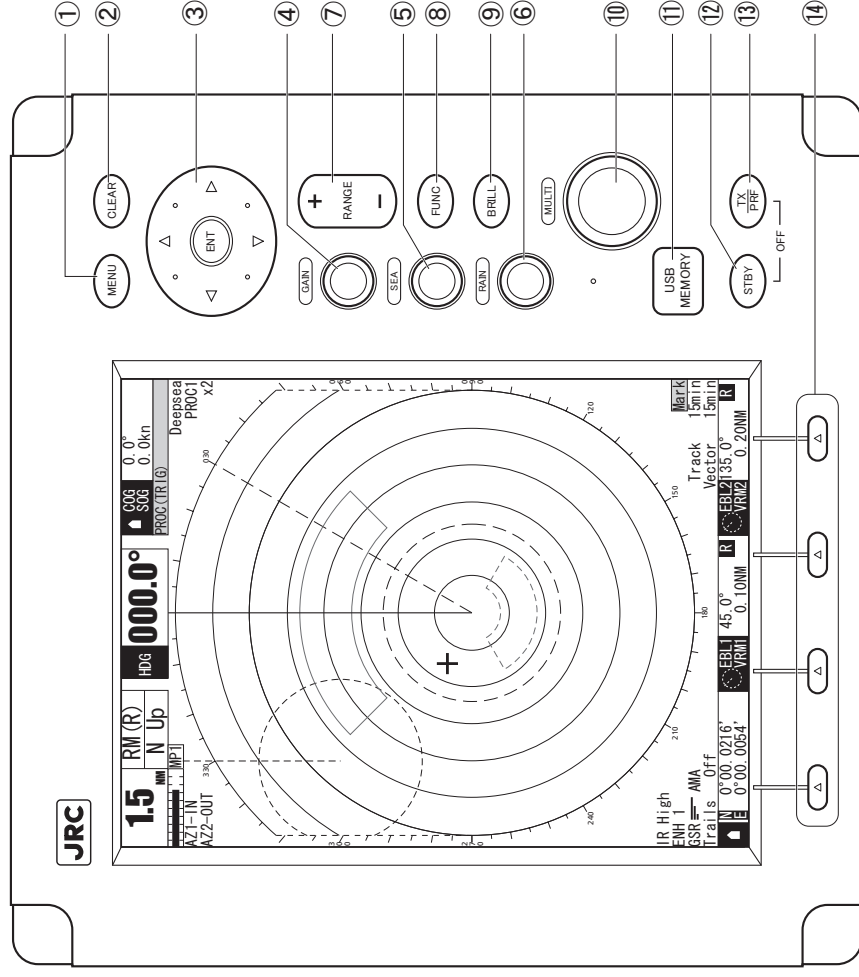


JMA-3300 Series Quick Manual

Radar Display Unit



No.	Name	Description
①	MENU	Press: Opens and closes the menu. / Hold down: Opens the code input screen (Displays the Adjust Menu).
②	CLEAR	Press: Cancels menu operations. Returns to upper menu. Stops the alarm sound.
③	ENT	Press: Enters the selected menu item.
④	Cursor keys	Press: Selects menu items. Moves the cursor.
⑤	GAIN	Press: Performs the user key 1 function. / Hold down: Switches the sensitivity between manual and automatic modes. / Turn: Adjusts receiving sensitivity.
⑥	SEA	Press: Performs the user key 2 function. / Hold down: Switches the sea clutter suppression function between manual and automatic modes. / Turn: Removes sea clutter.
⑦	RAIN	Press: Performs the user key 3 function. / Hold down: Switches the rain/snow clutter suppression function between manual and automatic modes. / Turn: Removes rain/snow clutter.
⑧	RANGE	Press: Switches the range.
⑨	FUNC	Press: Switches function modes. / Hold down: Opens the function mode setting menu.
⑩	BRILL	Press: Changes the display brilliance.
⑪	MULTI	Turn: Adjusts the selected mode. / Press: Displays the soft key menu.
⑫	USB MEMORY	Saves files. Updates the software.
⑬	STBY	Press: Turns on this equipment. Turns to standby state. / Press multiple keys: Turns off the equipment when pressed together with the TX/PRF key.
⑭	TX/PRF	Press: Starts transmitting. Tunes the repetition frequency. / Hold down: Turns off the heading line (HL).
⑮	Soft key	Press: Opens the soft key menu.

