# **Operator's Manual**

EDACS<sup>®</sup>
C3 MAESTRO<sup>™</sup>
DISPATCH CONSOLE
FOR WINDOWS NT<sup>®</sup>





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# **SECTION 1: START-UP**

#### IMPORTANT NOTE

Unless otherwise stated, all procedures in this section assume the console's hardware and software are configured in accordance with factory default settings. Consult with system or dispatch administration personnel for specific details.

## TURNING ON THE EQUIPMENT

- 1. Consult with system or dispatch administration personnel for power-up authorization and/or verify all cabling, power connections, other system hardware, etc. are interconnected as required. (Refer to the console's maintenance and installation manuals as necessary.)
- **2.** Turn on the computer system's monitor. Typically, the on/off power switch is located on the front panel of the unit and a small power light on this panel lights-up when AC power is applied and the unit is on. If necessary, consult the manufacturer's documentation for details.
- **3.** Turn on the audio system unit (the "Enhanced Audio Enclosure" or the "Audio Tower"). The power switch is located on the unit's rear panel<sup>1</sup>. A small power indicator light on the front panel lights-up when AC power is applied and the unit is on.

<sup>&</sup>lt;sup>1</sup> If the console is equipped with the audio system unit which is white in color and referred to as the "Audio Tower" (because it stands upright/vertically), the unit's on/off power switch is located inside unit's swinging door. Open the door to gain access to the power switch.

- **4.** Turn on the computer system's CPU enclosure. Typically, the CPU enclosure's on/off power switch is located on the front panel of the unit and a small power indicator light on this panel lights-up when AC power is applied and the unit is on. If necessary, consult the manufacturer's documentation for complete details.
- **5.** Continue with the operating system boot process described in the next section.

# "BOOTING-UP" THE OPERATING SYSTEM SOFTWARE AND STARTING THE CONSOLE SOFTWARE

Before the console software can function, the computer's operating system software (Windows NT®) must be started. In the computer industry, the process is typically referred to as "booting-up" the computer. The boot-up process automatically starts very soon after the computer's CPU enclosure is powered-up. After the operating system starts, the C3 Maestro console software automatically starts.

## Factory Default Start-Up Configuration

If the console is configured with the factory default start-up configuration, no actions are necessary after computer power-up to start the operating system software and the console software—both will automatically start without any operator intervention.

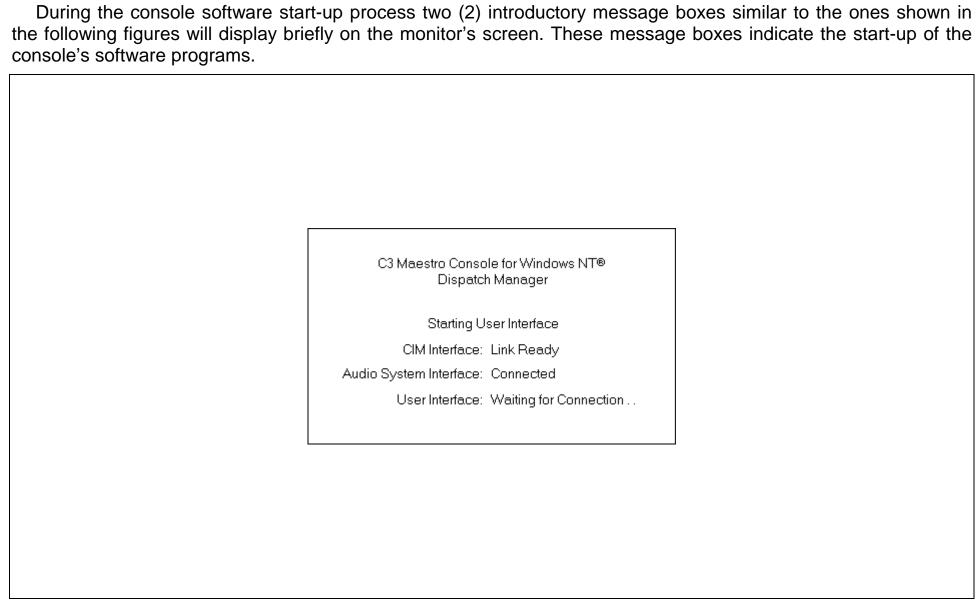


Figure 1-1 — First Start-Up Message Box



Figure 1-2 — Second Start-Up Message Box

Just after the appearance of the second message box, the console software will begin "painting" its screen; see Figure 1-3. Upon completion of this painting process, all of the console's communication module's program-up per the last operational session (if any) and module page A displays as the currently chosen module page. A sample screen is shown in Figure 1-4.

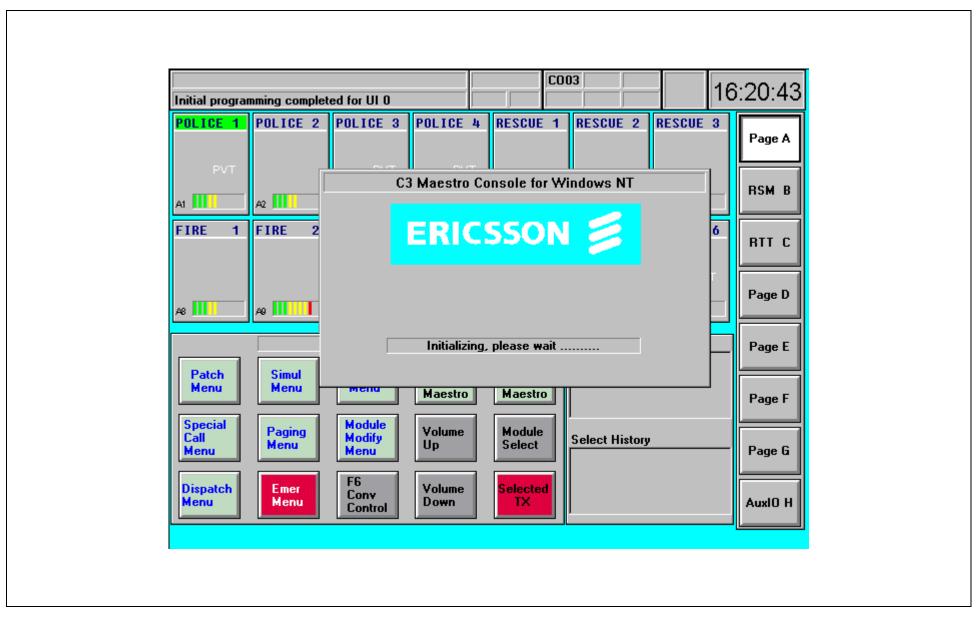


Figure 1-3 — Sample Console Screen During the Start-Up "Paint"

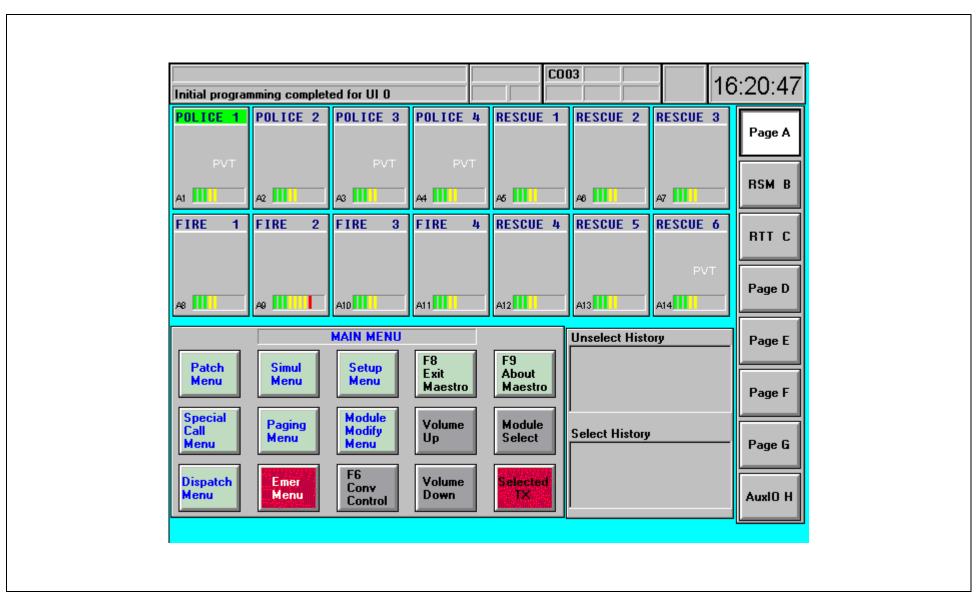
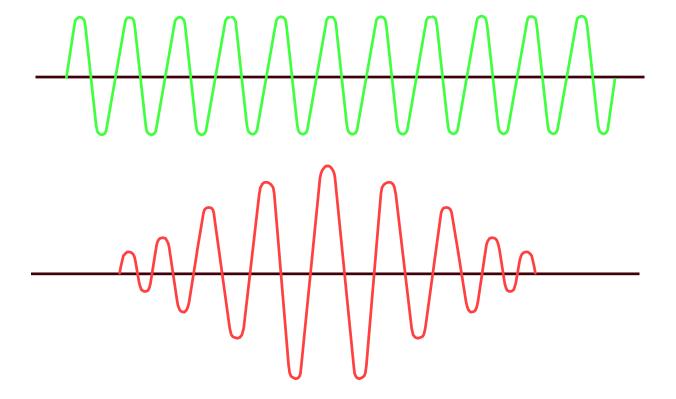


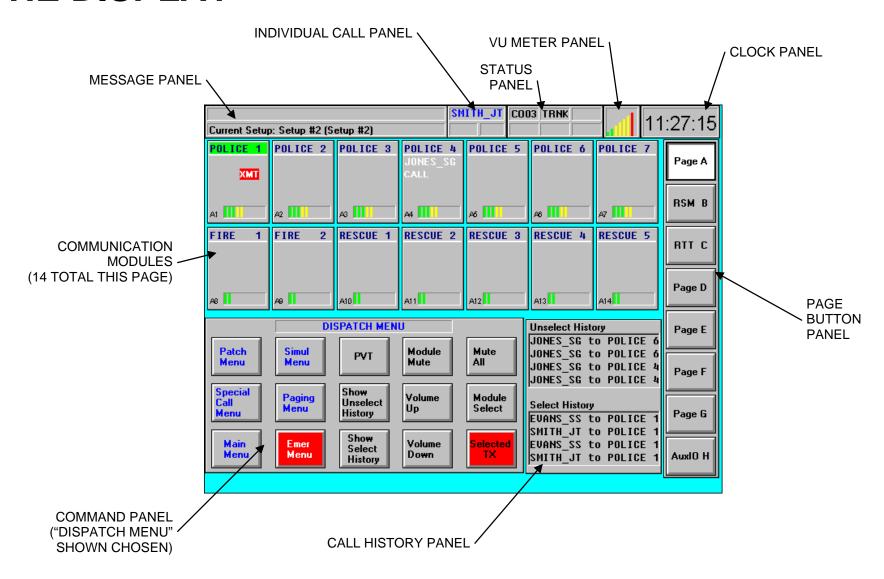
Figure 1-4 — Sample Console Screen After Completion of the Start-Up

When necessary, refer to section 13 in this manual (page 143) for important console shut-down information.

# **SECTION 2: BASIC COMMUNICATION**



## THE DISPLAY



Basic console display items are briefly described in the following paragraphs:

- Communication Modules—The communication module or simply "module" is the console's fundamental communication indication and console-originated transmission control display item. Each is programmable with a single entity (trunked talk group, individual radio unit, conventional channel or another console) for incoming call monitoring and outgoing console-originated call transmission functions. The figure on the previous page shows fourteen (14) total communication modules positioned in two rows of seven. This positioning reflects the pick and instant transmit key layout on the dispatch keyboard. Up to 112 communication modules can exist across multiple module pages. See page 20 in this manual for additional information.
- Status Message Modules (see page 132 for an example)—Status message is a feature licensed option which provides EDACS radio unit transmitted status monitoring at the console. Indications are displayed in one or more status message modules. Each status message module is assigned a unique title. For example, two status message modules utilized during emergency operations could be separately titled "IN ROUTE" and "AT SCENE." Unit names of EDACS radio units which have transmitted an equivalent status appear in the respective status message module's list. Using a scrolling-type user interface, each status message module can display up to sixty-four (64) radio units' names which have transmitted an equal status (and assigned to the status message module). Per the previous example, during a given instant, five different units could be "in route" per their radio unit names listed in the "IN ROUTE" status message module, and three could be "at (the) scene" per their radio unit names listed in the "AT SCENE" status message module. Each listed unit name is also time-stamped to indicate when the status message was received by the console. Refer to section 12 for additional information.
- Request-To-Talk (RTT) Modules (see page 130 for an example)—The RTT feature licensed option is similar to the status message option except the dispatcher may, as desired, individually reply to a unit requesting communications with dispatch via a radio status transmission. Dispatcher reply is accomplished via an analog individual call to the desired/chosen unit with the dispatcher being the caller and the requesting-to-talk unit being the callee. The individual call is initiated directly from the respective RTT module holding the queued-up requesting-to-talk unit(s). RTT queue status is indicated by displaying radio units' aliases/names or logical ID (LID) numbers within the particular RTT module. Using a scrolling-type user interface, each RTT module can

display up to sixty-four (64) radio units which have transmitted an equal status message. Unlike status message modules, RTT modules *do not* time-stamp each radio unit listing. Refer to section 12 for additional information.

- Auxiliary Input/Output (I/O) Modules (see page 137 for examples)—Using auxiliary I/O modules at the console, a console user/dispatcher can monitor and control the state of CEC/IMC auxiliary inputs and outputs. Auxiliary I/O is a feature licensed option at the C3 Maestro console for Windows NT. Each module is assigned to a specific CEC/IMC auxiliary input or output. Each has a large button at the top and a small text line at the bottom. The large button provides a text label identification area for the assigned input or output, output control via the mouse/track-ball/touch-screen if it is an output, and/or acknowledged control via the mouse/track-ball/touch-screen if it is an acknowledge input. Simple dispatch keyboard key mapping also allows auxiliary I/O control via keys on the dispatch keyboard. The small text line at the bottom indicates the current event state (active or inactive) via user-friendly text labels. As the system requires, both the button labels and the text line labels are customizable on a per-module basis. Auxiliary I/O state changes are also indicated within the console's message panel. Refer to section 12 for additional information.
- Module Pages—Each module page contains one or more communication modules, status message modules, RTT modules and/or auxiliary input/output (I/O) modules. Up to eight (8) module pages, identified page A thru page H, may be available. Only one (1) can be chosen at a time. When chosen, the module page's modules are displayed. The modules themselves are considered dynamic display items because they appear and disappear when the chosen module page changes. Module page selection is performed by the page button panel located on the console's screen using mouse/track-ball/touch-screen actions or by the page up/down keys on the dispatch keyboard using keystroke actions.
- Page Button Panel—The console's page button panel is considered a static display item because it does not appear or disappear when the chosen module page changes. It provides two (2) basic functions for the console's module pages. First, it is the screen display item which provides module page selection via the mouse/track-ball/touch-screen; each button on the panel can be pressed to select the corresponding module page. Secondly, for all pages which are not currently selected, each button highlights to indicate an incoming call exists or an emergency has been declared on at least one entity programmed into a communication

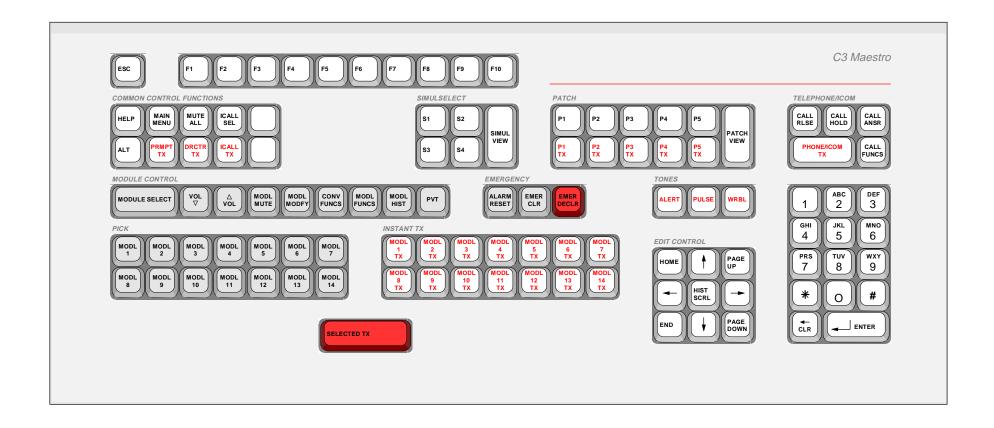
- module on the respective page. This highlighting feature is primarily provided so incoming calls on the nonchosen module pages can be easily observed.
- Message Panel—The message panel—a static display item—consists of two text lines which indicate various messages. The bottom-most line primarily displays system and operator error messages. The top-most line displays system-wide related messages such as emergency declarations, CEC/IMC auxiliary input/output (I/O) state transitions, and status message and RTT radio status-related messages. In most cases system-wide indications are also displayed in another area of the screen. For example, indication of an emergency declaration on a trunked talk group also occurs in the communication module programmed with the respective group entity upon which the emergency was declared.
- Status Panel—The console's status panel—a static display item—contains six (6) small dedicated text areas for various system status indications. These indications include the console's number, the lowest-level EDACS trunked system operational status of all trunked systems connected to the CEC/IMC (full-feature trunking, failsoft trunking, etc.), Call Director status (off hook), audio system off or headset connected status (a shared area), CEC/IMC database download status, and speaker audio mute all status (of all unselected communication modules).
- Volume Units (VU) Meter Panel—The VU meter panel—a static display item—displays relative audio levels
  of transmit and receive audio to and from the selected entity/module. Indication is in a bar graph format.
  When the console is receiving a call from the selected entity, the panel displays the relative level of the
  incoming audio. When the console is transmitting to the selected entity (or to any unselected entity via an
  "instant" transmit function), the panel displays the relative level of transmit audio level being sent out from the
  console.
- **Clock Panel**—The clock panel—a static display item—displays the current time in an hours:minutes:seconds digital-type format.
- Call History Panel—The call history panel—a static display item—continuously displays the last four (4) select calls and the last four (4) unselect calls received by the console. Each call is indicated on a caller-to-callee basis in a respective select or unselect list within the panel. When an incoming call is received, the oldest call in the respective list scrolls off the list.

Extended and detailed call history information is available from three (3) separate pop-up dialog boxes (not show in figure). One displays select call history for the last forty-eight (48) callers, one displays unselect call history for the last forty-eight callers, and one displays call history on a per communication module basis for the last twenty-four (24) callers. See section 3 for additional information.

• Command Panels—The command panels, each identified with a specific "menu" name, are the console's primary display items for control via mouse/track-ball and/or touch-screen actions. Only one is displayed (chosen) at a time. Each command panel has fifteen (15) buttons which are organized in a very user-friendly and simplistic manner for quick dispatch operating versatility. On each command panel, most buttons activate specific console operating functions such as module volume up/down control or transmit to (PTT) the selected entity; these buttons are located mostly to the right and bottom portions of each command panel. Other buttons on each command panel are utilized to switch to other command panels; these buttons are located mostly to the left and top portions of each command panel.

Many command panels such as the Main Menu command panel and the Dispatch Menu command panel have common buttons to reduce panel-to-panel switching requirements during typical dispatch operations. Other command panels such as the Emergency Menu command panel, the Patch Menu command panel and the Simulselect Menu command panel group buttons which control specific functions which console can perform; these panels also share some common/widely used buttons such as the volume control buttons.

## THE DISPATCH KEYBOARD



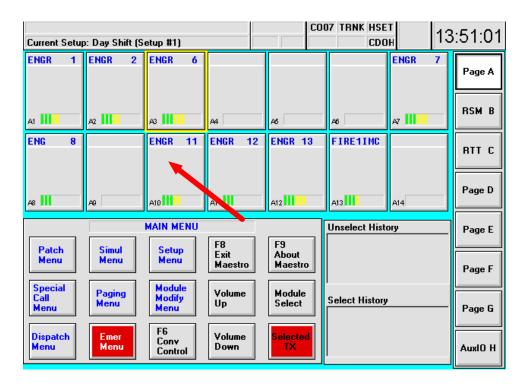
The C3 Maestro's specially designed dispatch keyboard—sometimes referred to as the "custom keyboard"—adds tactile-feel keyboard operation to the console thus providing dispatch speed capability equal to a modular-type console. It provides easy control for the advanced features of the C3 Maestro console. Keys with similar functions

are grouped together and the most frequently used key groups are located near the bottom of the keyboard for quick and easy access. For example, transmit and module pick keys are located at the bottom. Seldom used keys are located near the top of the keyboard. Key groups include:

- a selected module transmit (PTT) key
- fourteen (14) module pick keys
- fourteen (14) module instant transmit keys
- nine (9) module control keys
- three (3) emergency keys
- nine (9) edit control keys
- three (3) tone transmission keys
- a numeric keypad (telephone style)
- eight (8) common control function keys
- five (5) simulselect keys
- eleven (11) patch keys
- five (5) telephone/intercom keys
- ten (10) function keys and an escape key

In most cases, dispatch keyboard operation works in parallel with the console's pointing devices (mouse/track-ball and/or touch-screen). All standard dispatcher actions can be performed via either the dispatch keyboard or the pointing device and, in most cases, switching between the different operational input devices is possible when performing sequential operational input actions in a multi-action operation. For example, a communication module programming operation could be started with the dispatch keyboard, continued with the mouse and completed with the touch-screen. In most cases, each button which appears on the screen (for pointing device inputs) also has a corresponding key on the dispatch keyboard which performs an identical function.

