <u>11</u>	

note: fields are longer than required to accomodate mergedata syntax.

Make any necessary adjustments to the data and press **Enter** to return to the label design screen.

## PDF-417 BARCODE



### Introduction

The PDF-417 (Portable Data File) was created at Symbol Technologies in 1991, making it one of the first two-dimensional matrix symbologies. It was designed to hold a large amount of data securely in a relatively small area, though not as compressed as later 2-d symbologies.

However, the PDF-417 was designed to allow great flexibility in how the data is stored and presented to best fit the label space needed and several PDF symbols can be linked in combination.

### General Restrictions

1. Total field length between the { } may not exceed 114 characters.
2. Incrementing numbers may not be used with the PDF-417.
3. Text blocks T<sub>i</sub> may not be used on the PDF-417 data string setup screen.
4. Array's A<sub>i</sub> may not be used on the PDF-417 data string setup screen.

## Selecting the Barcode Type for PDF-417

From within the label design, define a print location of the PDF-417 symbol on the label using the **down** and **over** fields.

Type **BNE** in the barcode type or lookup field to indicate the PDF-417 symbology.

Down	Over	hh	ww	Data		
<u>0100</u>	<u>0050</u>	__	__	_____		
iit.	iit.	it	it	Prefix _____	Suffix _____	
Barcode Type or Lookup....	<u>BNE</u>					Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...	_____					Cmd2 FillZns
Extended Char Set(E)..	_					Cmd3 End
VERTICAL PRINT=VD..	__					Cmd4 DeleteIn
Tone.....	__					Cmd5 ChangeIn
Descenders(Y,N)....	__					Cmd8 LowerCse
Field Length..	__	Justify	_			Cmd9 LblSize
	iit	(L,R,C)				Cmd24 MoreKeys
						HELP Assist.

## Specifying Data - Using the Data Field

Data to be encoded in the PDF-417 Barcode can be entered into the normal data field or an extended data field. The extended data field will be used when the amount of data to be encoded is too large for the regular data field. The extended data field is covered in a separate section.

### Entering Data:

When entering PDF-417 Barcode information (data), all fields must be placed within braces { }. Fields not placed in braces will be considered comments.

The following example uses Merge fields 01,02,03,04. Each field has maintain field length <M> specified as well as a Carriage Return Line Feed (~).

```

Down Over  hh ww  Data
0100 0050  _ _  {M'01<M>~}{M'02<M>~}{M'03<M>~}{M'04<M>~}
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... BNE _____
Line Set(BOX,HLIN,VLIN)... _____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ___ Justify _
                    iit (L,R,C)

Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 DeleteIn
Cmd5 ChangeIn
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
```

Press **Enter** to add the symbol to the label format design.

### Examples of fields:

- {12345} Constant data of five characters.
- {12345~} Constant data of five characters followed by a carriage return line feed.
- {M01} Merge field number one. Field length will be variable.
- {M01~} Merge field number one. Field length will be variable followed by a carriage return line feed.
- {M'01<M>} Merge field number one. Field length will be fixed.
- {M'01<M>~} Merge field number one. Field length will be fixed followed by a carriage return line feed.
- {F'01~} Fill zone number one. Field length will be variable followed by a carriage return line feed.

**NOTE:** <M> maintains the field length. ~ will encode a Carriage Return/Line Feed.

## Changing PDF-417 Default Attributes

The attributes of the PDF-417 Barcode controls the size, security, and truncation of the barcode.

The following step is necessary only if attributes need changing.

In the data field type **PDF!** and **PRESS ENTER**.

```

Down Over  hh ww  Data
____ _  ___ ___  PDF!
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup.... _____
Line Set(BOX,HLIN,VLIN)... _____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ___ Justify _
                    iit (L,R,C)

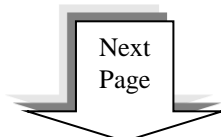
Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 DeleteIn
Cmd5 ChangeIn
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
    
```

The Default Values Attribute Screen will appear.

```

PDF417# 00      PDF417 DEFAULT VALUES

Number of Columns(1-30): 06   Element Width: 03   Element Height: 06
Security Level(0-8): 5       Truncate(Y,N): N
    
```

