14.5.7 Creating an arrow (Line object)

An arrow can be displayed on the user map or chart.

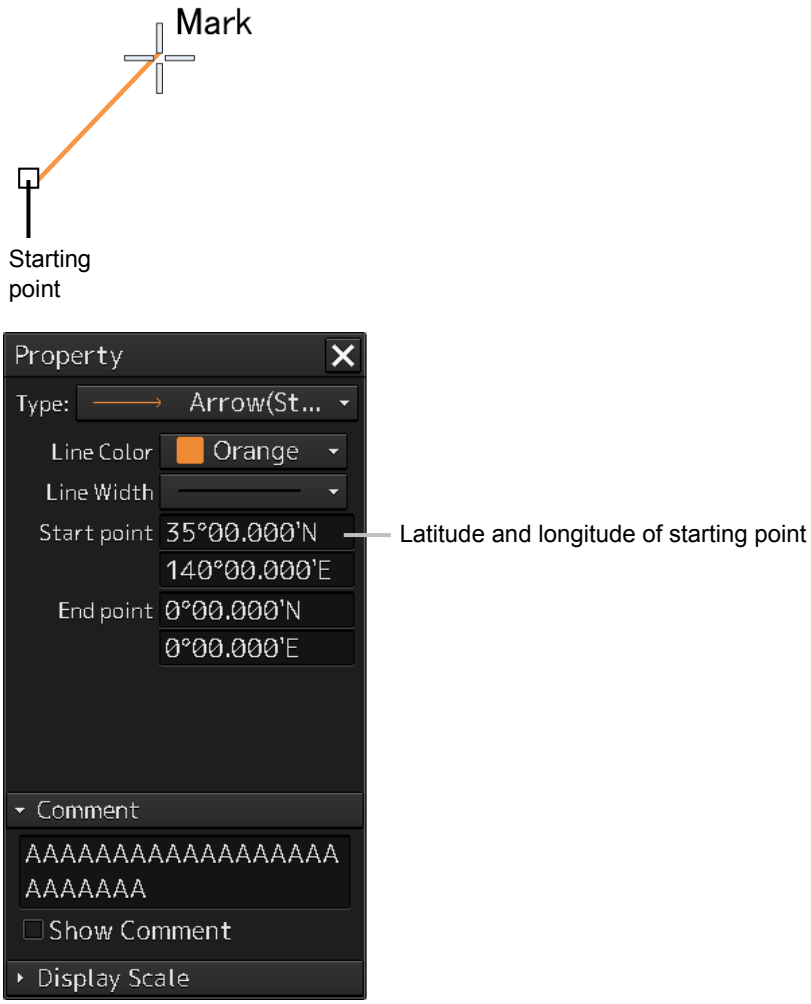
1 Click on the [Type] button on the drawing toolbar.

An icon list is displayed.

2 Select the arrow icon. (Refer to "14.2.3 Selecting an object type")

3 Click on the starting position with the cursor.

A starting point is created and the property information of the starting point is displayed on the object property dialog box.

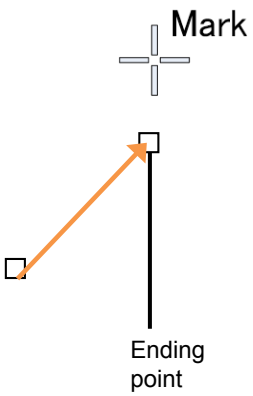


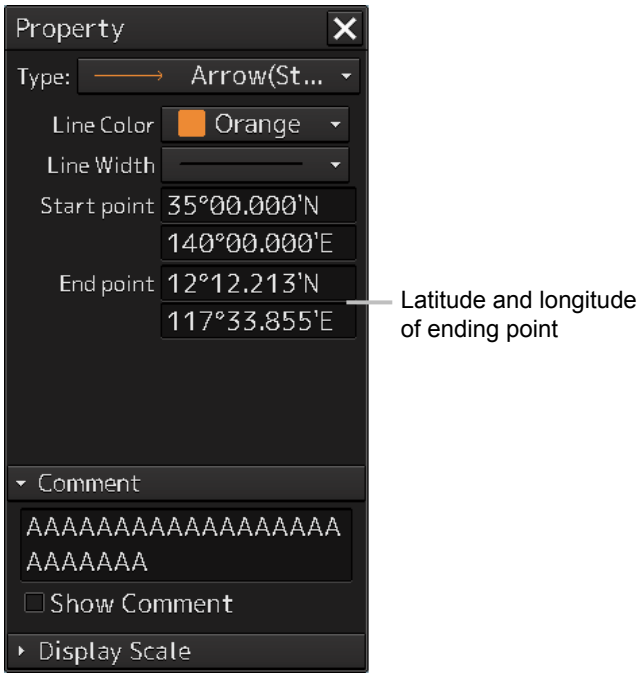
Note

The color, line type, and line width of a starting point cannot be changed.

4 **Click on the position of the ending point with the cursor.**

An ending point is created and the property information of the ending point is displayed on the object property dialog box.





5 **Adjust the parameters on the object property dialog box.**

6 **To create an object on another position continuously, repeat Steps to 3 to 5.**

14.5.7.1 Creating an object by specifying the starting point/ending point position coordinates

1 **Click on the [Enter POSN] button on the drawing toolbar.**

The "Enter Position" dialog box appears (Refer to "14.2.6 Creating an object by specifying latitude and longitude").

2 **Enter the coordinates of the starting point and click on the [Enter] button.**

A starting point of the arrow is created on the position of the specified coordinates and the property information is reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").

3 **Enter the coordinates of the ending point and click on the [Enter] button.**

An ending point of the arrow is created on the position of the specified coordinates and the property information is reflected in the object property dialog box.

4 **To create an object on another position continuously, repeat Steps 1 to 3.**

14.5.7.2 Drawing an object with EBL/VRM operation

1 **Click on the [EBL/VRM] button on the drawing toolbar.**

The cursor changes to the EBL/VRM reference point cursor. (Refer to "14.2.5 Creating an object in the EBL/VRM mode").

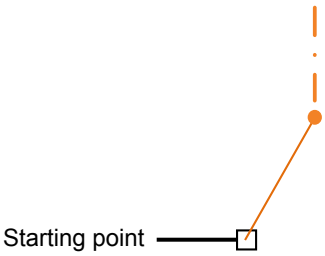
2 **Click on the position of the reference point of the EBL/VRM marker.**

The EBL/VRM marker is displayed.

3 **Place the EBL/VRM marker on the position of the starting point and click the button.**

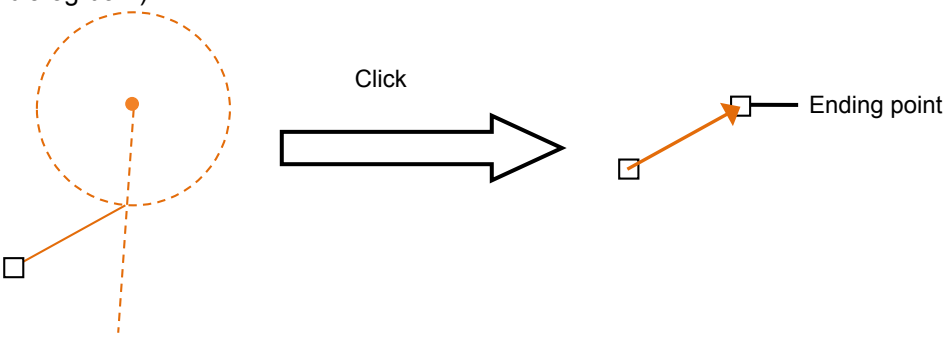
4 **Click on the reference position of the EBL/VRM marker.**

A starting point is created on the position on which the button was clicked and the property information is displayed on the object property dialog box. (Refer to "14.2.8 Object property dialog box").



5 **Place the EBL/VRM marker on the position of the ending point and click the button.**

An ending point is created on the position on which the button was clicked and the property information is displayed on the object property dialog box. (Refer to "14.2.8 Object property dialog box").



6 **To create an object on another position continuously, repeat Steps 2 to 5.**

14.5.8 Creating Mariner's Mark/Line drawing objects (ECDIS screen only)

At user map creation, the following Mariner's Mark/Line drawing objects can be created.

- Information Mark
- Clearing Line
- Tidal Stream mark
- Highlight mark

1 Click on the [Type] button on the drawing toolbar.

An icon list is displayed.

2 Click on the [Mariner's Mark/Line] button on the icon list.

Mariner's Mark/Line drawing objects are displayed on the icon list.

3 Select an object to be created and specify a creation position.

14.5.8.1 Information mark

An information mark can be created on any position of the chart. An information mark is used for comments and so on.

Information Mark

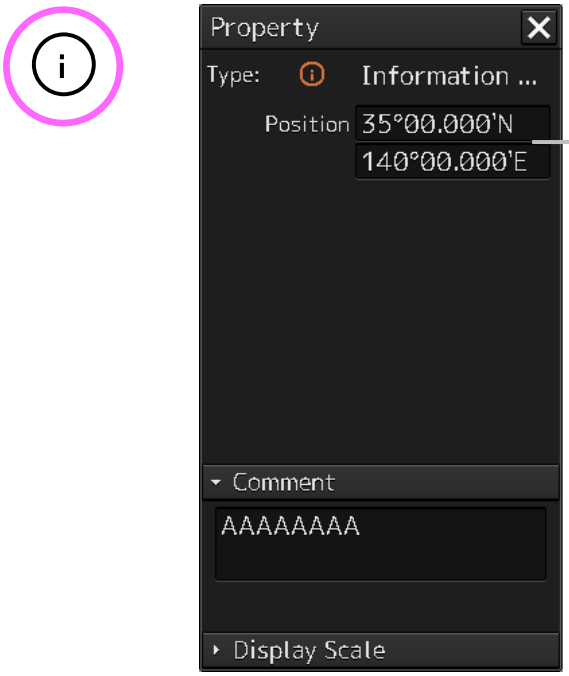
1 Click on the [Type] button on the drawing toolbar.

An icon list is opened.

Select the icon of information mark. (Refer to "14.2.3 Selecting an object type").

2 **Click on the position on which the information mark is to be created with the cursor.**

The information mark is displayed on the position on which the button was clicked and the parameters of the information mark are displayed on the object property dialog box.



Latitude and longitude of the information mark creation position

3 **Adjust the parameters on the object property dialog box.**

4 **To create an object on another position continuously, repeat Steps 2 and 3.**

Creating an object by specifying the latitude and longitude

1 **Click on the [Enter POSN] button on the drawing toolbar.**

The "Enter Position" dialog box appears (Refer to "14.2.6 Creating an object by specifying latitude and longitude").

2 **Enter the latitude and longitude of the position on which an object is to be created and click on the [Enter] button.**

An object is created on the position of the specified latitude and longitude and the property information is reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").

3 **Adjust the parameters on the object property dialog box.**

4 **To create an object on another position continuously, repeat Steps 2 and 3.**

Creating an object with EBL/VRM operation

1 **Click on the [EBL/VRM] button on the drawing toolbar.**
The cursor changes to the EBL/VRM reference point cursor. (Refer to "14.2.5 Creating an object in the EBL/VRM mode").

2 **Click on the position of the reference point of the EBL/VRM marker.**
The EBL/VRM marker is displayed.

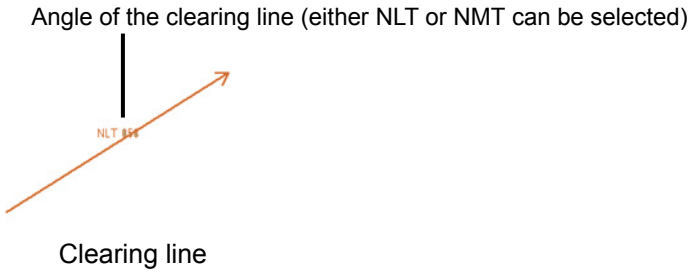
3 **Place the EBL/VRM marker on the position on which an object is to be created and click the button.**
An object is created on the position on which the button was clicked and the property information reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").

4 **Adjust the parameters on the object property dialog box.**

5 **To create an object on another position continuously, repeat Steps 2 to 4.**

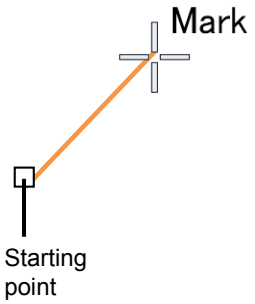
14.5.8.2 Clearing line

A clearing line can be created on a chart. It is possible to select an angle and either Not Less Than (NLT) or Not More Than (NMT) for a clearing line on the object property dialog box.



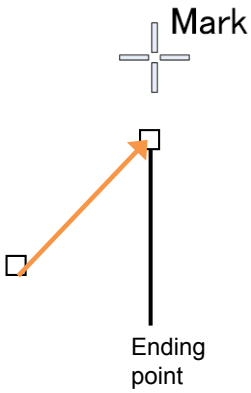
1 **Click on the [Type] button on the drawing toolbar.**
Open the icon list and select an icon of clearing line. (Refer to "14.2.3 Selecting an object type").

2 **Click on the position of a starting point with the cursor.**
A starting point is created and the property information of the clearing line is displayed on the object property dialog box.



3 **Click on the position of the ending point with the cursor.**

An ending point is created and the property information in the object property dialog box is updated.



Latitude and longitude of the starting point

Select Not Less Than (NLT)/Not More Than (NMT).

Specify the length of the clearing line.

4 **Adjust the parameters on the object property dialog box.**

- **Specifying an angle of a clearing line:** Display a numeric value input keyboard by clicking on the [Bearing] input box and enter an angle (0 to 359°).
- **Specifying a length of a clearing line:** Display a numeric value input keyboard by clicking on the [Display length] input box and enter a length (0 to 999.99).
- **Selecting Not Less Than (NLT)/Not More Than (NMT):** Set Not Less Than (NLT) or Not More Than (NMT) to On by clicking on the button.
  When Not Less Than (NLT) is selected, "NLTxx" is displayed for the clearing line, indicating that the line must not be below "xx". When Not More Than (NMT) is selected, "NMT xx" is displayed for the clearing line, indicating that the line must not exceed "xx".

For the method of using the numeric value input keyboard, refer to "3.15.2 Name and function of each section of the keyboard".

