

**FURUNO**

# 8.4" COLOR LCD RADAR

Model

# 1815



# FULLY AUTOMATIC GAIN FOR SIMPLIFIED USE

## Compact Radar Ensuring Safety at Sea

- ▶ Highly visible display makes it possible for you to recognize surrounding environment at a glance
- ▶ High sensitivity allows you to acquire other vessels, buoys and objects on the sea surface, and coasts
- ▶ Penetrate sudden fog or compensate for poor visibility in stormy weather
- ▶ Reliable coastline images, even in poor visibility
- ▶ Assist sailing in the night with high-sensitivity, reliable analyzing system
- ▶ Compact radome antenna with 4 kW transmitter output power
- ▶ Low power consumption of 38 W at the most
- ▶ Easy installation and intuitive operation
- ▶ Advanced auto-adjust settings for Gain/Sea clutter/Rain clutter
- ▶ Fast Target Tracking™ (TT)
- ▶ True trail mode
- ▶ True motion mode
- ▶ True view mode
- ▶ User-programmable function key
- ▶ Swivel mounting bracket to adjust the angle of the display unit

The MODEL1815 is an 8.4" color LCD radar designed for pleasure craft and small fishing boats. The Radar has easy-to-use, intuitive controls, while maintaining the high performance you expect from FURUNO products. Even in poor visibility such as fog or storms, the radar produces detailed pictures of coastline and targets at short ranges by utilizing narrow pulses and dual IF bandwidths. The waterproof display makes it ideal for exposed installations, such as fly bridges.

The MODEL1815 utilizes our Fast Target Tracking™, True Trail Mode and True View Mode technologies to ensure optimum performance in detecting and ranging targets of interest.



MENU/ESC

Menu settings  
Cancel key



Menu selections  
Cursor key

ENTER

Enter key  
AIS/TT select or acquire

MODE

Select display mode  
Measure target

ALARM

Alarm settings  
Set Guard zone

FUNC

Function settings: TLL

RANGE

Select range scale  
Adjust GAIN control  
Reduce SEA/RAIN clutter

PUSH FOR GAIN +

DATA BOX

Show data box (nav/target/both)

OFF/NAV/TT/TLL

Power ON/OFF  
Switch Stand-by and Transmit  
Display Brill

TX

Rings Brill  
Heading Line Brill  
Display Color  
Echo Color  
Display Mode  
Data Box  
Trail Time  
Trail Erase etc.

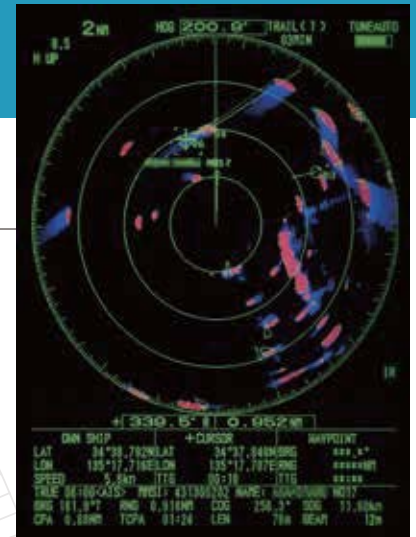
## 8.4" COLOR LCD RADAR

Model 1815

## Fast Target Tracking™ (TT) function

Fast Target Tracking™ (TT) function manually or automatically acquires and tracks 10 targets. After selecting a target, it only takes a few seconds for a speed and course vector to be displayed. With accurate tracking information, estimation of other vessel's course and speed is made easier.

### Target Tracking (TT) Symbols



## AIS display

When connecting a FURUNO FA-30/50 AIS unit, up to 100 AIS targets can be tracked and displayed on the Radar screen. The AIS improves safety during travel by sharing the status and position of your vessel with other AIS-equipped vessels nearby. You can easily read detailed information about other AIS equipped vessels nearby, such as speed and heading.

### AIS Symbols



Sleeping AIS Target



Lost Target



Activated Target



Dangerous Target

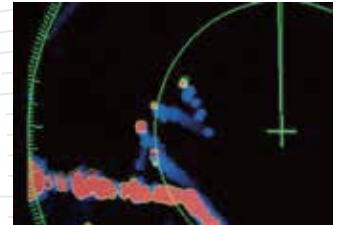


Selected Target

## True Trail mode

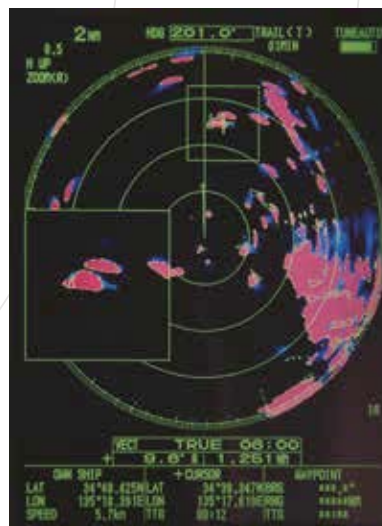
When using the True Trail Mode, moving objects will show up on the main screen with a gradational trail. These trails make it possible to see the movement of nearby vessels in the blink of an eye.

