

RADAR/PLOTTER/SOUNDER FRS-1000

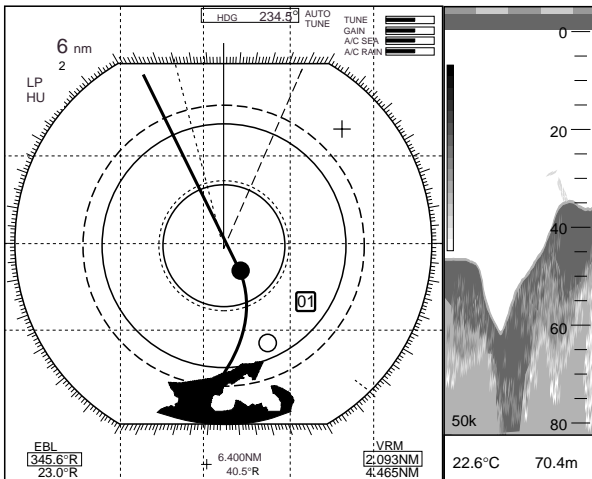
Operator's Guide

The purpose of this operator's guide is to provide the basic operating procedures for this equipment. For detailed information, refer to the operator's manual.

Selecting Displays

- [RDR MODE] key: Selects the radar display. Each press of the key turns the radar display on or off.
- [PLTR MODE] key: Selects the plotter display. Each press of the key turns the plotter display on or off.
- [SNDR MODE] key: Selects the sounder display. Each press of the key turns the sounder display on or off.

As many as three displays can be combined on one screen. The example below shows radar, plotter, sounder on one screen.



◆ RADAR ◆

Transmitting

1. Press the [RDR MENU/ESC] key.
2. Press the [9] (ST-BY/TX) key.
3. Press the [RDR MENU/ESC] key.

Adjusting Gain

1. Press the [RDR MENU/ESC] key.
2. Press the [3] (GAIN) key.
3. Use the omnipad to adjust.
4. Press the [RDR MENU/ESC] key.

Selecting a Range Scale

1. Press the [RDR MENU/ESC] key.
2. Press the [1] key or [2] key.
3. Press the [RDR MENU/ESC] key.

Suppressing Sea Clutter, Rain Clutter

1. Press the [RDR MENU/ESC] key.
2. Press the [4] (A/C SEA) key to suppress sea clutter; [5] (A/C RAIN) key to suppress rain clutter.
3. Adjust with the omnipad.
4. Press the [RDR MENU/ESC] key.



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Shift, Zoom

1. Press the [RDR MENU/ESC] key.
2. Press [0], [1], and select Page 1.
3. Select SHIFT or ZOOM from the SHIFT/ZOOM field.
4. For Shift, place cursor with the omnipad. For Zoom, place cursor on target of interest with the omnipad.
5. Press the [ENT] key.
6. Press the [RDR MENU/ESC] key.

Note: These do not function in the True motion mode.

Measuring the Range

1. Press the [RDR MENU/ESC] key.
2. Press the [6] (EBL/VRM SELECT) key to select the No.1 VRM or No.2 VRM.
3. Press the [7] [EBL/VRM CNTRL) key.
4. Place the VRM on the inner edge of the target with the omnipad.
5. Read VRM indication to find range.
6. To erase the VRM, press and hold down the [7] key about five seconds.
7. Press the [RDR MENU/ESC] key.

Measuring the Bearing

1. Press the [RDR MENU/ESC] key.
2. Press the [6] (EBL/VRM SELECT) key to select the No.1 EBL or No.2 EBL.
3. Press the [7] [EBL/VRM CNTRL) key.
4. Use the omnipad to bisect the target with the EBL.
5. Read EBL indication to find bearing.
6. To erase the EBL, press and hold down the [7] key about five seconds.
7. Press the [RDR MENU/ESC] key.

◆ PLOTTER ◆

Selecting a Range Scale

1. Press the [PLTR MENU/ESC] key.
2. Press the [1] key or [2] key.
3. Press the [PLTR MENU/ESC] key.

Shifting the Cursor, Display

1. **To shift the cursor**, turn on the cursor with the [+/-] key and then operate the omnipad.
2. **To shift the display**, turn off the cursor with the [+/-] key and then operate the omnipad.

This feature is only available on the plotter display in the CU, NU and TM modes.

Selecting Screen Center

1. Press the [+/-] key to turn on the cursor.
2. Place cursor at desired screen center with the omnipad.
3. Press the [PLTR MENU/ESC] key.
4. Press the [6] (CENTER) key.
5. Press the [PLTR MENU/ESC] key.