5 **To create an object on another position continuously, repeat Steps 2 to 4.**

Creating position coordinates of the starting point

1 Click on the [Enter POSN] button on the drawing toolbar.

The "Enter Position" dialog box appears (Refer to "14.2.6 Creating an object by specifying latitude and longitude").

2 Enter the coordinates of a starting point and click on the [Enter] button.

3 To create an object on another position continuously, repeat Steps 1 and 2.

Drawing an object with EBL/VRM operation

1 Click on the [EBL/VRM] button on the drawing toolbar.

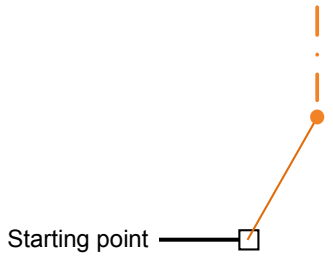
The cursor changes to the EBL/VRM reference point cursor. (Refer to "14.2.5 Creating an object in the EBL/VRM mode").

2 Click on the position of the reference point of the EBL/VRM marker.

The EBL/VRM marker is displayed.

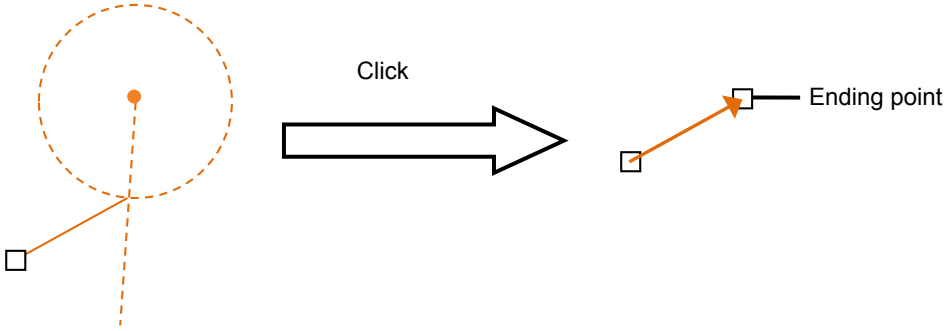
3 Place the EBL/VRM marker on the starting point position and click the button.

A starting point is created on the position on which the button was clicked and the property information is reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").



4 Place the EBL/VRM marker on the ending point position and click the button.

An ending point is created on the position on which the button was clicked and the property information is reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").



5 To create an object on another position continuously, repeat Steps 2 to 4.

14.5.8.3 Tidal Stream mark

A current drift and a bearing can be input for a tidal stream mark. Edit the current drift (Drift) and the bearing (Set) after creating a tidal stream mark on the object property dialog box.

Actual

Predicted

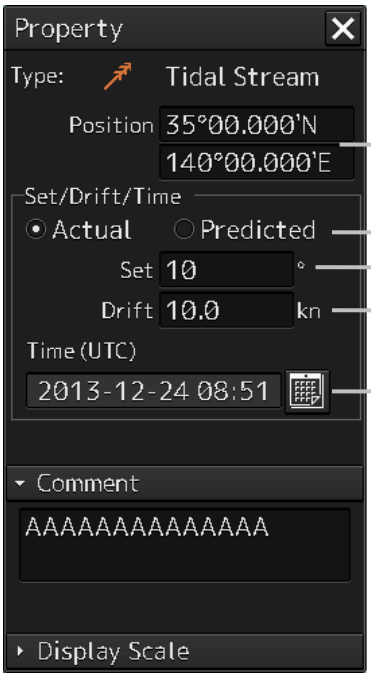
1 Click on the [Type] button on the drawing toolbar.

An icon list is opened.

Select the icon of a tidal stream mark. (Refer to "14.2.3 Selecting an object type").

2 Click on the position on which a tidal drift mark is to be created with the cursor.

A tidal stream mark is displayed on the position on which the button was clicked and the parameters of the tidal channel mark that was created are displayed on the object property dialog box.



Latitude and longitude of the starting point

Select Actual/Predicted.

Specify a bearing.

Specify a current drift.

Specify date/time.

3 Adjust the parameters on the object property dialog box.

- **Specifying a bearing:** Display a numeric value input keyboard by clicking on the [Set] input box and enter a bearing (0 to 359°).
- **Specifying a current drift:** Display a numeric value input keyboard by clicking on the [Drift] input box and enter a current drift (0 to 99.9).
- **Selecting Actual/Predicted:** Select the check box of either Actual or Predicted.
  When Actual is selected, a tidal stream mark of a solid line is displayed. When Predicted is selected, a tidal mark of a broken line is displayed.
- **Specifying date/time:** Display a calendar + time picker by clicking on the calendar button and enter a date and a time in the [Time(UTC)] input box.

For the method of using a numeric value input keyboard, refer to "3.15.2 Name and function of each section of the keyboard" and for the method of using a calendar + time picker, refer to "3.16 Setting a Date and a Time [Calendar Operation)".

4 To create an object on another position continuously, repeat Steps 2 and 3.

Moving a tidal stream mark

1 Click the right mouse button on the tidal stream mark that is set.

The menu is displayed.

2 Click on [Move this object].

3 Click on the required destination position.

Creating an object by specifying the latitude and longitude

1 Click on the [Enter POSN] button on the drawing toolbar.

The "Enter Position" dialog box appears (Refer to "14.2.6 Creating an object by specifying latitude and longitude").

2 Enter the latitude and longitude of the position on which an object is to be created and click on the [Enter] button.

An object is created on the position of the specified latitude and longitude and the property information is reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").

3 Adjust the parameters on the object property dialog box.

4 To create an object on another position continuously, repeat Steps 2 and 3.

Creating an object with EBL/VRM operation

1 **Click on the [EBL/VRM] button on the drawing toolbar.**
The cursor changes to the EBL/VRM reference point cursor. (Refer to "14.2.5 Creating an object in the EBL/VRM mode").

2 **Click on the position of the reference point of the EBL/VRM marker.**
The EBL/VRM marker is displayed.

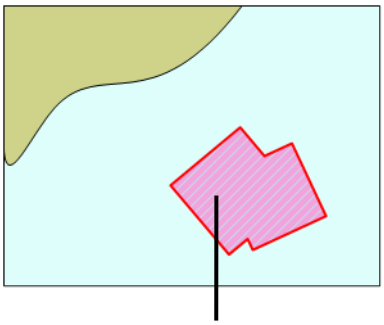
3 **Place the EBL/VRM marker on the position on which an object is to be created and click the button.**
An object is created on the position on which the button was clicked and the property information reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box").

4 **Adjust the parameters on the object property dialog box.**

5 **To create an object on another position continuously, repeat Steps 2 to 4.**

14.5.8.4 Highlighted display

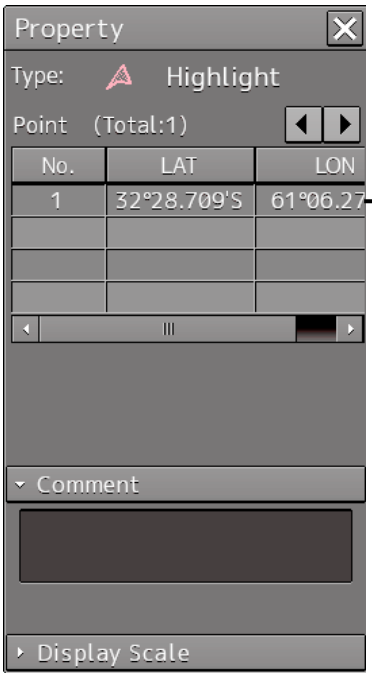
Highlighted display can be set by creating an area of a polygon on a chart. Use highlighted display for attaching a comment on the chart or so on.



1 **Click on the [Type] button on the drawing toolbar.**
An icon list is opened.
Select an icon of highlighted display. (Refer to "14.2.3 Selecting an object type").

2 **Click on the position of a starting point with the cursor.**

A starting point is created and the property information of vertex 1 is displayed on the object property dialog box.



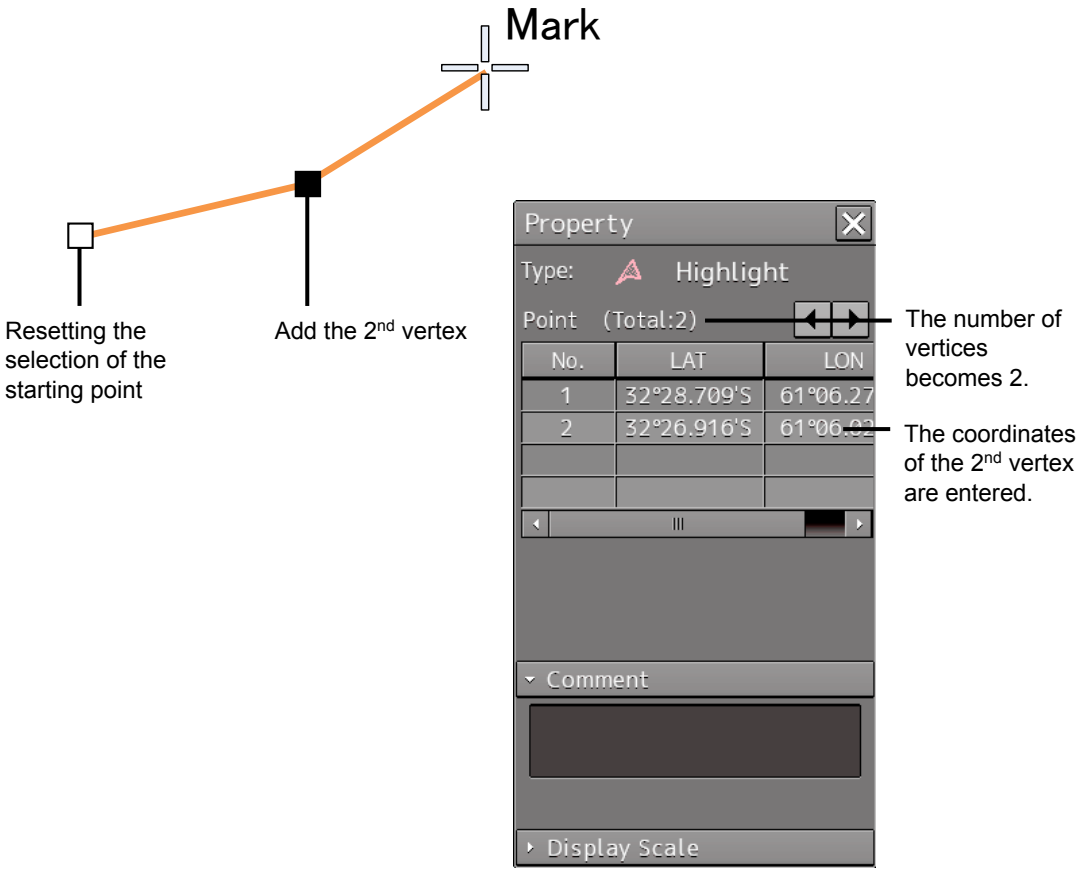
The latitude and longitude of the starting point (vertex 1) is displayed.

3 **Move the cursor to the next vertex.**

The latitude and longitude of the cursor are displayed near the cursor.

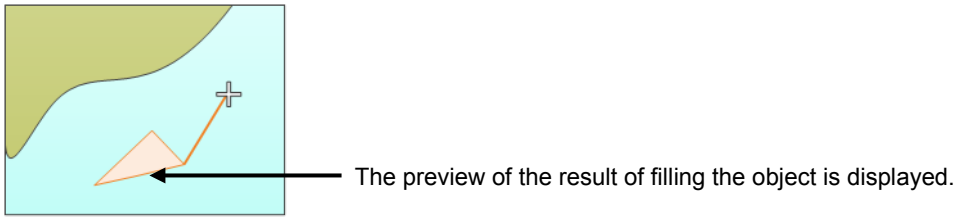
4 **Click on the position on which the 2nd vertex is to be created.**

A vertex is created and the latitude and longitude of the 2nd vertex are displayed on the object property dialog box.

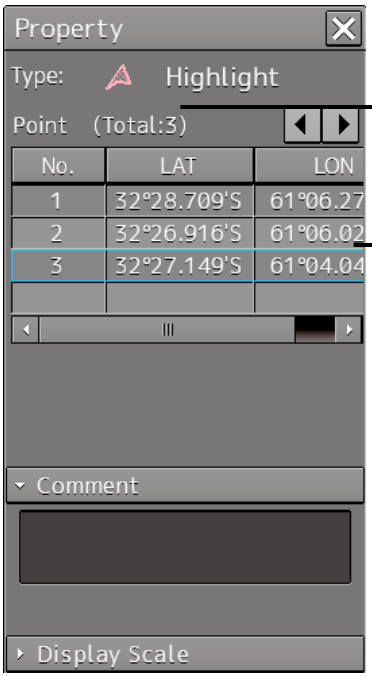


5 **Click on the position on which the 3rd vertex is to be created.**

A triangle is created by connecting three vertices. The preview screen is displayed, enabling to check the object fill status.



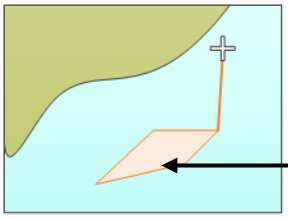
The latitude and longitude of the 3rd vertex are displayed on the object property dialog box.



The number of vertices becomes 3.

The coordinates of the 3rd vertex are entered.

6 To add another vertex continuously, click on the position on which the vertex is to be created.



When the 4th vertex is determined, the preview display is updated.

When not adding another vertex, determine the object by double-clicking or clicking the right button on the object.

7 Adjust the parameters on the object property dialog box.

8 To create an object on another position continuously, click on the [New] button in the "Enter Position" dialog and repeat Steps from 2 to 7.

Creating a vertex by entering the position

1 **Click on the [Enter POSN] button on the drawing toolbar.**
The "Enter Position" dialog box appears.

2 **Enter the values of latitude and longitude of the vertex of the object in the [Position] box and click on the [Enter] button.**
The position of one vertex of the object is determined.
The [Bearing] box and the [Distance] box are enabled.