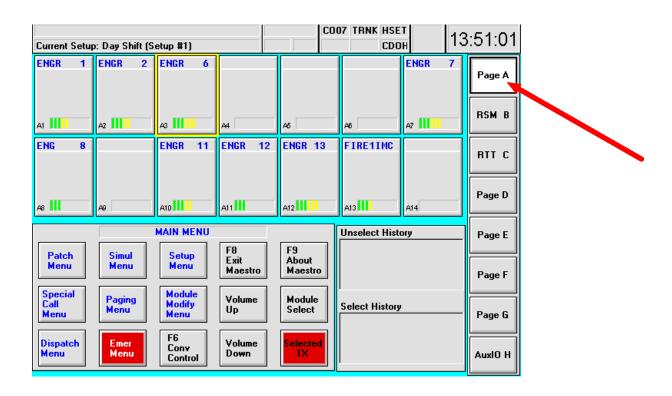
## **COMMUNICATION MODULES**



## Communication modules can be programmed with:

- 1. A trunked talk group,
- 2. An individual radio unit,
- 3. Another console, or
- 4. A conventional channel.

## **MODULE PAGE**



- 1. Page buttons are located on the right side of the console screen.
- 2. Current page button background is highlighted.
- 3. If an active call is present on a hidden page, the page button text is yellow.
- 4. If an active emergency is present on a hidden page, the page button background is red.

## WHAT IS PICKING & SELECTING A MODULE?

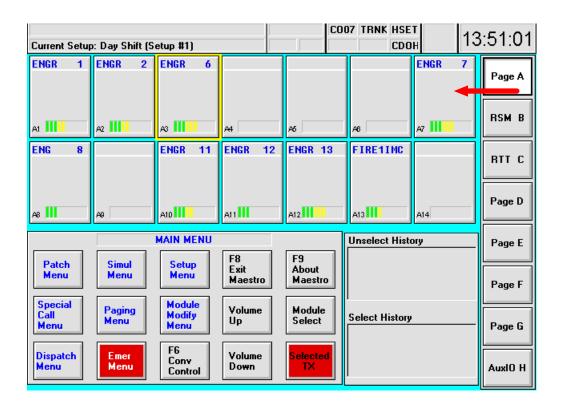
## <u>Pick</u>

- You must pick a module first before you select it.
- Pick module to change volume levels, mute modules, modify modules, and view module history and module functions.
- Pick modules to clear alarms and emergencies.
- Pick modules to answer intercom calls.

### **Select**

- Pick then select the module that contains your usual dispatch group.
- Press and hold the red Selected TX button to transmit to this group.
- Receive audio from the selected group will come through your selected speaker or through your headset.

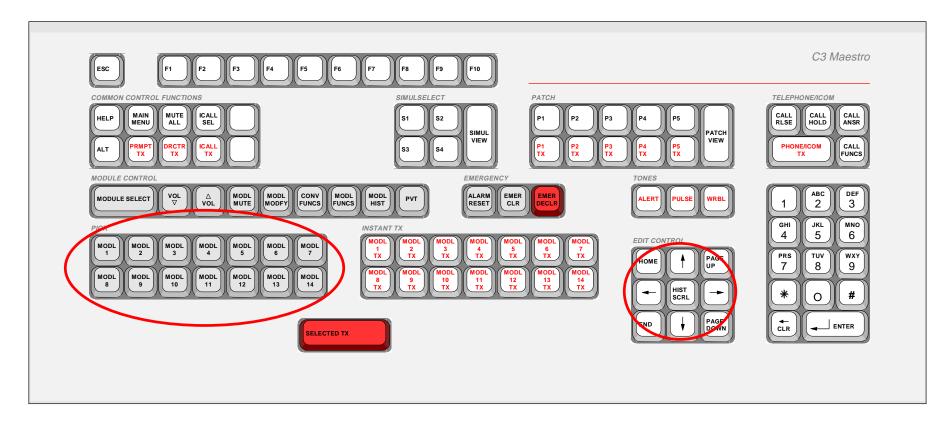
## **PICKING A MODULE**



#### To Pick a module:

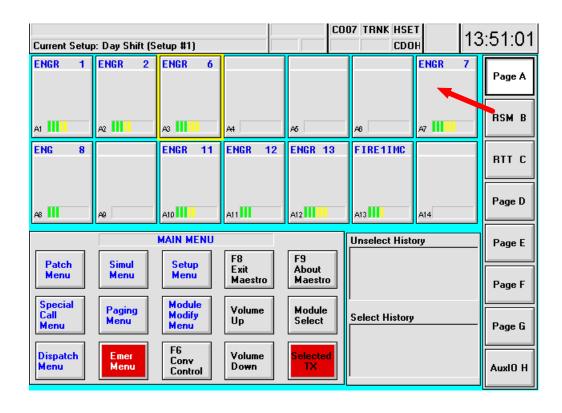
1. Click on or touch the module.

OR



- 1. Press the Pick keys,
- 2. OR, Press the arrow keys if another module is already picked.

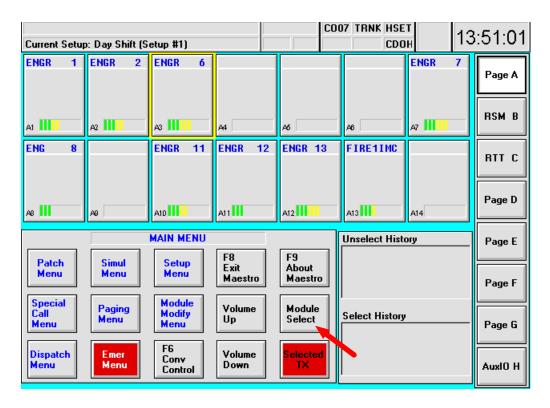
## A PICKED MODULE



- 1. A Picked module has a yellow border.
- 2. Only one module can be Picked.
- 3. New Pick cancels the old.
- 4. Pick saved when you change pages.

NOTE: It is NOT necessary to have a picked module on a page for normal operations.

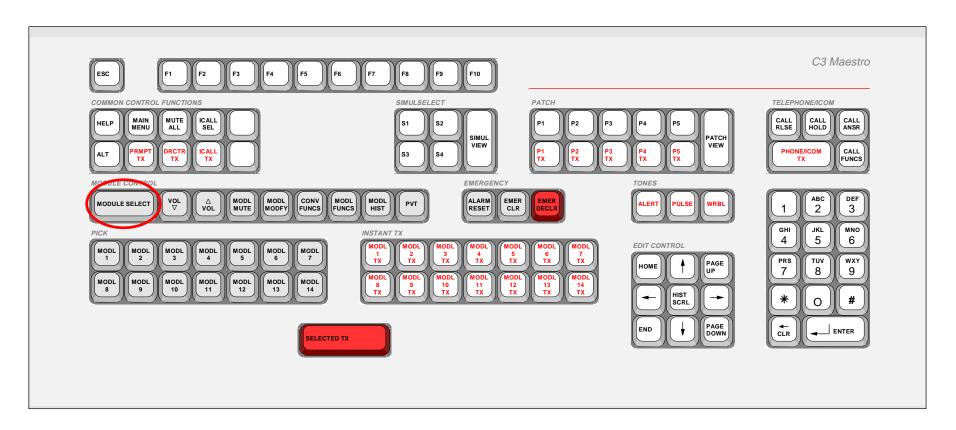
## **SELECTING A MODULE**



#### To Select a module:

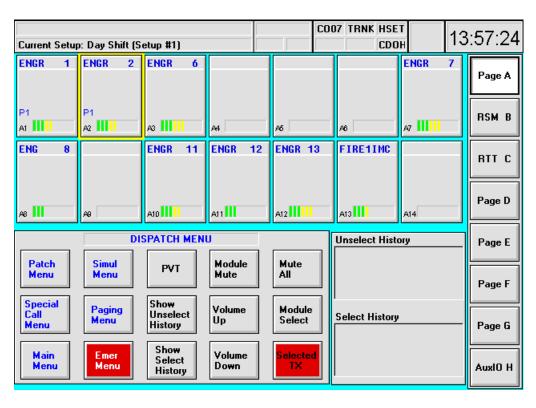
- 1. Pick the module first,
- 2. Click on or touch the Module Select button.

OR



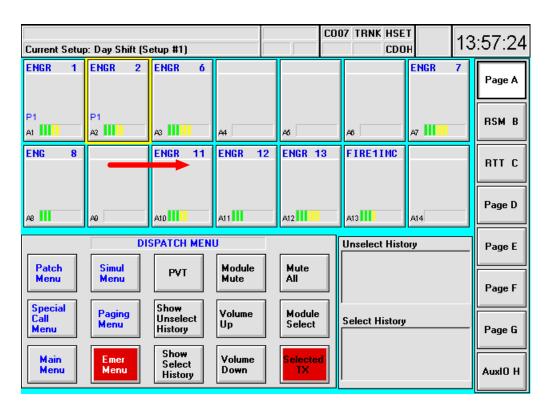
- 1. Pick the module,
- 2. Press the *Module Select* key.

## A SELECTED MODULE



- 1. A Selected module has a green highlight.
- 2. A Selected module is your primary dispatch group.
- 3. Only one module can be *Selected*. (Simulselect function is a special case.)
- 4. New Select cancels the old.
- 5. Selection saved when you change pages.

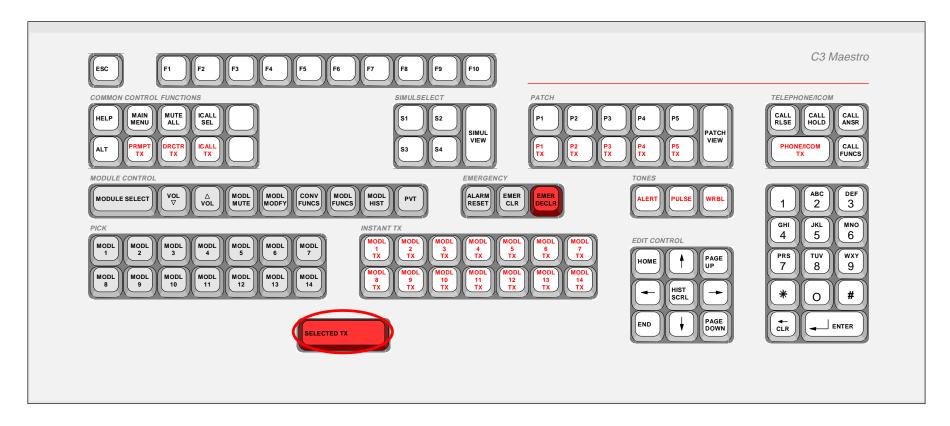
## **SELECT TRANSMITTING**



To transmit via the *Selected* module (even if not on current page):

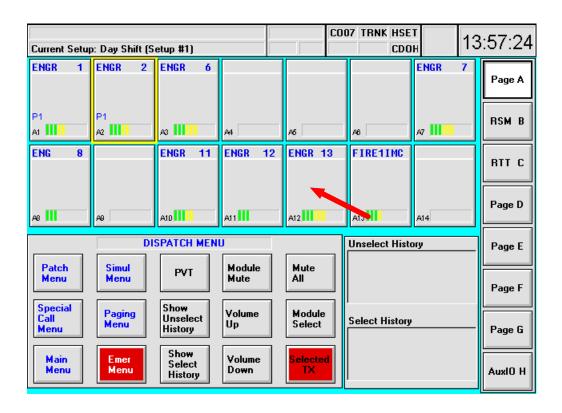
- 1. Click or press and hold the selected module, OR
- 2. The red Selected TX button, OR
- 3. Press the desk microphone transmit button, OR
- 4. Press the footswitch

OR



- 1. Press the red Selected TX button on your keyboard,
- 2. Press the desk microphone transmit button, or
- 3. Press the footswitch.

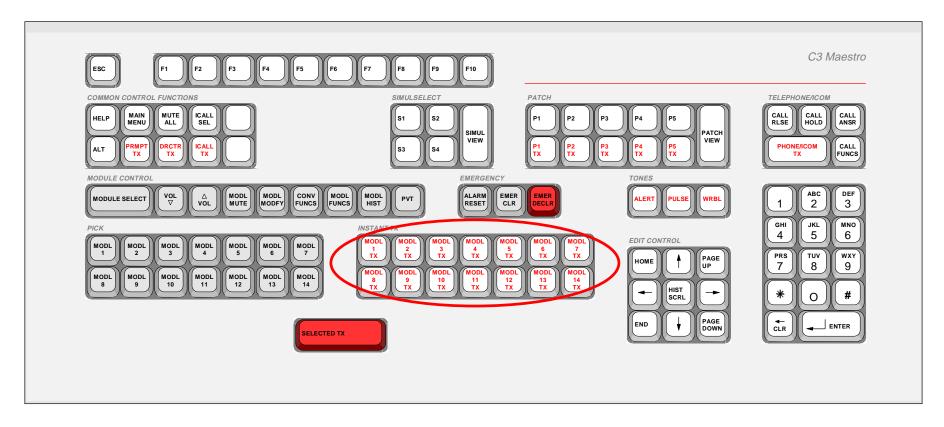
## **INSTANT TRANSMITTING**



To transmit via ANY module on the current page:

1. Click and hold the right or left mouse button while cursor is on the module, or if using the touch-screen, touch and hold within the module.

OR



1. Press the *Instant TX* key for the module number.

## **TONES HEARD AT A PTT**

The following list identifies the transmit confirmation tones heard just after a Push-To-Talk (PTT) action at the console—both select and instant transmits. Typically, only the grant tone sounds. These tones audibly indicate the status of each call throughout the radio system and an "OK" or "not OK" to speak into the microphone condition:

- **Grant Tone**—This short-duration medium-frequency beep<sup>2</sup> is usually heard immediately after a console PTT and in tandem with the appearance of the white-on-red XMT indicator<sup>3</sup> in the respective communication module(s). It signifies a "now OK to speak into the microphone" condition. Technically, it signifies a communication radio channel in the radio system has been assigned for the call; therefore, it is sometimes referred to as the "channel access tone." In most circumstances, <u>do not begin speaking into the microphone</u> until this tone is heard and/or the white-on-red XMT indication appears in the module.
- Queued Tone—This short duration high-frequency beep<sup>4</sup> occurs immediately after a PTT when the call has been queued by the radio system. Usually, this occurs only during very busy periods when many calls are being processed simultaneously by the radio system. Typically, the queue duration is short so the queue tone, when it occurs, is almost immediately followed by a grant tone along with the white-on-red XMT indicator, signifying the "now OK to speak into microphone" condition.
- Access Denied Tone—This low-frequency beep<sup>5</sup> signifies the transmission request cannot be granted by the radio system. If this occurs, consult with the system or dispatch administration personnel.

#### **NOTE**

In some rare cases these tones may be turned off via the system or dispatch administration personnel.

Therefore, none will be heard at the console.

 $<sup>^2</sup>$  Grant tone = 1000 Hz tone for  $20/1000^{th}$  of a second.

<sup>&</sup>lt;sup>3</sup> The console's color settings are highly configurable. A white-on-red XMT indicator is the factory default color setting. Refer to the system or dispatch administration personnel for specific color settings.

<sup>&</sup>lt;sup>4</sup> Queued tone = 2000 Hz tone for 20/1000<sup>th</sup> of a second.

<sup>&</sup>lt;sup>5</sup> Access denied tone = 500 Hz tone for 80/1000<sup>th</sup> of a second followed by 20/1000<sup>th</sup> silence; three (3) repetitions of this.

## TRANSMITTING TONES

Three (3) distinctive tones may be transmitted from the console via three reserved buttons on the Emergency Menu command panel and/or via three reserved keys on the dispatch keyboard. When a tone is being transmitted from the console using one of these buttons/keys, it is simultaneously heard in a speaker or headset at the console. To prevent voice interference, all console microphone audio is muted (not transmitted) during a tone transmission. Typically, these tone transmissions are utilized during emergency operations to signal radio units of various predefined emergency conditions. The tones are identified:

- **Alert Tone**—A continuous medium-frequency tone<sup>6</sup> while the respective button/key is depressed.
- **Pulse Tone**—A medium-frequency tone<sup>7</sup> which turns on and off repeatedly while the respective button/key is depressed.
- Warble Tone—A repeating sequence of a medium-frequency tone followed by a higher frequency tone<sup>8</sup> while the respective button/key is depressed.

Tone transmissions can be made to both the selected entity(ies) and the unselected entities in accordance with the procedures presented in the following sections.

<sup>&</sup>lt;sup>6</sup> Alert tone = continuous 1000 Hz tone.

<sup>&</sup>lt;sup>7</sup> Pulse tone = 1000 Hz tone on for approximately ½ second then off for approximately ½ second; repeating sequence.

<sup>8</sup> Warble tone = 1600 Hz tone for approximately \(^{1}\)4 second followed by a 2000 Hz tone for approximately \(^{1}\)4 second; repeating sequence.

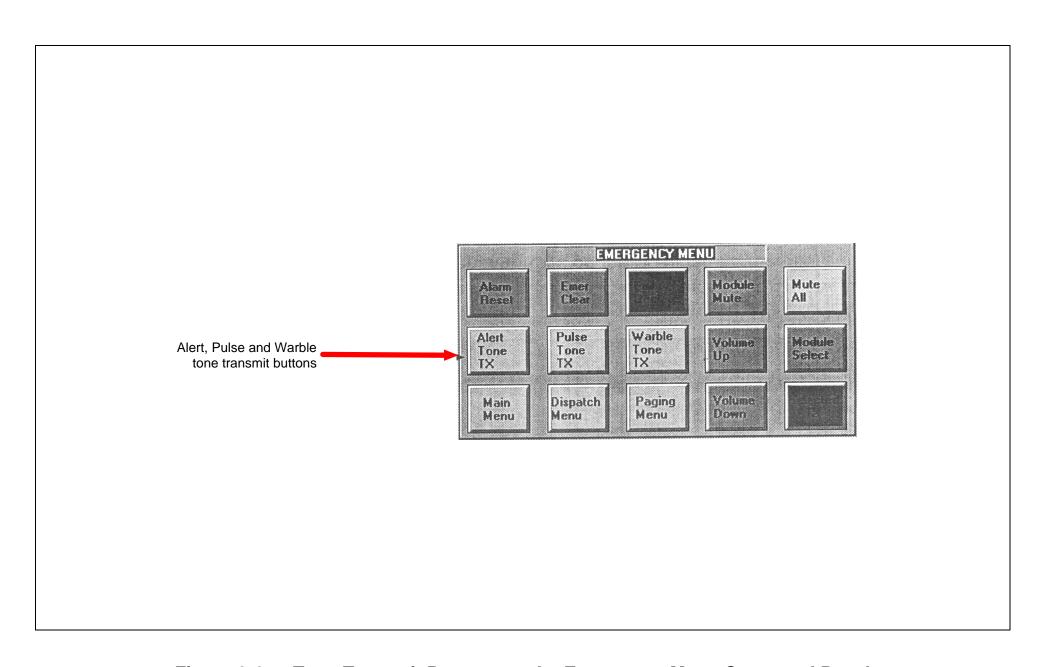


Figure 2-1 — Tone Transmit Buttons on the Emergency Menu Command Panel

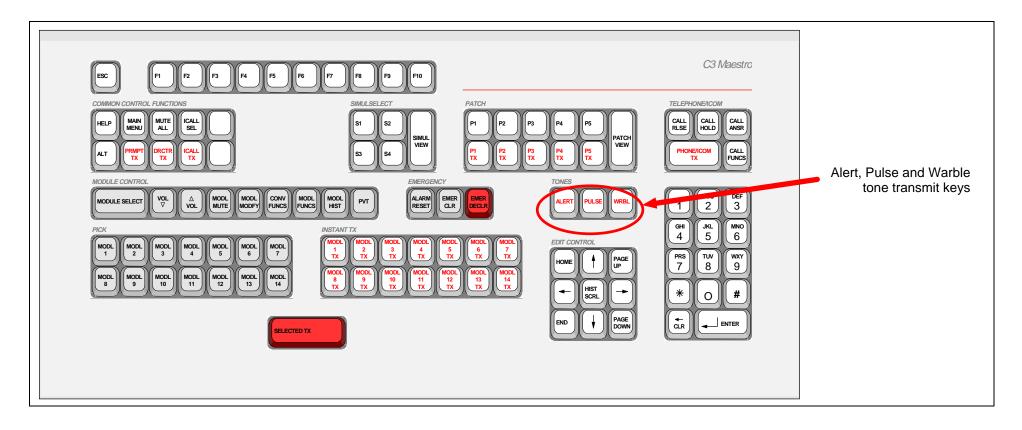


Figure 2-2 — Tone Transmit Keys on the Dispatch Keyboard

### Transmitting Tones To The Selected Entity(ies)

To transmit an alert, pulse or warble tone to the selected entity (or entities if an active patch is selected or if a simulselect is active), simply click-and-hold or depress the respective tone transmit button/key and release it to end the tone transmission. During the tone transmission, the XMT indicator appears in the respective module(s) and the tone is heard in the select speaker or headset. Voice transmissions to the selected entity(ies) may precede or succeed tone transmissions; use standard selected entity/module voice transmissions methods. As previously stated, all console microphone audio is muted during a tone transmission.

