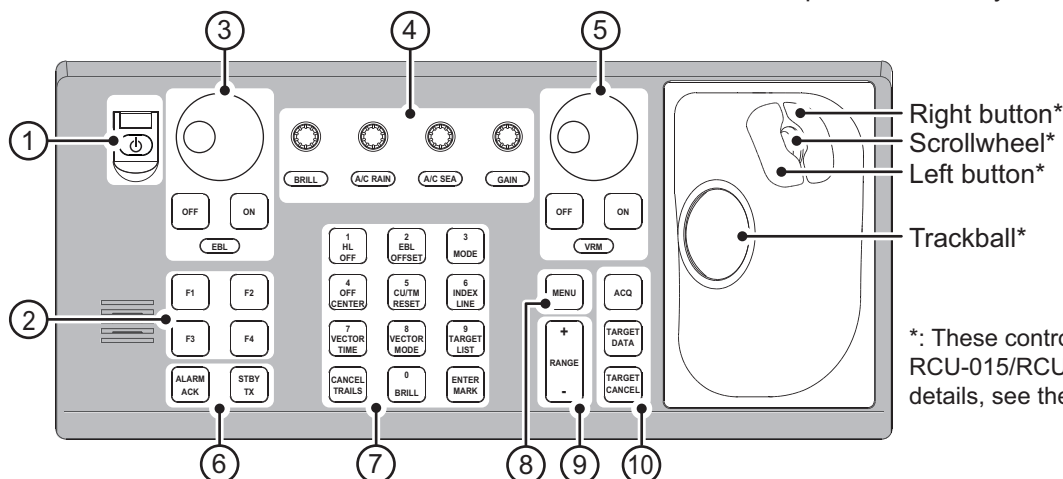


## Controls description for the RCU-014 Control Unit

The figure and table below show the RCU-014 control unit and a short description of each key's function.