3 **Enter the values of latitude and longitude of the next vertex of the object in the [Position] box. Alternatively, enter the bearing from the vertex that was determined immediately previously in the [Bearing] box and the [Distance] input box.**

4 **Click on the [Enter] button.**

5 **Determine the positions of 3 or more vertices by repeating Steps 2 to 4.**

6 **Adjust the parameters on the object property dialog box.**

7 **To create an object on another position continuously, repeat Steps 2 to 6.**

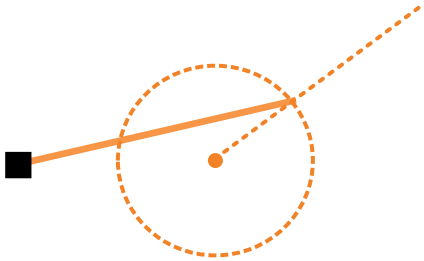
Creating an object with EBL/VRM operation

1 **Click on the [EBL/VRM] button on the drawing toolbar.**
The cursor changes to the EBL/VRM reference point cursor. (Refer to "14.2.5 Creating an object in the EBL/VRM mode").

2 **Click on the position of the reference point of the EBL/VRM marker.**
The EBL/VRM marker is displayed.

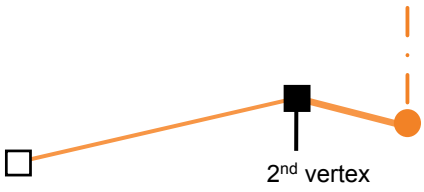
3 **Placing the EBL/VRM marker on the position of the starting point and click the button.**
A vertex is created on the position on which the button was clicked, and the property information is displayed on the object property dialog box. (Refer to "14.2.8 Object property dialog box").

4 **Click on the reference point.**
The EBL/VRM marker is displayed to determine the 2nd vertex.



5 Place the EBL/VRM marker on the position of the 2nd vertex and click the button.

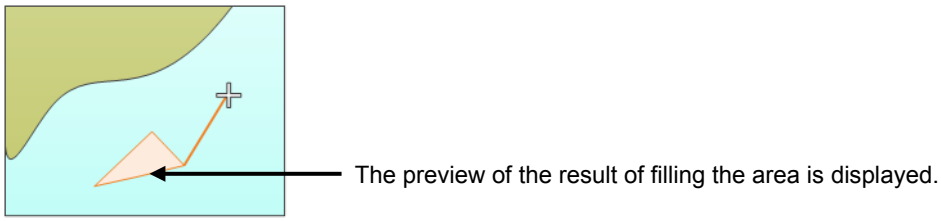
A vertex is created on the position on which the button was clicked and the property information is reflected in the object property dialog box. (Refer to "14.2.8 Object property dialog box".)



The EBL/VRM marker is reset to the EBL/VRM reference point cursor.

6 Place the EBL/VRM marker on the position of the 3rd vertex and click the button.

A triangle is created by connecting the three vertices. A preview screen is displayed, enabling the checking of the fill status of the polygon and the Warning area.



7 Adjust the parameters on the object property dialog box.

8 To create an object on another position continuously, repeat Steps 1 to 7.

14.6 Collective Deletion of Objects [Delete by Type/Color]

Objects of the same shape and color can be deleted collectively by "Delete by Type/Color".

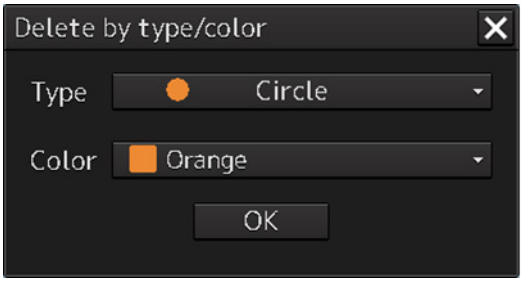
1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

2 Click on the [User Map] button on the menu.

3 Click on the [Delete by Type/Color] on the submenu.

The "Delete by type/color" dialog box appears.



"Delete by type/color" dialog box

4 Elect the common parameters for the objects to be deleted from the lists of the [Type] combo box and the [Color] box.

When [All] is selected, all the objects are deleted.

5 Click the [OK] button.

Note

- If the color that is specified in the [Color] box matches any of the point color, line color and area color of the object, the object is targeted for deletion.
- When a Warning line is selected in the [Type] combo box, the [Color] box is displayed as Disabled.

14.7 Managing/Editing Objects [Mark Line/List]

User maps and manually updated objects can be managed/edited through [Mark/Line List].

14.7.1 Displaying the "Mark/Line List" dialog box

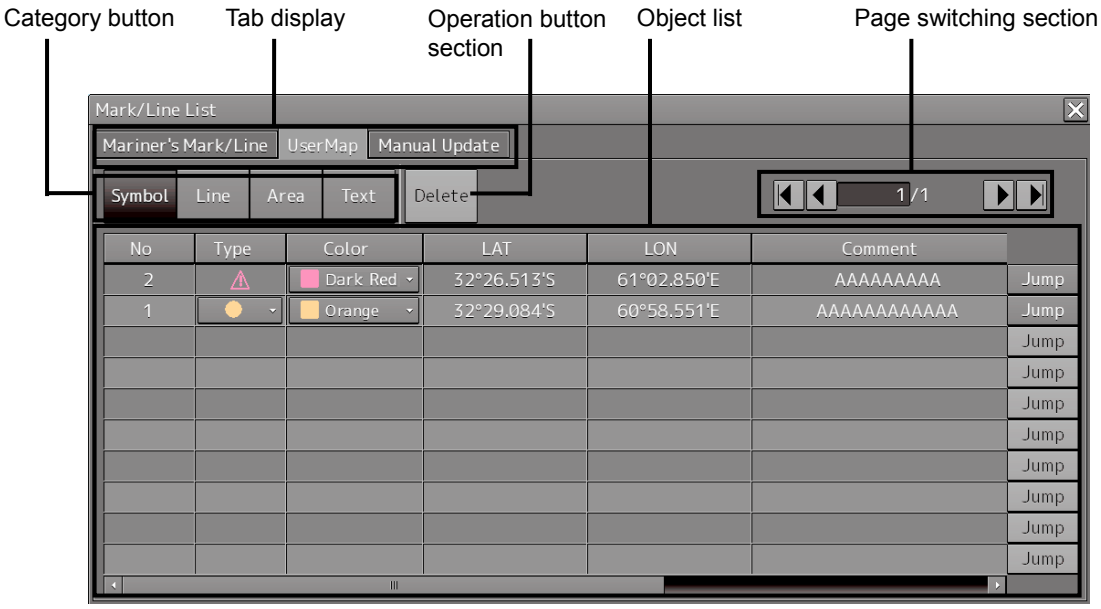
1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

2 Click on the [User Map] button on the menu.

3 Click on the [Mark/Line List] on the submenu.

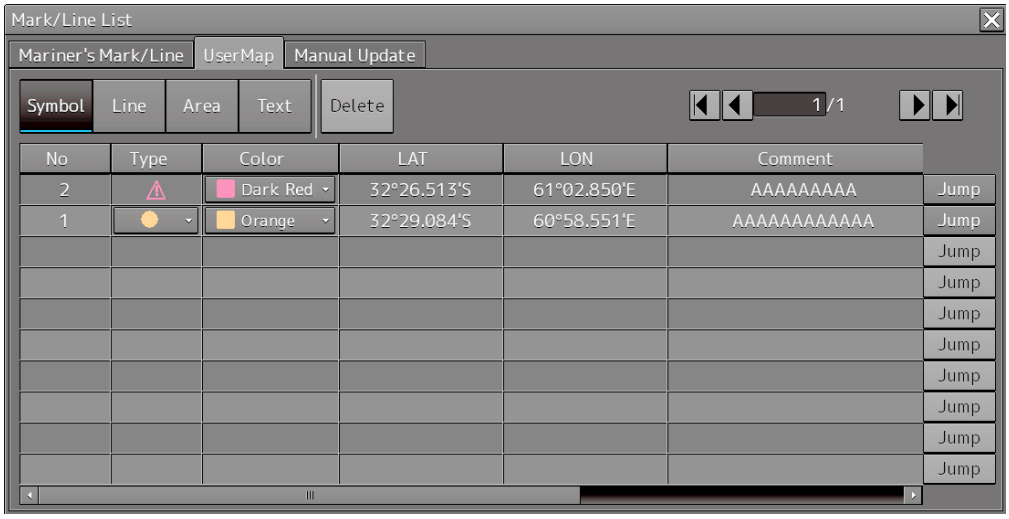
The "Mark/Line List" dialog box appears.



"Mark/Line List" dialog box (Display example of [User Map] tab)

14.7.2 Displaying a user map list

The [User Map] tab displays a list of the user maps that are currently displayed.
The display of each category can be switched by clicking on the [Symbol] button/[Line] button/[Area] button/[Text] button.



[User Map] tab (example at selection of [Symbol])

The tabs in the "Mark/Line List" dialog box consist of the following.

- **[User Map] tab**
  - Symbol
  - Line
  - Area
  - Text
- **[Mariner's Mark/Line] tab (only the ECDIS screen and at creation of user map only)**
  - Event Mark
  - Information Mark
  - Tidal Stream
  - Highlight (highlighted display)
  - Clearing Line

  (Refer to "14.7.3 Displaying a Mariner's Mark/Line List (ECDIS screen only)").
- **[Manual Update] tab (ECDIS screen only)**
  - Symbol
  - Line
  - Area
  - Text

14.7.2.1 Displaying an object on a chart

Click on the [Jump] button on the row of the object to be displayed on the chart.

14.7.2.2 Deleting an object

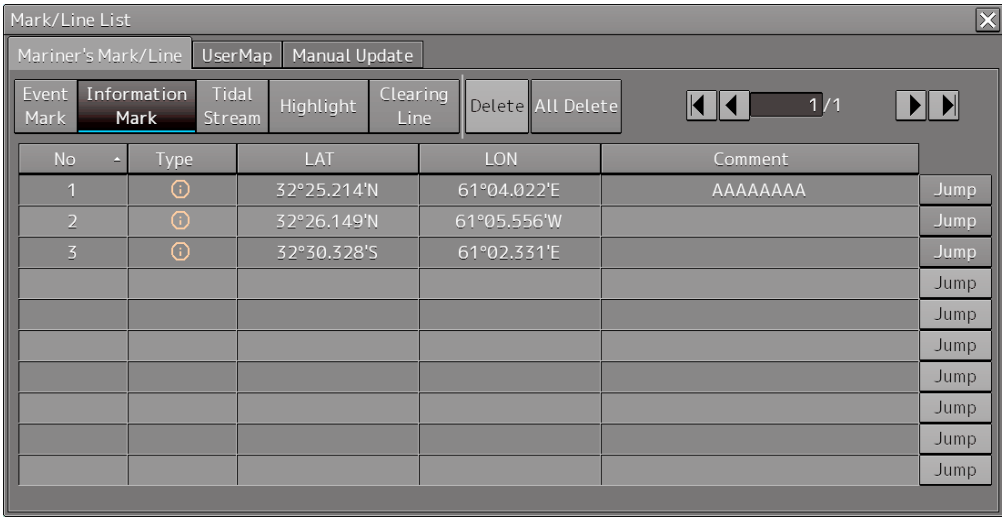
Select the row of the object to be deleted and click on the [Delete] button.

Note

As soon as the [Delete] button is clicked on, the object is deleted. Re-check whether the object can be deleted before clicking on the [Delete] button.

14.7.3 Displaying a Mariner's Mark/Line List (ECDIS screen only)

A Mariner's Mark/Line can be displayed by using the [Mariner's Mark/Line] tab.
Display of each category can be switched by clicking on the [Event Mark] button/[Information Mark]button/[Tidal Stream] button/[Highlight] button/[Clearing Line] button.



[Mariner's Mark/Line] tab (example at selection of [Information Mark]

14.7.3.1 Displaying an object on a chart

Click on the [Jump] button on the row of the object to be displayed on the chart.

14.7.3.2 Deleting an object

Select a line of the object to be deleted and click on the [Delete] button.

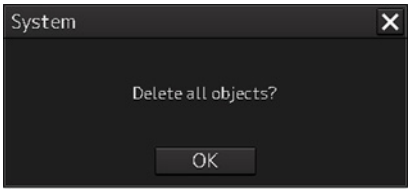
Note

As soon as the [Delete] button is clicked on, the object is deleted. Re-check whether the object can be deleted before clicking on the [Delete] button.

14.7.3.3 Deleting objects collectively from an object list

1 Click on the [All Delete] button.

A message dialog box for confirming deletion appears.

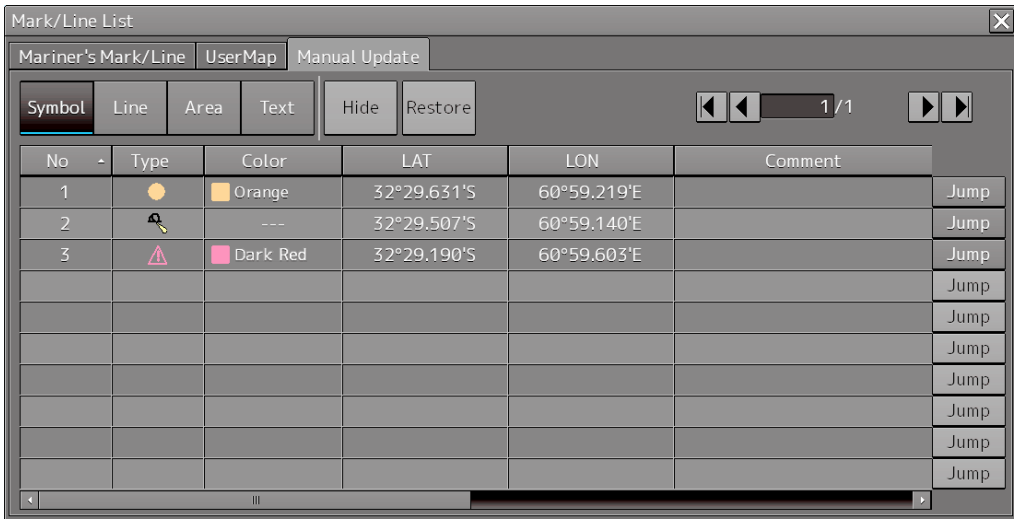


2 To execute deletion, click on the [OK] button. To cancel deletion, click on the [X] button.

14.7.4 Displaying a manual update list (ECDIS screen only)

A manual update list can be displayed by using the [Manual Update] tab.

Display of each category can be switched by clicking on the [Symbol] button/[Line] button/[Area] button/[Text] button.