#### **Transmitting Tones To The Unselected Entities**

#### Via The Dispatch Keyboard Only

To transmit an alert, pulse or warble tone to an unselected entity using only keys on the dispatch keyboard, follow this procedure:

- **1.** Instant transmit to the entity (or entities if an active patch is selected or if a simulselect is active) by depressing the respective instant transmit key. The XMT indicator appears in the respective communication module during the PTT. <u>Do not</u> release the instant transmit key. If a voice transmission is required prior to the tone transmission, speak into the microphone at this time.
- **2.** To transmit a tone to the selected entity(ies), depress the respective tone transmit key. At the console, the tone is heard in the select speaker or headset while it is being transmitted. Release the key to end the tone transmission. Repeat this step as necessary.
- **3.** If necessary, follow with voice transmissions by speaking into the appropriate microphone.
- **4.** Release the instant transmit key. The XMT indicator disappears.

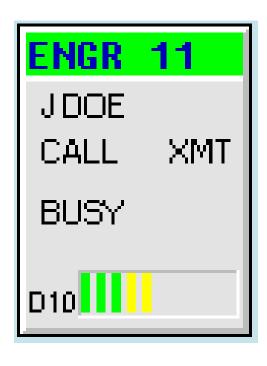
#### Via The Pointing Device And Dispatch Keyboard

Instantly transmitting tones *only* via the pointing device (mouse/track-ball/touch-screen) is not possible. The following procedure is recommended for instant tone transmits using the tone transmit buttons on the Emergency Menu command panel and an instant transmit key on the dispatch keyboard:

- 1. Instant transmit to the entity (or entities if a patch or simulselect) by depressing the respective instant transmit key on dispatch keyboard. The XMT indicator appears in the respective communication module during the PTT. Do not release the instant transmit key. If a voice transmission is required prior to the tone transmission, speak into the microphone at this time.
- 2. On the Emergency Menu command panel, click/touch and hold the required tone transmission button. The tone is heard in the select speaker or headset while it is being transmitted. Release the button to end the tone transmission. Repeat this step as necessary.

- **3.** If necessary, follow with voice transmissions by speaking into the appropriate microphone.
- **4.** Release the instant transmit key. The XMT indicator disappears.

## MODULE INDICATIONS



**ENGR 11: Module name** 

J DOE: Caller name or ID (trunked only)

**CALL: Individual radio unit transmits** 

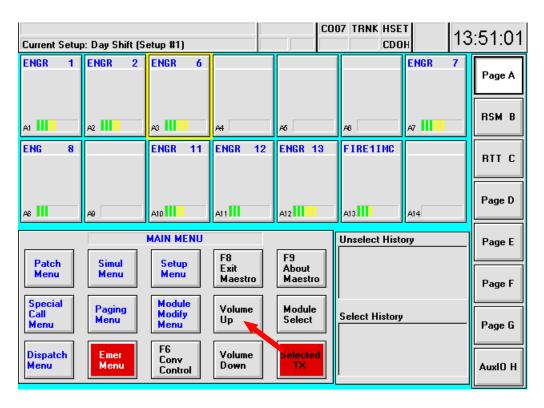
XMT: When this console transmits

**BUSY: Another console transmits** 

D10: Module page and position

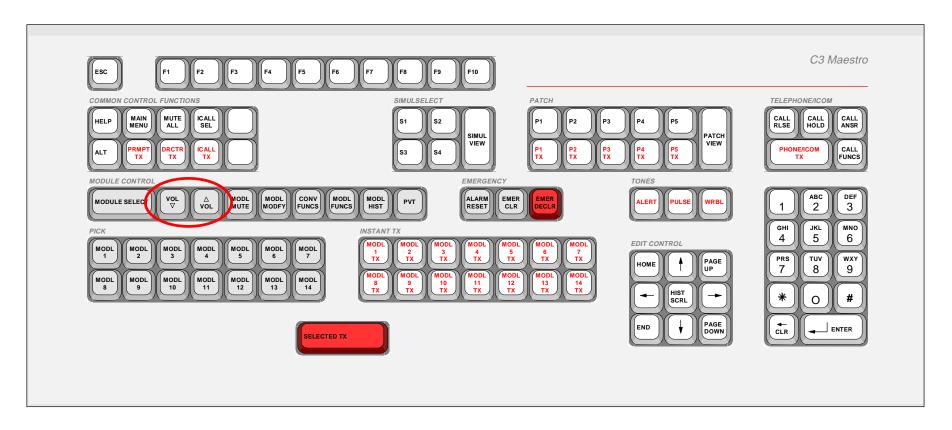
Volume bar at bottom of module displays audio level (0 - 10)

# **MODULE VOLUME**



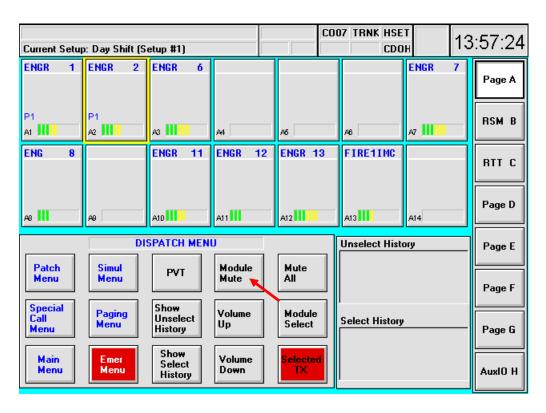
To increase or decrease the volume of a module:

- 1. Pick the module,
- 2. Click on or touch the Volume Up or Volume Down buttons.



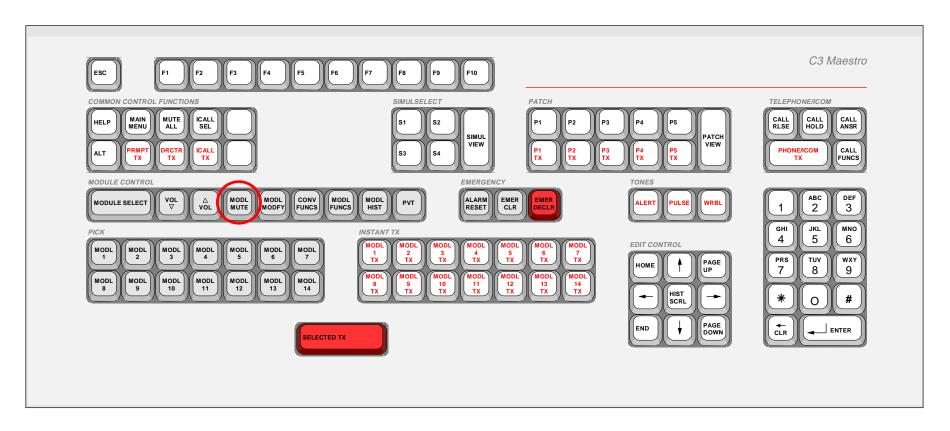
- 1. Pick the module,
- 2. Press the Vol Up/Vol Down keys.
- 3. The volume bar at the bottom of the module will change as you change the volume level.

#### **MODULE MUTE**



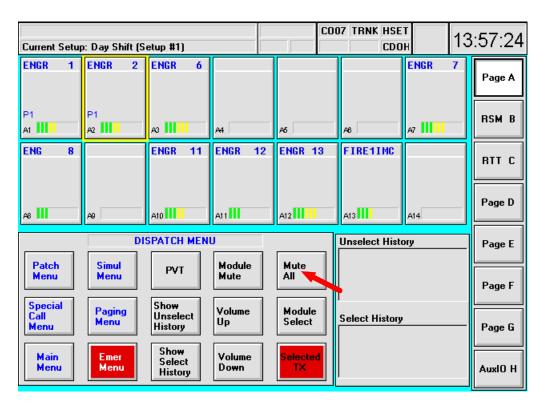
#### To mute the audio in one module:

- 1. *Pick* the module you want to mute,
- 2. From the Main Menu, click on or touch the Dispatch Menu button,
- 3. Click on or touch the Module Mute button.
- 4. To unmute the module, click on or touch *Module Mute* again.



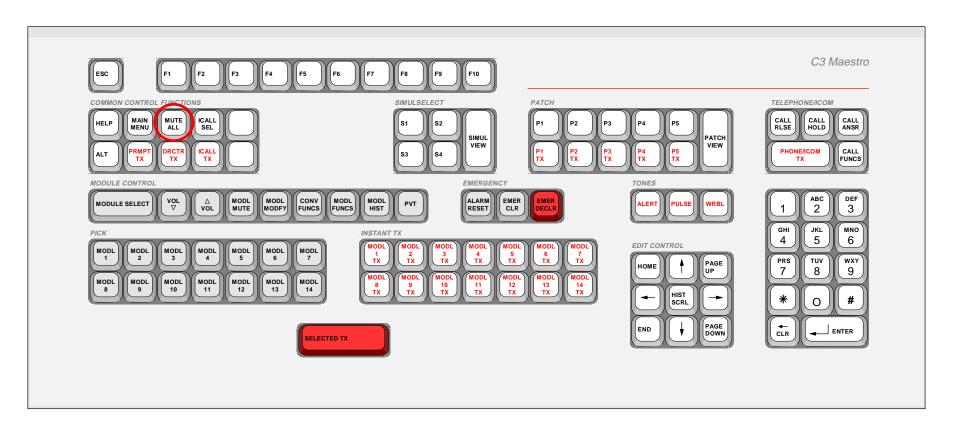
- 1. Pick the module you want to mute,
- 2. Press the *Modl Mute* key.
  - This Mute status will NOT time out. To turn off the Mute, press *Modl Mute* again.
  - While a module is muted, the MUTE indicator will replace the volume bar at the bottom of the module.

#### **MUTE ALL**



#### To mute the audio in ALL UNSELECTED modules:

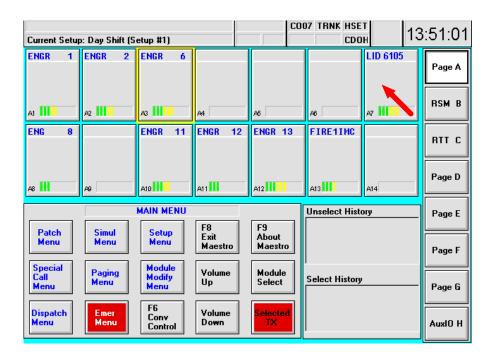
- 1. From the Main Menu, click on or touch the Dispatch Menu button,
- 2. Click on or touch the Mute All button.
- The *Mute All* will automatically time out based on a programmed delay; or, just press or click on *Mute All* again to turn it off.
- While Mute All is active, all unselected modules will display MUTE.



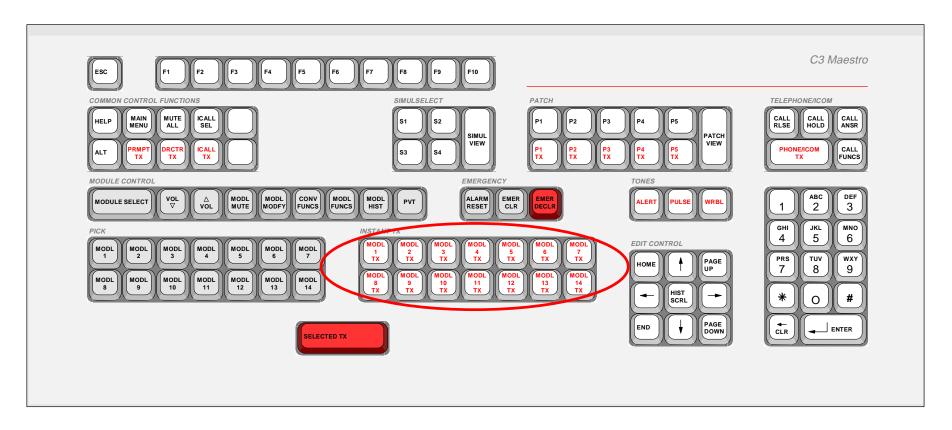
#### 1. Press the Mute All key.

- The *Mute All* will automatically time out based on a programmed delay; or, just press *Mute All* again to turn it off.
- While *Mute All* is active, all unselected modules will display the MUTE indicator.

## **INDIVIDUAL CALLS - PROGRAMMED**

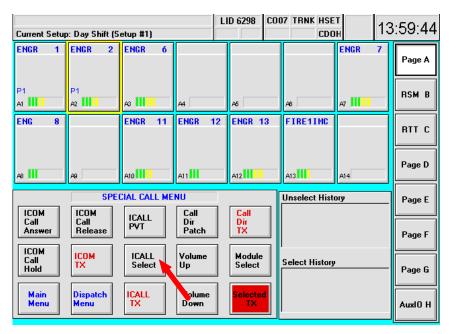


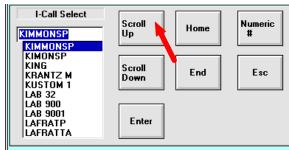
- 1. An individual radio unit may be programmed into a module.
- 2. To make an individual call to this radio, simply press and hold the left or right mouse button while the cursor is in the module, or touch and hold the module.
- 3. Talk into the microphone.
- 4. Release mouse button to end transmission.



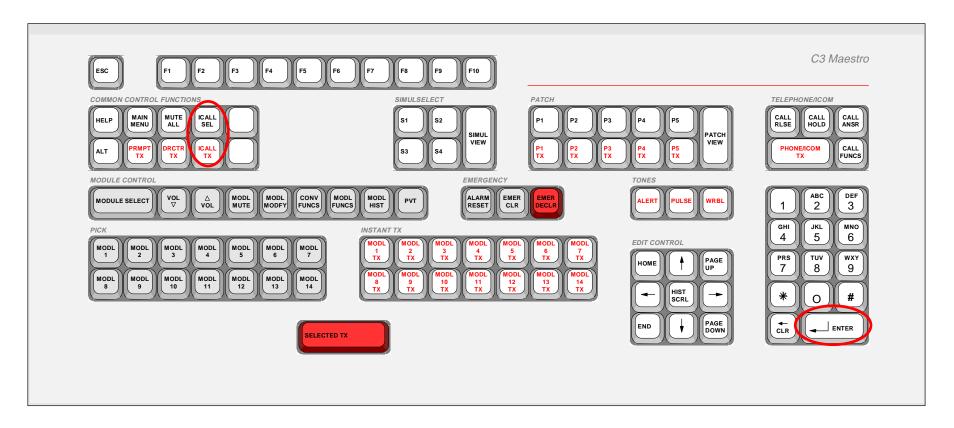
- 1. Press the *Instant TX* key for that module, talk into your microphone.
- 2. Talk into your microphone.
- 3. Release *Instant TX* key to end transmission.

### INDIVIDUAL CALLS - UNPROGRAMMED





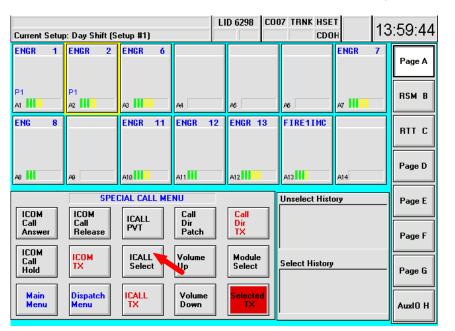
- 1. From the Main Menu, click on or touch the Special Call Menu button,
- 2. Click on or touch the *Icall Sel* button, and you will see a list of the available radio IDs in the system.
- 3. Use the Scroll Up/Scroll Down buttons to find the radio ID you wish to call.
- 4. Click on Enter. The unit ID will be displayed on the Icall panel.
- 5. Now press the *Icall TX* button and speak into your microphone.
- 6. Release Icall TX button to end the transmission.

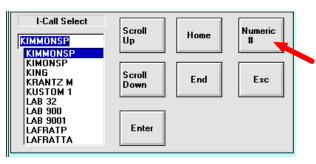


- 1. Press the *ICALL SEL* key, and you will see a list of the available radio IDs in your system.
- 2. Use the arrow keys to select the radio ID you wish to call.
- 3. Press Enter.
- 4. Now press the *ICALL TX* key and speak into your microphone.
- 5. Release the *ICALL TX* key to end the transmission.

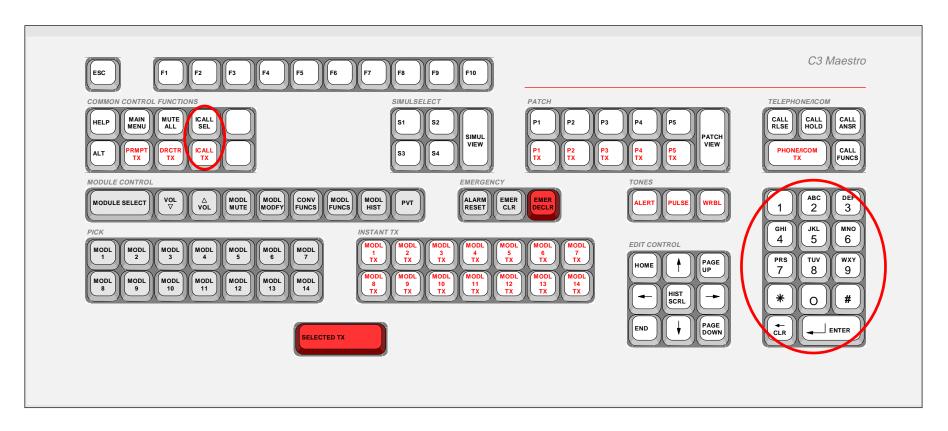
#### INDIVIDUAL CALLS - USING THE KEYPAD

#### (Supervisory Function)



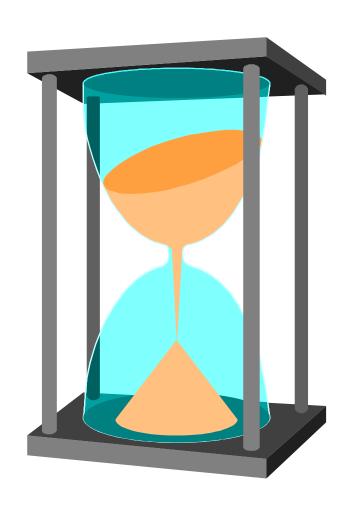


- 1. From the Main Menu, click on the Special Call Menu button,
- 2. Click on the Icall Select button,
- 3. Click on the Numeric # button.
- 4. Click on or touch the number buttons to type in the radio ID, and press *Enter*. The unit alias or ID will be displayed in the Icall panel.
- 5. Press and hold the *Icall TX* button, and speak into the microphone.
- 6. Release the button to end the transmission.

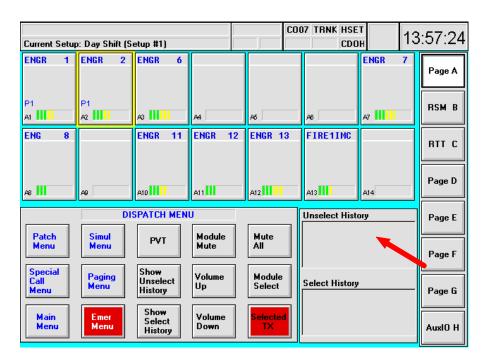


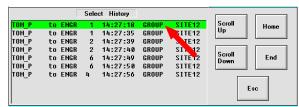
- 1. Press the ICALL SEL key,
- 2. Press the # key.
- 3. Use the number keys to type in the radio ID, and press *Enter*.
- 4. Press the ICALL TX key, and speak into the microphone.
- 5. Release the key to end the transmission.

# **SECTION 3: CALL HISTORY**

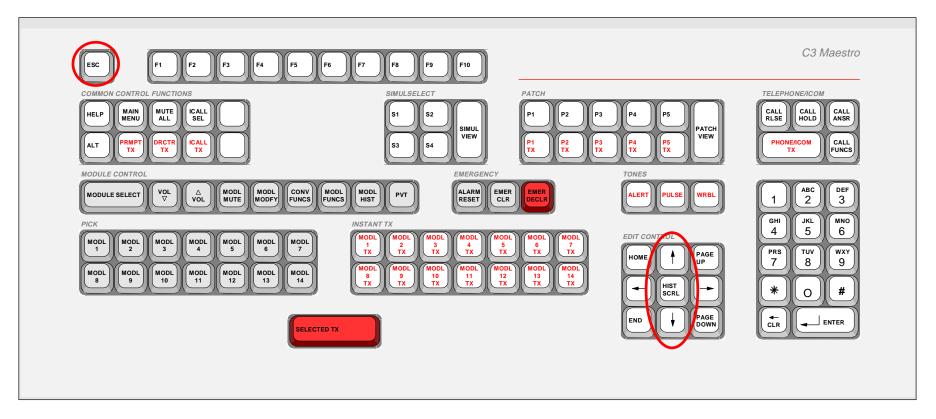


### **CALL HISTORY**





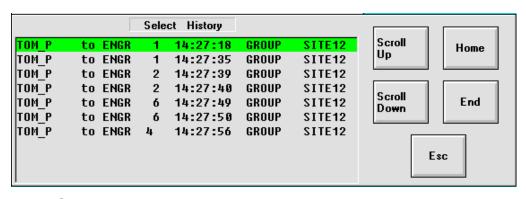
- 1. *UnSelect History* displays the 4 most recent calls processed by all Unselect modules.
- 2. Select History displays the 4 most recent calls processed by the SELECT module. (Does not display calls made by your own console.)
- 3. Click on or touch an item in the history scroll. Click on *Scroll Up/Scroll Down* or *Home/End* buttons to view information about the 48 most recent calls.
- 4. The separate history windows do not update in real time; they will update after you click on or touch *Esc* and return to the main screen.