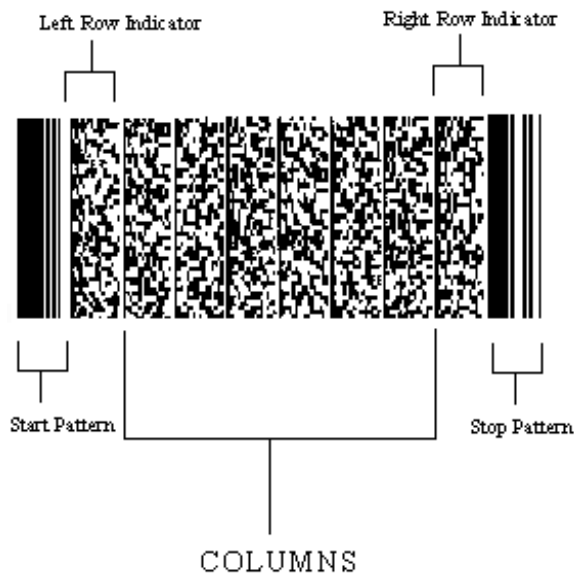


## Appendix C – Two Dimensional Barcodes

### PDF-417 Options – Continued

PDF417# 00	PDF417 DEFAULT VALUES	
Number of Columns(1-30): 06	Element Width: 03	Element Height: 06
Security Level(0-8): 5	Truncate(Y,N): N	

**Number of Columns (1-30):** (Default value 06) Indicates the number of columns to encode in the PDF-417 symbol.



In the above example there are six columns.

**Element Width:** (Default value 03) The width of the narrow bar expressed in dots. Increasing the element width will increase the width of the PDF symbol.

**Element Height:** (Default value 06) The height of the row expressed in dots. Increasing the element height will increase the height of the PDF symbol.

**Security Level (0-8):** (Default value 5) Consult the PDF specification for proper use of security level.

**Truncate (Y/N):** (Default value N) Truncation Y (yes) will omit the right row indicators and the stop pattern will be reduced to one module width bar. (Printer dependent)

Type the desired values, press **Enter** to return to the design screen.





## Appendix C – Two Dimensional Barcodes

PDF Datastring Setup – Continued.

PDF417# 01      PDF417 DATASTRING SETUP

Number of Columns(1-30): 06      Element Width: 03      Element Height: 06  
Security Level(0-8): 5      Truncate(Y,N): N  
Data:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

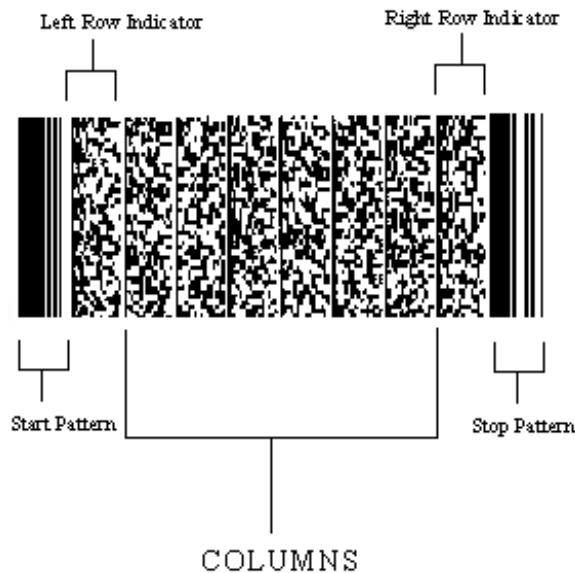
\_\_\_\_\_

Note: Enclose fields with{ }. e.g. {ABC CO.}{515 W.5th St.}{Covington, KY}  
All data NOT ENCLOSED{ } will be lost.      F8 = Upper and Lower Case

The **PDF-417 #** is displayed at the top left corner of the screen. Since several PDF-417 symbols can be placed on a label format, each symbol is assigned a unique number. The PDF# will be used when it is necessary to edit the symbol's contents.

### Attributes

**Number of Columns (1-30):** (Default value 06) Indicates the number of columns to encode in the PDF-417 symbol. Increasing the number of columns will produce a wider Barcode.



*\*NOTE: In the above example there are six data columns.*









# DATA MATRIX BARCODE



## Introduction

International Data Matrix, Inc (ID Matrix) created the two-dimensional barcode symbol which can hold over 2,300 characters. However, it's primary function is encoding part and product details since not only can it produce a lot of data in a very small space, but Data Matrix symbols can actually be created directly into the product material itself.