[Manual Update] tab (Selecting [Symbol] example)

14.7.4.1 Displaying an object on a chart

1 Click on the [Jump] button on the row of the object to be displayed on the chart.

14.7.4.2 Hiding an object

1 Select a line of the object to be hidden and click on the [Hide] button.

The [Status] of the object to be hidden changes from [Normal] to [Hidden].

When the chart that uses the object that is set to Hide is updated, the expiration date (90 days after the date when the object is created) of the object is displayed as [Expiration Date].
When the expiration date is reached, the object is deleted.

14.7.4.3 Redisplaying an object

Select a line of the object that has been set to Hide and click on the [Restore] button.
The [Status] of the object that is re-displayed changes from [Hidden] to [Normal].
The date of [Expiration Date] of the object is deleted.

Section 15 Logbook

Various types of information (events) during the voyage can be recorded/displayed in a logbook.

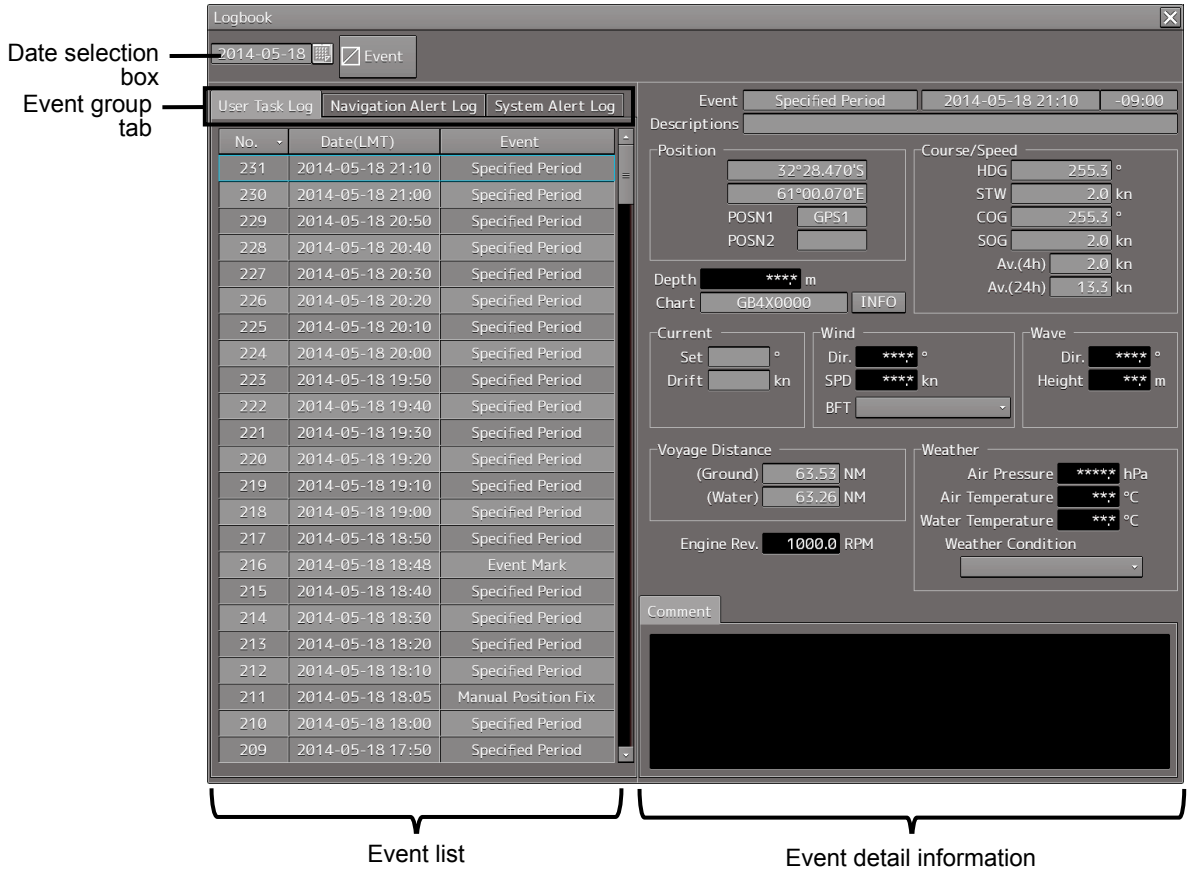
15.1 Browsing a Logbook

1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

2 Click on [Logbook] on the menu.

The "Logbook" dialog box appears.



Memo

Events that are recorded/displayed in a logbook can be changed by using the [Settings] menu. For the details, refer to "18.16 Setting Logbook".

The following events are recorded in a logbook.

- At Noon: Recorded at 12:00 (LMT) every day.
- Specified Period: Recorded at any time interval.
- Event Mark: Recorded at marking an event mark.
- Manual Position Fix: Recorded at fixing a position manually.
- Chart Manual Updating: Recorded at updating a chart manually.
- System Start: Recorded at the start of the system.
- System Exit: Recorded at the termination of the system.
- Route Alert: Recorded at the occurrence of a Route-related alert.
- Chart Alert: Recorded at the occurrence of a Chart-related alert.
- Auto Sail Alert: Recorded at the occurrence of an automatic sailing related-alert and sensor alarm
- System Alert: Recorded at the occurrence of an alert that does not belong to the types that are indicated above

Searching an event based on the date

Enter a date and time in the date selection box.

The events of the date and time that were input are searched. The event list is scrolled and the line of the first event is highlighted in blue.

Sorting events

When turning on the power, events are registered in the event list starting from the event of the latest date.

When any of the items of the title line in the event list is clicked on, the events can be sorted based on the item. Whenever the item is clicked on, the events are sorted in the ascending order or descending order.

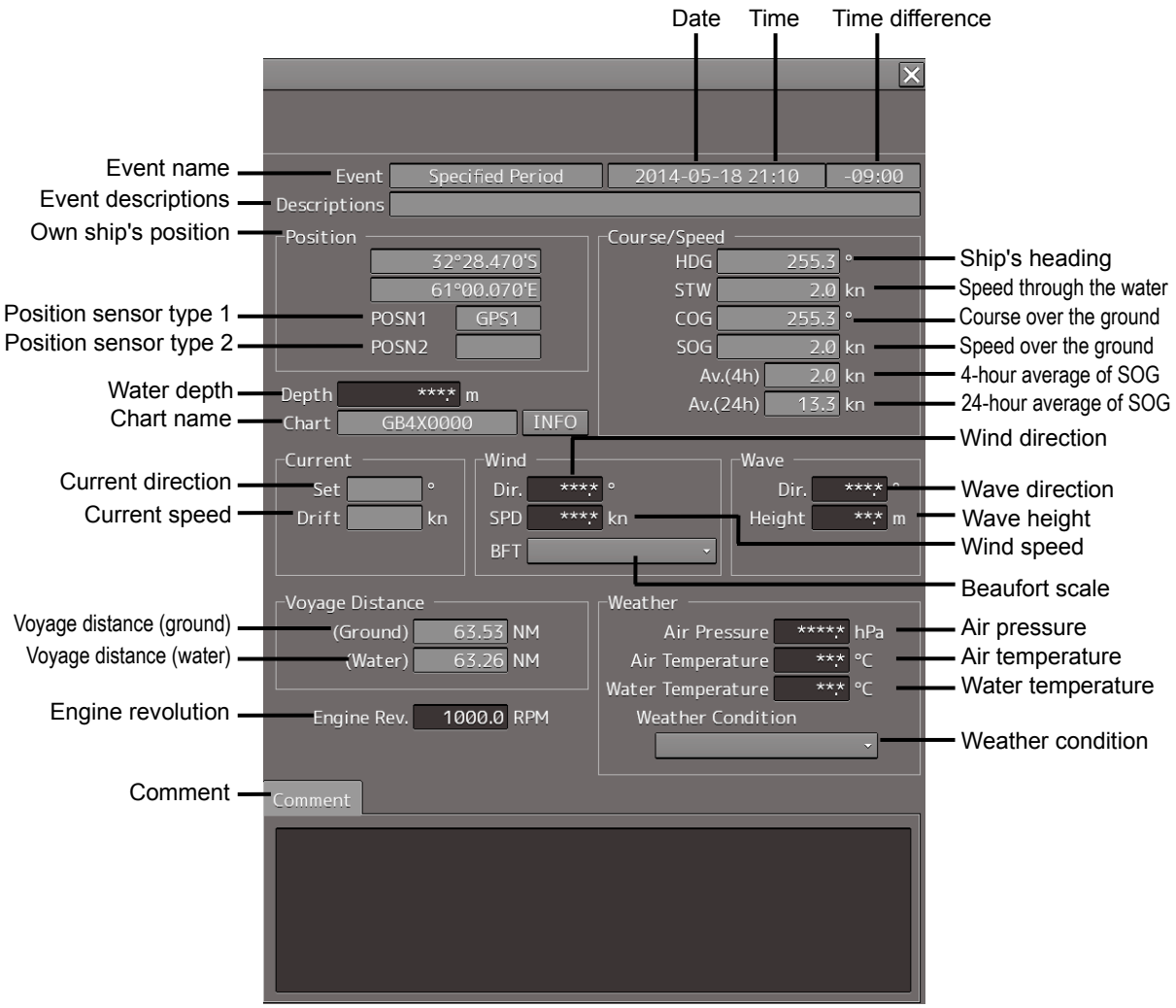
Switching the event groups

Events are classified into the following three event groups. When any of these tabs is clicked, the associated evens are displayed.

- [User Task Log] tab: Displays the events relating to user operations.
- [Navigation Alert Log] tab: Displays the events relating to navigation alerts.
- [System Alert Log] tab: Displays the events relating to system alerts.

15.1.1 Event detail information

Navigation record data is displayed as event detail information.



Detail information that can be edited

The information below can be edited during browsing.

[Depth] (Water depth):	Enter a value within the range from 0 to 999.9 m.
[Engine Rev.] (Engine revolution):	Enter a value within the range from -9999.9 to 9999.9 RPM.
[Wind Dir.] (Wind direction):	Enter a value within the range from 0 to 359.9°.
[Wind SPD] (Wind speed):	Enter a value within the range from 0 to 200.0 kn.
[Wave Dir.] (Wave direction):	Enter a value within the range from 0 to 359.9°.
[Wave Height] (Wave height):	Enter a value within the range from 0 to 50.0 m.
[Air Press.] (Air pressure):	Enter a value within the range from 0 to 2000.0 hPa.
[Air Temp.] (Air temperature):	Enter a value within the range from -50.0 to 99.9°C.
[Water Temp.] (Water temperature):	Enter a value within the range from -10.0 to 50.0°C.

The information below can be input manually. The setting can be selected from the list.

[Beaufort scale]

0: Calm
1: Light air
2: Light breeze
3: Gentle breeze
4: Moderate breeze
5: Fresh breeze
6: Strong breeze
7: Near gale
8: Gale
9: Strong gale
10: Storm
11: Violent storm
12: Hurricane

[Weather condition]

b: Blue sky
bc: Fine but cloudy
c: Cloudy
o: Overcast
r: Rainy
q: Squalls
s: Snow
f: Foggy

A comment can be input in the [Comment] box by using up to 1000 characters.

15.2 Editing a Logbook

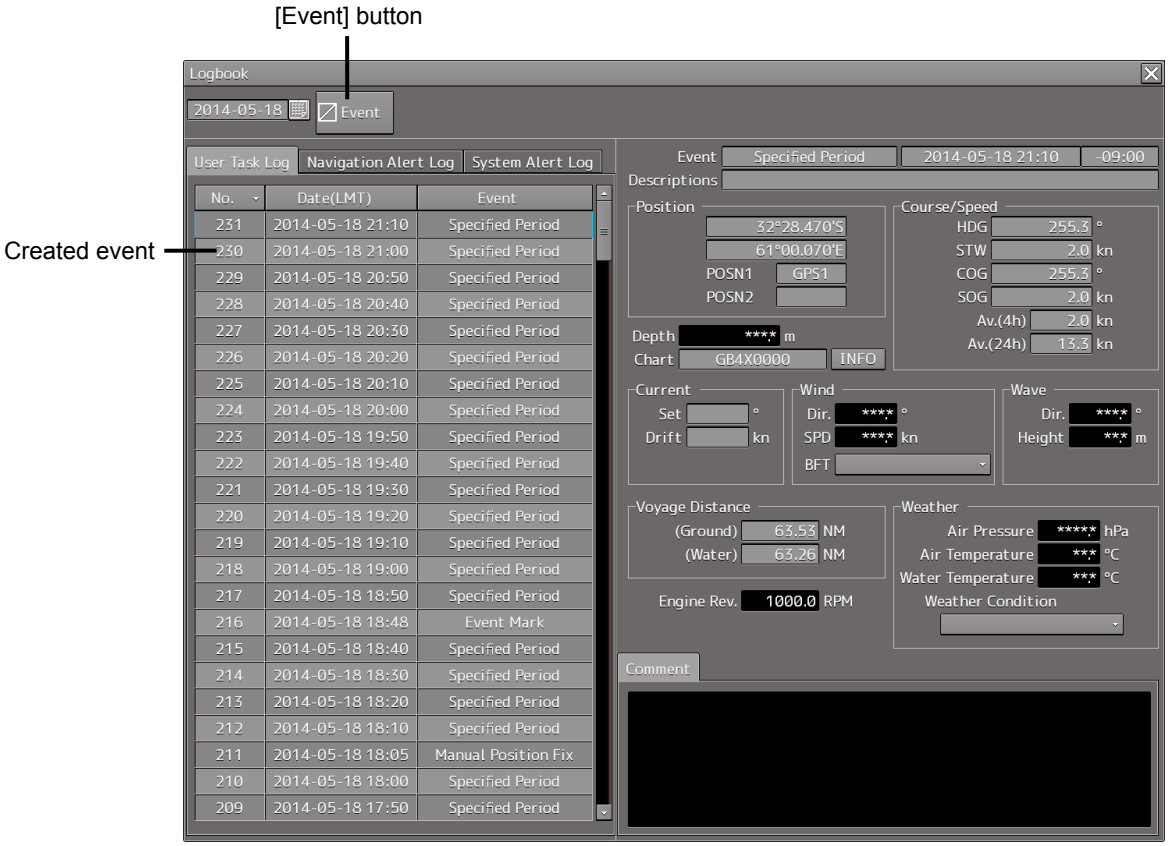
15.2.1 Adding an event

1 Click on the [Event] button.

An event mark is plotted at the own ship's position. An event called "Event Mark" is created with the current time and is registered in the top line of the event list.

