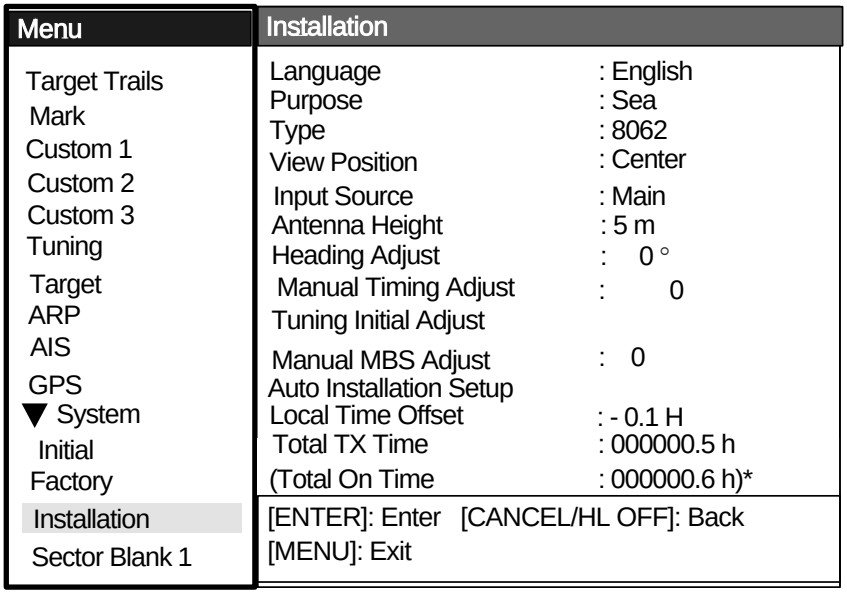
3. SETTING UP THE EQUIPMENT

3.1 Opening the Installation Menu

After you have installed the equipment, set up the equipment as follows.

1. Press the **MENU** key. The main menu appears on the screen.
2. Rotate the trackball downward to choose **Installation**. The installation menu appears in gray to right side of the screen.
3. While pressing down the **CANCEL/HL OFF** key, press the **MENU** key five times.



* : Displayed when scrolled.

4. Press the **ENTER** key. The highlighted cursor appears in the Installation menu.
5. Rotate the trackball downward or upward to choose an item in the Installation menu.
6. Press the **ENTER** key to show setting window.
7. Rotate the trackball downward or upward to choose an option.
8. Press the **ENTER** key to set it.
9. Finally, press the **MENU** key to close the main menu.

Basic settings

Language: The default setting is English. Choose an appropriate language.

Purpose: Choose the purpose of this radar among River, Sea and IEC. The default setting is Sea.

River: To use this radar on the river

Sea: To use this radar at oceans.

IEC: To use this radar as the type approved radar.

Type: Choose type of this radar among 8062 (6 kW radar), 8122 (12 kW radar) and 8252 (25 kW radar) to coincide with the specifications of the antenna unit. The default setting is 8062. Unsuitable setting may result malfunctions.

View Position: Choose an operating position for this radar among Left, Left-Center, Center, Right-Center and Right to view the colors (echo, background, characters, etc.) correctly. The default setting is Center.
Left: When operating this radar at the left side.
Left-Center: When operating this radar at the left-center side.
Center: When operating this radar at center position.
Right-Center: When operating this radar at the right-center side.
Right: When operating this radar at the right side.

Input Source: Choose the input source between Main and Sub. The default setting is Main.
Main: When using this display unit as main radar.
Sub: When using this display unit as sub display.

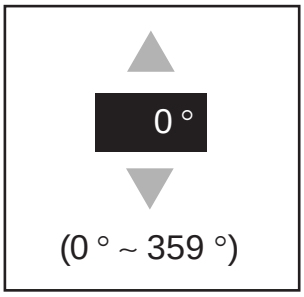
Antenna Height: Choose a position of the antenna unit from the sea level among 5, 10, 15, 20, 30, 40 and 50 m. The default setting is 5 m.

Local Time Offset: To display a local time on the screen, set the time difference from the UTC.