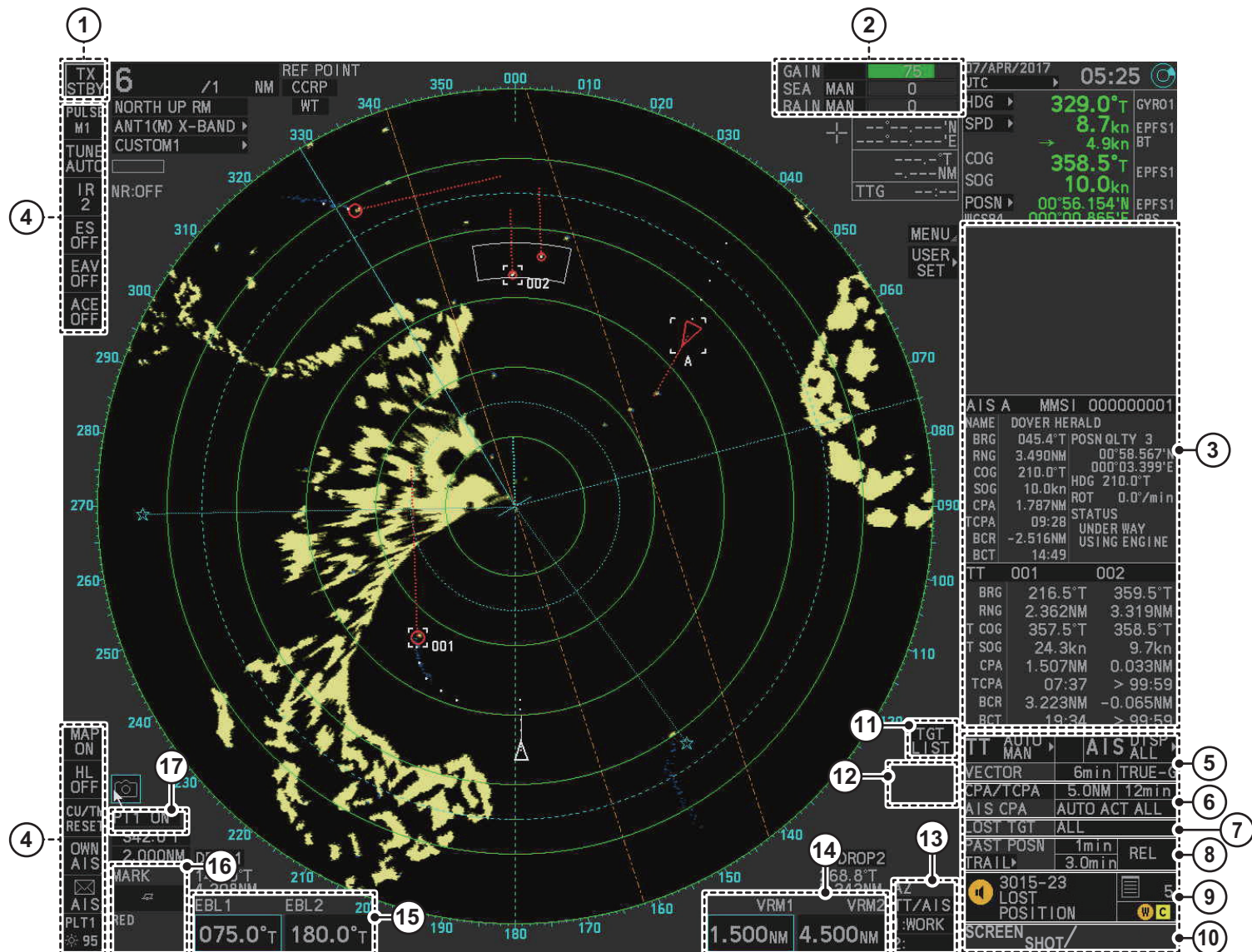


\*: These controls are also found on the RCU-015/RCU-016 Control Unit. For details, see the Operator's Manual.

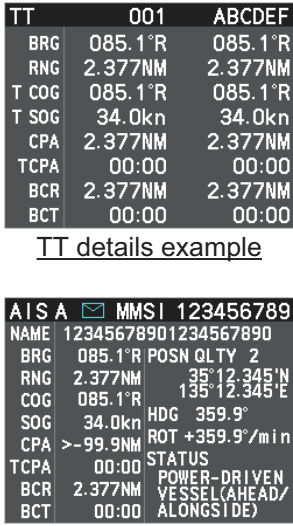
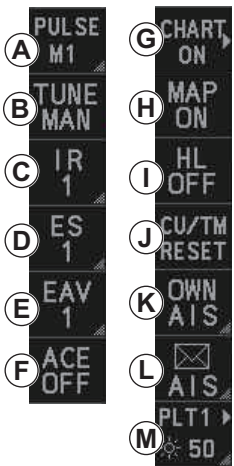
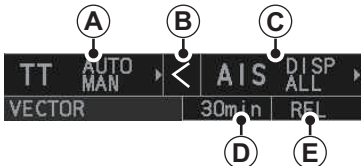
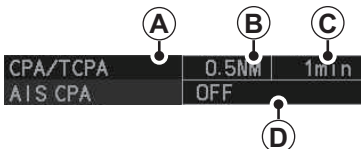