## General Restrictions

1. Total field length between the { } may not exceed 114 characters.
2. Incrementing numbers may not be used with the Data Matrix.
3. Text blocks T<sub>i</sub> may not be used on the Data Matrix data string setup screen.
4. Array's A<sub>i</sub> may not be used on the Data Matrix data string setup screen.

\* See individual printer notes for additional printer restrictions.

## Selecting the Barcode Type for Data Matrix

From within the label design, define a print location of the Data Matrix symbol on the label using the **down** and **over** fields. Type **BNQ** in the barcode type or lookup field to indicate the Data Matrix symbology.

Down	Over	hh	ww	Data		
<u>0100</u>	<u>0050</u>	__	__			
iit.	iit.	it	it	Prefix	_____	Suffix _____
Barcode Type or Lookup....				<u>BNQ</u>		Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...				_____		Cmd2 FillZns
Extended Char Set(E)..				__		Cmd3 End
VERTICAL PRINT=VD..				_		Cmd4 Deleteln
Tone.....				__		Cmd5 Changeln
Descenders(Y,N)....				__		Cmd8 LowerCse
Field Length..				Justify -		Cmd9 LblSize
				iit (L,R,C)		Cmd24 MoreKeys
						HELP Assist.

## Specifying Data - Using the Data Field

Data to be encoded in the Data Matrix Barcode can be entered into the normal data field or an extended data field. The extended data field will be used when the amount of data to be encoded is too large for the regular data field. The extended data field is covered in a separate section.

### Entering Data:

When entering Data Matrix Barcode information (data), all fields must be placed within braces { }. Fields not placed in braces will be considered comments.

The following example uses Merge fields 01,02,03,04. Each field has maintain field length <M> specified as well as a Carriage Return Line Feed (~).

Down Over	hh	ww	Data	
0100	0050	__	__	{M!01<M>~}{M!02<M>~}{M!03<M>~}{M!04<M>~}
iit.	iit.	it	it	Prefix _____ Suffix _____

Barcode Type or Lookup....	<u>BNQ</u>	Cmd1	MrgData
Line Set(BOX,HLIN,VLIN)...	___	Cmd2	FillZns
Extended Char Set(E)..	_	Cmd3	End
VERTICAL PRINT=VD..	__	Cmd4	DeleteIn
Tone.....	__	Cmd5	ChangeIn
Descenders(Y,N)....	_	Cmd8	LowerCse
Field Length..	___ Justify _	Cmd9	LblSize
	iit (L,R,C)	Cmd24	MoreKeys
		HELP	Assist.

Press **Enter** to add the symbol to the label format design.

### Examples of fields:

- {12345} Constant data of five characters.
- {12345~} Constant data of five characters followed by a carriage return line feed.
- {M!01} Merge field number one. Field length will be variable.
- {M!01~} Merge field number one. Field length will be variable followed by a carriage return line feed.
- {M!01<M>} Merge field number one. Field length will be fixed.
- {M!01<M>~} Merge field number one. Field length will be fixed followed by a carriage return line feed.
- {F!01~} Fill zone number one. Field length will be variable followed by a carriage return line feed.

**NOTE:** <M> maintains the field length. ~ will encode a Carriage Return/Line Feed.



## Changing Data Matrix Default Attributes

The attributes of the matrix barcode control size, security, and ID of the barcode.

The following step is necessary only if attributes need changing.

In the data field type **MATRIX!** press **Enter**.

Down	Over	hh	ww	Data		
_____	_____	_____	_____	<b>MATRIX!</b>	_____	_____
iit.	iit.	it	it	Prefix	_____	Suffix _____
Barcode Type or Lookup...	_____					Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...	_____					Cmd2 FillZns
Extended Char Set(E)..	_____					Cmd3 End
VERTICAL PRINT=VD..	_____					Cmd4 DeleteLn
Tone.....	_____					Cmd5 ChangeLn
Descenders(Y,N)....	_____					Cmd8 LowerCse
Field Length..	_____	Justify	_____			Cmd9 LblSize
		iit (L,R,C)				Cmd24 MoreKeys
						HELP Assist.

The Default Values Attribute Screen will appear.