\* Heading data and positional data are required.



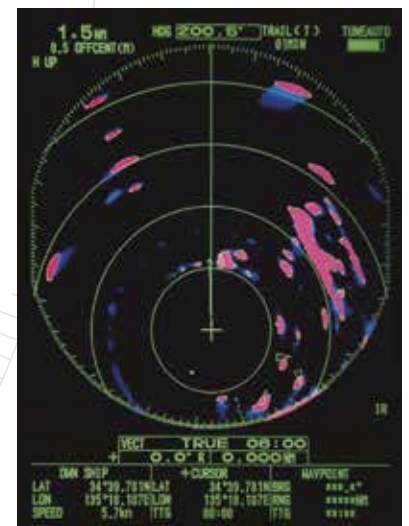
## Gain/Sea/Rain setting menu

To display targets clearly and accurately, the gain must be adjusted. The MODEL1815 can do this automatically for you. By automatically adjusting the gain, the Radar eliminates unnecessary echoes and displays a clear image.



## Zoom mode

The Zoom function expands the length and width of a selected target with the magnification of 2.0, in the zoom window.

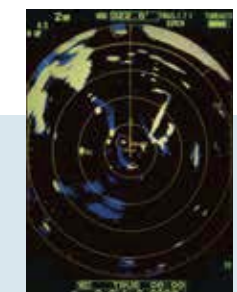


## Off Center mode

Own ship position can be shifted to a pre-registered point on the screen. This allows the operator to focus on a specific area ahead of or around the vessel without losing track of the position.

## Adjustable display colors

You can select the color scheme depending on your environment. From brightly sunlit to dark of the night, displayed images can always be seen.



# Swivel mounting bracket

The gimbal mount allows the display unit to swivel around when desktop mounted. You can adjust the angle of the display for optimal viewing comfort.



## SPECIFICATIONS OF Model 1815

### ANTENNA

Type  $\varnothing$ 488 mm (19") radome  
 Beamwidth Horizontal 5.2°, Vertical 25°  
 Rotation Speed 24 rpm

### RF TRANSCEIVER

Frequency 9410  $\pm$ 30 MHz (X-band)  
 Pluslength & PRR 0.08  $\mu$ s/360 Hz (0.0625-0.5 NM)  
 0.3  $\mu$ s/360 Hz (0.75-2 NM)  
 0.8  $\mu$ s/360 Hz (3-36 NM)  
 Peak Output Power 4 kW  
 IF Frequency IF : 60 MHz  
 BW: 20 MHz (0.0625 to 0.5 NM)  
 4.5 MHz (0.75 to 36 NM)

### DISPLAY

Display Type 8.4" color LCD  
 Effective Display Area 128.2 (W) x 170.9 (H) mm  
 Pixel Number 480 x 640 (VGA)  
 Presentation Mode Head-up, Course-up\*, North-up\*, True view\*  
 True motion\*\*  
 Target tracking (TT)\* Up to 10 targets  
 AIS\*\* Up to 100 targets

### Language

\* Heading data required  
 \*\* Heading data and position data required  
 English, French, Spanish, German, Italian, Portuguese, Danish, Norwegian, Russian, Chinese, Thai, Vietnamese, Indonesian, Burmese, Korea, Japanese

### Accuracy

Range : 1.0% of range in use or 0.01 NM, whichever is greater

### Range and Range Ring Interval

Bearing : EBL accuracy  $\pm$ 1°  
 Range : 0.0625, 0.125, 0.25, 0.5, 0.75, 1, 1.5, 2, 3, 4, 6, 8, 12, 16, 24, 36 NM

### EchoTrail

Ring : 0.03125, 0.0625, 0.125, 0.125, 0.25, 0.25, 0.5, 0.5, 1, 1, 2, 2, 3, 4, 6, 12 NM  
 Type : True\* or relative trails  
 Interval : 15, 30 s, 1, 3, 6, 15, 30 min., or continuous

### Minimum Range

Range Discrimination 25 m  
 Interface (NMEA0183 format)

\* Heading data required  
 Input : ALR, BWC, BWR, DBT, DPT, GGA, GLL, GNS, GSA, GSV, HDG, HDT, HDM, MTW, MWV, RMB, RMC, THS, TTM, VDM, VHW, VTG, VWR, WVT, XTE, ZDA  
 Output : ACK, RSD, TLL, TTM