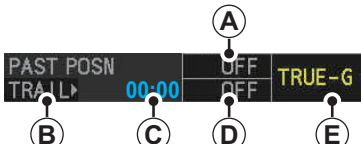

No.	Key/Control	Description
1	<b>Power key</b>	Turn the radar power on/off.
2	<b>Function keys (F1 to F4)</b>	Press to perform the registered function(s). With pop up windows open, press to perform the function listed in the window.
3	<b>EBL ON, EBL OFF keys</b>	Activate/deactivate the EBLs.
	<b>EBL knob</b>	Adjusts the EBL bearing.
4	<b>BRILL knob</b>	Adjusts the echo and screen brilliance.
	<b>A/C RAIN knob</b>	Adjusts the auto/manual clutter reduction for rain.
	<b>A/C SEA knob</b>	Adjusts the auto/manual clutter reductions for rough seas.
	<b>GAIN knob</b>	Adjusts the gain (sensitivity).
5	<b>VRM ON, VRM OFF keys</b>	Activate/deactivate the VRMs.
	<b>VRM knob</b>	Adjusts the VRM range.
6	<b>ALARM ACK key</b>	Acknowledges alerts, silences the alert buzzer.
	<b>STBY TX key</b>	Toggles radar operation between transmit (TX) and standby (STBY).
7	<b>Number keys</b>	With the menu open, press to select the corresponding menu item.
	<b>HL OFF key</b>	Press and hold to hide all indications and lines, showing only the echoes.
	<b>EBL OFFSET key</b>	Offsets or resets the EBL.
	<b>MODE key</b>	Change the orientation mode.
	<b>OFF CENTER key</b>	Enable or disable off-center.
	<b>CU/TM RESET key</b>	- Course Up mode: Reset the heading line to 000°. - True Motion mode: Move Own Ship position 75% of the radius in opposite direction of the current heading.
	<b>INDEX LINE key</b>	- Short press: Select a PI line. - Long press: Show or hide the selected PI line.
	<b>VECTOR TIME key</b>	Change the vector time.
	<b>VECTOR MODE key</b>	- Sets the positive/negative value to "-". - Toggle between true and relative vectors.
	<b>TARGET LIST key</b>	Shows/hides the TT/AIS target list.
	<b>CANCEL TRAILS key</b>	<b>Without the menu open:</b> - Short press: Change the trail display time. - Long press: Erase displayed trails. <b>With the menu open:</b> - Go back one level in the menu. Closes the menu if the top level is displayed. - Cancel changes made to a menu setting.
	<b>BRILL key</b>	Change the color scheme.
	<b>ENTER MARK key</b>	<b>Inside the Operational Display Area (ODA):</b> Inscribes a mark. <b>With the menu open:</b> Confirm changes, open the selected menu.

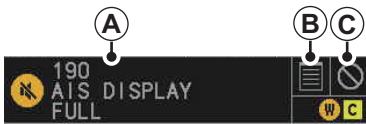



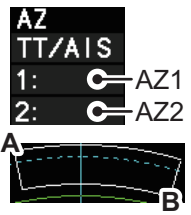

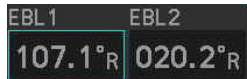

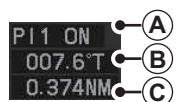
No.	Key/Control	Description
8	<b>MENU</b> key	Open/close the menu.
9	<b>RANGE</b> controls	Increase/decrease the display range.
10	<b>ACQ</b> key	Manually acquire the cursor-highlighted target for Target Tracking (TT).
	<b>TARGET DATA</b> key	- Show the information for the cursor-highlighted target. - Activate a sleeping AIS target.
	<b>TARGET CANCEL</b> key	- Cancel tracking for the selected target. - Sleep the selected AIS target. - Long press: Cancel tracking for all TT targets.

## Radar display indications and on-screen box operations



No.	Name	Description
1	STBY TX 	Toggles radar operation between transmit (TX) and standby (STBY).
2	Echo adjustment and antenna tuning <div> <div>GAIN</div><div>0</div> <div>SEA MAN</div><div>0</div> <div>RAIN MAN</div><div>0</div> </div>	Place the cursor in the left-side of the box, then press the left button to toggle automatic and manual adjustment. Place the cursor in the right-side of the box, then rotate the ADJUST knob to adjust the settings. [GAIN]: Adjusts the sensitivity of the receiver. [SEA]: Suppresses sea clutter. [RAIN]: Suppresses rain clutter.