Data Matrix#	DATA MATRIX DEFAULT VALUES
01	
ECC Level (0,50,80,100,140,200):	<u>200</u> Element Size: <u>04</u> Format ID (1-6): <u>06</u>
Number of Columns :	<u>0</u> Number of Lines: <u>0</u>

**ECC Level (0,50, 80,100,140,200):** (Default value 200) Indicates the level of error correction in the Data Matrix symbol.

**Element Size:** (Default value 04) The size of the individual blocks that comprise the Data Matrix. The Element size is for both width and height.

**Format ID:** (Default value 06) The data structure the contents of the Data Matrix is following. This value is dependent upon the requirements of the receiver.

**Number of Columns (0-9):** (Default value 0\*) The number of columns the Data Matrix is broken into. Increasing this number will cause the symbol to grow taller but narrower. Leaving the value at zero, the printer will automatically configure the number of columns.

*\*Using the ECC value of 200 automatically nullifies this value to 0.*

**Number of Lines (0-9) :** (Default value 0\*) The number of lines (rows) the Data Matrix is broken into. Increasing the number of lines will cause the symbol to grow wider but shorter. Leaving this value at zero, the printer will then automatically configure the number of lines.

*\*Using the ECC value of 200 automatically nullifies this value to 0.*

Type the desired values; and then **PRESS ENTER** to return to the design screen.









# QR CODE BARCODE



## Introduction

Denso Corporation in Japan developed QR Code in 1995. Its primary function was for high-speed sortation and the ability to encode Kanja and Katakana (Japanese script characters). A fully functioning system can scan up to 30 QR Codes per second.

## General Restrictions

1. Total field length between the { } may not exceed 114 characters.
2. Incrementing numbers may not be used with the QR Code.
3. Text blocks T<sub>i</sub> may not be used on the QR Code data string setup screen.
4. Array's A<sub>i</sub> may not be used on the QR Code data string setup screen.

\* See individual printer notes for additional printer restrictions.

## Selecting the Barcode Type for QR Code

From within the label design, define a print location of the QR Code symbol on the label using the **down** and **over** fields.

Type **BNq** in the barcode type or lookup field to indicate the QR Code symbology.

Down	Over	hh	ww	Data		
<u>0100</u>	<u>0050</u>	__	__			
iit.	iit.	it	it	Prefix _____	Suffix _____	
Barcode Type or Lookup....	<u>BNq</u>					Cmd1 MrgData
Line Set(BOX,HLIN,VLIN)...	_____					Cmd2 FillZns
Extended Char Set(E)..	_					Cmd3 End
VERTICAL PRINT=VD..	__					Cmd4 Deleteln
Tone.....	__					Cmd5 Changeln
Descenders(Y,N)....	__					Cmd8 LowerCse
Field Length..	_____	Justify	-			Cmd9 LblSize
	iit	(L,R,C)				Cmd24 MoreKeys
						HELP Assist.

## Specifying Data - Using the Data Field

Data to be encoded in the QR Code Barcode can be entered into the normal data field or an extended data field. The extended data field will be used when the amount of data to be encoded is too large for the regular data field. The extended data field is covered in a separate section.

### Entering Data:

When entering QR Code Barcode information (data), all fields must be placed within braces { }. Fields not placed in braces will be considered comments.

The following example uses Merge fields 01,02,03,04. Each field has maintain field length <M> specified as well as a Carriage Return Line Feed (~).

Down	Over	hh	ww	Data
0100	0050	__	__	{M'01<M>~}{M'02<M>~}{M'03<M>~}{M'04<M>~}
iit.	iit.	it	it	Prefix _____ Suffix _____
Barcode Type or Lookup....				<u>BNq</u>
Line Set(BOX,HLIN,VLIN)...				_____
Extended Char Set(E)..				-
VERTICAL PRINT=VD..				__
Tone.....				__
Descenders(Y,N)....				-
Field Length..				Justify -
				iit (L,R,C)

Cmd1	MrgData
Cmd2	FillZns
Cmd3	End
Cmd4	DeleteLn
Cmd5	ChangeLn
Cmd8	LowerCse
Cmd9	LblSize
Cmd24	MoreKeys
HELP	Assist.

Press **Enter** to add the symbol to the label format design.