- 1. Press the *Hist ScrI* key once to access Unselect call history information. Use the arrow keys to scroll through the list.
- 2. Press *Hist Scrl* again for Select call history information. Use the arrow keys to scroll through the list.
- 3. Press *Esc* key once to close Select Call History window.
- 4. Press *Esc* key again to close Unselect Call History window.

#### CALL HISTORY INFORMATION

Extended and detailed call history information is available from three (3) separate pop-up dialog boxes. One displays select call history for the last forty-eight (48) callers, one displays unselect call history for the last forty-eight callers, and one displays call history on a per communication module basis for the last twenty-four (24) callers to each module. The select call history dialog box is shown in the following figure (with several sample calls).



Call Parameter: Example:

Caller ID: TOM P

Callee ID: ENGR 1

**Start Time** 

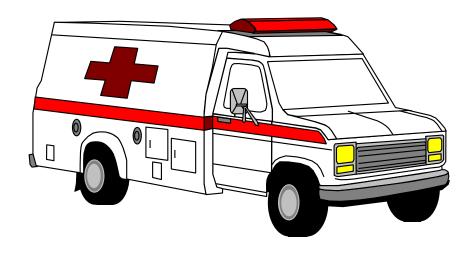
of Call: 14:27:18

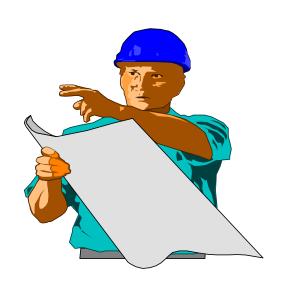
Type of Call: GROUP

Site/Node/ Console used

by Caller: SITE 12

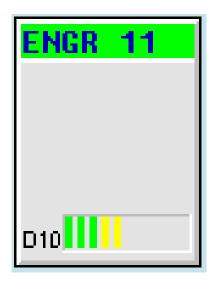
# **SECTION 4: EMERGENCIES**





## **EMERGENCY: MODULE INDICATIONS & ALARM**

No Emergency (Normal Background)

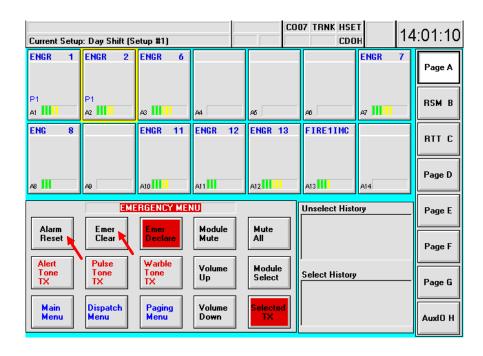


Emergency (Red Background)

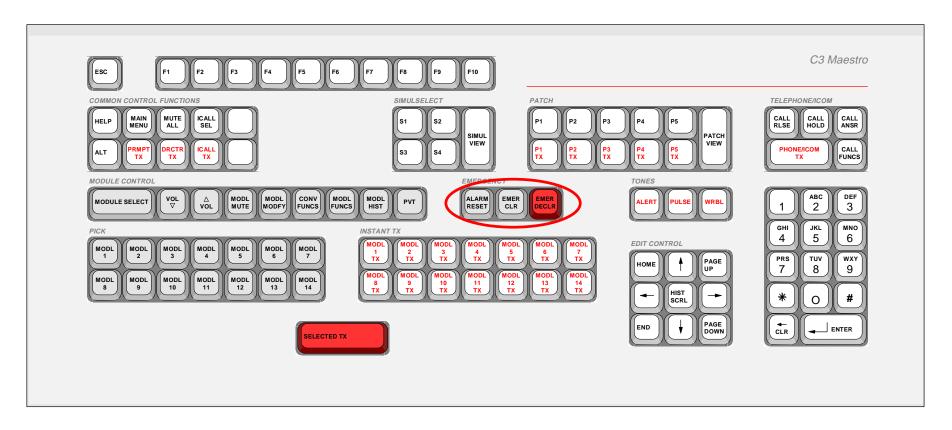


- 1. ALARM sounds when Emergency is declared.
- 2. CALLER identification is "frozen" to module.
- 3. "EMER" flashes until the alarm is acknowleged; "EMER" remains in the module until the emergency is cleared..

#### CLEARING AN EMERGENCY

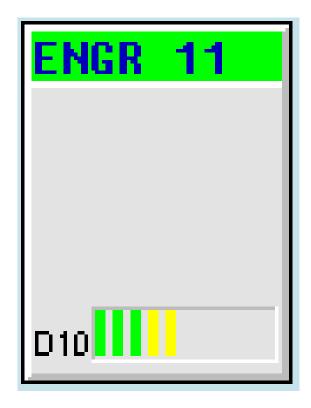


- 1. From the Main or Dispatch Menus, click on or touch the *Emer Menu* button.
- 2. Pick module with Emergency.
- 3. Click on or touch the Alarm Reset button to silence console alarm.
- 4. Click on or touch *Emer Clear* button to clear the Emergency from ALL consoles.
- 5. Console may be programmed to force Alarm Reset before Emergency Clear.

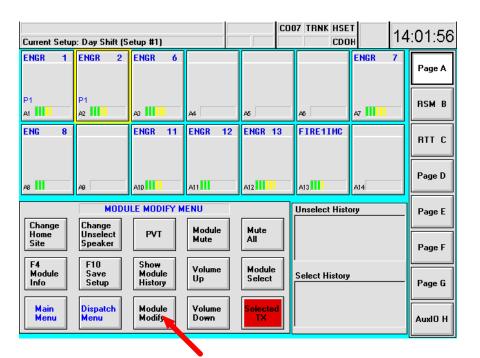


- 1. Pick module with emergency.
- 2. Press the Alarm Reset key to silence console alarm.
- 3. Press *Emer Clr* key to clear the emergency.
- 4. Console may be programmed to force *Alarm Reset* before allowing *Emergency Clear*.

# **SECTION 5: MODULE MODIFY**



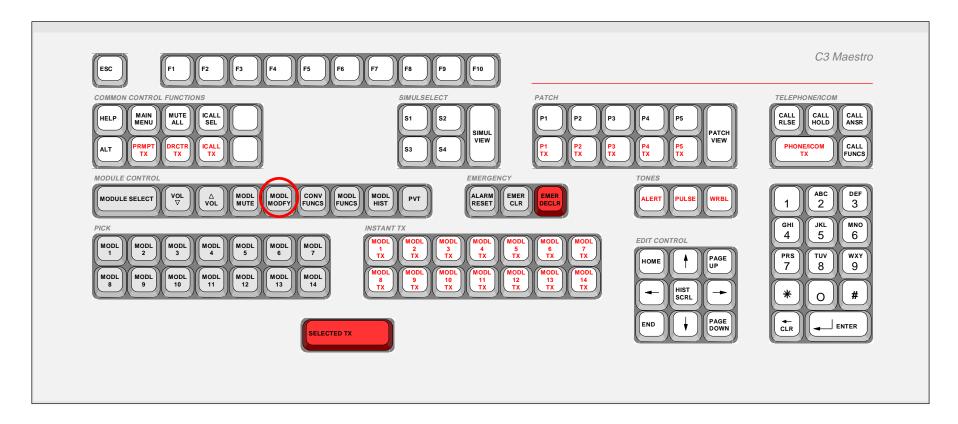
#### PROGRAM FROM LIST





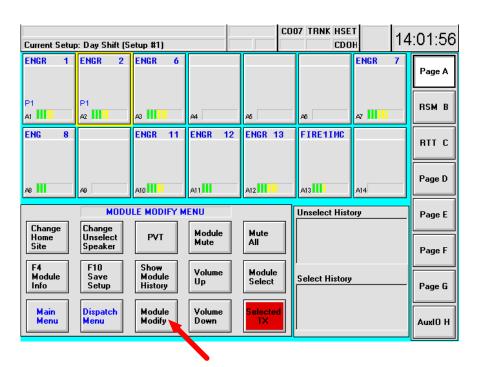
- 1. Pick the module to be modified,
- 2. From the Main Menu, click on the Module Modify Menu button.
- 3. Click on or touch the *Module Modify* button.
- 4. Click on or touch the appropriate function key shown in the window. (F1 Unit List, F2 Group List, F3 Conv List, etc.)
- 5. Use Scroll Up/Down or Home/End buttons to move through the list.
- 6. Choose the group, unit, etc. and click on or touch *Enter* to program the module.

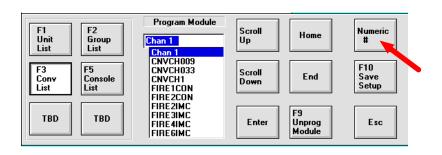
**OR** 

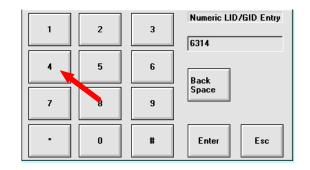


- 1. First *Pick* the module,
- 2. Press the *ModI Modfy* key.
- 3. Press the appropriate function key shown in the window. (F1 Unit List, F2 Group List, F3 Conv List, etc.)
- 4. Use up/down arrow keys or *Pg Up/Down* or *Home/End* keys to move through the list,
- 5. Choose the group, unit, etc. and press *Enter* to program the module.

#### PROGRAM BY NUMBER

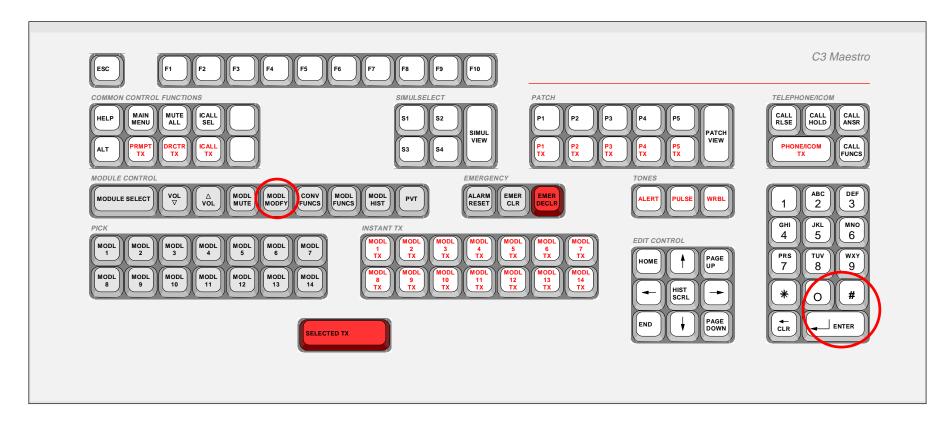






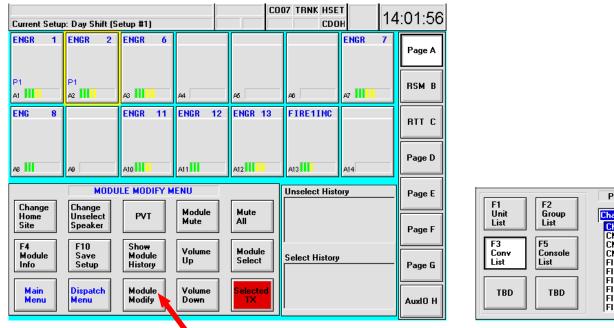
- 1. Pick the module to be modified,
- 2. From the Main Menu, click on or touch the Module Modify Menu button.
- 3. Click on or touch the *Module Modify* button.
- 4. Click on or touch the appropriate button to select unit, group, conv, or console list.
- 5. Click on or touch the Numeric #, and then use the number keys to type in the ID,
- 6. Click on or touch *Enter* to program the unit, group, etc. into the module.

**OR** 



- 1. First Pick the module,
- 2. Press the *ModI Modfy* key.
- 3. Press the appropriate F# key to program a unit, group, conv, or console.
- 4. Press the # key, and then use the number keys to type in the Unit ID, Group ID, etc.
- 5. Press *Enter* to program the unit, group, etc. into the module.

# **MODULE DELETE**

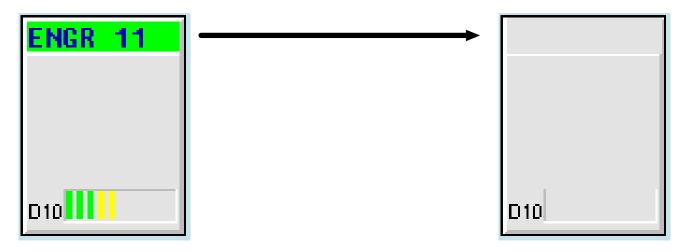




To delete a group, radio unit, or console from a module:

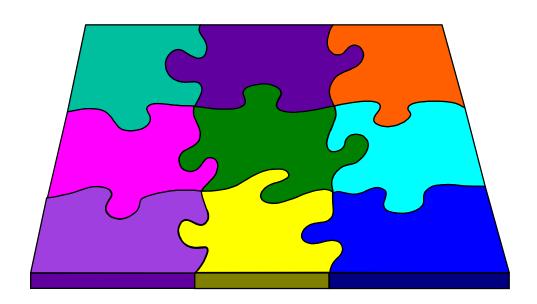
- 1. First Pick the module,
- 2. From the Main Menu, click on the Module Modify Menu button.
- 3. Click on or touch the *Module Modify* button.
- 4. Click on or touch the F9 Unprog Module button to delete the item in the module.

OR



- 1. Using the keyboard, *Pick* the module.
- 2. Press the *ModI Modfy* key.
- 3. Press F9 to delete the group, unit, etc. from the module.

# **SECTION 6: PATCH & SIMULSELECT**



#### OVERVIEW—PATCH VS. SIMULSELECT

#### **Patch**

- Patch ties trunked talk groups and/or conventional channels together as one common communication entity, basically, as one talk group throughout the radio system.
- Console receives all patched groups/channels radio unit transmissions.
- All radio units on the groups/channels within the patch hear the console when it transmits on the patch.
- All radio units on groups/channels within a patch CAN communicate with each other across group/channel boundaries.
- A patch can be SELECTED and UNSELECTED.
- Each console may have up to FIVE (5) patches active at any one time.
- Other consoles in the system CAN see a patch activated at another console via indications in the respective communication module(s) if the patched group(s)/channel(s) are programmed. This information is also available in the respective Module Info dialog box(es).
- Other consoles in the system cannot patch or simulselect groups/channels which are within an active patch.
- The patch function IS available in the trunked failsoft mode if the system is configured for failsoft patch operations. Consult with the system or dispatch administration personnel for specific details.

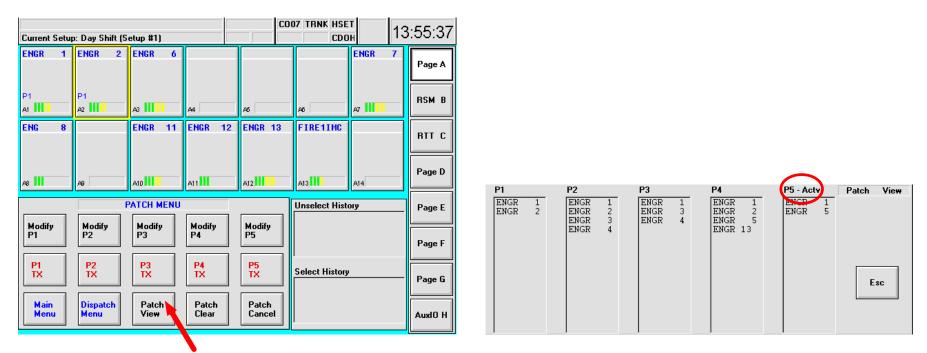
#### **Simulselect**

- Simulselect joins trunked talk groups and/or conventional channels together to hear broadcasts from the console (i.e., an "all-points bulletin").
- Console receives all simulselected groups/channels radio unit transmissions (in the select speaker or headset).

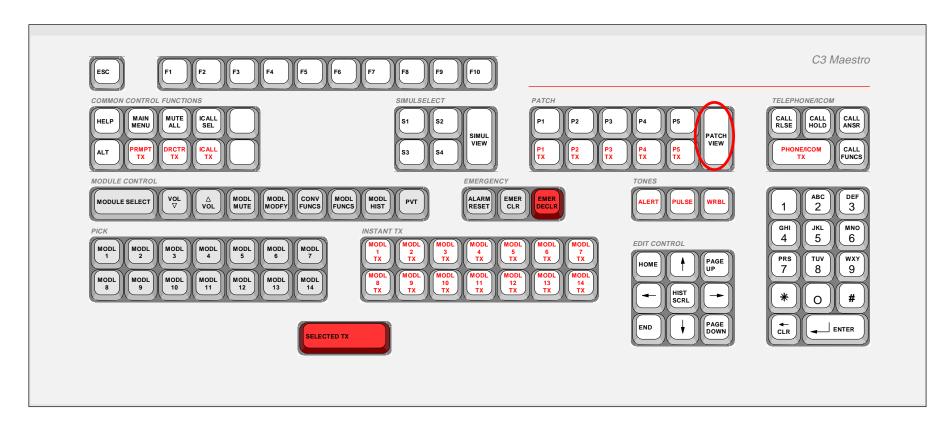
- All radio units on groups/channels within the simulselect hear the console when it transmits on the simulselect.
- All radio units on groups/channels within a simulselect CANNOT communicate with each other across group/channel boundaries.
- Groups/Channels within an active simulselect are all always simultaneously in the SELECT stated.
- Each console may have only ONE (1) simulselect active at any one time.
- Other consoles in the system CANNOT see a simulselect activated from another console in the respective communication module(s), if programmed. This information is available in the respective Module Info dialog box(es).
- Other consoles in the system cannot patch or simulselect groups/channels which are already within an active simulselected.
- The simulselect function is NOT available in the trunked failsoft mode.

### **PATCH VIEW**

Use the patch view function to view the console's current patches—both active and inactive. These patches are considered to be "in memory" at the console.

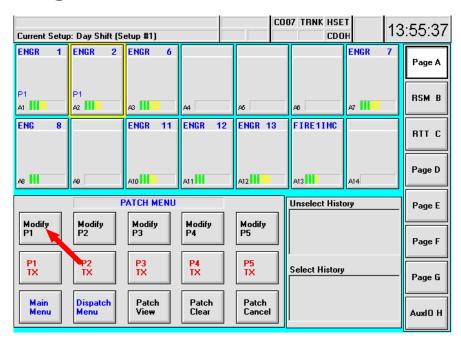


- 1. From the Main Menu, click/touch the Patch Menu button.
- 2. Click/touch the *Patch View* button to see the console's current patches. This action opens the Patch View dialog box which displays the console's currently active and inactive patches. An active patch will be shown as P1-Actv, P2-Actv, etc.

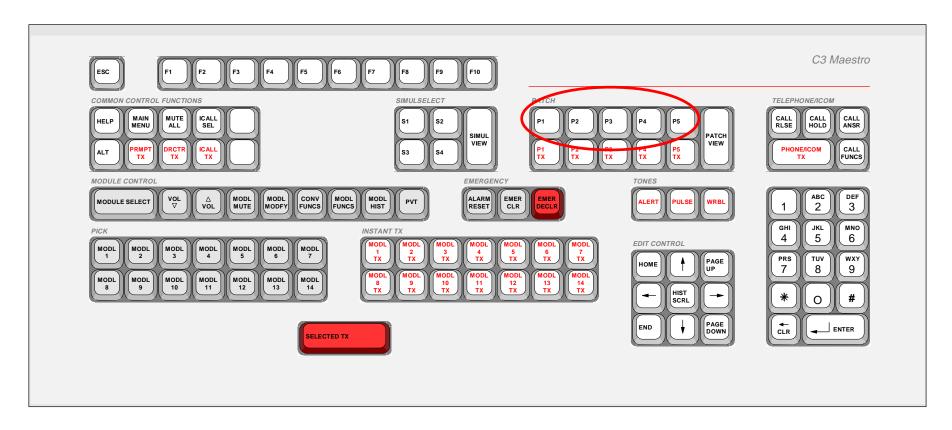


Press the PATCH VIEW key on the keyboard to open the Patch View dialog box.

#### CREATING A PATCH



- 1. Click/touch a *Modify P#* button (where # = 1 thru 5).
- 2. Pick modules for the patch. P# indicators flash in the picked modules.
- 3. Click/touch the *Modify P#* button again. The patch activates when the P# indicators stop flashing and remain on in the picked modules. These module contain the patched groups/channels.
- 4. To deactivate (turn off) the patch, click/touch the *Modify P#* button twice.
- 5. The patch is saved for future use; just double click or click/touch the *Modify P#* button twice to re-activate it.



- 1. Depress (hold down) the respective *P#* key in the *PATCH* key group (where # = 1 thru 5).
- 2. *Pick* modules for the patch. P# indicators flash in the picked modules.
- 3. Release the P# key. The patch activates when the P# indicators stop flashing and remain on in the picked modules. These modules contain the patched groups/channels.
- 4. To deactivate (turn off) the patch, press (depress and release) the respective *P#* key again.
- 5. The patch is saved for future use; press the respective *P#* key again to re-activate it.

