

FRS1000 RADAR/PLOTTER/SOUNDER

QUICK OPERATION GUIDE

(USING THE REMOTE CONTROL)



FURUNO®

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FRS-1000 REMOTE



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BASIC OPERATION OF FRS1000

POWERING UP YOUR FRS1000

1. Press the [POWER] key on the display
2. Allow 30 seconds for the self test to complete.

ADJUSTING BRILLIANCE

1. Press the [BRILL] key on the display to activate the brilliance menu
2. Press the [BRILL] key again to increase or decrease the intensity of the display.

ADJUSTING BACKGROUND COLOR

1. Press the [BRILL] key on the display to activate the brilliance menu
2. Press the [+/-] key or [1] - [4] key on the display to scroll through background choices.
Note: Keypad numbers 1-4 allow you to select from 3 preset color palettes or a custom palette. The custom palette allows you to individually choose colors for target video, plotter background, etc. in their respective menus.

SELECTING DISPLAY MODES

The FRS1000 allows you to operate up to three (3) modes simultaneously or any combination thereof. NOTE: At least one mode MUST be selected at all times. Each time an individual mode key is pressed, it acts as a toggle switch and turns the respective display mode on or off.

1. Radar Display - Press the [RDR] mode key to activate or deactivate the radar display
2. Plotter Display - Press the [PLTR] mode key to activate or deactivate the plotter display
3. Sounder Display - Press the [SNDR] mode key to activate or deactivate the sounder display
4. To activate multiple display modes at once, press each desired display mode key. To deactivate a mode, simply press that display mode key again to deactivate it. NOTE: At least one display mode MUST be selected at all times.

See figures at right for all possible display modes.

USING MENU/ESC KEYS

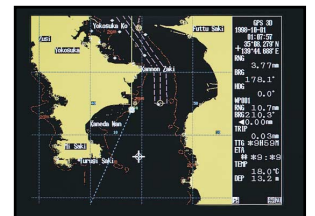
The individual menu keys allow you to change parameters that are specific to a mode, e.g. Radar/Sounder. Each time the individual menu/Esc keys are pressed, they act as toggle switches, which will turn their respective menu on or off. Only one menu can be active at a time.

1. Press the [RDR] menu key once to bring up the Radar menu
2. Press the [RDR] menu key again to return to the original display mode you were in before pressing the menu key
3. Repeat this process for the [PLTR] and [SNDR] menu keys.

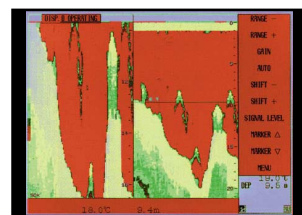
NOTE: When you enter into a specific menu (i.e. radar, plotter or sounder) the FRS1000 will change to that mode with the respective menu on the side. When you are finished using the menu, you must press that last menu button again to return to the originally selected display mode, or press (Esc) button on remote control.