No.	Name	Description	
3	<p>Information box</p>  <p><b>TT details example</b></p> <p><b>AIS details example</b></p>	<p><b>TT details display</b></p> <p>Selected target's data is displayed on the right-hand side of the screen.</p> <p>The data displayed is as follows:</p> <p>[BRG]: Bearing from own ship. [RNG]: Range from own ship. [T COG]: COG of target. [T SOG]: SOG of target. [CPA]: Closest Point of Approach of target to own ship. [TCPA]: Time to Closest Point of Approach of target to own ship. [BCR]: Target's Bow Cross Range. [BCT]: Target's Bow Cross Time.</p> <p><b>AIS details display</b></p> <p>Selected target's data is displayed on the right-hand side of the screen.</p> <p>The data displayed is as follows:</p> <p>[MMSI]: Target's unique MMSI ID. [NAME]: Target vessel's name (call sign). [NAV-STATUS]: Target's navigational status. [BRG]: Bearing from own ship. [RNG]: Range from own ship. [COG]: COG of target. [SOG]: SOG of target. [CPA]: CPA of target to own ship. [TCPA]: TCPA of target to own ship. [BCR]: Target's BCR. [BCT]: Target's BCT. [POSN QUALITY]: Overall accuracy of positioning data. [HDG]: Heading of target. [ROT]: Target's rate of turn. [STATUS]: Navigation status of target.</p> <p><b>Note:</b> The data displayed on-screen is dependent on equipment configuration and AIS settings.</p>	
4	<p>InstantAccess bar™</p> 	<p><b>Top half</b></p> <p><b>A:</b> Pulselength button: Selects the pulselength. <b>B:</b> Tune button: Toggles between automatic and manual tuning. <b>Note:</b> For SSD antennas, this button appears as "TX CH x". ("x" denotes the channel used for transmission). <b>C:</b> Interference Rejection button: Activates/deactivates the interference rejection feature. <b>D:</b> Echo Stretch button: Activates/deactivates the echo stretch function. <b>E:</b> Echo Average button: Activates/deactivates the echo average function. <b>F:</b> ACE button: Activates/deactivates the ACE (Auto Clutter Elimination) function.</p> <p><b>Lower half</b></p> <p><b>G:</b> Chart button: Shows/hides the chart. <b>Note:</b> This button appears only on A/B/W-types with Radar Plotter functionality. <b>H:</b> Radar Map button: Shows/hides the radar map marks. <b>I:</b> Heading Line button: Temporarily hides the heading line. <b>J:</b> CU/TM RESET button: Puts the ship's heading at the top of the screen in course-up mode the moment this button is pressed; Resets the ship's position to a point of 75% radius opposite to the extension of the heading line passing through the display centre in true motion modes. <b>K:</b> Own Ship AIS button: Shows the AIS VOYAGE DATA for AIS data setup. <b>L:</b> AIS Message button: Displays received AIS messages; Opens the [AIS Message] menu. <b>M:</b> Brilliance button: Adjusts the screen brilliance; Opens the [BRILLIANCE] menu.</p>	
5	<p>TT/AIS operations</p> 	<p><b>A:</b> Selects the TT mode, hides TT targets. <b>B:</b> Selects the display priority for associated targets' data. Appears as "&lt;" or "&gt;". <b>C:</b> Shows/hides AIS targets, or filters which targets to display. <b>D:</b> Sets the vector time. <b>E:</b> Sets the vector mode (reference).</p>	
6	<p>CPA/TCPA box</p> 	<p><b>A:</b> Enable/disable CPA/TCPA alerts. <b>B:</b> Set the CPA range. <b>C:</b> Set the TCPA time. <b>D:</b> Enable/disable the automatic AIS activation function.</p>	
7	<p>Lost filter</p> 	<p>Enables/disable the TT/AIS lost alert (OFF/FILT/ALL).</p>	
8	<p>Target trail box</p> 	<p><b>A:</b> Selects the interval for past position plotting. <b>B:</b> Right-click to show the [TRAILS] menu. <b>C:</b> Shows the elapsed time since trail plotting started. Counter increases until the preset trail time is reached. <b>D:</b> Sets the trail time. <b>E:</b> Sets the trail mode (reference).</p>	
9	<p>Alert box (for software version 02.xx or later)</p> 	<p><b>A:</b> Displays alert information for active alerts. Click to acknowledge the displayed alert. <b>B:</b> Opens the [ALERT LIST] to view all alerts. <b>C:</b> Number of unacknowledged alerts.</p>	