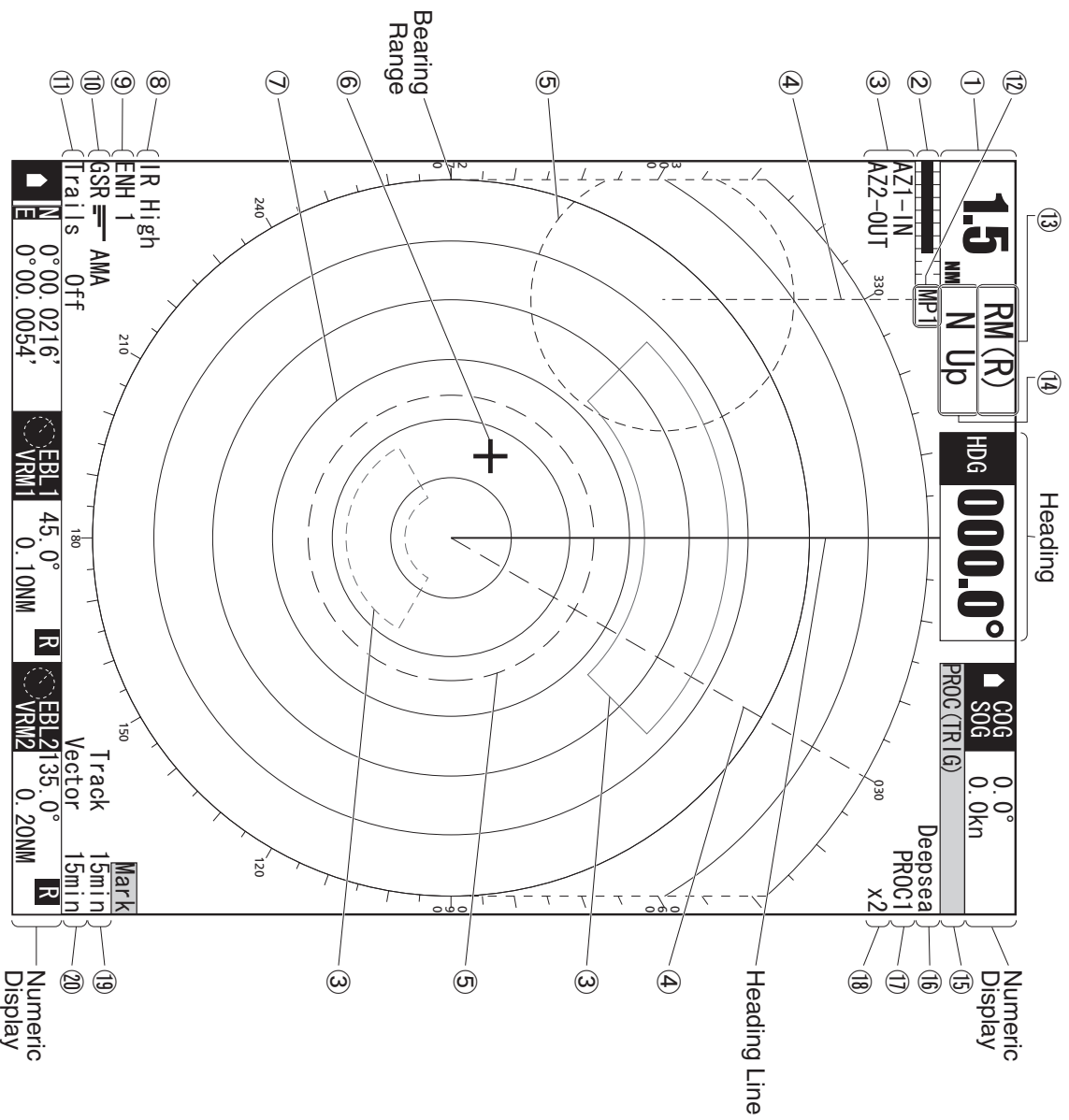
Key Operations

- Press :** Press a key, then release the key before 2 seconds elapse.
- Hold down :** Press a key, and hold down the key for 2 seconds or more.
- Press multiple keys :** Press multiple keys simultaneously.
- Turn :** Turn a control in clockwise/counterclockwise direction.