Radar [RDR] Mode



Plotter [PLTR] Mode



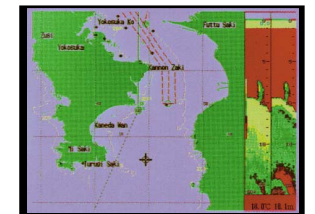
Sounder [SNDR] Mode



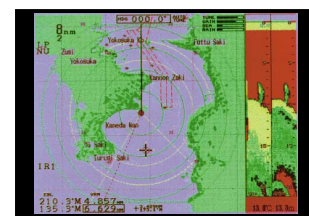
Radar & Sounder Modes



Radar & Plotter Modes

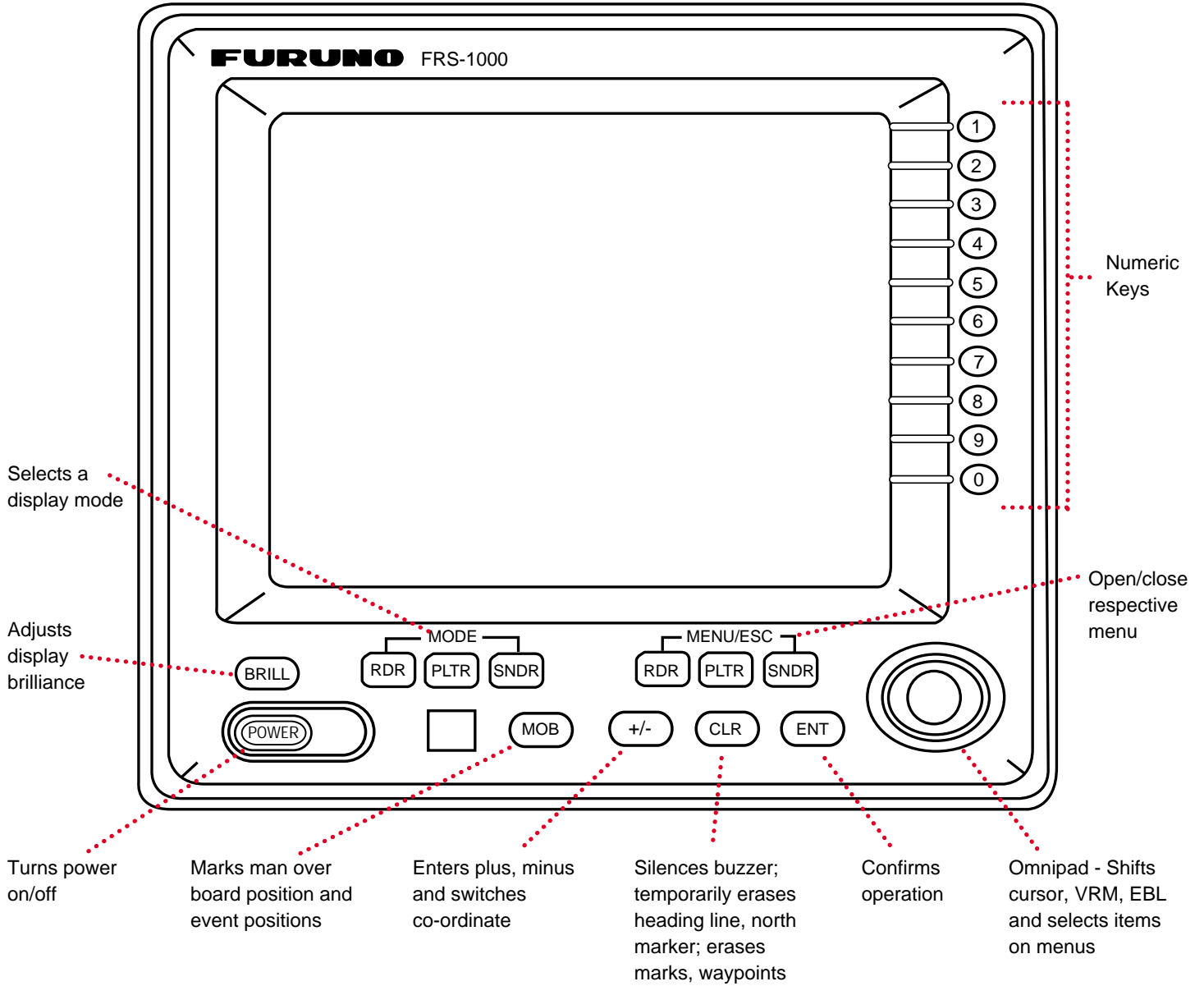


Plotter & Sounder Modes



Radar, Plotter & Sounder Modes

GETTING FAMILIAR WITH THE DISPLAY



GETTING FAMILIAR WITH THE REMOTE

RADAR BUTTON

Used to toggle between stand-by and transmit.

PLOTTER BUTTONS

MOB - Press once to store an event. Later you can GOTO these events, which will be sorted from newest to oldest. Hold MOB for 5 seconds to enable MOB mode. (See page 3-8 in op. manual.)

MARK - used to set a mark on the chart using either ship position or cursor position. (See page 3-6 in op. manual.)

GOTO - used to go to cursor position, event, waypoint or route. (See page 3-12 in op. manual.)

WPT - used to open waypoint menu. (See page 3-9 in op. manual.)

CURSOR CONTROLS

Arrow keys used to move the cursor up, down, left and right.

MODE KEYS

MODE keys are used to toggle on & off the radar, plotter and sounder displays.