### Examples of fields:

- {12345} Constant data of five characters.
- {12345~} Constant data of five characters followed by a carriage return line feed.
- {M'01} Merge field number one. Field length will be variable.
- {M'01~} Merge field number one. Field length will be variable followed by a carriage return line feed.
- {M'01<M>} Merge field number one. Field length will be fixed.
- {M'01<M>~} Merge field number one. Field length will be fixed followed by a carriage return line feed.
- {F'01~} Fill zone number one. Field length will be variable followed by a carriage return line feed.

**NOTE:** <M> maintains the field length. ~ will encode a Carriage Return/Line Feed.



## Changing QR Code Default Attributes

The attributes of the QR Barcode control the size, model, and error correction of the barcode.

**The following step is necessary only if attributes need changing.**

In the data field type **QRCODE#** and then **PRESS ENTER**.

```

Down Over  hh ww  Data
  ___ ___  __ __  QRCODE#
  iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... _____
Line Set(BOX,HLIN,VLIN)... _____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. ___ Justify _
                    iit (L,R,C)

                                Cmd1 MrgData
                                Cmd2 FillZns
                                Cmd3 End
                                Cmd4 Deleteln
                                Cmd5 Changeln
                                Cmd8 LowerCse
                                Cmd9 LblSize
                                Cmd24 MoreKeys
                                HELP Assist.
    
```

The Default Values Attribute Screen will appear.

```

QRCODE# 01      QRCODE DATASTRING SETUP

Size (1-10):  03
Model (1,2):  2      Error Correction (L,M,Q,H):  M
Data:
    
```

**Size (1-10):** (Default value 3) Indicates the size of the elements (boxes) that comprise the QR Code symbol.

**Model:** (Default value 02) Type of QR Code. Model 2 is the Enhanced QR Code.

**Error Correction:** (Default value M) The level of error correction. The higher the level (Low, Medium, Quality, High), the larger the symbol.

Type the desired values; **PRESS ENTER** to return to the design screen.

## Specifying the Data - Using the Extended Data Field

In some case the data field may not be large enough to place all the QR Code information. To eliminate this problem, use the extended data field as outlined below.

In the Data Field type QRCODE; then **PRESS Enter**.

```

Down Over  hh ww  Data
0100 0050  __ __  QRCODE;
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... ____
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. __
Tone..... _
Descenders(Y,N).... _
Field Length.. ____ Justify _
                    iit (L,R,C)

Cmd1  MrgData
Cmd2  FillZns
Cmd3  End
Cmd4  DeleteIn
Cmd5  ChangeIn
Cmd8  LowerCse
Cmd9  LblSize
Cmd24 MoreKeys
HELP  Assist.
    
```

The QR Code attributes are displayed along with the extended data field.

```

QRCODE# 01      QRCODE DATASTRING SETUP

Size (1-10):  03
Model (1,2):  2      Error Correction (L,M,Q,H):  M
Data _____
    
```

When entering QR Code Barcode information (data), all fields must be placed within braces { }. Fields not placed in braces will be considered comments.

QR Code Datastring Setup - Continued.

QR CODE# 01      QR CODE DATASTRING SETUP

Size (1-10): 03

Model (1,2): 2      Error Correction (L,M,Q,H): M

Data:

PART NUMBER {P12345678}

---



---



---

The QR Code # is displayed at the top left corner of the screen. Since several QR Code symbols can be placed on a label format, each symbol is assigned a unique number. The QR# will be used when it is necessary to edit the symbol's contents.

**Data**

Type the fields you wish to place in the QR Code symbol between braces { }. Data not enclosed in braces will be considered comments. Since many fields can be encoded in a QR Code symbol, insertion of comments will assist in managing the symbol's contents.

**Examples of fields:**

- {12345}      Constant data of five characters.
- {12345~}      Constant data of five characters followed by a carriage return line feed.
- {M01}      Merge field number one. Field length will be variable.
- {M'01~}      Merge field number one. Field length will be variable followed by a carriage return line feed.
- {M'01<M>}      Merge field number one. Field length will be fixed.
- {M'01<M>~}      Merge field number one. Field length will be fixed followed by a carriage return line feed.
- {F'01~}      Fill zone number one. Field length will be variable followed by a carriage return line feed

Permissible value for fields includes constant data, merge fields, fill zones, and carriage return/line feed (cr/lf).

Once all fields have been entered in the data field, **PRESS ENTER** to return to the design screen.