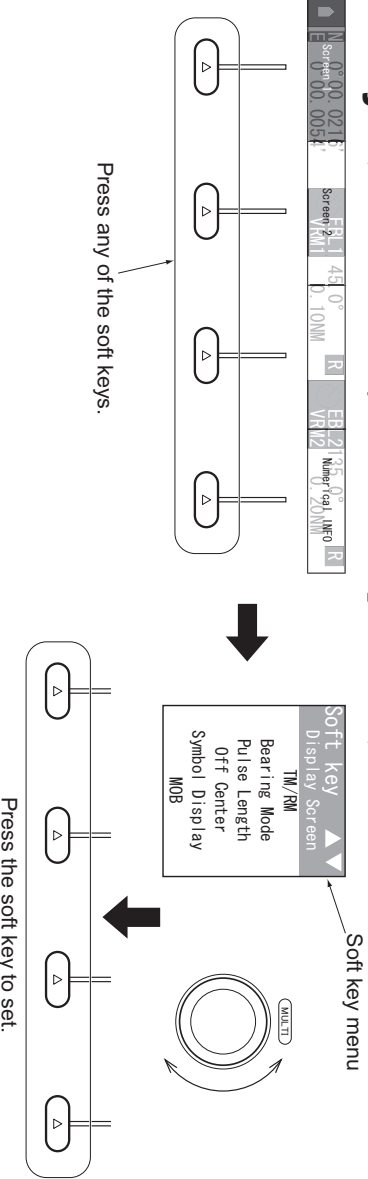
Notes

- Read the instruction manual for details.
- Maintain this quick manual so that operators can refer to it at anytime.
- Use the radar only as a navigation aid. The final navigation decision must always be made by the operator him/herself. Making the final navigation decision based only on the radar display may cause accidents such as collisions or running aground.
- When using the sea clutter suppression function, never set the suppression level too high canceling out all image noises from the sea surface at close range. Detection of not only echoes from waves but also targets such as other ships or dangerous objects will become inhibited.
- When using the sea clutter suppression function, never set the suppression level too high canceling out all image noises from the rain or snow at close range. Detection of not only echoes from the rain or snow but also targets such as other ships or dangerous objects will become inhibited.
- Use the TT function only as a navigation aid. The final navigation decision must always be made by the operator him/herself. Making the final navigation decision based only on the target tracking function information may cause accidents.

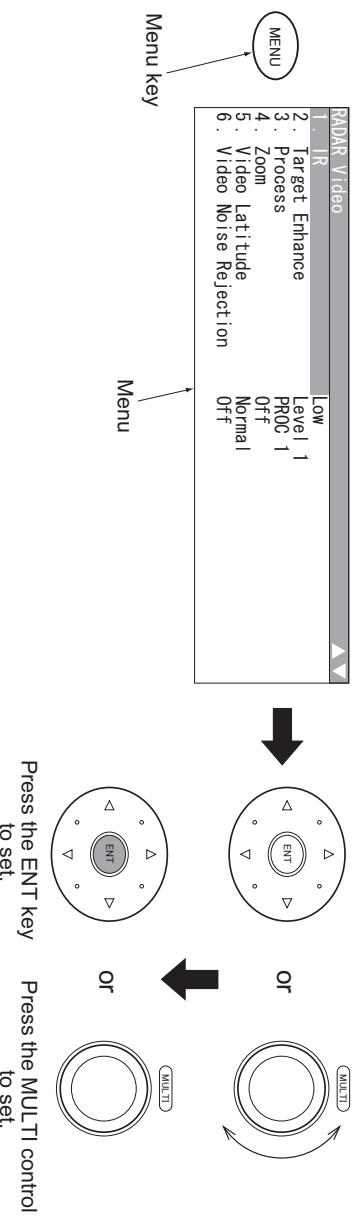
SCREEN DISPLAY



Soft keys (Use the soft keys for basic operations.)