The navigation data that has been acquired automatically is displayed as event detail information.

> **Memo**
> The data that is not automatically acquired is displayed as blank space.



Deleting an event mark

For deletion of event marks, refer to "8.12 Marking the Position of Own Ship with an Event Mark".

15.2.2 Editing event detail information

Use the procedure that is shown below to edit the event detail information that can be edited.
For the detail information that can be edited, refer to "Detail information that can be edited" in "15.1.1 Event detail information".

1 Click on the box of the data that can be edited.

2 Edit the information by using the software keyboard.

3 Click on the [Enter] key.

The editing is determined and the data is stored.

15.3 Outputting Event Data

By selecting an event, the detail information can be output as a file.

15.3.1 Outputting a logbook as a file

A logbook data can be output with "File Manager".

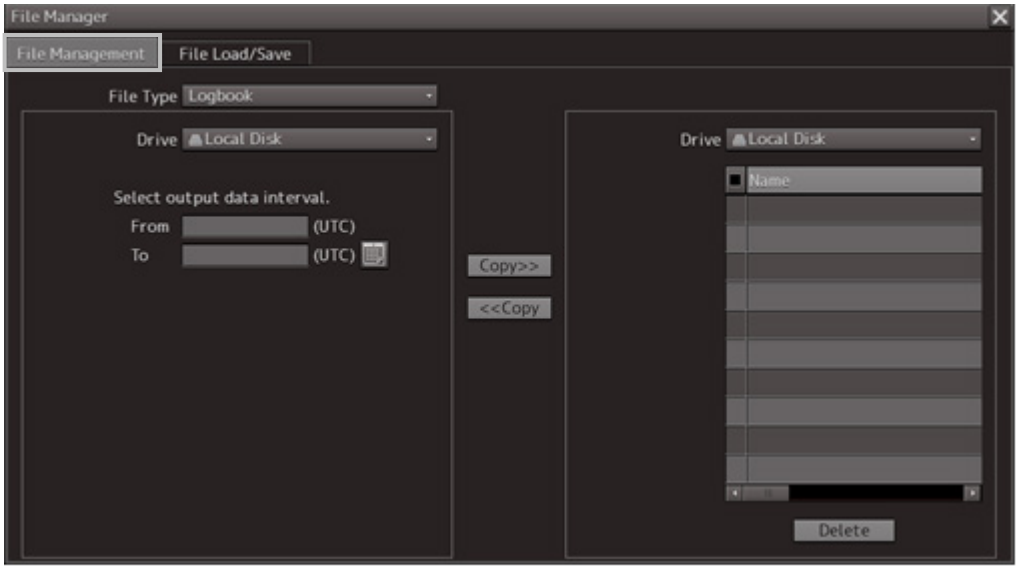
1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

2 Click on the [Tools] - [File Manager] on the menu.

The "File Manager" dialog box appears.

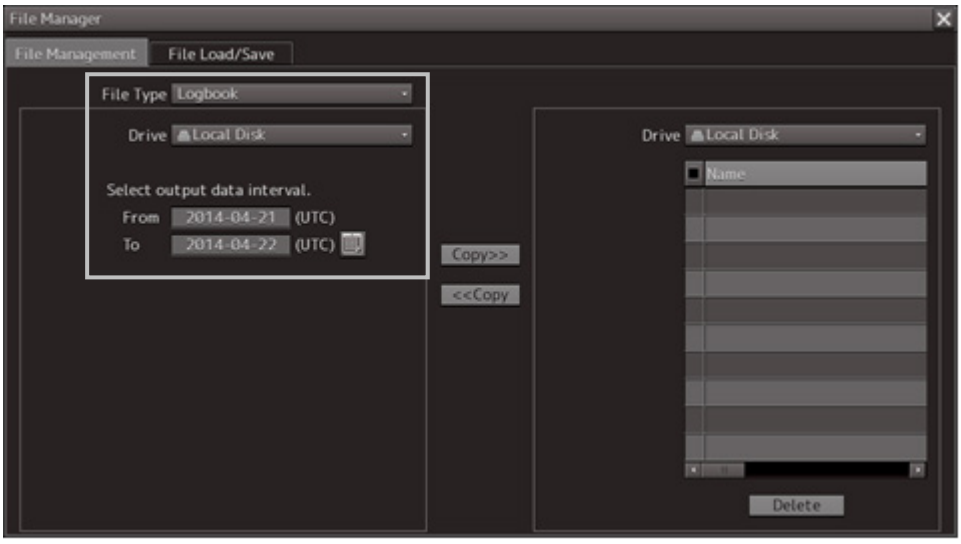
3 Click on the [File Management] tab.



4 Select the [Logbook] from the [File Type] combo box.

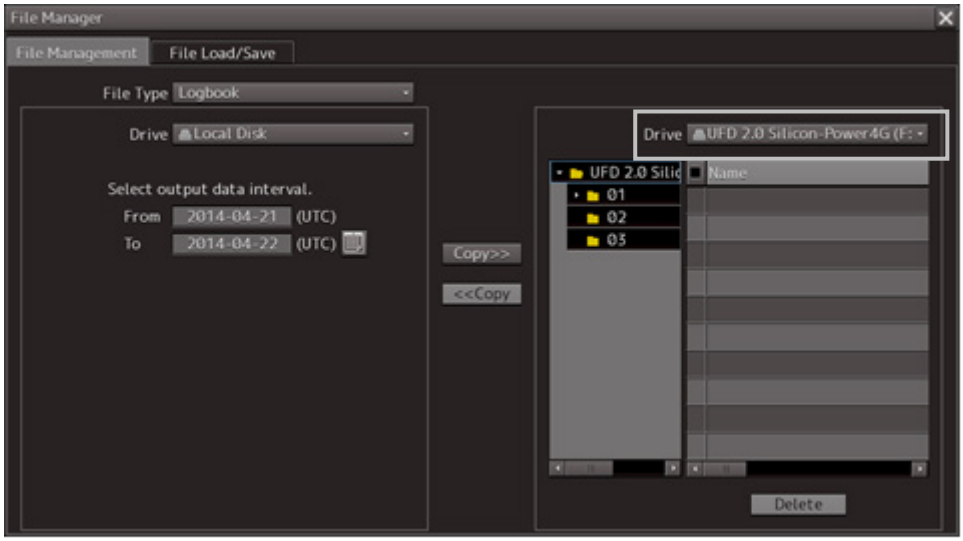
5 Select the drive containing logbook data from the [Drive] combo box.

6 **Input the period of the logbook data to be output in [From] and [To] of [Select output data interval.].**

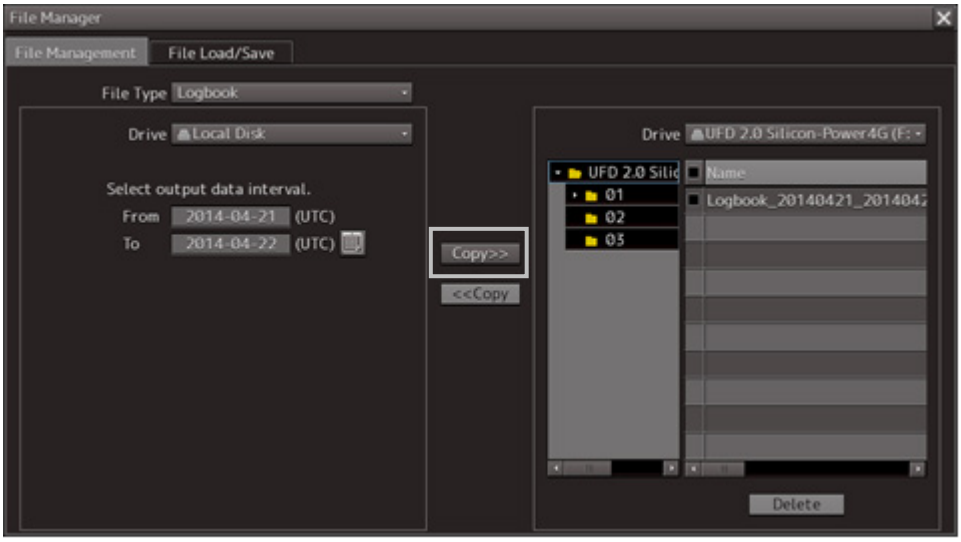


The [Copy] button is enabled.

7 **Select the storage destination of the logbook data from the [Drive] combo box of the output destination.**



8 **Click on the [Copy] button.**



Section 16 Setting up Screen View

Screen display detail is set through the [View] menu.
The display procedure of the View setup dialog box is as follows.

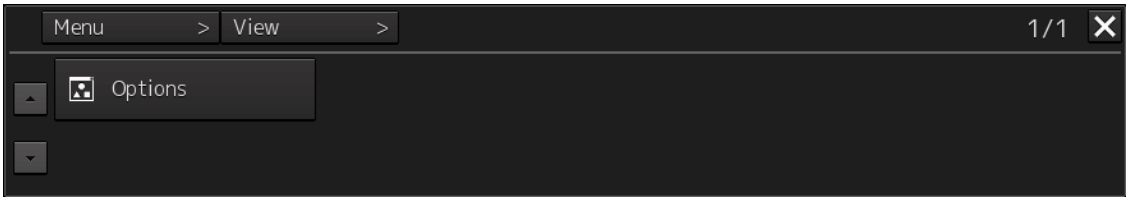
1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

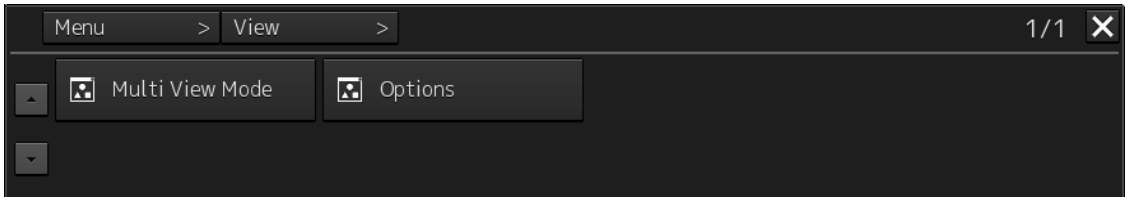
2 Click on the [View] button on the menu.

The submenu is displayed.
The submenu contents vary between RADAR and ECDIS.

[RADAR]

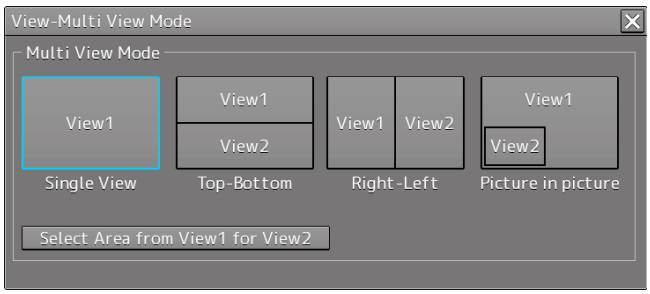
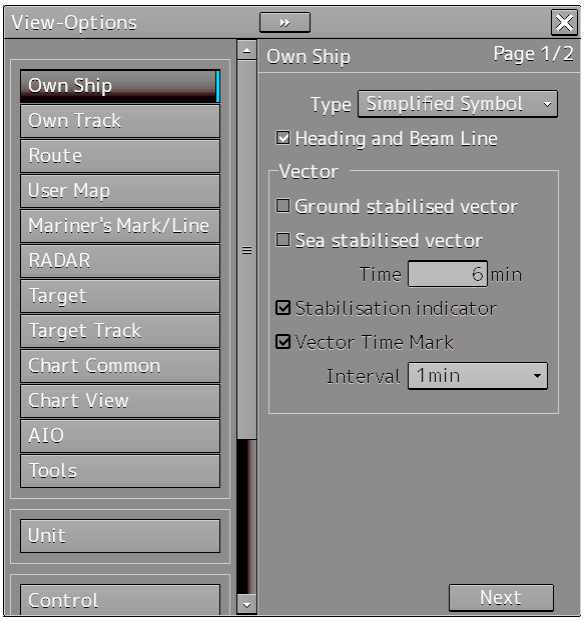


[ECDIS]



16

When submenu buttons are clicked, their respective setup dialog boxes are displayed.

Button	Dialog box	Reference
Multi View Mode		16.1 Setting Chart Display Mode (Multi View Mode) (ECDIS only)
Options	 *The setting items may vary between RADAR and ECDIS.	16.2 Setting Screen Display Options

16.1 Setting Chart Display Mode (Multi View Mode) (ECDIS only)

In the "View-Multi View Mode" dialog box, chart display modes can be set.

16.1.1 Setting Multi-Screen

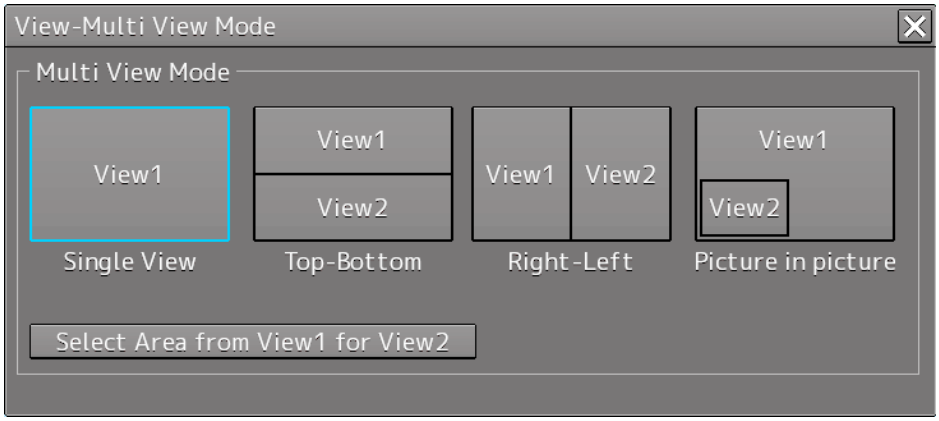
For details about how to use the multi-screen, refer to "8.10.1 Display of multi view."

1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

2 Click on [View] - [Multi View Mode] on the menu.

The "View-Multi View Mode" dialog box appears.



You can select a chart display mode from the following four modes.