Heading Adjustment

You have mounted the antenna unit facing straight ahead in the direction of the bow. Therefore, a small but conspicuous target dead ahead visually should appear on the heading line (zero degrees).
In practice, you will probably observe some small error on the display because of the difficulty in achieving accurate initial positioning of the antenna unit. The following adjustment will compensate for this error.

1. Set ship's heading toward a suitable target (for example, ship or buoy) at a range between 0.125 and 0.25 nautical mile.
2. Transmit the radar at 0.25 nm range and measure the bearing of that target relative to ship' heading with EBL.
3. Open the Installation menu, and choose Heading Adjust.
4. Press the **ENTER** key to show the HEADING ADJUST window.



5. Rotate the trackball upward or downward to set the value measured at the step 2 above.
6. Press the **ENTER** and confirm that the target shows dead ahead on the screen.

Auto Installation Setup

When this item is executed, the tune adjustment, timing adjustment, video adjustment and MSB adjustment are automatically done.

1. Transmit the radar at 48 nm range.
2. Choose Auto Installation Setup at the installation menu and press the **ENTER** key.
3. Rotate the trackball to choose **Yes**, and then press the **Enter** key.
   Automatically, the tune adjustment begins, indicating “Tuning adjusting….” Then, the timing adjustment, video adjustment and MSB adjustment are execute automatically, indicating “Timing adjustment…”, “Video adjustment…”, and “MSB adjustment…” in that order. After adjustment, the window disappears.

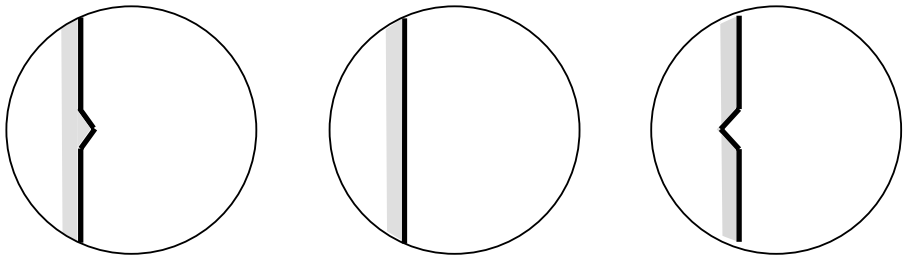
If you do not satisfy the result of the Auto Installation Setup, execute Manual Timing Adjust, Tuning Initial Adjust and Manual MSB Adjust as follows.

Tuning Initial Adjust

1. Transmit the radar.
2. Open the Installation menu, and choose Tuning Initial Adjust.
3. Press the **ENTER** key to show the setting window.
4. Rotate the trackball to choose **Yes**, and then press the **Enter** key. The tune adjustment begins, indicating “Tuning adjusting….” After adjustment, the window disappears.

Manual Timing Adjust

This adjustment ensures proper radar performance, especially on short ranges. The radar measures the time required for a transmitted echo to travel to the target and return to the source. The received echo appears on the display based on this time. Thus, at the instant the transmitter is fired, the sweep should start from the center of the display (sometimes called sweep origin.)
A trigger pulse generated in the display unit goes to the antenna unit through the signal cable to trigger the transmitter (magnetron). The time taken by the signal to travel up to the antenna unit varies, depending largely on the length of signal cable. During this period the display unit should wait before starting the sweep. When the display unit is not adjusted correctly, the echoes from a straight local object (for example, a harbor wall or straight pier) will not appear with straight edges – namely, they will be seen as “pushed out” or “pulled in” near the picture center. The range of objects will also be incorrectly shown.



Examples of improper and correct sweep timing

1. Transmit on the shortest range and confirm that gain and A/C SEA are properly adjusted.
2. Visually select a target which forms straight line (harbor wall, straight piers).
3. Open the Installation menu and choose Manual Timing Adjust.
4. Press the **ENTER** key to show the setting window.
5. Rotate the trackball to straighten the target selected at step 2, and then press the **ENTER** key to finish.

Manual MBS Adjust

Main bang (black hole), which appears at the display center on short ranges, can be suppressed as follows.

1. Open the Installation menu and select b Manual MBS Adjust.
2. Press the **ENTER** key to show the setting window.
3. Rotate the trackball to suppress main bang (between 0 and 25).
4. Press the **ENTER** key to finish.