## **RECEIVING CALLS ON A PATCH**

When a radio unit transmits on a group within a patch, a CALL indicator and the radio unit's name<sup>9</sup> appear in <u>all</u> of the communication modules containing the patched groups/channels. This indication is provided to indicate the unit's transmission is being heard on all groups/channels within the radio patch—it is transmitting on the patch. An indication of the incoming call also appears in the Call History panel. Like standard (non-patched) incoming calls, if the radio unit is transmitting on a conventional channel within a patch, only the conventional channel's name appears in the respective communication modules containing the patched groups/channels.

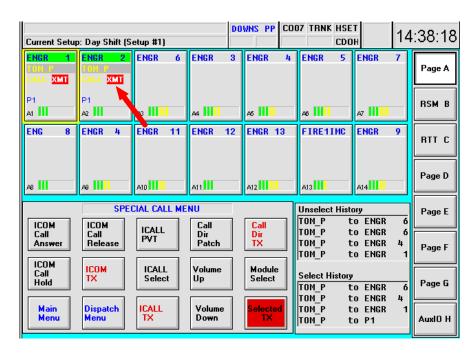
Patched modules are selected and unselected like other non-patched modules—by first performing a pick action, and then by toggling selection via the Module Select button on a command panel menu or by the **Module Select** key on the dispatch keyboard. If any one module within the patch is selected the patch itself is considered selected; therefore, all of the patched modules' title bars highlight (typically in green). Only one module within the patch must be picked before the select or unselect action is performed.

If a patch is selected, receive audio from a radio unit transmitting on a group/channel within the patch (and thus transmitting on the patch) will be heard in the select speaker or headset. Similarly, if a patch is unselected, receive audio from a radio unit transmitting on a group/channel within the patch will be heard in an unselect speaker.

All modules within an active patch always have equal volume level settings. When a patch is created/activated, this patch volume level setting equalizes to the setting of the module within the patch which has the highest setting. After activation, volume level setting changes to any one module within the (active) patch will automatically change the settings of the other modules within the patch to an equal level. Upon deactivation of the patch, each module's volume level setting will return to its previous setting.

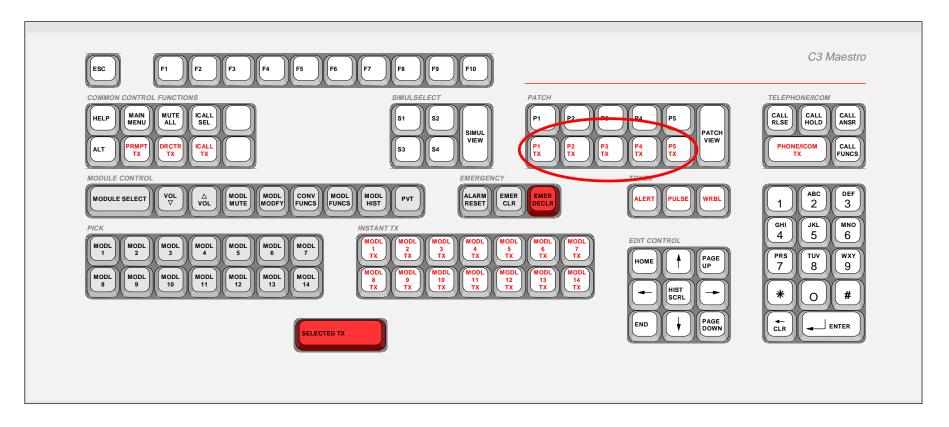
<sup>&</sup>lt;sup>9</sup> If the radio unit's name is not available at the console, its unit/logical ID (LID) number will be displayed instead of the unit's name. Also, in some cases system or dispatch administration personnel may disable the display of calling radio units' ("callers") names/LIDs within unselected modules.

#### TRANSMITTING ON A PATCH



#### To transmit on an ACTIVE Patch:

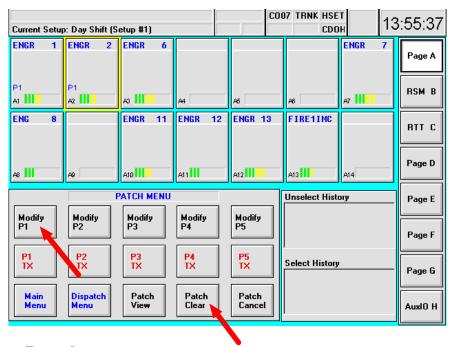
- 1. Press and hold a *Patch Instant TX* button,
- 2. OR, Press and hold any Patched module,
- 3. OR, if the Patch includes your Selected group, just press and hold the red *Selected TX* button, footswitch, or microphone.



- 1. Press a Patch Instant TX key,
- 2. OR, press an Instant TX key of any Patched module.
- 3. OR, if the Patch includes your Selected group, just press the red *Selected TX* key, footswitch, or microphone switch.

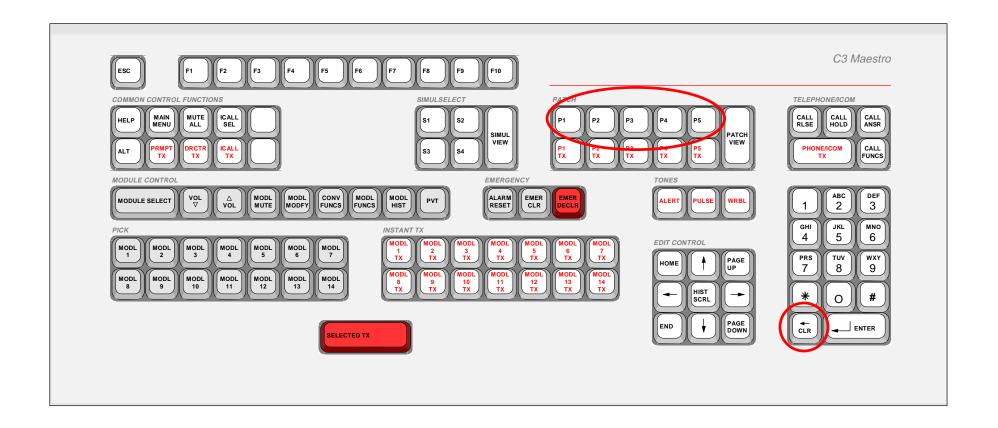
#### **CLEARING A PATCH**

Both active and inactive patches can be cleared. This action removes the patch from the console's patch memory. If a patch is active when it is cleared, it will automatically deactivate before it is removed from patch memory.



#### To Clear a Patch:

- 1. Go to the *Patch Menu* command panel.
- 2. Click/Touch the appropriate *Modify P#* button.
- 3. Click/Touch the Patch Clear button.

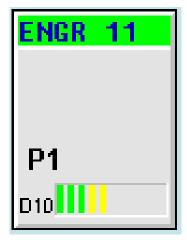


- 1. Depress (press and hold) the respective *P#* key.
- 2. Depress (press and hold) the CLR key located in the numeric keypad.
- 3. Release the *P#* key.
- 4. Release the CLR key.

#### PATCH: MODULE INDICATORS

#### **Local And Remote Patch Indications**

Your Console (a local patch indication)



Patch P1 is ACTIVE on this console.

Other Consoles (a remote patch indication)

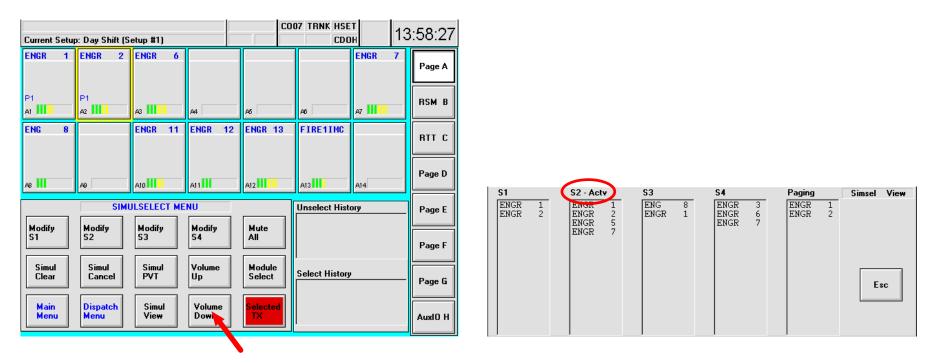


Another console with an ACTIVE Patch.

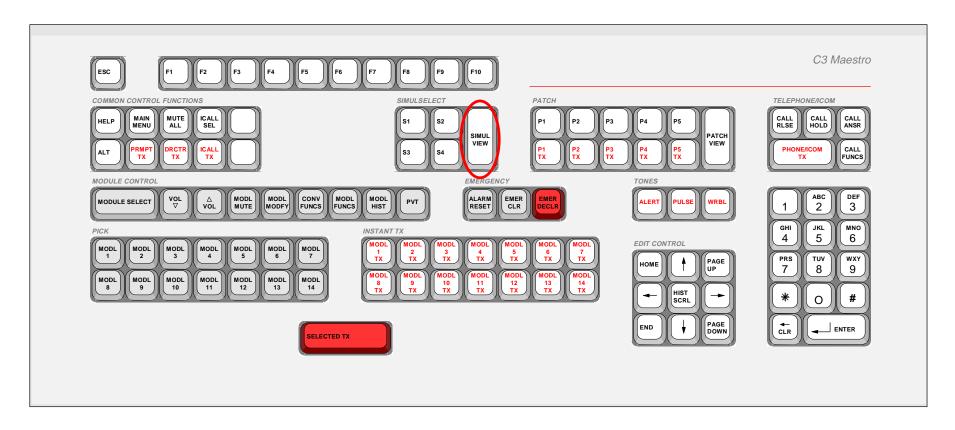
C## = remote console's number.

P# = patch number at remote console.

#### SIMULSELECT VIEW

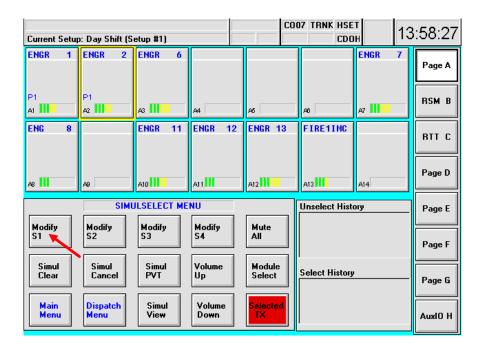


- 1. From the Main Menu, click on or touch the Simulselect Menu button.
- 2. Click on or touch the *Simulselect View* button to see the console's current Simulselects in the window.
- 3. When a Simulselect is active, the Simsel View window displays S#-Actv.

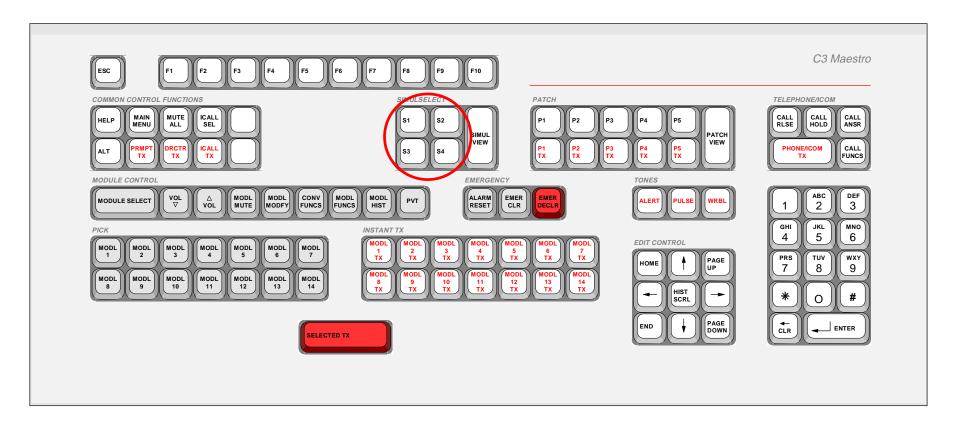


Press the Simulselect View key on the keyboard to see the Simulselect list.

#### CREATING A SIMULSELECT

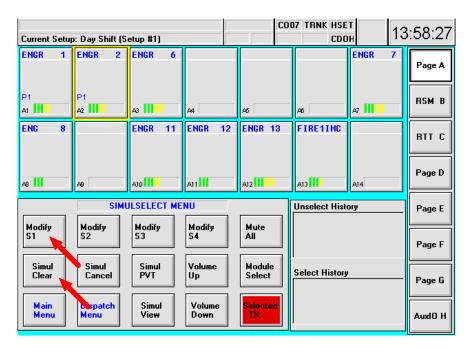


- 1. Click on or touch a *Modify S#* button, and *Pick* modules for the Simulselect.
- 2. Click on or touch the *Modify S#* button again, and now the Simulselect is active.
- 3. To turn off the Simulselect, double click on or touch and release the *Modify S#* button twice. The Simulselect is saved for future use; just double click on or touch and release the *Modify S#* button twice to re-activate.



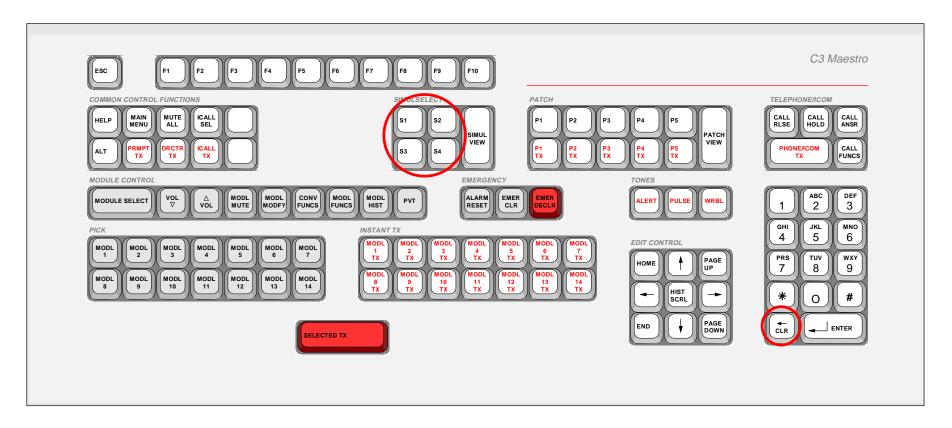
- 1. While holding down an S# key, press Pick keys to add modules to the Simulselect.
- 2. Simulselect is ACTIVE when the *S#* key is released. Even if a different module was originally the select module, the new Simulselect becomes selected.
- 3. To turn off the Simulselect, press and release the *S#* key again. The original selected module returns to the select state. The Simulselect is saved for future use; just press and release the *S#* key again to re-activate.

#### **CLEARING A SIMULSELECT**



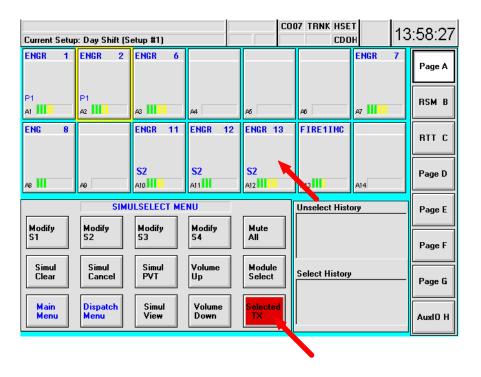
#### To Clear a Simulselect:

- 1. Go to the Simulselect Menu.
- 2. Click on or touch the appropriate *Modify S#* button.
- 3. Click on or touch Simul Clear button.



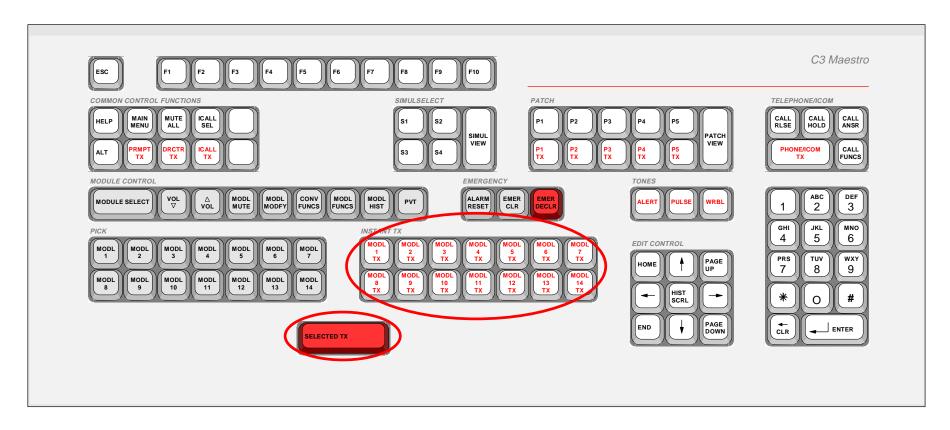
- 1. Depress (press and hold) the respective S# key.
- 2. Depress (press and hold) the CLR key located in the numeric keypad.
- 3. Release the S# key.
- 4. Release the CLR key.

#### SIMULSELECT TRANSMIT



- 1. To transmit on an ACTIVE Simulselect:

  Press and hold the red *Selected TX* button, footswitch, or microphone switch.
- 2. To transmit via the modules individually: Press and hold the individual module.



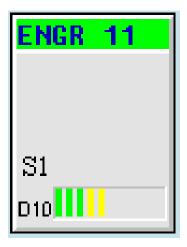
- 1. To transmit on an ACTIVE Simulselect:

  Press the red Selected TX button, footswitch, or microphone switch.
  - 2. To transmit via the modules individually: Use the *Instant TX* keys for the modules.

#### SIMULSELECT: MODULE INDICATORS

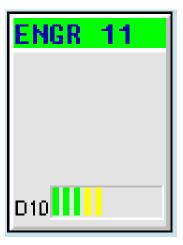
When S1 is active on your console, the consoles will show these indications:

**Your Console** 



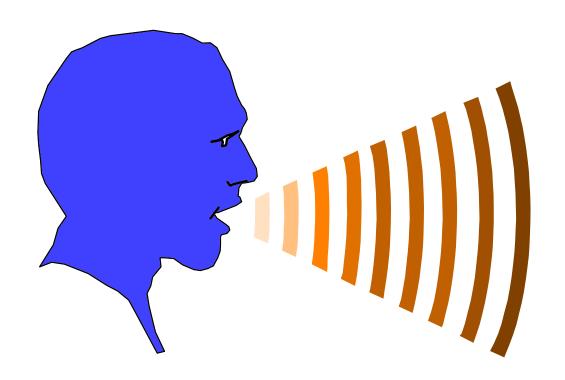
Simulselect S1 Active on this console.

**Other Consoles** 

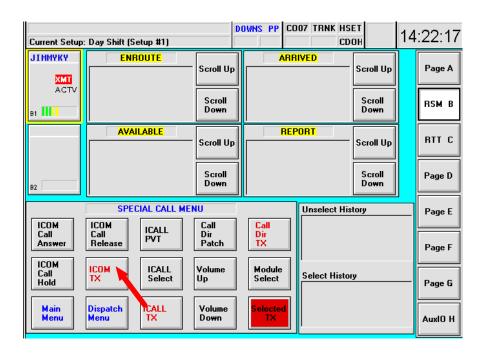


No indication displayed at other consoles (remote consoles) for this Simulselect.

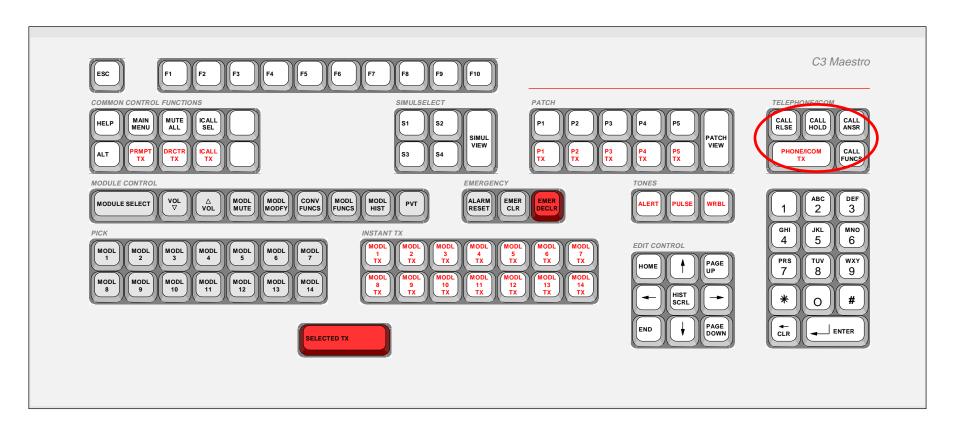
# **SECTION 7: CONSOLE INTERCOM**



#### PLACING AN INTERCOM CALL

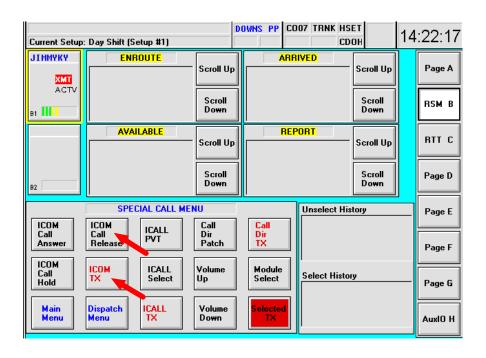


- 1. *Pick* module programmed with a console.
- 2. Press ICOM TX button.
- 3. The module displays a "RING" indication.
- 4. After other console answers, "RING" will change to "ACTV".
- 5. Press and hold ICOM TX to transmit.
- 6. Either console can end the call by pressing ICOM Call Release.