## Appendix C – Two Dimensional Barcodes

The following example uses Merge fields 01,02,03,04,05,06,07,08,09,10. Each field has maintain field length<M> specified as well as a Carriage Return Line Feed (~).

```

QRCODE# 01      QRCODE DATASTRING SETUP

Size (1-10):   03
Model (1,2):   2      Error Correction (L,M,Q,H): M
Data:
{M!01<M>~}{M!02<M>~}{M!03<M>~}{M!04<M>~}{M!05<M>~}{M!06<M>~}{M!07<M>~}
{M!08<M>~}{M!09<M>~}{M!10<M>~}
    
```

Notice that the data field will contain QRCODE!01 which indicates the QR# assigned by the labeling system.

```

Down Over  hh ww  Data
0100 0050  __ __  QRCODE!01
iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... BNq
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. __
Tone..... __
Descenders(Y,N).... _
Field Length.. __ Justify _
                   iit (L,R,C)

Cmd1  MrgData
Cmd2  FillZns
Cmd3  End
Cmd4  Deleteln
Cmd5  Changeln
Cmd8  LowerCse
Cmd9  LblSize
Cmd24 MoreKeys
HELP  Assist.
    
```

Press **Enter** to add the symbol to the label format design. The label design screen re-displays.

## Changing QR Code Attributes and Data

While editing the QR Code line, tab to the data field and place a question mark (?) after the two digit number following QRCODE!, press **Enter**.

```

SpcITn  Down Over  hh ww  Data
01 BNq   0100 0050  00 00  QRCODE!01

          Down Over  hh ww  Data
          0100 0050  00 00  QRCODE!01?
          iit. iit.  it it  Prefix _____ Suffix _____

Barcode Type or Lookup... BNq
Line Set(BOX,HLIN,VLIN)... ____
Extended Char Set(E).. _
VERTICAL PRINT=VD.. _
Tone..... _
Descenders(Y,N).... _
Field Length.. _ Justify _
                iit (L,R,C)

Cmd1 MrgData
Cmd2 FillZns
Cmd3 End
Cmd4 Deleteln
Cmd5 ChangeIn
Cmd8 LowerCse
Cmd9 LblSize
Cmd24 MoreKeys
HELP Assist.
    
```

The QR Code extended data field screen will appear. Changes may be made to the attributes and the data.

```

          QRCODE# 01      QRCODE DATASTRING SETUP

          Size (1-10): 03
          Model (1,2): 2      Error Correction (L,M,Q,H): M
          Data:
          {M!01<M>~}{M!02<M>~}{M!03<M>~}{M!04<M>~}{M!05<M>~}{M!06<M>~}{M!07<M>~}
          {M!08<M>~}{M!09<M>~}{M!10<M>~}
          _____
          _____
          _____
    
```

Once all necessary changes have been made, press **Enter** to return to the label design screen.



# Appendix D

---

## Backing Up The Software

To backup the barcode labeling software, perform the following steps outlined below:

1. Sign onto the IBM i as QSECOFR.

During the back-up process no one is allowed to use the Barcode software. Additionally, the TLABARCODE and TLACS library may not be in any users' library list.

2. If using the Graphical Label Designer ensure that the BC400SERVR subsystems are ended.

*Type the following:* **ADDLIB TLACS**      *press Enter*

*Type the following:* **ENDBC400**      *press Enter*

3. Ensure that the BC400SERVR subsystem has ended.

*Type the following:* **WRKSBSJOB BC400SERVR** *press Enter*

*A message should be displayed below the command line indicating that the BC400SERVR subsystem is NOT active. If no such message is displayed go back to step 2.*

4. Save the TLABARCODE and TLACS library.

*Type the following:* **SAVLIB LIB(TLABARCODE TLACS) DEV(DEVICENAME)** *press Enter*  
*(Device Name e.g. TAP01,OPT01,QTAPE etc...)*

5. Restart the GUI subsystem.

*Type the following:* **ADDLIB TLACS** *press Enter*

*Type the following:* **STRBC400**      *press Enter*





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## Contacto



**Distribuidor Oficial**

Via Laietana 20  
08003 Barcelona  
España

att@att.es  
www.att.es  
+34 933 191 612

### **Barcode400 4.0 User Manual**

©T.L. Ashford & Associates  
626 Buttermilk Pike  
Crescent Springs, KY 41017

Phone: 800-541-4893  
Fax: 859-291-1804  
Web: [www.tlashford.com](http://www.tlashford.com)