- **[Single View] Mode:** Displays a chart in full screen.
- **[Top-Bottom] Mode:** Divides the screen into top and bottom sections; the same or different charts can be displayed in two views of View 1 and View 2.
- **[Right-Left] Mode:** Divides the screen into left and right sections; the same or different charts can be displayed in two views of View 1 and View 2.
- **[Picture in Picture] Mode:** Displays the chart in View 2 on top of the chart in View 1 as a child dialog box.

1 Click on the icon of the chart display mode to be used.

A selection frame appears on the icon of the selected mode.

2 Click on the [Select Area from View1 for View2] button.

The button is highlighted.

3 On the chart in View 1, select an area you want to display in View 2.

The selected area is displayed in View 2.

16.2 Setting Screen Display Options

In the "View-Options" dialog box, the screen display options can be set.

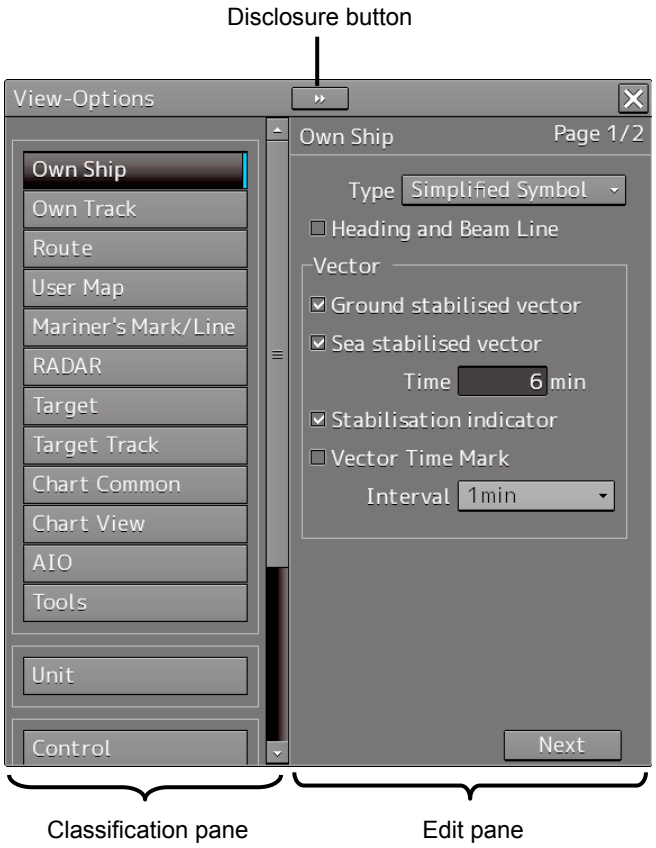
Take the following steps to display the "View-Options" dialog box.

1 Click on the [Menu] button on the left toolbar.

The menu is displayed.

2 Click on the [View] - [Options] on the menu.

The "View-Options" dialog box appears.



The "View-Options" dialog box consists of the classification pane and edit pane.

Click on the Disclosure button to hide the classification pane.

1 Click on the screen view of which you want to set up the options in the classification pane.

The Option setup dialog box for the screen view you have selected appears in the edit pane.

2 Set up in the edit pane.

Display targets for classification pane

The classification pane displayed in RADAR and ECDIS and reference of the explanation are as follows.

Classification pane	Display target		Reference
	RADAR	ECDIS	
Own Ship	○	○	16.2.1 Setting up the display of Own Ship symbol
Own Track	-	○	16.2.2 Setting up the display of ECDIS own ship's track
Route	○	○	16.2.3 Setting up the display of Route Monitoring
User Map	○	○	16.2.4 Setting up the display of User Map
Mariner's Mark/Line	-	○	16.2.5 Setting up the display of Mariner's Mark/Line
RADAR	○	○	16.2.6 Setting up Radar Overlay and Transparency of Echo/Trails
Target	○	○	16.2.7 Setting up the display of TT/AIS Target
Target Track	○	○	16.2.8 Setting up the display of Other Ship's Track
Chart Common	○	○	16.2.9 Setting up the display of Chart Common
Chart View	○	-	16.2.10 Setting up the display of RADAR Chart
Chart View	-	○	16.2.11 Setting up the display of ECDIS Chart
AIO	○	○	16.2.12 Setting up AIO display
Tool	○	○	16.2.13 Setting up the display of range/bearing measurement function
Unit	○	○	16.2.14 Setting up the display of Unit of Setting Value
Control	○	○	16.2.15 Setting up display of Own Ship Track Control, display format of Own Ship/Cursor Position and display of Sub-Information dialog
Depth Graph	○	○	16.2.16 Setting up the Water Depth display
Rudder Graph	○	○	16.2.17 Setting up the Rudder graph
Gyro/Rudder Graph	○	○	16.2.18 Setting up the Gyro/Rudder graph
Engine Graph	○	○	16.2.19 Setting up the Engine Graph
ROT	○	○	16.2.20 Setting up the graph range of the ROT slide bar

Screen display set in the "View-Options" dialog box

In the "View-Options" dialog box, the following screen display is set.

Target category	Item
Graphical Objects	Own Ship
	Own Track
	Route
	User Map
	Mariner’s Mark/Line
	RADAR
	Target
	Target Track
	GPS Buoy
	Chart Common
	Chart View
	AIO
	Tools
Unit	Unit
Control	Control

16.2.1 Setting up the display of Own Ship symbol

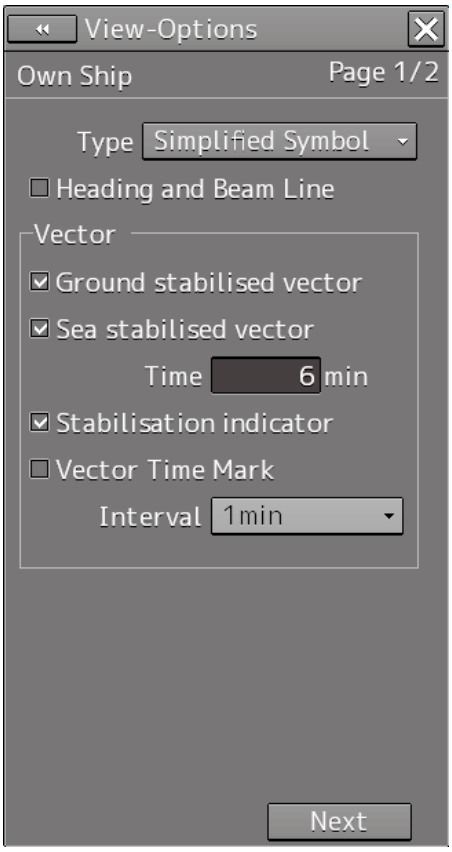
When you select [Own Ship] in the classification pane, the "Own Ship" dialog is displayed in the edit pane.

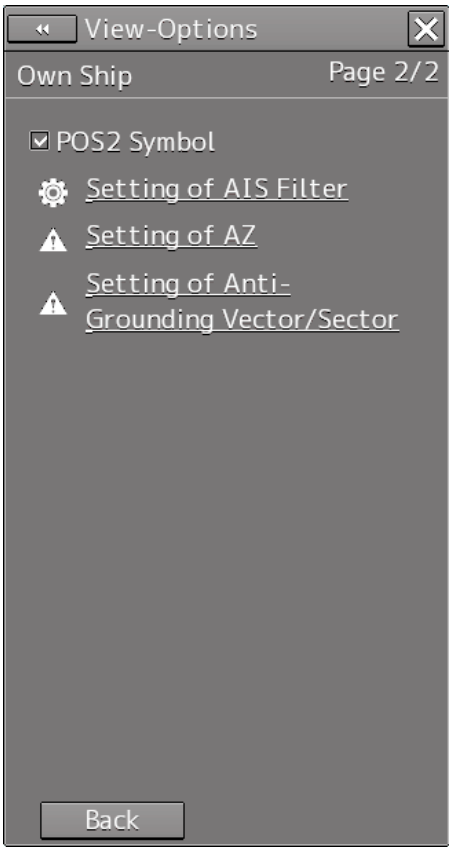
Configure the setting for own ship symbols.

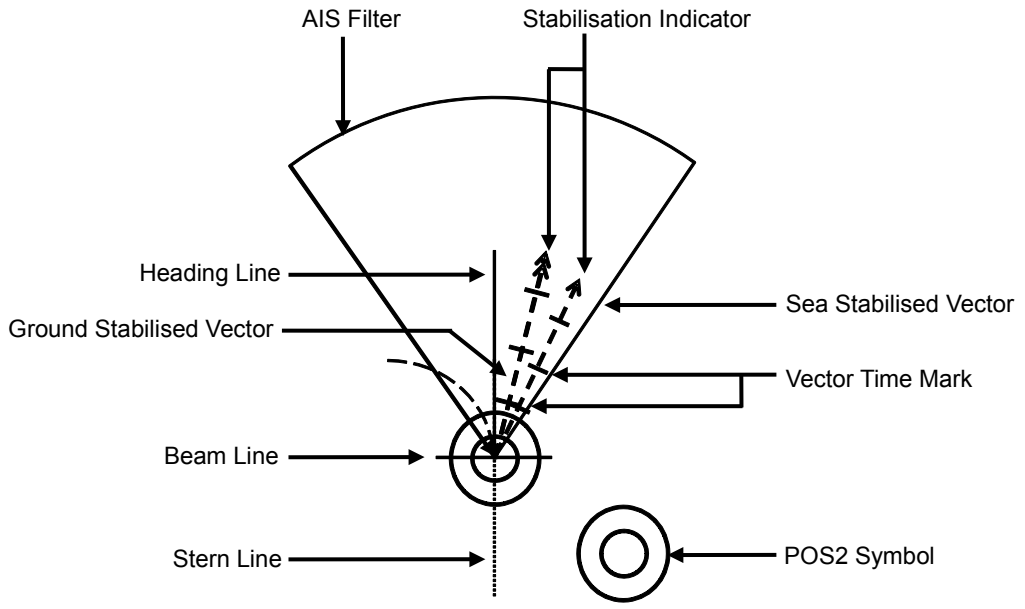
The edit pane is divided into two dialogs.

To advance to the next dialog: Click on the [Next] button.

To return to the previous dialog: Click on the [Back] button.

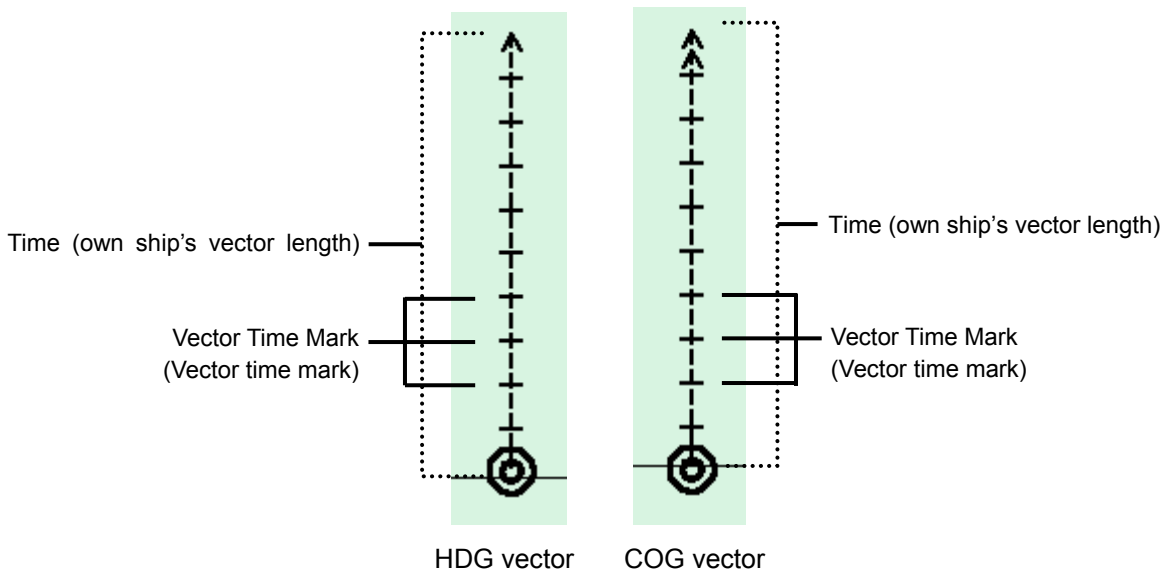






Vector display at primary position

In the own ship symbol, COG (Course Over the Ground) vector, HDG (Heading) vector, and heading line can be displayed. The COG or HDG vector can also be displayed by the length proportionate to the current ship speed in minute by the setting. For example, when the vector length is set to 10 minutes, the vector tip is at the predicted position after 10 minutes if the ship is assumed to navigate at the current speed.



- To display the COG (Course Over the Ground) vector, check [Ground Stabilised Vector] in [Vector].
- To display the HDG (Heading) vector, check [Sea Stabilised Vector] in [Vector].
- To display the heading line, check [Heading and Beam Line].

For details on the setting of type and length of the vector to be displayed, refer to the following table.

The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Type	Select an own ship symbol from the combo box (symbols of other ships are also linked). : Auto : Simplified Symbol : Outline : Minimized Symbol *In Auto, the display is switched between Outline and Minimized Symbol depending on the size of the symbol. When the beam side of the Outline symbol is 6mm or more, the symbol is displayed in Outline and when the symbol is less than 6mm, it is displayed in Minimized Symbol. The beam side is 6mm or more	For RADAR: AUTO Outline Minimized Symbol [default] For ECDIS: Simplified Symbol [default] Outline
Heading and Beam Line (Heading line/beam line display)	Selecting this enables to display heading lines and beam lines. **Note** This item can only be set on the ECDIS screen.	To enable: Select. To disable: Clear.
Stern Line	Selecting this enables to display a stern line. **Note** This item can only set in the RADAR screen.	To enable: Select. To disable: Clear.
Ground Stabilised Vector	Selecting this enables to display a ground stabilised vector.	To enable: Select. To disable: Clear.
Sea Stabilised Vector	Selecting this enables to display a sea stabilised vector.	To enable: Select. To disable: Clear.
Time (Length of own ship's vector)	Enter the own ship's vector length in the box.	0 to 120
Stabilization Indicator	Selecting this enables to display the stabilization indicator. **Note** When both the Ground Stabilised Vector and the Sea Stabilised Vector are effective, this automatically takes effect.	To enable: Select. To disable: Clear.
Vector Time Mark	Selecting this enables the interval of the vector time mark.	To enable: Select. To disable: Clear.