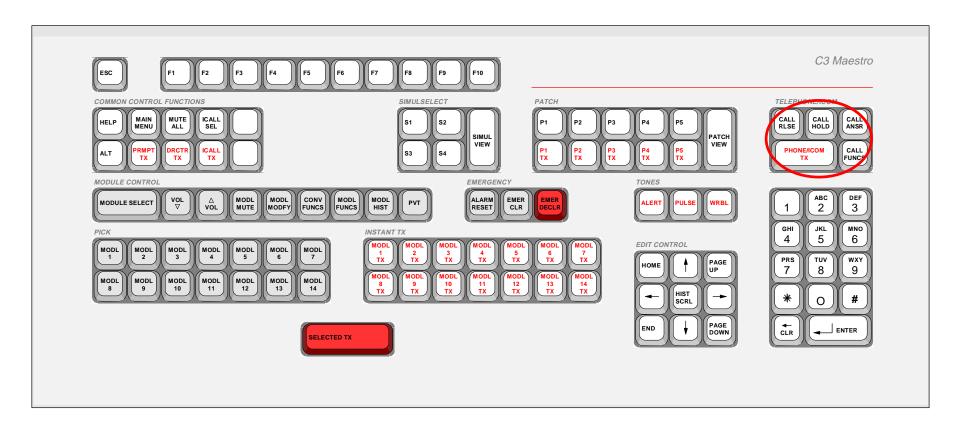


- 1. Pick module programmed with a console.
- 2. Press Phone/ICOM TX key.
- 3. The module displays a "RING" indication.
- 4. After other console answers, "RING" changes to "ACTV".
- 5. Press Phone/ICOM TX to transmit.
- 6. Either console can end the call by pressing Call Rise.

#### ANSWERING AN INTERCOM CALL



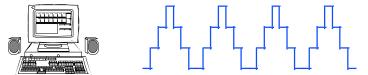
- 1. A ringing sound will be heard when the console receives an intercom call.
- 2. To answer, *Pick* the module with the calling console.
- 3. Click on or touch the ICOM Call Answer button.
- 4. Use the ICOM TX button to transmit.
- 5. Either console can put the other on hold by pressing *ICOM Call Hold*. Press *ICOM Call Answer* to continue the call.



- 1. A ringing sound will be heard when the console receives an intercom call.
- 2. To answer, *Pick* the module with the calling console.
- 3. Press the Call Ansr button.
- 4. Use the *Phone/ICOM TX* button to transmit.
- 5. Either console can put the other on hold by pressing *Call Hold*. Press *Call Ansr* to continue the call.

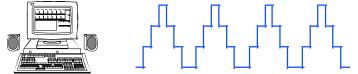
# **SECTION 8: DIGITAL DISPATCH**





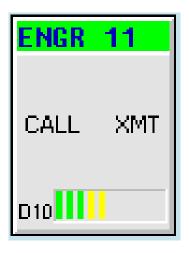
C3 Maestro

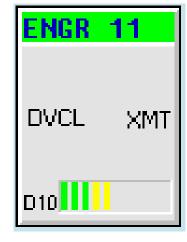




C3 Maestro

# ANALOG VS. DIGITAL DISPATCH: MODULE INDICATORS





Receive: Analog call;

**EMER** if emergency

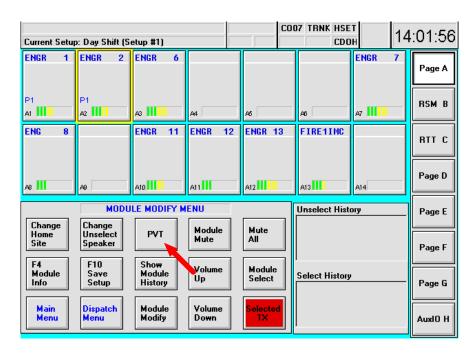
Receive: Digital voice call;

**Transmit: XMT Analog** 

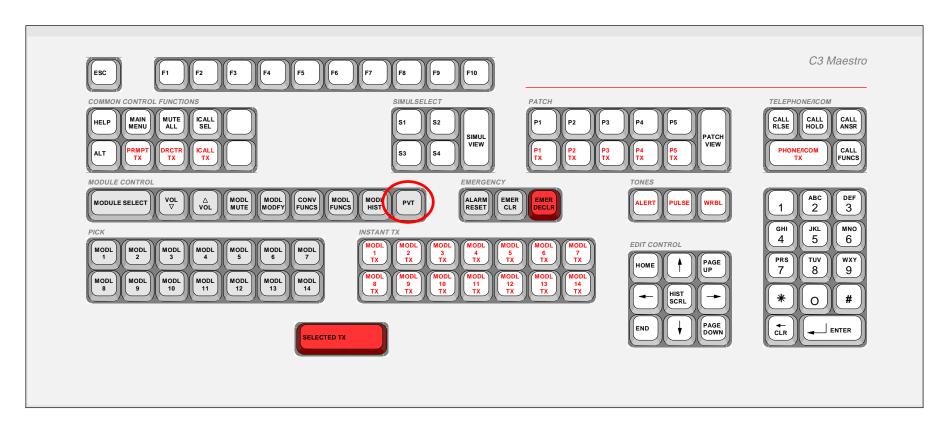
**Transmit: XMT Digital; private** 

**DVEM** if emergency

#### DIGITAL DISPATCH TRANSMIT MODE

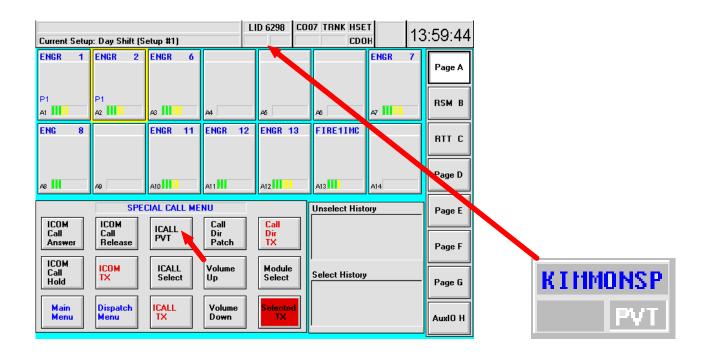


- 1. Transmit mode self-toggles to mode last received: Digital or Analog.
- 2. To manually switch modes: Pick module and click on or touch Private button.

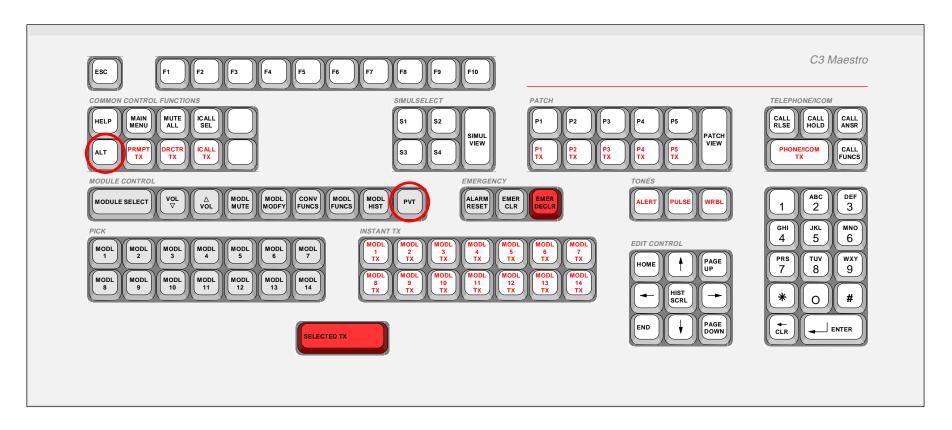


- 1. Transmit mode self-toggles to mode last received: Digital or Analog.
- 2. To manually switch modes: *Pick* module and press the PVT key.

#### DIGITAL DISPATCH: INDIVIDUAL CALL

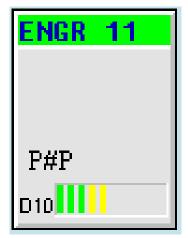


- 1. PVT indicates Digital or Encrypted Mode.
- 2. Transmit to the radio unit in the mode shown with the ICall TX key.
- 3. To toggle to the other Transmit Mode, click on or touch the ICall PVT button.



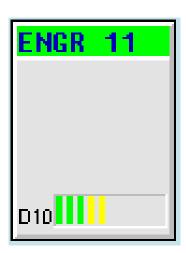
- 1. Transmit to the radio unit in the mode shown with the ICall TX key.
- 2. Toggle to the other Transmit Mode, by pressing *ALT* and *PVT* keys simultaneously.

### **DIGITAL DISPATCH: PATCH**



P#P: Patch # Private

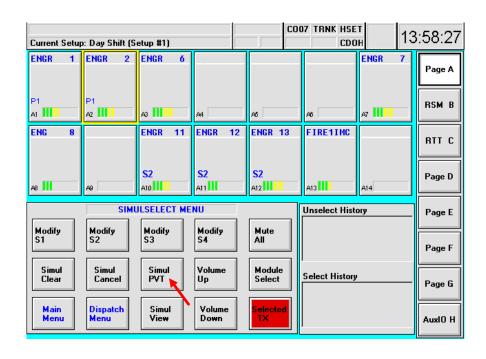
Digital Patch may include:
Digital groups and
conventional channels;
if analog groups are included
in a digital patch, they will NOT
hear the transmission.



Analog Patch may include: Digital groups, analog groups, and conventional channels.

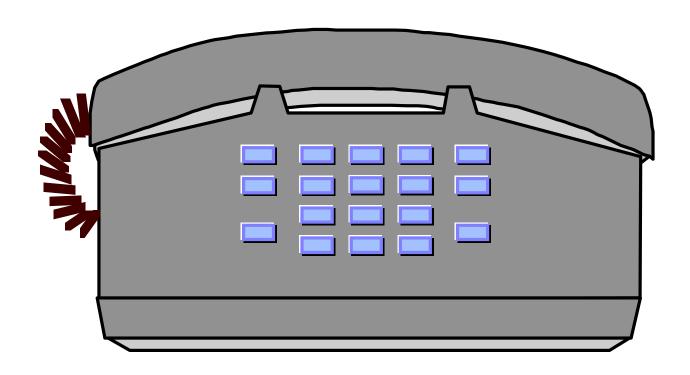
- 1. If an active patch is toggled to the PVT mode, any analog group in that Patch will NOT hear the transmission.
- 2. If ALL groups are PVT when a Patch becomes active, the Patch is Digital.
- 3. To toggle an active Patch between Digital and Analog, *Pick* any patched module and click on *PVT*.

#### DIGITAL DISPATCH: SIMULSELECT

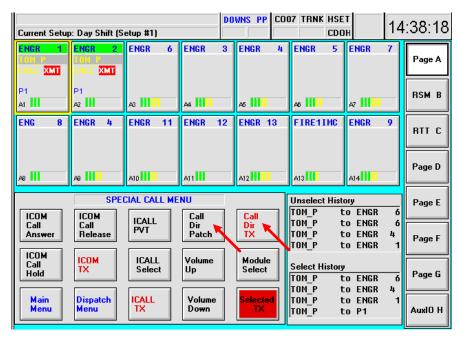


- 1. To toggle an active Simulselect between Digital and Analog, *Pick* any module in the Simulselect and click on or touch *Simul PVT*.
- 2. If all groups or units are PVT when a Simulselect becomes active, the Simulselect is Digital.
- 3. If an active Simulselect is toggled to the PVT mode, any analog group or unit in that Simulselect will **NOT** hear the transmission.

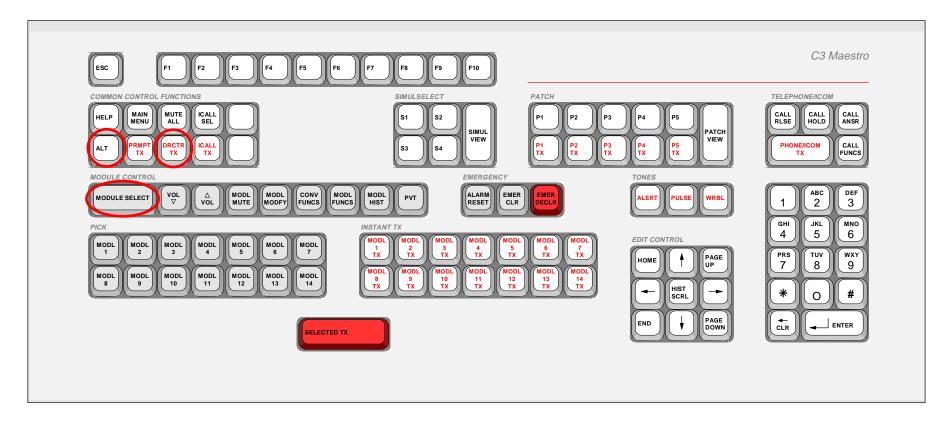
# **SECTION 9: CALL DIRECTOR PATCH**



#### CALL DIRECTOR PATCH

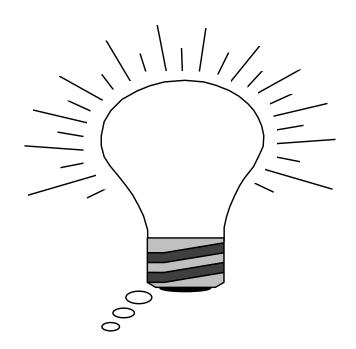


- 1. Units, groups, conventional channels, and radio patches can be patched to a telephone line. (A radio patch must be <u>active first</u> before entering it into a *Call Director Patch.*)
- 2. *Pick* the module (or radio patched modules) you wish to include in the Call Director patch.
- 3. Click on or touch the Call Dir Patch button.
- 4. The module(s) in the Call Director patch will display a brown highlight.
- 5. To transmit to the Call Director patch, press and hold or touch and hold the Call Dir TX button.
- 6. To end the patch, click on or touch Call Dir Patch again.



- 1. Units, groups, conventional channels, and radio patches can be patched with a telephone line. (The radio patch must be <u>active first</u> before entering it into a *Call Director patch*.)
- 2. Pick the module(s) you wish to include in the Call Director patch.
- 3. Press the *ALT* key followed by the *Module Select* key.
- 4. The modules in the Call Director patch will display a brown highlight.
- 5. To transmit to the Call Director patch, press the *Drctr TX* key.
- 6. To end the patch, press the ALT and Module Select keys at the same time.

# SECTION 10: MISCELLANEOUS CONSOLE FEATURES



**VU Meter** 

#### **SYSTEM STATUS**

STATUS: KIMMONSP is ENROUTE

Current Setup: Setup #3 (Setup #3)

J DOE

CO04 TRNK OFFL

MTAL DNLD CDOH

14:42:44

Status: Displays unit status and messages
Current Setup: Displays current setup number (1-10)

J Doe: Displays most recent unprogrammed individual caller

PVT: Displays PVT for digital individual call;

Blank for analog individual call

CO04: Displays console number TRNK: Displays system status

TRNK: Trunking system normal;

TRFS: Trunking failsoft; trunking OK; Patch OK; no Simulselect

FS2: At least one site not available; status of other sites not indicated

Blank: Display of trunking status disabled from IMC Manager

OFFL: Console off-line

(Same field may display HSET: Headset in use, or

**APwr: Audio Power disconnected)** 

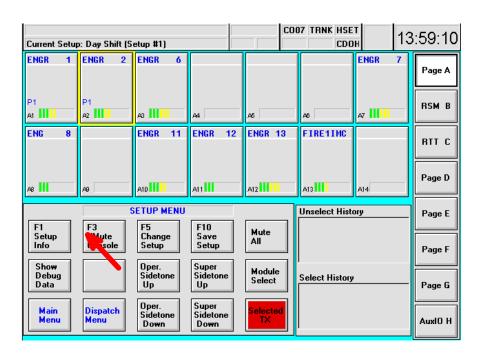
MTAL: Mute All function enabled

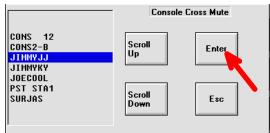
DNLD: Receiving a database download

CDOH: Call Director Off-Hook

VU Meter: Shows volume of console transmissions and received select audio

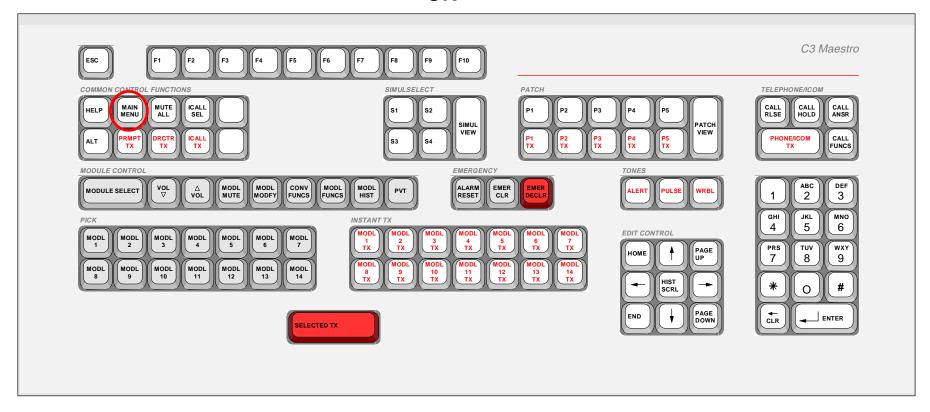
### **CONSOLE CROSS-MUTE**





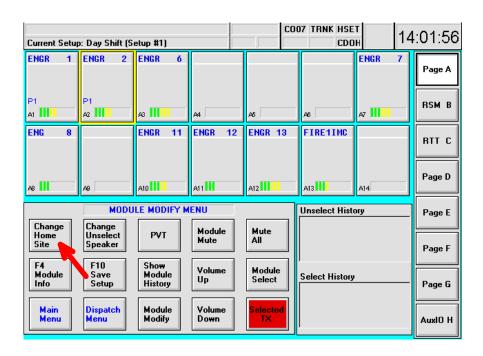
- 1. From the Main Menu, click on or touch the Setup Menu button.
- 2. Click on or touch F3 XMute Console.
- 3. Use the Scroll Up/Scroll Down buttons to move through the list.
- 4. Click on or touch *Enter* to mute the console.
- 5. Click or touch *Enter* again to unmute the console.

Cross-Mute silences another console's audio at your console.
This audio can create feedback when consoles are in the same room.



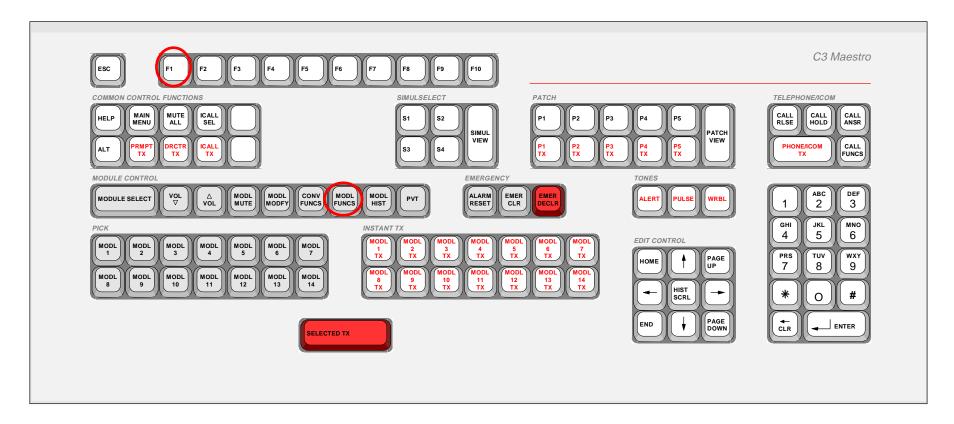
- 1. Press the Main Menu key,
- 2. Press the F3 key to access Miscellaneous Functions,
- 3. Press F1 Console Crossmute.
- 4. Use the arrow keys to choose the appropriate console,
- 5. Press *Enter* to mute the console.
- 6. Press *Enter* again to unmute.

# SITE SELECT (MULTI-SITE TRUNKED SYSTEMS)





- 1. Pick the module which is programmed with the desired unit or group.
- 2. From the Main Menu, click on or touch the *Module Modify* button.
- 3. Click on or touch Change Home Site.
- 4. Use the Scroll Up/Scroll Down buttons to move through the site list.
- 5. Click on or touch Change Site to change to a new site.
- 6. Click on or touch *Reset to Default Site* to reset original default site. The default home site is used when radio units have not "Logged On" to additional sites.



- 1. Pick module,
- 2. Press *ModI Funcs* key.
- 3. To change default home site, press *F1*.
- 4. From Site List, choose a new site by using the arrow keys.
- 5. Press Enter.
- 6. To reset the default home site, press *F2* in the Module Functions menu.