MENU KEYS

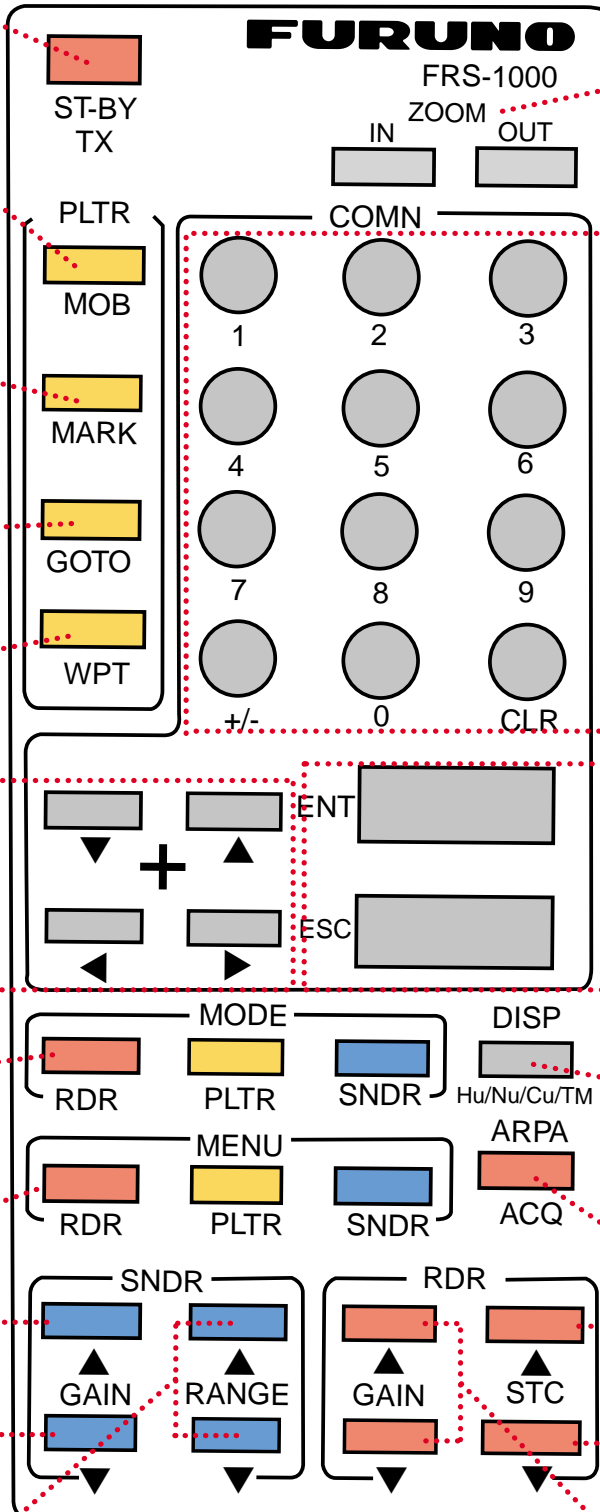
MENU keys are used to toggle on & off the radar, plotter and sounder menus.

SOUNDER GAIN

GAIN - used to adjust the gain. 50/200 may be independently adjusted.

SOUNDER RANGE

RANGE - used to adjust the sounder's range.



RADAR & PLOTTER BUTTON

Used to zoom in and out of range scales.

NUMERIC KEYPAD

Used to enter numbers and select menus for all modes.

ENTER & ESCAPE

[ENT] - used as an ENTER key in all modes to confirm information being selected or entered.

[ESC] - used as an ESCAPE key in all modes to exit from menu screen to originally selected mode display.

DISPLAY BUTTON

Used to change display orientation to Heads up, North up, Course up, or True Motion for Radar and Plotter.

RADAR BUTTON

Used to acquire ARPA targets.

RADAR SEA CLUTTER

STC - used to suppress sea clutter.

RADAR GAIN

GAIN - used to adjust the Radar's gain.

RADAR OPERATION

SELECTING THE RADAR DISPLAY

1. Press the [RDR] MODE key to turn Radar on
2. Press the [RDR] MODE key again if you want to turn the Radar display off.