Setting Item	Description of Setting	Setting Value
Interval (vector time mark interval)	Select a vector time mark interval from the pull-down menu when Vector Time Mark is valid.	1 to 6 min
POS2 Symbol	Selecting this enables to display the POS2 symbol. **Note** This item may not be displayed depending on the equipment setting. The setting is not possible on the RADAR screen.	To enable: Select. To disable: Clear.

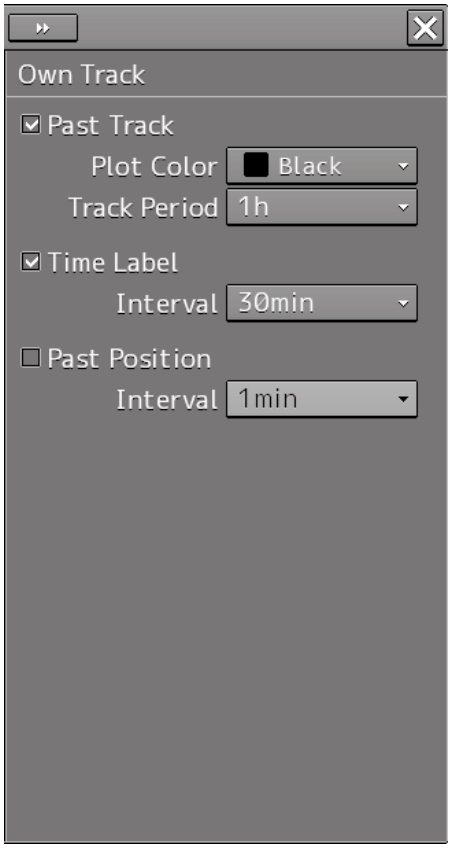
Shortcuts

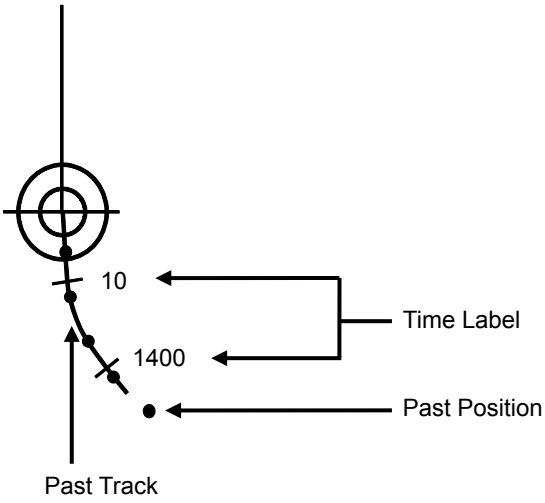
Click on any of available shortcuts to display the related dialog box.

Shortcut	Setup Dialog
Setting of AIS Filter	"AIS Filter Setting" dialog box
Settings of AZ	"AZ Setting" dialog box
Settings of Anti-Grounding Vector/Sector	"Anti-Grounding Vector/Sector Setting" dialog box

16.2.2 Setting up the display of ECDIS own ship's track

When you select [Own Track] in the classification pane, the "Own Track" dialog is displayed in the edit pane.
Configure the settings for own tracks.
Information of own tracks is recorded in the SSD at every second. Information of a maximum of 24 hours is displayed on a chart as own tracks.



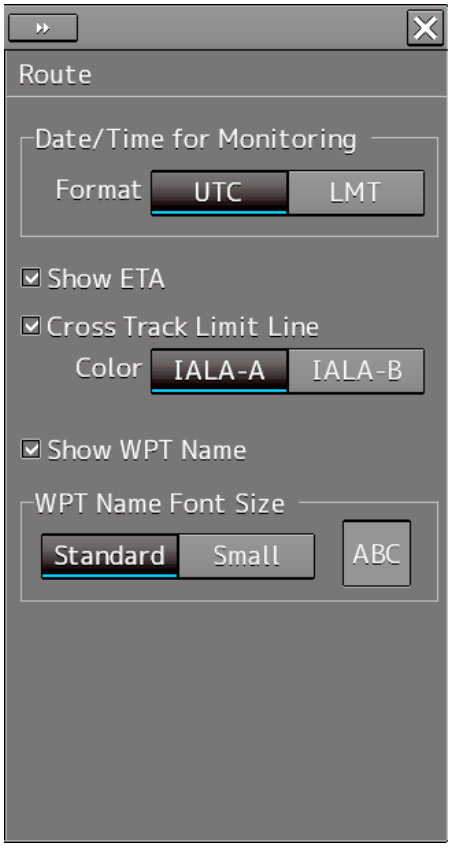


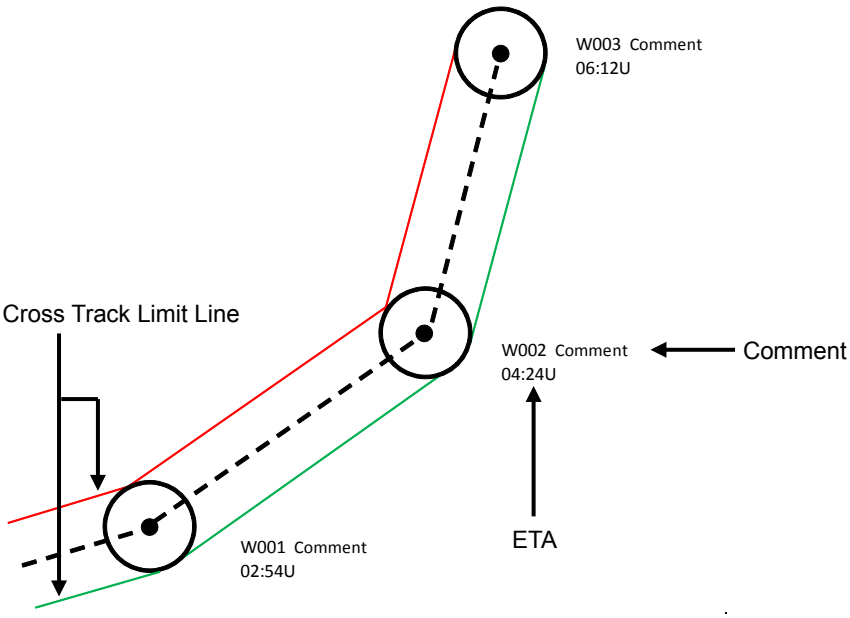
The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Past Track	Selecting this enables to display the past track.	To enable: Select. To disable: Clear.
Plot Color (plot color of track)	When Past Track is enabled, select a plot color of the track from the list (preview not supported).	White (Black), Gray, Pink, Magenta, Blue, Cyan, Green, Yellow, Orange, Dark Red **Note** When the background of the screen is being set to Day1 or Day2, Black can be selected instead of White.
Track Period	When Past Track is enabled, select a track period from the list (preview not supported).	1, 2, 4, 6, 8, 12, 16, 24 h
Time Label	Selecting this enables to display the time label interval.	To enable: Select. To disable: Clear.
Interval (time label interval)	When Time Label is enabled, select a time label interval from the list (preview not supported).	1, 3, 5, 10, 30, 60 min
Past Position	Selecting this enables to display the past position.	To enable: Select. To disable: Clear.
Interval (past position interval)	When Past Position is enabled, select an interval of track points from the list (preview not supported).	0.5 min, 1 min, 2 min, 4 min, 0.1 NM, 0.2 NM, 0.5 NM, 1 NM

16.2.3 Setting up the display of Route Monitoring

When you select [Route] in the classification pane, the "Route" dialog is displayed in the edit pane. Configure the settings for route monitoring.





The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Show ETA	Selecting this enables to display the ETA (estimated time of arrival at WPT) while route monitoring.	To enable: Select. To disable: Clear.
Format	When ETA is enabled, select a display format of the ETA while route monitoring by clicking on the corresponding button. 04:24U : UTC 13:24L : LMT	UTC/LMT
Cross Track Limit Line	Selecting this enables to display cross track limit lines.	To enable: Select. To disable: Clear.
Color	When Cross Track Limit Line is enabled, select a display color of cross track limit lines by clicking on the corresponding button. IALA-A: Starboard - green, Port - red IALA-B: Starboard - red, Port - green	IALA-A, IALA-B
Show WPT Name (Comment display)	Selecting this enables to display a comment on the vicinity of the target.	To enable: Select. To disable: Clear.
WPT Name Font Size (Comment font size)	When Show WPT Name is enabled, select a font size of comments by clicking on the corresponding button (preview not supported).	Standard, Small

16.2.4 Setting up the display of User Map

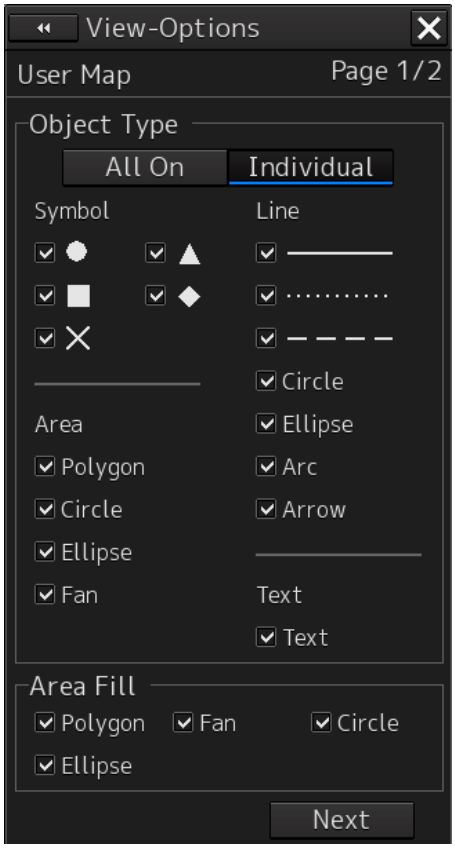
When you select [User Map] in the classification pane, the "User Map" dialog is displayed in the edit pane.

Set up the display of User Map.

The edit pane is divided into two dialogs.

To advance to the next dialog: Click on the [Next] button.

To return to the previous dialog: Click on the [Back] button.



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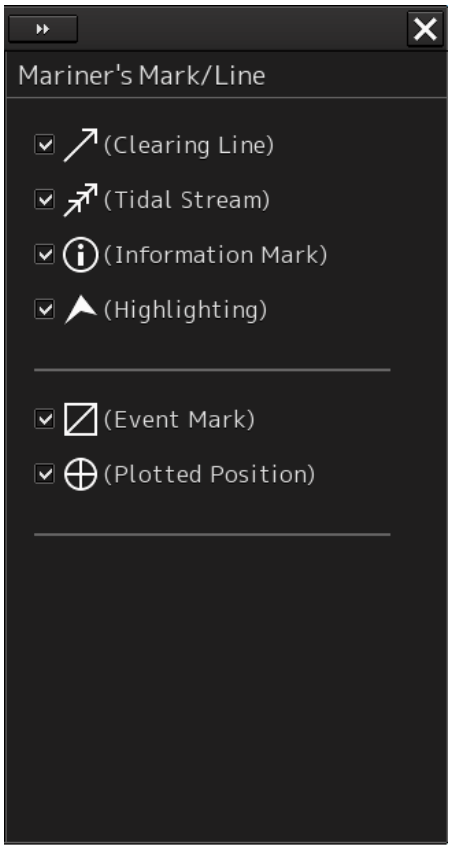
The descriptions of settings are shown in the table below.

Area	Description of Setting	Setting Value
Object Type (Object display condition)	Click on the button to specify whether to display or hide the object mark, and select the mark to be displayed. All On: Displays all marks. Individual: Displays selected marks.	All On/Individual **Types of selectable marks** Symbol: ○, △, □, ◇, × Area: Polygon, Circle, Ellipse, Fan Line: Solid Line, Dotted Line, Dashed Line, Circle, Ellipse, Arc, Arrow Text: Text
Area Fill (Fill)	Set the fill color display to On/Off. Check the On mark.	Off/On
Symbol/Simple Line Color (Symbol and Simple Line Color)	Set to On/Off the display of the color that targets the symbol and simple line. Check the color that is to be set to On.	Off/On
Mark Size (Mark size)	Set the mark display size.	1 (Minimum) /2/3/4/5 (Maximum)
Comment Font Size (Comment font size)	Set the font size of the comment.	Standard/Small

16.2.5 Setting up the display of Mariner's Mark/Line

When you select [Mariner’s Mark/Line] in the classification pane, the "Mariner’s Mark/Line" dialog is displayed in the edit pane.
Select mariner’s marks and lines you want to display on the user map by selecting the corresponding check boxes.
You can select the following marks and lines.

- Clearing Line
- Tidal Stream
- Information Mark
- Highlighting
- Event Mark
- Plotted Position



16.2.6 Setting up Radar Overlay and Transparency of Echo/Trails

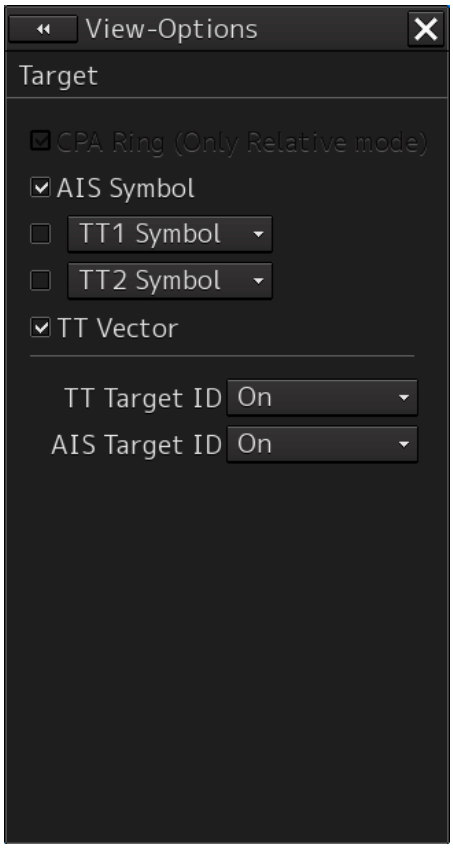
When you select [RADAR] in the classification pane, the "RADAR" dialog is displayed in the edit pane.

The descriptions of settings are shown in the table below.