### CONVENTIONAL BASE STATION CONTROL

Any communication module can be programmed with a privileged conventional channel entity for console-to-conventional radio unit(s) communication via conventional base station equipment interconnected to the CEC/IMC. In addition to the basic ability to transmit on conventional channels, conventional base station control functions provided by the console include all remote control functions normally performed by a conventional base station remote controller. Examples include channel selection for a multi-channel base station, monitor enable/disable, tone/digital decoder enable/disable (for example, a Channel Guard decoder) and repeater enable/disable. In accordance with wiring of the conventional interface equipment, the console can also be utilized to enable/disable remote controllers which are wired in parallel with the CEC's/IMC's conventional interface or to toggle between two different sets of conventional base station channels, each of which is typically located at two different radio sites (for main/standby "site" operations).

### **Indications And Control**

The Change Conventional Channel dialog box indicates the current states of a conventional channel's remote control functions. Figure 10-1 shows a typical dialog box. An enabled or selected function is indicated by highlighting of the respective button. For example, as shown in the figure, channel 1 is selected, the main "site" is enabled, and all other functions are disabled. As described in the following subsections, this same dialog box is also utilized to change the operational states.

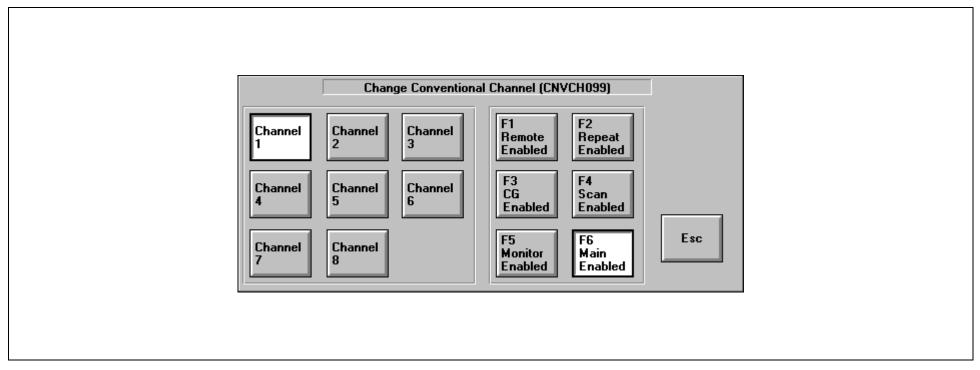


Figure 10-1 — Change Conventional Channel Dialog Box

### Repeat(er) Enable/Disable Toggling

In many cases a conventional base station may be capable of operating as a repeater. When a base station's repeat function is enabled, it retransmits radio-originated audio which it has received on its in-bound (receive) conventional radio frequency. This retransmission occurs on the base station's out-bound (transmit) conventional radio frequency. Together, both frequencies form the conventional channel. The retransmission extends the coverage range of the originating conventional radio unit. Use the following procedure to enable and disable a conventional channel's base station repeater:

1. This console operational procedure can potentially affect many conventional radio units operating on the conventional channel. Therefore, consultation with system or dispatch administration personnel for enable/disable toggle approval is recommended.

- 2. Pick the desired module programmed with the conventional channel. This channel must have repeat enable/disable toggling capability.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.
- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sub>6</sub> function key on the dispatch keyboard to open this dialog box.
- 5. If the dialog box's F2 Repeat Enabled button is not highlighted, the conventional channel's repeater is currently disabled; click/touch this button to enable it. Alternately, press the F2 function key on the dispatch keyboard. The button will highlight when the repeater toggles to the enabled state.
  If the dialog box's F2 Repeat Enabled button is highlighted, the conventional channel's repeater is currently enabled; click/touch this button to disable it. Alternately, press the F2 function key on the dispatch keyboard. The button will de-highlight when the repeater toggles to the disabled state.
- **6.** Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

### Tone/Digitally-Controlled Squelch Enable/Disable Toggling

A conventional base station's receiver may be equipped with a continuous tone-coded squelch system (CTCSS) such as Channel Guard<sup>TM</sup> (CG) or a digital-coded squelch system (DCSS) such as Digital Channel Guard (DCG). These CTCSS/DCSS electronic decoder circuits at the base station help prevent extraneous signals from "getting into" the base station—typically a repeater—and they allow selective access to only those radio units transmitting the proper continuous low-frequency tone or digital code. Use the following procedure to enable and disable this conventional channel functionality:

- **1.** This console operational procedure can potentially affect many conventional radio units operating on the conventional channel. Therefore, consultation with system or dispatch administration personnel for enable/disable toggle approval is recommended.
- 2. Pick the desired module programmed with the conventional channel. This channel must have CG enable/disable toggling capability.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.
- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sub>6</sub> function key on the dispatch keyboard to open this dialog box.
- **5.** If the dialog box's **F3 CG Enabled** button *is not* highlighted, the conventional channel's tone/digital decoder is currently disabled; click/touch this button to enable it. Alternately, press the **F**₃ function key on the dispatch keyboard. The button will highlight when the decoder toggles to the enabled state.
  - If the dialog box's **F3 CG Enabled** button *is* highlighted, the conventional channel's tone/digital decoder is currently enabled; click/touch this button to disable it. Alternately, press the **F**₃ function key on the dispatch keyboard. The button will de-highlight when the decoder toggles to the disabled state.
- 6. Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

### Monitor Enable/Disable Toggling

If the conventional base station's receiver is equipped with a CTCSS or DCSS decoder, in some cases, it may be desired to monitor the conventional channel for any and all activity on the in-bound (receive) radio frequency. Typically, this action is performed just prior to transmission from the console to ensure a conventional radio unit which is transmitting an improper tone/digital code on the in-bound radio frequency is not preempted ("stepped-on") by the dispatcher. When the monitor function is enabled, the conventional channel's base station receiver passes all received signals to the CEC/IMC and console(s), regardless of the originating conventional radio unit's transmitted tone/digital code. If the base station is a repeater, this action <u>normally</u> does not affect repeat operation, as the valid tone/digital code is still necessary to key the repeater. If the monitor function is in the enabled stated, it automatically disables upon the next console-originated (or paralleled remote controller) transmission. Use the following procedure to enable and disable this conventional channel functionality:

- 1. This console operational procedure can potentially cause unnecessary conventional radio traffic to be heard at the console(s) and paralleled remote controllers. Therefore, consultation with system or dispatch administration personnel for enable/disable toggle approval is recommended.
- 2. Pick the desired module programmed with the conventional channel. This channel must have monitor enable/disable toggling capability.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.
- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sub>6</sub> function key on the dispatch keyboard to open this dialog box.
- 5. If the dialog box's **F5 Monitor Enabled** button *is not* highlighted, the conventional channel's monitor function is currently disabled; click/touch this button to enable it. Alternately, press the **F**₅ function key on the dispatch keyboard. The button will highlight when the monitor function toggles to the enabled state.

If the dialog box's **F5 Monitor Enabled** button *is* highlighted, the conventional channel's monitor function is currently enabled; click/touch this button to disable it. Alternately, press the **F**₅ function key on the dispatch keyboard. The button will de-highlight when the monitor function toggles to the disabled state.

- 6. Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

### **Channel Changing**

In some cases, a conventional channel may be interconnected to a multi-channel remotely-controlled conventional base station instead of the more common single-channel remotely-controlled conventional base station. In these cases, base station channel selection may be performed at the console via the Change Conventional Channel dialog box. With the C3 Maestro dispatch console for Windows NT, each channel's transmit and receive frequencies are always "coupled" together. Use the following procedure for channel selection:

- 1. This console operational procedure can potentially affect communications between conventional radio units and other consoles in the system. Therefore, consultation with system or dispatch administration personnel for conventional base station channel change approval is recommended.
- 2. Pick the desired module programmed with the conventional channel. This channel must have channel-change capability and the respective conventional base station must be a multi-channel base station.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.
- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sub>6</sub> function key on the dispatch keyboard to open this dialog box.

- 5. The respective button for the currently selected base station channel highlights. For example, if channel 5 at the conventional base station is the selected channel, the Channel 5 button highlights. To select a different valid channel, simple click/touch the respective button. This button will highlight and the previous button will de-highlight when the new channel selects. Alternately, use the F<sub>7</sub> and F<sub>8</sub> function keys on the dispatch keyboard to change the channel. Invalid channels cannot be selected.
- **6.** Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

### **Channel Scan Enable/Disable Toggling**

Multi-channel remotely-controlled conventional channel base stations may be equipped with channel scan functionality. Use the following procedure to enable and disable a conventional channel's base station scan function:

- 1. This console operational procedure can potentially affect communications between conventional radio units and other consoles in the system. Therefore, consultation with system or dispatch administration personnel for enable/disable toggle approval is recommended.
- 2. Pick the desired module programmed with the conventional channel. This channel must have channel scan enable/disable toggle capability and the respective conventional base station must be a multi-channel base station with scan capability.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.
- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sub>6</sub> function key on the dispatch keyboard to open this dialog box.

- **5.** If the dialog box's **F4 Scan Enabled** button *is not* highlighted, the scan function is currently disabled; click/touch this button to enable it. Alternately, press the **F**<sup>4</sup> function key on the dispatch keyboard. The button will highlight when the base station begins scanning.
  - If the dialog box's **F4 Scan Enabled** button *is* highlighted, the scan function is currently enabled; click/touch this button to disable it. Alternately, press the **F**<sup>4</sup> function key on the dispatch keyboard. The button will dehighlight when the base station stops scanning.
- **6.** Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

### Remote Controller Enable/Disable Toggling

Some CEC/IMC systems may be equipped with optional hardware (specialized relays) which allow conventional base station remote controllers such as an RCN-1000 to be "paralleled" with the console's CEC/IMC. This gives both the C3 Maestro console and the remote controller(s) simultaneous ability to control the respective conventional base station(s). During certain operational periods, this simultaneous control ability may not be desired; thus, remote controller enable/disable toggling is provided. Use the following procedure to toggle remote controllers between the enabled and disabled states. This functionality is mutually-exclusive with the main/standby "site" toggling function described in the next section:

- **1.** Depending upon system wiring, this console operational procedure can potentially affect many remote controllers in the system. Therefore, consultation with system or dispatch administration personnel for enable/disable toggle approval is recommended.
- 2. Pick the desired module programmed with the conventional channel. This channel must have remote controller enable/disable capability.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.

- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sup>6</sup> function key on the dispatch keyboard to open this dialog box.
- 5. If the dialog box's F1 Remote Enabled button is not highlighted, the remote controller(s) is currently disabled (not paralleled with CEC/IMC); click/touch this button to enable it. Alternately, press the F1 function key on the dispatch keyboard. The button will highlight when the remote controller(s) toggles to the enabled state(s).
  If the dialog box's F1 Remote Enabled button is highlighted, the remote controller(s) is currently enabled (paralleled with CEC/IMC); click/touch this button to disable it. Alternately, press the F1 function key on the dispatch keyboard. The button will de-highlight when the remote controller(s) toggles to the disabled state(s).
- **6.** Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

### Main/Standby "Site" Toggling

For remote control operations, some CEC/IMC systems may be equipped with optional hardware (specialized relays) which allow toggling between a main set of conventional base stations—typically located at one radio site—and a standby set of conventional base stations—typically located at a different radio site. Use the following procedure to toggle between the main "site" and the standby "site." This functionality is mutually-exclusive with the remote controller enable/disable toggling function described in the previous section:

- 1. Depending upon system wiring, this console operational procedure can potentially affect communications between conventional radio units and other consoles in the system. Therefore, consultation with system or dispatch administration personnel for main/standby "site" toggle approval is recommended.
- 2. Pick the desired module programmed with the conventional channel. This channel must have main/standby site toggling capability.
- **3.** If necessary, broadcast a system change voice call on the conventional channel via standard selected transmission or instant transmission procedures.

- **4.** From the MAIN MENU command panel, open the Change Conventional Channel dialog box by clicking/touching the **F6 Conv Control** button. Alternately, press the **conv Funcs** key or the **F**<sub>6</sub> function key on the dispatch keyboard to open this dialog box.
- 5. If the dialog box's **F6 Main Enabled** button *is* highlighted, the main "site" (set of stations/channels) is currently enabled for remote control operation; click/touch this button to switch to the standby "site." Alternately, press the **F**<sub>6</sub> function key on the dispatch keyboard. The button will de-highlight when the standby "site" becomes active for remote control operation. When necessary, repeat this action to toggle back to the main "site."
- **6.** Optional: Make other conventional channel function changes via the other buttons on within the dialog box.
- 7. Exit the Change Conventional Channel dialog box via its **Esc** button or via the **Esc** button on the dispatch keyboard.

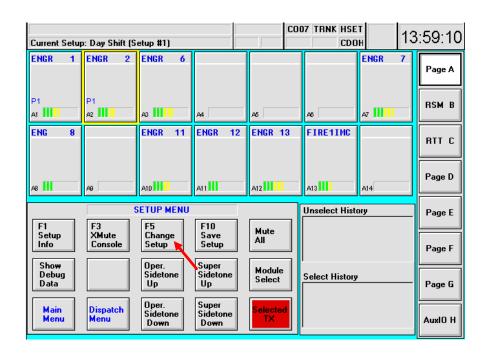
# SECTION 11: SUPERVISORY/SETUP INFORMATION

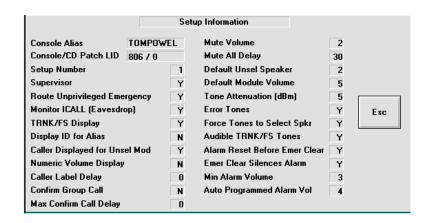


# **SUPERVISORY CONSOLES**

- Supervisory consoles can interrupt transmissions from non-supervisory consoles.
- Supervisors can receive emergencies not in the console's privilege list.

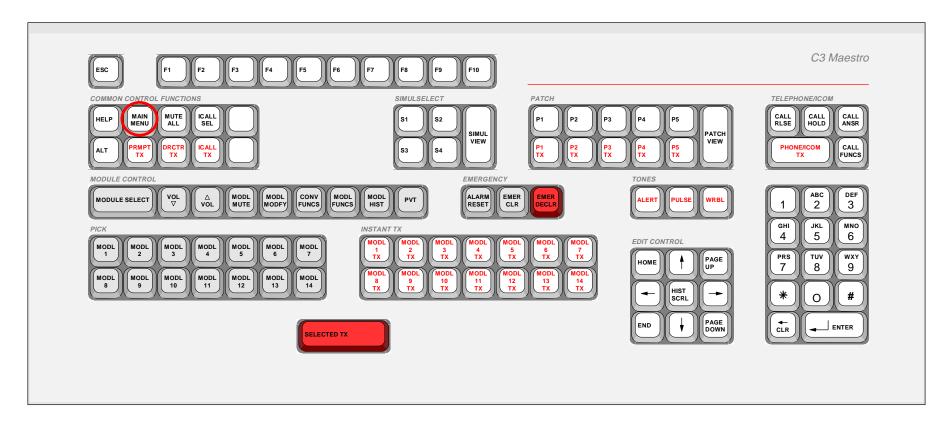
### **CONSOLE SETUP INFORMATION**





- 1. From the Main Menu, click on or touch Setup Menu button.
- 2. In the Setup Menu, click on or touch F1 Setup Info. The Setup Information dialog box displays.

**OR** 



1. Press F1 Console Setup Information or access through the Main Menu.

See the next page for setup information definitions.

## SETUP INFORMATION DEFINITIONS

	S	etup Information		
Console Alias	TOMPOWEL	Mute Volume	2	
Console/CD Patch LID	806 / 0	Mute All Delay	30	
Setup Number	1	Default Unsel Speaker	2	
Supervisor	Y	Default Module Volume	5	
Route Unprivileged Emergency Y		Tone Attenuation (dBm)	5	
Monitor ICALL (Eavesdrop)		Error Tones	Y	Esc
TRNK/FS Display	Y	Force Tones to Select Spkr	Y	
Display ID for Alias	N	Audible TRNK/FS Tones	Y	
Caller Displayed for Uns	el Mod Y	Alarm Reset Before Emer Clear	Y	
Numeric Volume Display	N	Emer Clear Silences Alarm	Y	
Caller Label Delay	0	Min Alarm Volume	3	
Confirm Group Call	N	Auto Programmed Alarm Vol	4	
Max Confirm Call Delay	0			

Console Alias: Console number/name

Console/CD Patch LID: Console /Call Director Patch ID number Setup Number: Displays current setup number (1-10)

Supervisor: Y=Supervisory console; N=Not a supervisory console

Route Unpriv Emer (Supervisory): Y=Responds to ALL emergencies; N=Responds to emergencies in groups

in console's privilege list only (Supervisory function only)

Monitor ICALL (Eavesdrop): Y=Monitor individual calls at the console; N=Unable to monitor individual calls

TRNK/FS Display: Y=Failsoft message displayed; N=Not displayed in Status Window

Caller Displayed for Unsel Mod: Y=Caller ID in selected & unselected modules; N=Called ID in select module only

Numeric Volume Display: Y=Numeric labels for module volume levels; N=Volume bar for volume levels

Caller Label Delay: Delay in seconds before caller ID is blanked (0-5 seconds)

Confirm Group Call: Y=Requires confirmation from ALL sites before transmit; N=Requires confirmation from

only one site for transmit (for Wide Area multi-site calls)

Max Confirm Call Delay: Maximum time the system will wait for all sites to respond to the call

		Sel	tup Information		
Console Alias	TOMPOWE	L	Mute Volume	2	
Console/CD Patch LID	806 / 0		Mute All Delay	30	
Setup Number		1	Default Unsel Speaker	2	
Supervisor		Υ	Default Module Volume	5	
Route Unprivileged Emergency Y		Υ	Tone Attenuation (dBm)	5	
Monitor ICALL (Eavesdrop)		Υ	Error Tones	Y	Esc
TRNK/FS Display		Υ	Force Tones to Select Spkr	Y	
Display ID for Alias		N	Audible TRNK/FS Tones	Y	
Caller Displayed for Uns	el Mod	Υ	Alarm Reset Before Emer Clear	Y	
Numeric Volume Display		N	Emer Clear Silences Alarm	Y	
Caller Label Delay		0	Min Alarm Volume	3	
Confirm Group Call		N	Auto Programmed Alarm Vol	4	
Max Confirm Call Delay		0			

Mute Volume: Volume when muted (0-10)

Mute All Delay: Delay in seconds before MUTE ALL times out (0-120 seconds)

Default Unsel Speaker: Normally speaker 2 for newly programmed module Default Module Volume: Initial volume of newly programmed module (0-10)

Tone Attenuation (dBm): Volume of tones relative to voice (0=Same as voice; 20=Much less than voice)

Error Tones: Y=Receive error tones; N=No tones

Force Tones to Select Spkr: Y=All confirmation tones to select speaker;

N=Tones from unselect modules heard in unselect speaker

Audible TRNK/FS Tones: Y=Receive FS warning tones; N=No tones

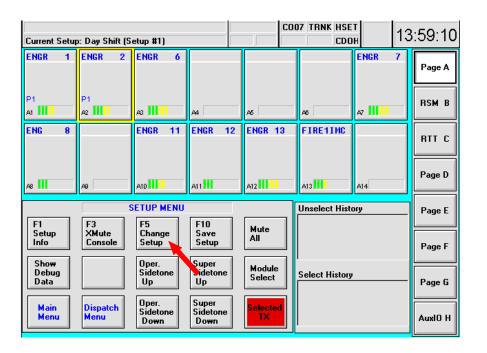
Alarm Reset Before Emer Clear: Y=Must silence emergency alarm before clearing;

N=Can clear emergency before alarm reset

Emer Clear Silences Alarm: Y=Alarm resets with emergency clear; N=Must reset alarm

Min Alarm Volume: Minimum volume for emergency tones Auto Programmed Alarm Vol: Default volume for emergency alarms

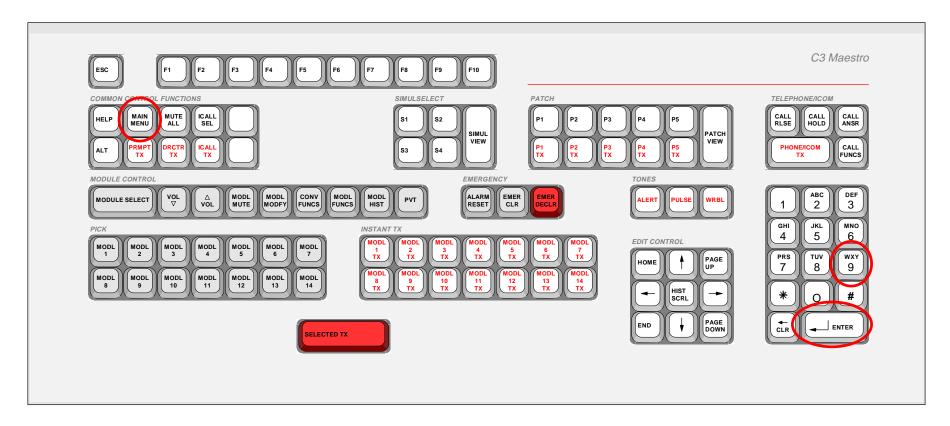
### **CHANGE SETUP**





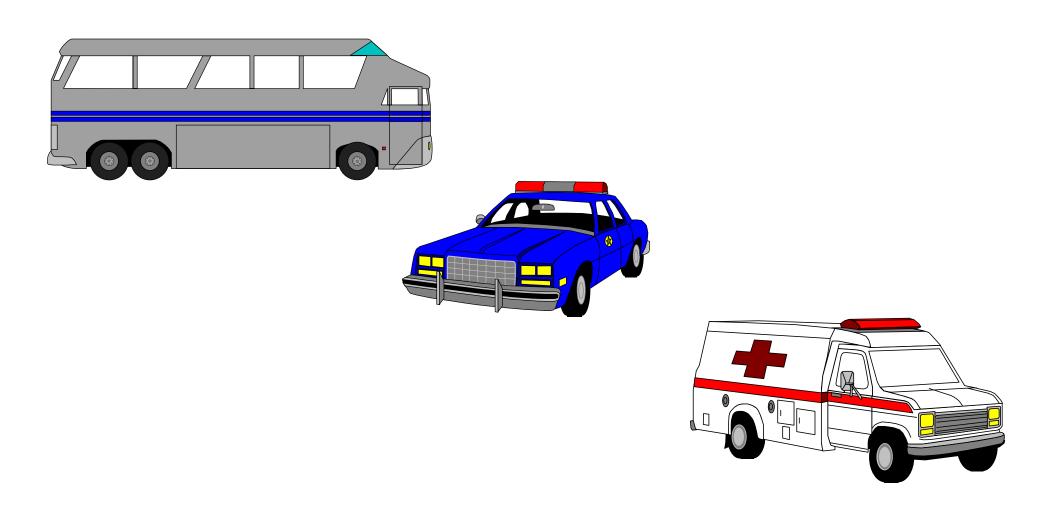
- 1. From the Main Menu, click on or touch the Setup Menu button.
- 2. Click on or touch F5 Change Setup.
- 3. Use the Scroll Up/Scroll Down buttons to move through the Setup List.
- 4. Click on or touch *OK* to change to the new setup.