TRANSMITTING

1. Press the [ST-BY/TX] key to transmit
2. Press the [ST-BY/TX] key again if you want to return to stand-by mode.

ADJUSTING GAIN

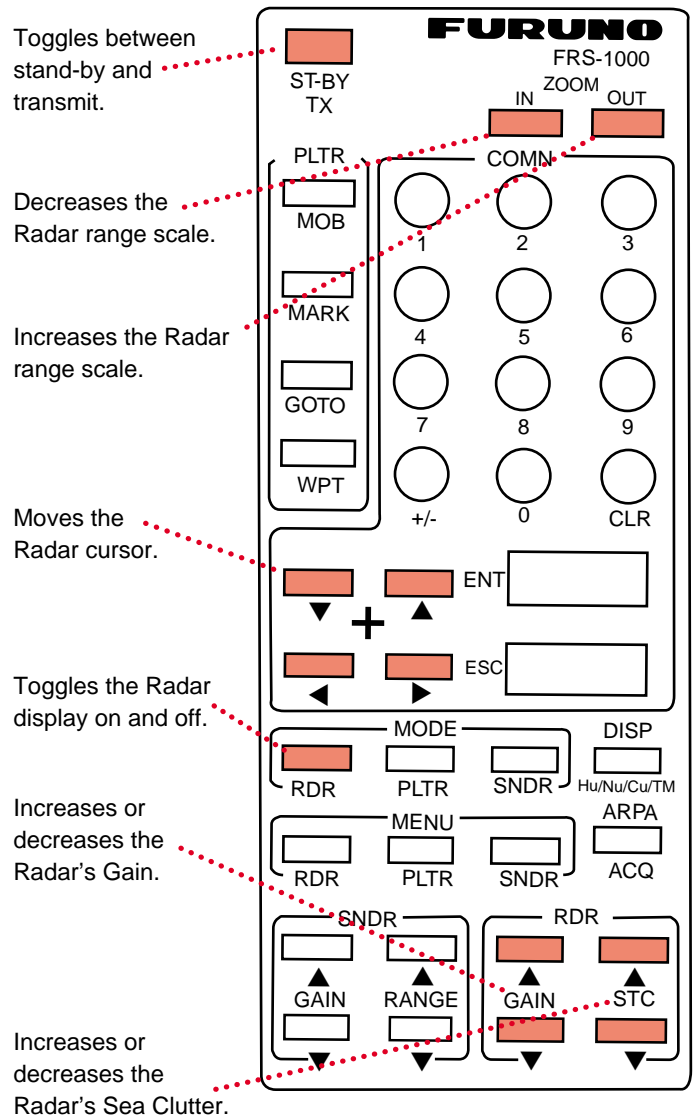
1. Press or hold down the Radar GAIN [▲] key to increase gain or the Radar GAIN [▼] key to decrease gain
2. Observe the gain level indicator in the upper right corner of the display along with the Radar presentation to optimize your Radar's gain setting. Adjust for maximum targets with slight background noise or "speckle".

SELECTING A RANGE SCALE

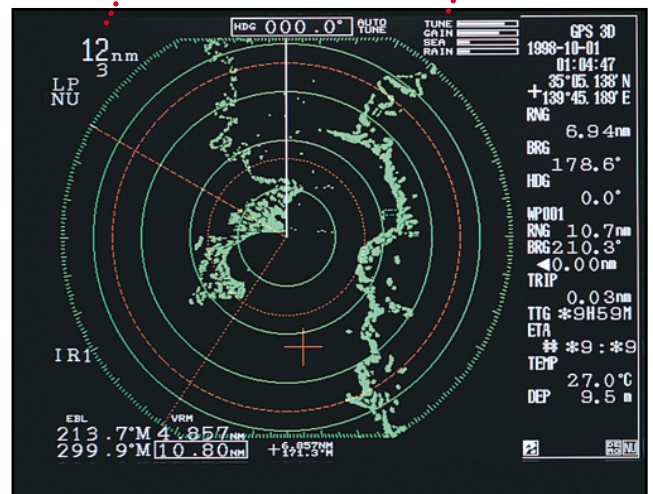
1. Press the ZOOM [IN] key to decrease the Radar range scale and the ZOOM [OUT] key to increase the Radar range scale
2. You can see the currently selected range scale by checking the indicator in the upper left corner of the display.