No.	Name	Description	
9	Alert box (for software version 01.xx) 	<b>A:</b> Displays alert information for active alerts. Click to acknowledge the displayed alert. <b>B:</b> Opens the [ALERT LIST] to view all alerts. <b>C:</b> Silence the alert buzzer temporarily.	
10	Guidance box 	Displays operational guidance for the currently selected item. The left-hand side shows guidance for the <b>left button</b> , right-hand side shows guidance for the <b>right button</b> .	
11	Target list box 	Click to show the AIS/TT target lists.	
12	Trial maneuver box 	Set up and conduct trial maneuvers. To show the box: 1. Open the menu. 2. Select [5 TT/AIS]. 3. Select [3 TRIAL MANEUVER]. 4. Select the appropriate type of maneuver. 5. Close the menu.	
13	Acquisition Zone (AZ1/AZ2) box 	<ul style="list-style-type: none"> <li>- Set up acquisition/sentry zones.</li> <li>- Change the acquisition mode. [TT/AIS] or [TGT ALR] indicate the acquisition mode in use.</li> </ul>	<b>How to set up the acquisition zone.</b> 1. Place the cursor on the [AZ1] indication at the bottom-right of the screen. 2. Press the <b>left button</b> to cycle through the settings and select [SET]. 3. Place the cursor on the acquisition zone starting point ("A" in the figure to the left), then press the <b>left button</b> . 4. Place the cursor on the acquisition zone end point ("B" in the figure to the left), then press the <b>left button</b> .
14	VRM boxes 	<ul style="list-style-type: none"> <li>- Activate/deactivate VRM1/VRM2.</li> <li>- Shows the range for each VRM.</li> <li>- Adjusts the range for the selected VRM.</li> </ul>	<b>How to measure range from own ship to a target:</b> 1. Press the <b>VRM</b> key to activate a VRM. The active VRM is highlighted (VRM1 in the example to the left). 2. Rotate the <b>VRM</b> knob to adjust the VRM. Place the VRM on the inner edge of the target whose range you wish to measure. 3. Check the range displayed in the VRM boxes at the bottom right of the screen.
15	EBL boxes 	<ul style="list-style-type: none"> <li>- Activate/deactivate EBL1/EBL2.</li> <li>- Shows the range for each EBL.</li> <li>- Adjusts the range for the selected EBL.</li> </ul>	<b>How to measure range from own ship to a target:</b> 1. Press the <b>EBL</b> key to activate a EBL. The active EBL is highlighted (EBL1 in the example to the left). 2. Rotate the <b>EBL</b> knob to adjust the EBL. Place the EBL on the inner edge of the target whose range you wish to measure. 3. Check the range displayed in the EBL boxes at the bottom right of the screen.
16	Mark box 	Place the cursor on the box, then spin the scrollwheel to select the mark to insert. <ul style="list-style-type: none"> <li>- Left-click to insert the selected mark.</li> <li>- Right-click to show the [RADAR MAP] menu.</li> </ul>	
17	PI Lines box 	<b>A:</b> PI Lines status indication. Select the indication, then spin the scrollwheel to select the desired PI line. Left-click to show/hide the selected PI Line. <b>B:</b> PI Line bearing. <b>C:</b> PI Line interval.p	<b>How to adjust PI line bearing and interval</b> 1. Place the cursor on the PI line bearing ("B" in the example figure to the left). 2. Spin the scrollwheel to adjust the PI line bearing. 3. Place the cursor on the PI line interval ("C" in the example figure to the left). 4. Spin the scrollwheel to adjust the PI line interval.