### ENVIRONMENT

Temperature Antenna Unit: -25 °C to +55 °C  
 Display Unit : -15 °C to +55 °C  
 Waterproofing Antenna Unit: IPX6  
 Display Unit : IP56

### POWER SUPPLY

12 -24 VDC: 3.2-1.6 A

### EQUIPMENT LIST

#### Standard

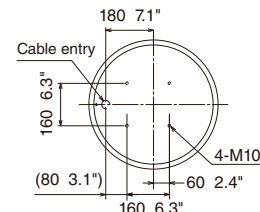
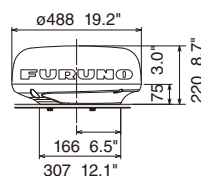
1. Display Unit RDP-157
2. Antenna Unit RSB-127-120
3. Antenna Cable 10/15/20/30 m specify when ordering
4. Power Cable 3.3 m
5. Spare Parts & Installation Materials

#### Option

1. Antenna Bracket OP03-209
2. External Buzzer OP-3-21
3. NMEA Data Converter IF-NMEA2K2
4. Flush Mount Kit

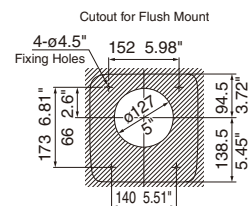
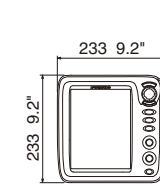
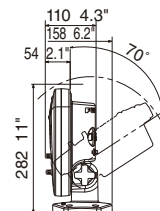
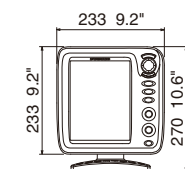
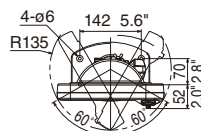
### Antenna Unit

6.5 kg 14.3 lb

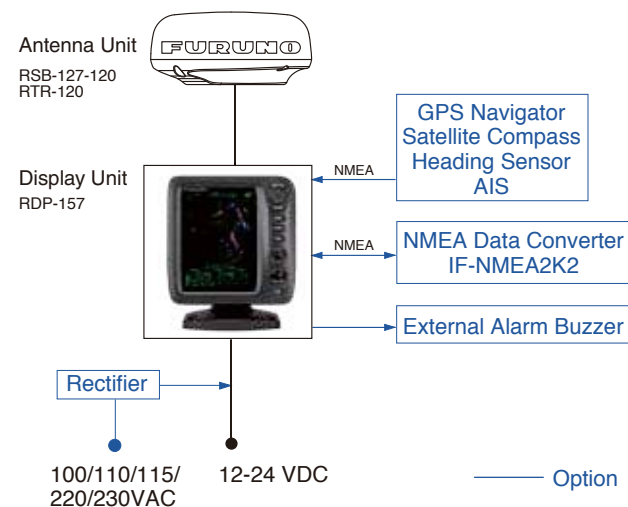


### Display Unit

Bracket Mount 2.2 kg 4.9 lb  
 Flush Mount 1.6 kg 3.5 lb



### INTERCONNECTION DIAGRAM



Beware of similar products

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Model MODEL1815

## Operator's Guide

This guide provides the basic operating procedures for this equipment. For detailed information, see the Operator's Manual. The brand and product names mentioned in this guide are trademarks, registered trademarks or service marks of their respective holders.

### Power ON/OFF

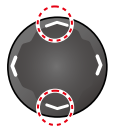
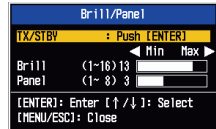


Power ON: Short push  
Power OFF: Long push

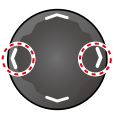
### How to adjust screen brilliance



Short push



Select [Brill].



Adjust.



Open, close the menu.



Move cursor (8 directions).



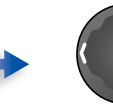
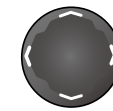
Confirm selection.



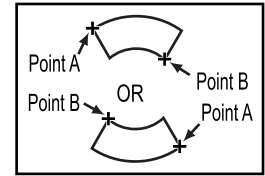
### How to set a guard zone



Set the cursor on point A, then push



Set the cursor on point B, then push

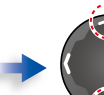


### How to use the FUNC key

Register function to key



Long push



Select function to register.



Start the function

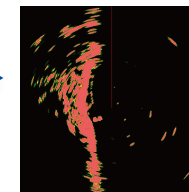


Short push

### How to select a range scale



Rotate knob.