Menu



- ① **Range Scale** (Refer to 2-2 in the INSTRUCTION MANUAL)
Operation panel: **RANGE**
Changes the range.
 - ② **Tune Indicator Bar** (Refer to 2-54 in the INSTRUCTION MANUAL)
Soft key: **Tune**
Performs tuning and PRF fine tuning.
 - ③ **Alarm Area** (Refer to 2-47 in the INSTRUCTION MANUAL)
Soft key: **Alarm1** **Alarm2**
Sets the alarms when ships enter or depart from the area.
 - ④ **EBL** (Refer to 2-22 in the INSTRUCTION MANUAL)
Soft key: **EBL1** **EBL2**
Measures the target bearing.
 - ⑤ **VRM** (Refer to 2-24 in the INSTRUCTION MANUAL)
Soft key: **VRM1** **VRM2**
Measures the range to targets.
 - ⑥ **Cursor** (Refer to 2-88 in the INSTRUCTION MANUAL)
Menu: **Marker**
Measures the bearing and range to targets.
 - ⑦ **Range Ring** (Refer to 2-93 in the INSTRUCTION MANUAL)
Menu: **Marker**
Sets the range ring.
 - ⑧ **IR (Interference rejection)** (Refer to 2-79 in the INSTRUCTION MANUAL)
Menu: **IR**
Interference can be rejected.
 - ⑨ **Target Enhance** (Refer to 2-80 in the INSTRUCTION MANUAL)
Menu: **RADAR Echo**
Sets the target to the appropriate size.
 - ⑩ **Gain/Sea Clutter/Rain/snow Clutter** (Refer to 2-6, 2-8 and 2-11 in the INSTRUCTION MANUAL)
Operation panel: **GAIN** **SEA** **RAIN**
Sets the gain, sea clutter suppression and rain/snow clutter suppression.
 - ⑪ **Own Ship Trails** (Refer to 2-71 in the INSTRUCTION MANUAL)
Soft key: **Own Track**
Sets the time of own ship trails.
 - ⑫ **Pulse Length** (Refer to 2-64 in the INSTRUCTION MANUAL)
Soft key: **Pulse Length**
Selects a pulse width.
 - ⑬ **Motion Mode** (Refer to 2-60 in the INSTRUCTION MANUAL)
Soft key: **TM/RM**
Switches between true motion mode (TM) and relative motion mode (RM).
 - ⑭ **Bearing Mode** (Refer to 2-62 in the INSTRUCTION MANUAL)
Soft key: **Bearing Mode**
Switches among H Up/N Up/C Up.
 - ⑮ **Alarm** (Refer to 2-134 in the INSTRUCTION MANUAL)
Menu: **RADAR Alarm**
Sets the radar alarm.
 - ⑯ **Function key** (Refer to 2-112 in the INSTRUCTION MANUAL)
Operation panel: **FUNC**
Selects a function mode.
 - ⑰ **Process** (Refer to 2-81 in the INSTRUCTION MANUAL)
Menu: **RADAR Echo**
Unnecessary noise can be reduced.
 - ⑱ **Zoom** (Refer to 2-82 in the INSTRUCTION MANUAL)
Menu: **RADAR Echo**
Zooms 2x around own ship position.
 - ⑲ **Own Ship Trails** (Refer to 2-71 in the INSTRUCTION MANUAL)
Soft key: **Own Track**
Sets the time of own ship trails.
 - ⑳ **Vector Length** (Refer to 2-39 in the INSTRUCTION MANUAL)
Soft key: **Vector Length**
Vector Length can be set.
- Target Tracking** Soft key: **TT** (Refer to 2-39 in the INSTRUCTION MANUAL)
- Soft key 1: **Numerical Data**, **TT Acquisition**, **TT Release** Selects the mode of TT acquisition, TT Release, and numerical display.
- Soft key 2: **Setting/Release** Sets/releases the tracking target data display.
- Soft key 3: **TT List**, **TT Number SEL** Switches the display of the TT list/TT number.
- Soft key 4: **Target Select** Acquires/releases targets and displays numerical data at the cursor position.
- AIS** Soft key: **AIS** (Refer to 2-34 in the INSTRUCTION MANUAL)
- Soft key 1: **Numerical Data**, **Retrieved Vessel**, **DEST Ship** Selects the mode of retrieved vessel, destination ship and numerical data display.
- Soft key 2: **Setting/Release** Sets/releases the tracking target data display.
- Soft key 3: **AIS List**, **AIS Number SEL** Switches the display of the AIS list/AIS number.
- Soft key 4: **Target Select** Displays target numerical data at the cursor position.