OR

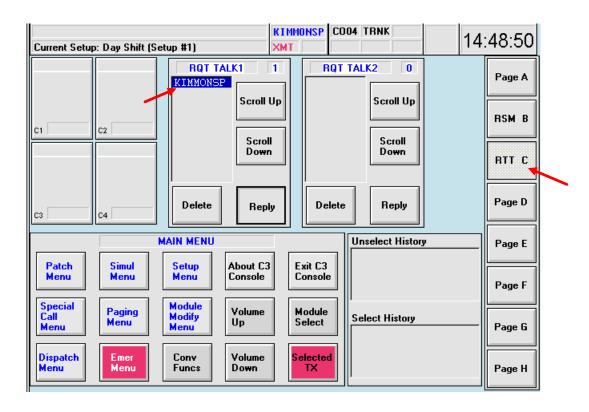


- 1. Press *F5* or access through the *Main Menu* key.
- 2. Use arrow keys to choose a setup.
- 3. Press Enter.
- 4. You're asked: "Save Current Setup?" Press the *WXY* key for "Yes."

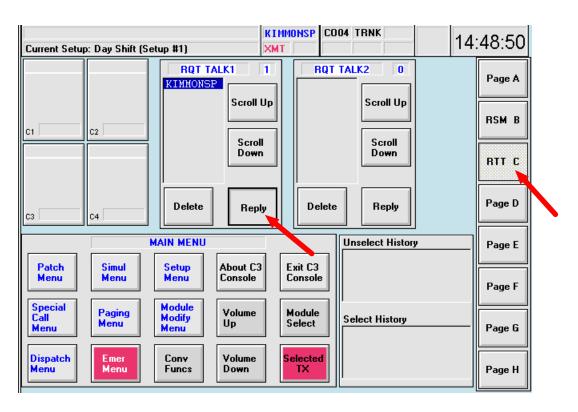
# **SECTION 12: OPTIONAL FEATURES**



# REQUEST TO TALK (RTT)

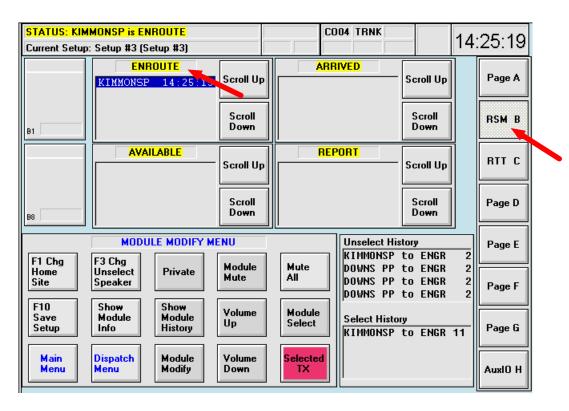


- 1. The RTT function allows multiple units to request to talk to the dispatcher.
- 2. When a unit sends an RTT signal from a radio, the unit is placed in the RQT TALK1 or RQT TALK2 list at the console.
- 3. To view the RQT TALK lists, click on or touch the page button labeled RTT.
- 4. The dispatcher can respond to units in the RQT TALK lists in ANY order.

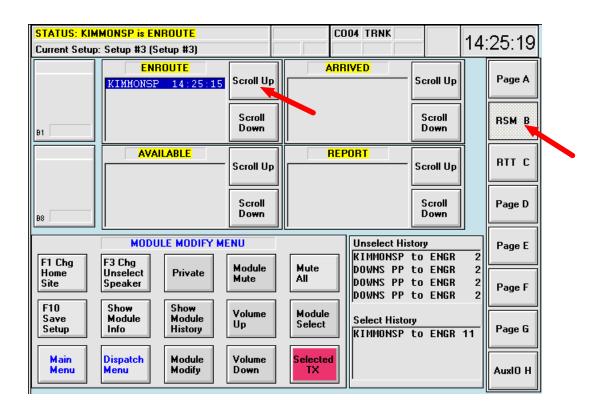


- 1. From any screen, click on or touch the page button labeled RTT.
- 2. Use the *Scroll Up/Scroll Down* buttons to move through the RTT list. You may respond to RTT's in ANY order.
- 3. When the desired RTT is highlighted, press and hold or touch and hold *Reply* to respond to the unit.
- 4. Click on or touch Delete to remove the unit from the RTT list.

# **STATUS MESSAGE (RSM)**

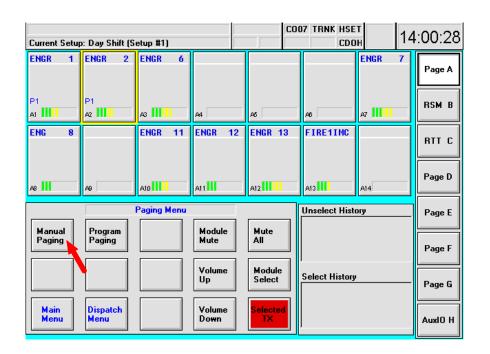


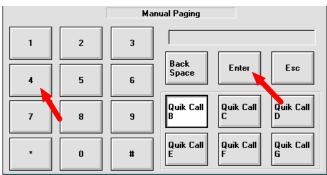
- 1. The Status function provides the dispatcher with unit status information.
- 2. When a unit sends a Status signal from a radio, the unit is placed in the appropriate status window (ENROUTE, ARRIVED, etc.) at the console.
- 3. To view the Status windows, click on or touch the page button labeled Status.
- 4. This function is used to <u>receive</u> unit status information only.



- 1. From any screen, click on or touch the page button programmed with Status.
- 2. Use the *Scroll Up/Scroll Down* buttons to move through the different *Status* lists.
- 3. A unit can only be in one status at a time.
  When the unit enters a new status, it will be removed from the old status.

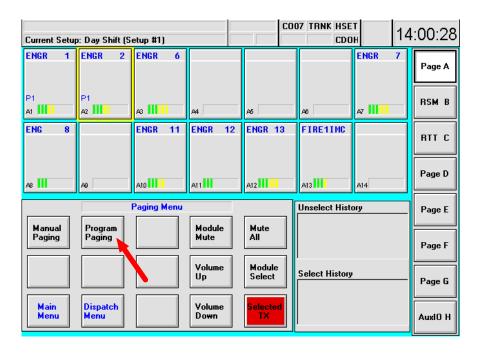
### MANUAL PAGING

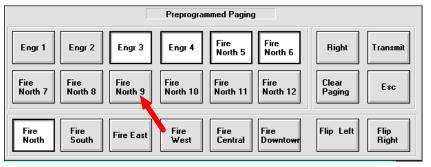




- 1. From the Dispatch Menu, click on or touch the *Paging Menu* button.
- 2. Click on or touch the *Manual Paging* button.
- 3. Choose the appropriate paging method,
- 4. Use the numerical keypad to type in the paging number.
- 5. Click on or touch Send to transmit the paging tone to the selected module.

### PREPROGRAMMED PAGING





- 1. From the Dispatch Menu, click on or touch the Paging Menu button.
- 2. Click on or touch Program Paging.
- 3. Choose the desired paging group button(s),
- 4. Click on or touch *Send*; a *Simulselect* will be created with the paging groups after the last page has completed.
- 5. Click on or touch *Transmit* to transmit a voice message on the *Simulselect*.
- 6. Click on or touch Clear Paging to end the page and deactivate the Simulselect.

# **AUXILIARY INPUT/OUTPUT ("AUX. I/O")**

	_	_
N	7	_
- 1		

Since CEC/IMC auxiliary I/O capability at a console is a feature licensed option, operations described in the section are only possible if the console is equipped with this software license. Also, various system configurations are necessary before auxiliary I/O is operational. Consult with system and/or dispatch administration personnel for details.

Using special modules referred to as "auxiliary I/O modules," auxiliary inputs and outputs can be monitored and controlled at the console. For example, one auxiliary input module might be utilized to monitor the state of a door—either open or closed—via a sensor switch at the door, and a auxiliary output module might be utilized to turn a relay-controlled siren on and off via a button press or keystroke actions at the console. Each auxiliary I/O module has a button at the top, and a small text line at the bottom known as the state indicator.

#### The button provides:

- a text identification area to uniquely identify the module;
- for auxiliary output modules, output control via the pointing device (mouse/track-ball/touch-screen), or;
- for auxiliary input modules set-up for acknowledged operation, acknowledge response via the pointing device.

#### The state indicator displays:

• the current state of the auxiliary input or output. For example, "Open" if module is utilized to monitor a door and the door is currently open. Auxiliary I/O is a binary-type monitoring and control function. Therefore, only two (2) possible states for each auxiliary input or output are possible and only one state is valid during any given instant. In other words, using this example, the door can only be "Open" or "Closed."

The following figure shows an example console display with auxiliary I/O modules located on module page A. Each module page can have up to a total of eight (8) auxiliary I/O modules for a total of sixty-four (64) if all eight module pages are available.

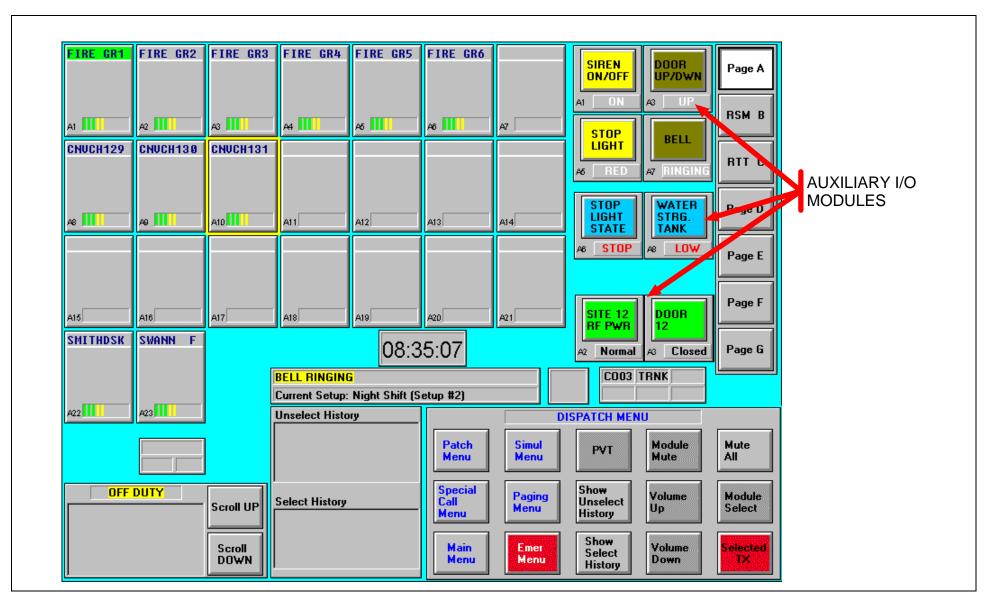


Figure 12-1 — Example Screen With Eight (8) Auxiliary I/O Modules On Module Page A (This example screen has a resolution of 800 x 600 pixels; factory default resolution is 640 x 480 pixels)

### **Auxiliary Input Modules**

### **Standard Operation**

Auxiliary I/O modules set-up for standard input operation simply provide monitoring functions for the respective auxiliary inputs. No dispatcher response is required as each auxiliary input changes state. The following two figures illustrate how indications appear in example auxiliary input modules of this type as each respective auxiliary input changes states several times.

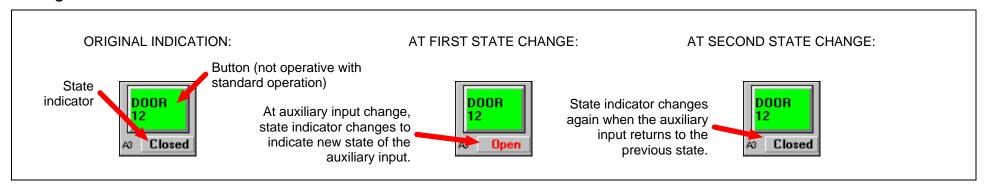


Figure 12-2 — Auxiliary Input Module Set-Up For Standard Operation (Example 1)

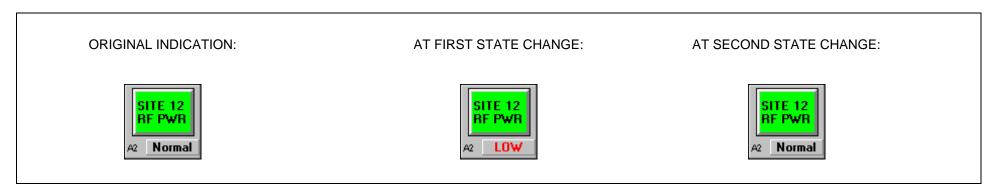


Figure 12-3 — Auxiliary Input Module Set-Up For Standard Operation (Example 2)

#### **Acknowledge Operation**

Auxiliary input modules set-up for acknowledge operation require a dispatcher to acknowledge an inactive-to-active state change to guarantee the change is observed. Here, "inactive" is utilized to identify an idle or a normal condition of an input and "active" is utilized to identify an abnormal condition. Until an auxiliary input change of this type is acknowledged by the dispatcher, the state indicator in the respective auxiliary input module flashes (turns on and off repeatabely) and rings sound in the unselect speaker. Typically, auxiliary inputs which require quick or immediate action by a dispatcher are set-up for acknowledge operation. After acknowledgment, when the input changes back to the inactive state (if not already) the state indicator returns to the inactive indication (no flash) and no rings sound. The following figure illustrates how indications appear in an example auxiliary input module of this type as the auxiliary input changes states several times and the dispatcher responds with the necessary acknowledgment action.

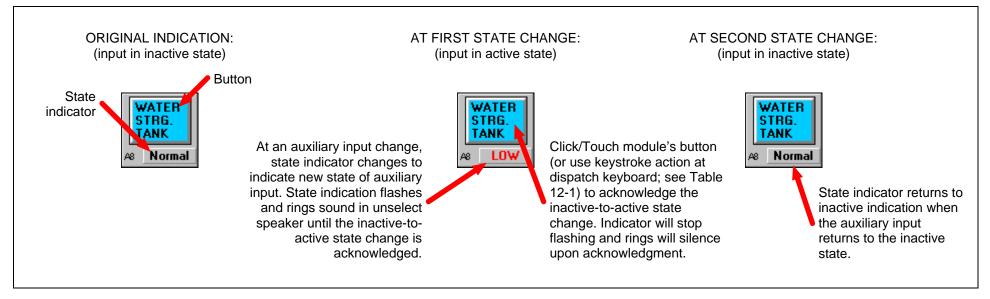


Figure 12-4 — Auxiliary Input Module Set-Up For Acknowledge Operation

Table 12-1 — Dispatch Keyboard Keystroke Mapping For Auxiliary I/O Module Button Activation

AUXILIARY I/O MODULE	DISPATCH KEYBOARD KEYSTROKE WHICH ACTIVATES MODULE'S BUTTON
1	<alt> F1</alt>
2	<alt> F2</alt>
3	<alt> F3</alt>
4	<alt> F4</alt>

AUXILIARY I/O MODULE	DISPATCH KEYBOARD KEYSTROKE WHICH ACTIVATES MODULE'S BUTTON
5	<alt> F5</alt>
6	<alt> F6</alt>
7	<alt> F7</alt>
8	<alt> F8</alt>

### **Auxiliary Output Modules**

### **Momentary Operation**

Auxiliary output modules set-up for momentary operation allow momentary activation of the auxiliary outputs. In other words, the output changes to the active or momentary state only while the button is depressed (or the respective keys at dispatch keyboard are depressed). The following figure illustrates this via an example auxiliary output module.

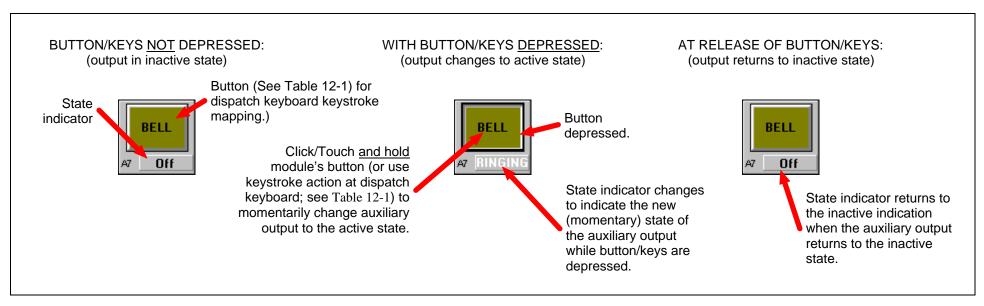


Figure 12-5 — Auxiliary Output Module Set-Up For Momentary Operation

In some cases, other (remote) consoles in the system may also be set-up to control the same auxiliary outputs as the local console. In these cases, the corresponding auxiliary output modules' state indicators may change state when no button/keystroke action occurs at the local console. This guarantees the state indicators at the local console always indicate the current states of the respective auxiliary outputs.

### **Toggle Operation**

Auxiliary output modules set-up for toggle operation provide steady-state toggling between two possible output states. In other words, via a button/keystroke press and release action, the output can be changed to one state and it will remain in that state until another identical button/keystroke action is perfromed. The following figure illustrates this via an example auxiliary output module.

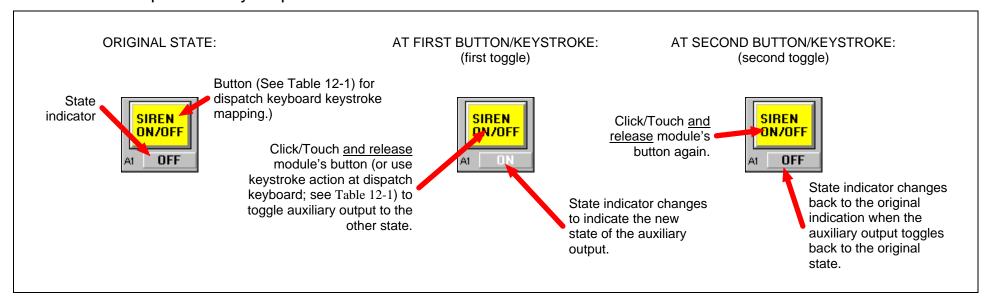


Figure 12-6 — Auxiliary Output Module Set-Up For Momentary Operation

In some cases, other (remote) consoles in the system may also be set-up to control the same auxiliary outputs as the local console. In these cases, the corresponding auxiliary output modules' state indicators may change state when no button/keystroke action occurs at the local console. This guarantees the state indicators at the local console always indicate the current states of the respective auxiliary outputs.

# **SECTION 13: SHUT-DOWN**

П	M	P	റ	R	Т	Δ	N.	Т	N	O	T	F
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Unless otherwise stated, all procedures in this section assume the console's hardware and software are configured in accordance with factory default settings. Consult with system or dispatch administration personnel for specific details.

### SHUT-DOWN PROCEDURE

Always exercise proper shut-down procedures when it is necessary to power-down the equipment. Shut-down the C3 Maestro console in accordance with the following recommended shut-down procedure:

- **1.** If the console application is running, exit it via the exit button on the Main Menu command panel. If desired, save any new module programming changes when prompted.
- 2. If necessary, exit any other application software running under Windows NT.
- **3.** Perform a Windows NT "shutdown" by selecting <u>File > Shutdown...</u> from Program Manager, or by simultaneously depressing <Ctrl><Alt><Del> on the PC keyboard and selecting the <Shutdown...> button.
- **4.** When the "It is now safe to turn off your computer" (or similar) prompt displays, power-down the PC's via its power switch.
- **5.** Power-down the monitor via its power switch.
- 6. Power-down the Enhanced Audio Enclosure via its power switch.
- 7. Power-down any other externally-connected equipment such as a Call Director or a paging tone encoder.