SUPPRESSING SEA CLUTTER

1. Press the Radar STC [▲] key to increase sea clutter suppression and the Radar GAIN [▼] key to decrease sea clutter
2. You can see the amount you are increasing and decreasing on the A/C SEA Level Indicator Bar in the upper right corner of the display. The A/C Sea Level indicator bar shows the amount of A/C Clutter suppression being used.



Range scale indicator Level Indicator Bars



For a complete and detailed description of all the Radar functions, please refer to the FRS1000 Operations Guide.

PLOTTER OPERATION

SELECTING THE PLOTTER DISPLAY

1. Press the [PLTR] MODE key to turn the Plotter on
2. Press the [PLTR] MODE key again if you want to turn the Plotter display off.

SELECTING THE RANGE

1. Press the ZOOM [IN] key to decrease the Plotter range scale and the ZOOM [OUT] key to increase the Plotter range scale.

MAN OVER BOARD

1. Press and hold the [MOB] key until confirmation appears to enable the MOB mode. The MOB position will appear as a large "M" waypoint.

STORE AN EVENT

1. Press the [MOB] key momentarily to save the current ship position as an event. These events are saved to memory and can be returned to via the GOTO L/L position method.

ENTERING MARKS

1. Use the cursor [▲▼] keys to move to your desired mark coordinates
2. Press the [MARK] key to place a mark at the cursor position. To place a mark at current ships position, turn off the cursor by pressing the +/- key. (See page 3-7 in op. manual to change mark color and shape.)

REGISTERING WAYPOINTS

1. Press the [WPT] key to access the waypoint menu
2. When menu appears, you may enter waypoints by using the cursor, saved event, own ships position or via direct entry on the waypoint list. (See page 3-9 in the op. manual)

Increases and decreases the chart range scale.

Creates Man Over Board Mark.

Activates mark menu allowing you to assign a mark.

Activates goto menu allowing you set a course.

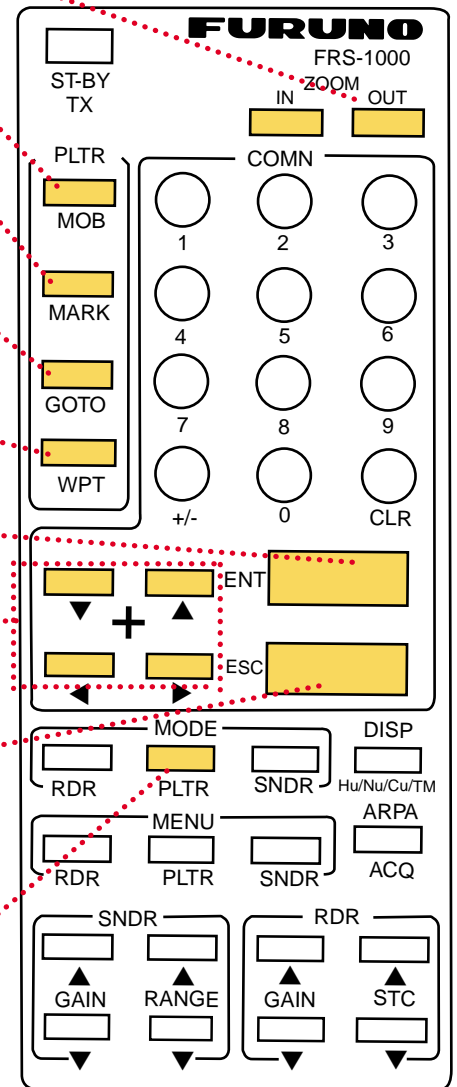
Activates waypoint menu allowing you to create a waypoint.

Confirms entry.

Moves Plotter cursor in direction arrow is indicating.

Escapes the Plotter menu and brings you back to the display mode.

Toggles the Plotter display on and off.



SETTING/CANCELING DESTINATION

1. Press the [GOTO] key to set your destination waypoint by cursor, event, L/L position, waypoint number or route number
2. Current destination waypoint may also be cancelled in this menu.