This feature is only available on the plotter display in the CU, NU and TM modes.

Stopping, Restarting Track Recording

1. Press the [PLTR MENU/ESC] key.
2. Press the [5] (TRACK ON/OFF) key.
3. Press the [PLTR MENU/ESC] key.

Entering, Erasing Marks

1. Press the [+/-] key to turn on the cursor.
2. Place the cursor on the location desired for a mark.

3. Press the [PLTR MENU/ESC] key.
4. Press the [8] (MARK ENTRY) key.
5. Press the [PLTR MENU/ESC] key.

To erase a mark (including waypoint mark), place the cursor on it and press the [CLR] key.

Changing Mark Shape, Line Type

1. Press the [PLTR MENU/ESC] key.
2. Press the [9] (MARK SHAPE) key.
3. Select MARK SHAPE or LINE TYPE.
4. Select desired mark shape or line type.
5. Press the [PLTR MENU/ESC] key.

Registering Waypoints

There are four ways to register a waypoint. Below is the procedure for registering one with the cursor.

1. Press the [PLTR MENU/ESC] key.
2. Press the [3] (WAYPOINT) key.
3. Select Cursor.
4. Press the [ENT] key if you want to register the waypoint under the number shown.
5. Use the omnipad to place the cursor on the location desired for a waypoint.
6. Press the [ENT] key.
7. Enter comment (max. 15 alphanumeric characters).
8. Select "end" and press the [ENT] key.
9. Press the [PLTR MENU/ESC] key.

Registering Routes

1. Press the [PLTR MENU/ESC] key.
2. Press [0], [4].
3. Select route number and press the [ENT] key.
4. Key in waypoint number (three digits).
5. Press the [ENT] key.
6. Repeat steps 4 and 5 to complete the route.
7. Press the [PLTR MENU/ESC] key.

Setting, Canceling Destination

There are four ways to set destination. Below is the procedure for doing it with the cursor.

1. Press the [PLTR MENU/ESC] key.
2. Press [4] (GOTO) key.
3. Select CURSOR and press the [ENT] key.
4. Use the omnipad to place the cursor on the location desired and press the [ENT] key.
5. Press the [PLTR MENU/ESC] key.

To cancel destination select Delete in step 3.

Setting the Arrival Alarm

1. Press the [PLTR MENU/ESC] key.
2. Press [0], [9] and select PAGE 1.
3. Select ARRIVAL from the ARRIVAL/ANCHOR field.
4. Key in alarm range in the RANGE field, and press the [ENT] key.
5. Press the [PLTR MENU/ESC] key.

To silence the buzzer, press the [CLR] key. To disable the alarm select OFF at step 3.

Saving Data

1. Insert memory card in card slot.
2. Press the [PLTR MENU/ESC] key.
3. Press [0], [5], [1].
4. Select Yes for items you wish to record.
5. Press the [ENT] key twice.
6. Enter file name.
7. Select "end," and press the [ENT] key.
8. Press the [PLTR MENU/ESC] key.

Playing Back Data

1. Insert memory card in card slot.
2. Press the [PLTR MENU/ESC] key.
3. Press [0], [5], [2].
4. Select YES for items you wish to play back and press the [ENT] key.
5. Select file name to play back and press the [ENT] key.
6. Press the [PLTR MENU/ESC] key.

◆ SOUNDER ◆

Selecting Sounder Displays

1. Press the [SNDR MENU/ESC] key.
2. Press [0], [1], and select PAGE 1.
3. Select the FREQUENCY field.
4. Select 50 kHz, 200 kHz or 50/200 kHz.
5. Select the DISPLAY MODE field.
6. Select desired display mode.
7. Press the [SNDR MENU/ESC] key.

Changing Sounding Range

1. Press the [SNDR MENU/ESC] key.
2. Press [1] key or [2] key.
3. Press the [SNDR MENU/ESC] key.

Shifting the Display

1. Press the [SNDR MENU/ESC] key.
2. Press [5] key or [6] key.
3. Press the [SNDR MENU/ESC] key.

Adjusting Gain

1. Press the [SNDR MENU/ESC] key.
2. Press the [3] (GAIN) key.
3. Use the omnipad to adjust.
4. Press the [SNDR MENU/ESC] key.

Automatic Operation

1. Press the [SNDR MENU/ESC] key.
2. Press the [4] (AUTO) key to select desired auto mode.
3. Press the [SNDR MENU/ESC] key.

Measuring Depth to a Fish School

1. Press the [SNDR MENU/ESC] key.
2. Press the [8] key or [9] key to place the VRM on the fish school.