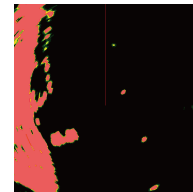


Range scale increases. (Zoom out)

Rotate knob clockwise.



Rotate knob counterclockwise.

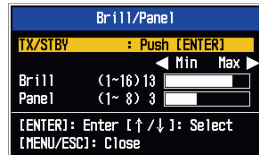


Range scale decreases. (Zoom in)

### How to switch between ST-BY and TX



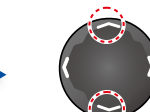
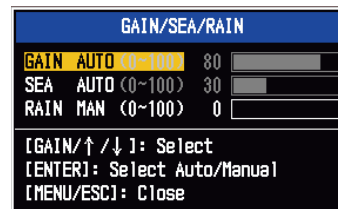
Short push



### How to adjust GAIN/SEA/RAIN



Push knob.



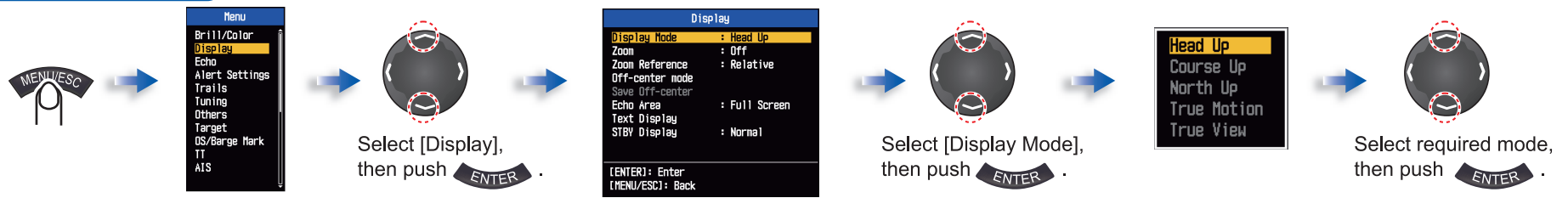
Select [GAIN AUTO], [SEA AUTO], or [RAIN MAN].



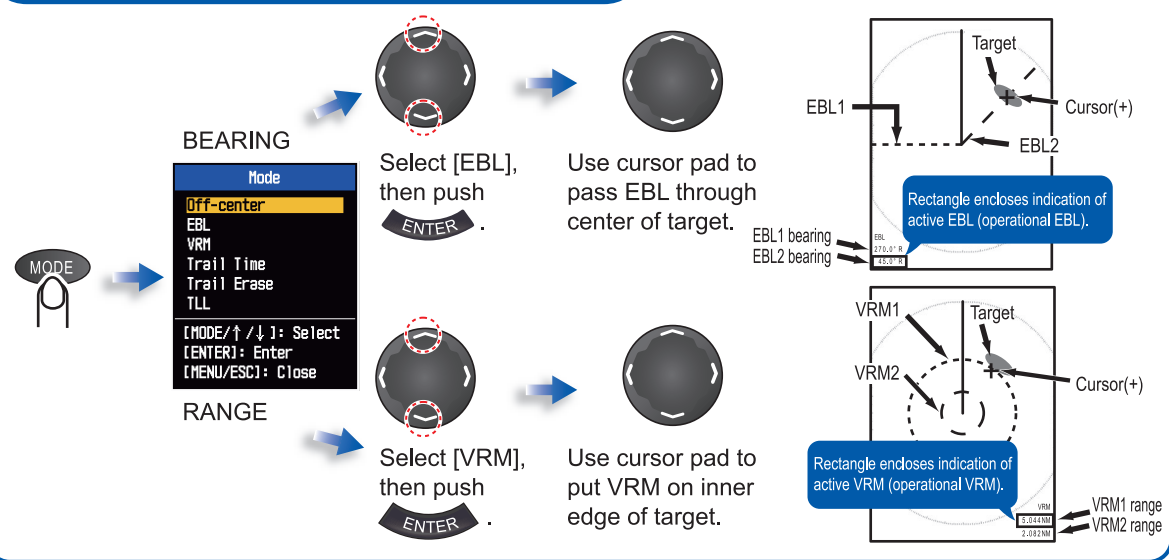
Auto/Manual: Push knob.  
Manual adjustment: Rotate knob.

GAIN AUTO: Adjust radar display gain.  
SEA AUTO: Adjust sea clutter.  
RAIN MAN: Adjust rain clutter.

### How to select a display mode



### How to measure the range/bearing to a target



### How to select the data to show in the data box



Rotate knob to select.

- OFF: No display
- NAV: Show nav data.
- TGT: Show target data.
- ALL: Show nav data and target data.

### How to off-center ship position