SOUNDER OPERATION

SELECTING THE SOUNDER DISPLAY

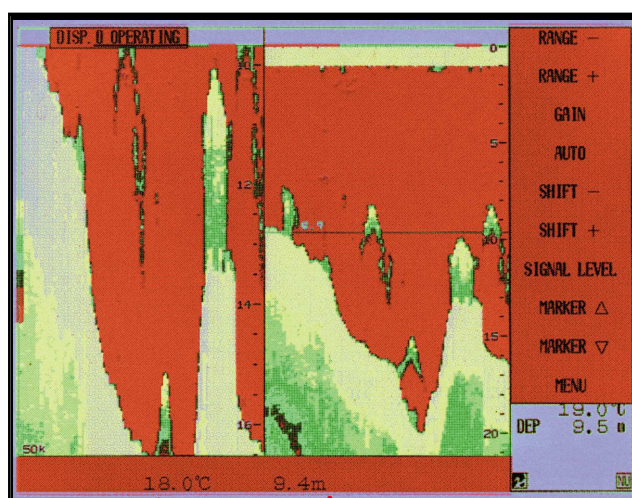
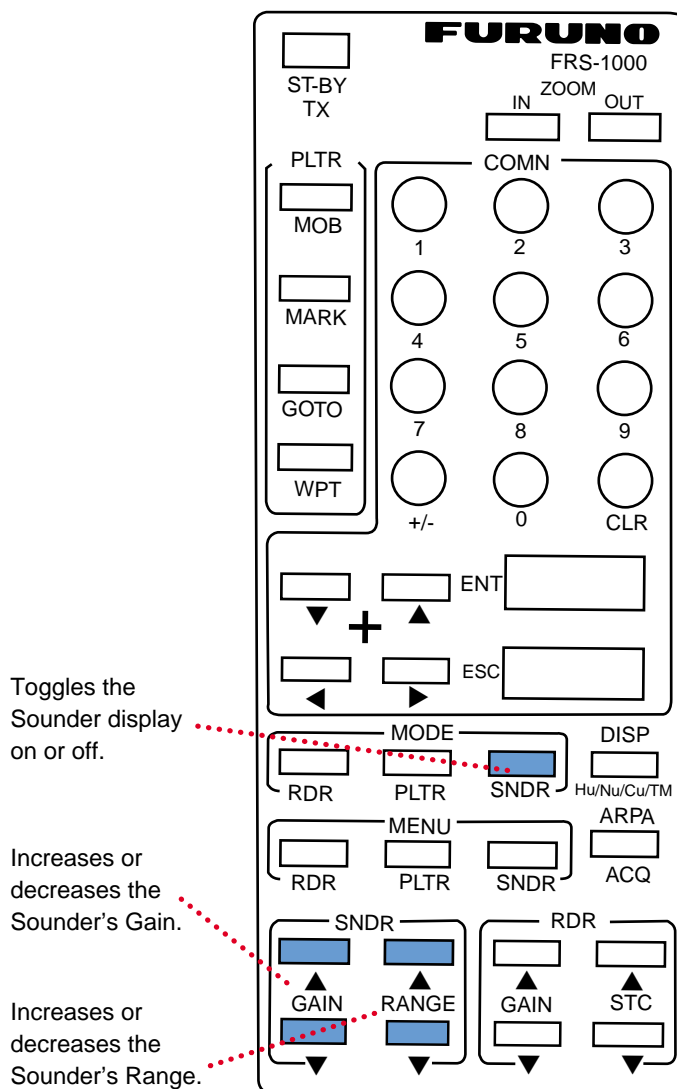
1. Press the [SNDR] MODE key to turn Sounder on
2. Press the [SNDR] MODE key again if you want to turn the Sounder display off.

CHANGING SOUNDING RANGE

1. Press the Sounder RANGE [▲] key to increase range or the Sounder RANGE [▼] key to decrease range.

ADJUSTING GAIN

1. Press or hold down the Sounder GAIN [▲] key to increase gain or the Sounder GAIN [▼] key to decrease gain. Move the cursor control up or down to select either the 200 kHz gain adjustment or the 50 kHz gain adjustment.



Water Temperature

Depth

For a complete and detailed description of all the Sounder functions, please refer to the FRS1000 Operations Guide.