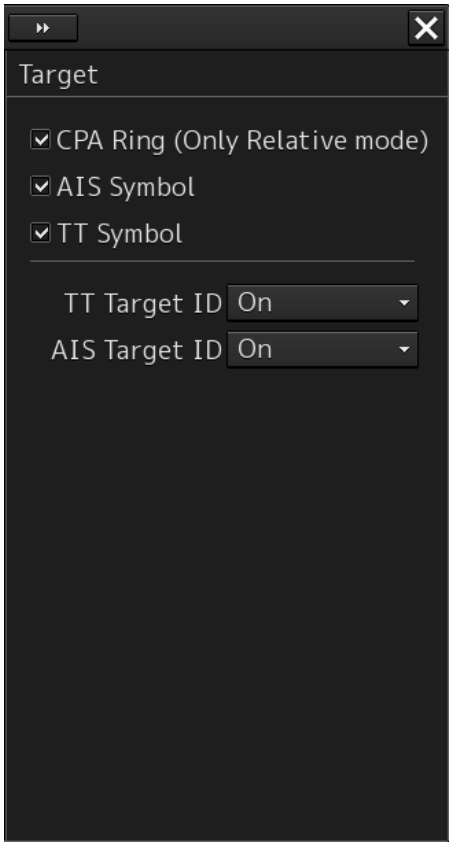
Setting Item	Description of Setting	Setting Value
RADAR Overlay	The radar overlay display turns ON by selecting the [RADAR Overlay] Select the required radar system from the pull-down menu. **Note** - When this is turned OFF, even the alerts related to the radar will not be displayed. - This item is displayed on the ECDIS screen if RADAR interface is available.	**Without interswitch setting** RADAR1/RADAR2 **With interswitch setting** RADAR1 to 8
Transparency of Echo/Trails	Click on the control on the slider and set up the transparency of echoes/trails.	0 to 15 0 = Opaque (Nontransparent) 15 = Transparent (Completely transparent)

16.2.7 Setting up the display of TT/AIS Target

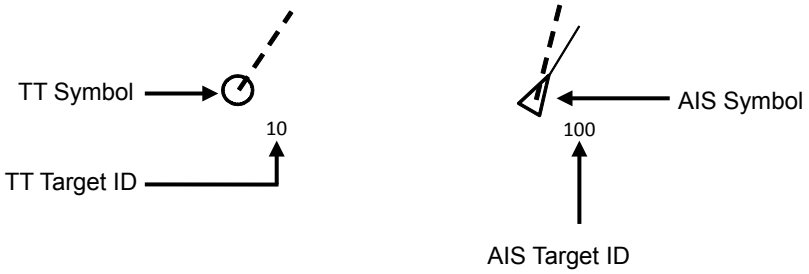
When you select [Target] in the classification pane, the "Target" dialog is displayed in the edit pane. Configure the settings for TT/AIS targets.

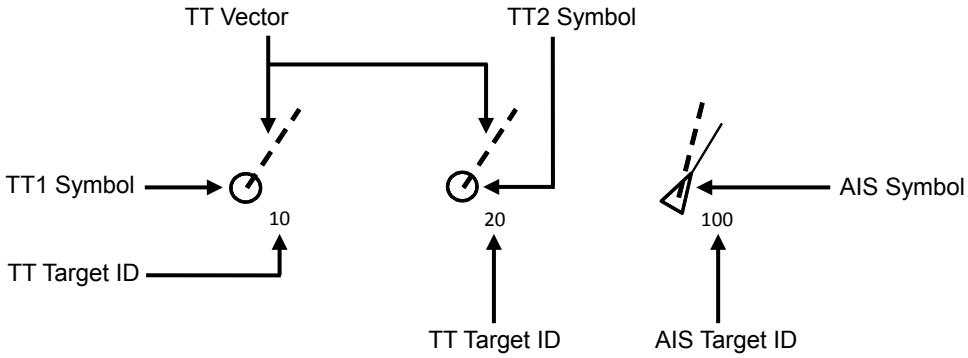


ECDIS screen



RADAR screen





The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
AIS Symbol	Selecting this enables to display the AIS symbol.	To enable: Select. To disable: Clear.
TT Symbol	Select this item to enable the TT symbol. For the ECDIS screen, select the TT Symbol to be used from the combo box. TT1 Symbol TT2 Symbol TT1 Symbol indicates the TT target information that is received from RADAR1 and the TT Target ID is displayed as “T1-***” (*** indicates the target number or ship name). TT2 Symbol indicates the TT target information that is received from RADAR2 and the TT Target ID is displayed as “T2-***” (*** indicates the target number or ship name).	To enable: Select. To disable: Clear.
TT Vector	Selecting this enables to display the TT vector. **Note** This item takes effect only on the ECDIS screen.	To enable: Select. To disable: Clear.
TT Target ID	Select a display mode of the TT target ID from the combo box. Off: Hide On: Show TT Track: Displays only the target that shows other ship's track. Display Ship's Name: When the ship’s name has been input in the "TT Target INFO" (property of tracked target) dialog, that ship name is displayed. If the ship’s name has not been input, the identification number is displayed. Display : Off 10 : On 10 : TT Track Name : Ship’s Name	Off, On, TT Track

Setting Item	Description of Setting	Setting Value
AIS Target ID	Select a display mode of the AIS target ID from the combo box. Off: Hide On: Show AIS Track: Displays only the target that shows other ship's track (target track). Ship's Name: When a ship‘s name is input in the “AIS Target INFO” (property of AIS target) dialog, the ship’s name is displayed. When no ship’s name is input, the ID is displayed. Display : Off 10 : On 10 : TT Track Name : Ship’s Name	Off, On, AIS Track, Ship's Name

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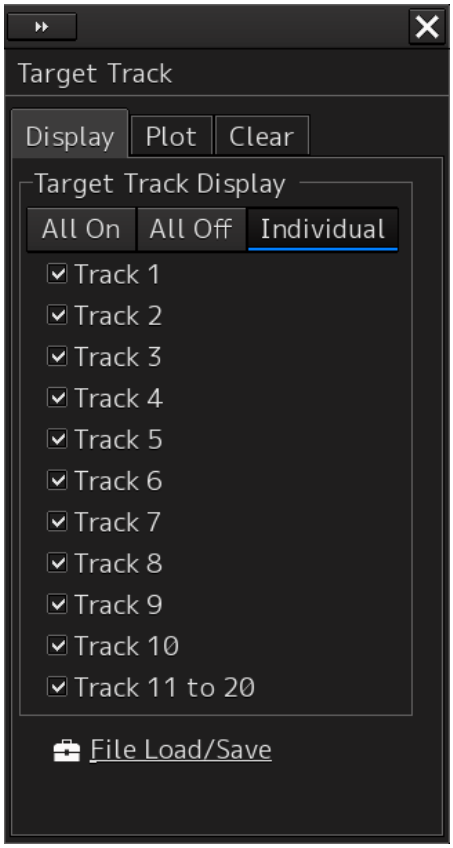
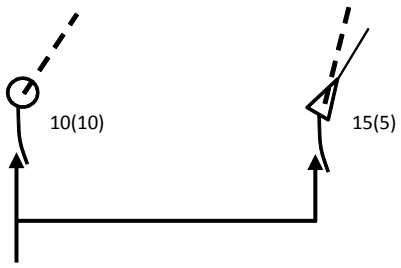
16.2.8 Setting up the display of Other Ship's Track

When you select [Target Track] in the classification pane, the "Target Track" dialog is displayed in the edit pane.
The "Target Track" dialog consists of the [Display], [Plot] and [Clear] tabs.

[Display] tab

On the [Display] tab, set up the display of other ship's tracks.





Target Track

The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Target Track Display (display of other ship's tracks)	Select to show/hide target tracks by clicking on the corresponding buttons and then specify the target tracks you want to display by checking them. All On: Shows all of target tracks. All Off: Hides all of target tracks. Individual: Shows selected target tracks.	All On, All Off **When Individual is selected:** Select from Tracks 1 to 10 and from Tracks 11 to 20.

Shortcut

Click on any of available shortcuts to display the related dialog box.

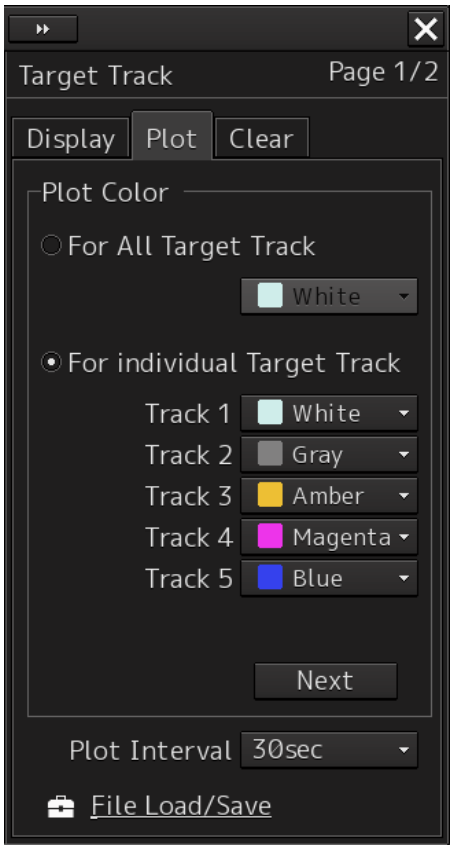
Shortcut	Setup Dialog Box
File Load/Save	"File Load/Save" dialog box in File Manager

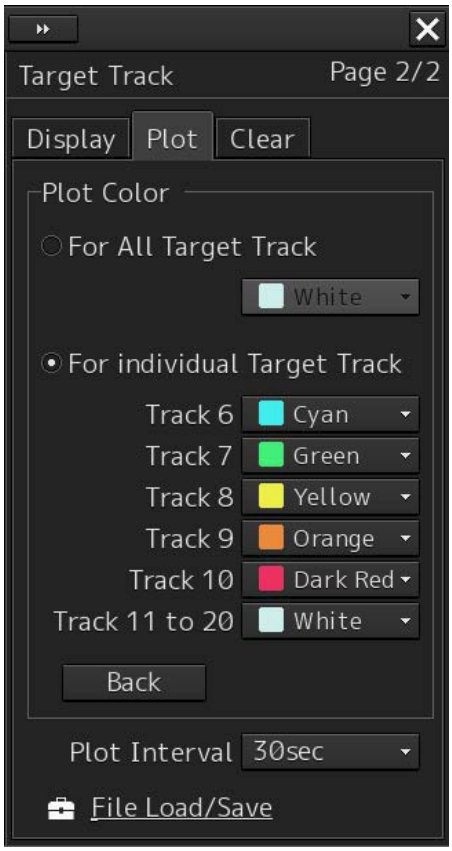
[Plot] tab

The edit pane of the [Plot] tab is divided into two dialogs.

To advance to the next dialog: Click on the [Next] button.

To return to the previous dialog: Click on the [Back] button.





The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
For All Target Track	Click on the check box and select a plot color of target tracks from the list.	White (Black), Gray, Amber, Magenta, Blue, Cyan, Green, Yellow, Orange and Dark Red
For Individual Target Track	Click on the check box and select plot colors of individual target tracks (Tracks 1 to 10 and Tracks 11 to 20) from the list.	White (Black), Gray, Amber, Magenta, Blue, Cyan, Green, Yellow, Orange and Dark Red
Plot Interval	Select a plot interval of target tracks from the combo box.	Off, 3s, 5s, 10s, 30s, 1 min, 3 min, 5 min, 10 min, 30 min, 60 min, 1 NM, 3 NM, 5 NM, 10 NM, 0.1 NM, 0.2 NM, 0.3 NM, 0.5 NM

* White/Black interchanges under the following conditions.

RADAR screen: Always White

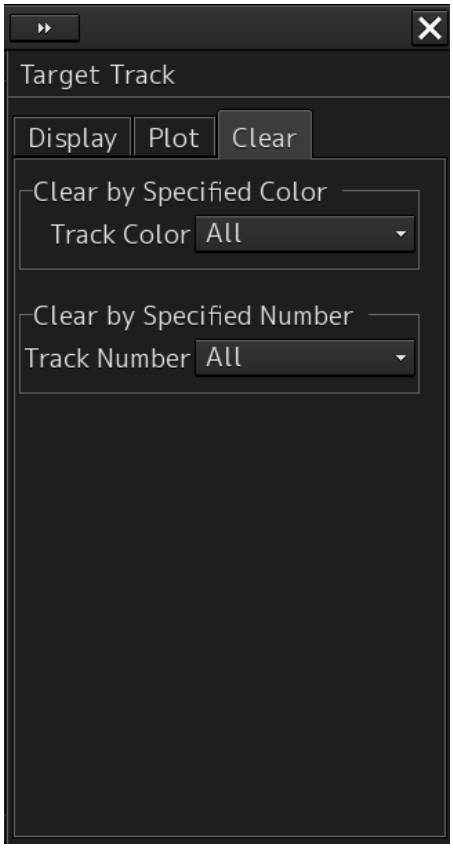
ECDIS screen: Black at Day1/Day2 (or Day), white at Day3/Dusk/Night

Shortcut

Click on any of available shortcuts to display the related dialog box.

Shortcut	Setup Dialog Box
File Load/Save	"File Load/Save" dialog box in File Manager

[Clear] tab



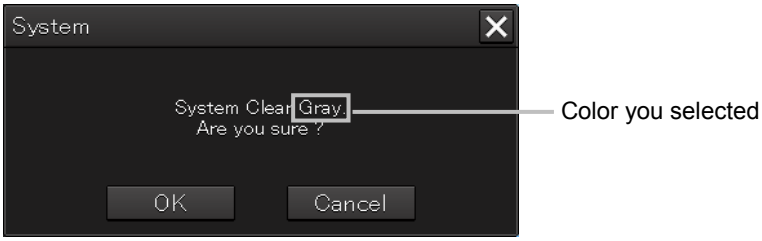
To erase tracks by specifying a color

1 Select the color of other ship's track to be erased from the [Track Color] combo box.

You can select from All, White, Gray, Amber, Magenta, Blue, Cyan, Green, Yellow, Orange and Dark Red.

* White/Black interchanges under the following conditions.
RADAR screen: Always White
ECDIS screen: Black at Day1/Day2 (or Day), white at Day3/Dusk/Night

A message dialog box prompting you to confirm erasing appears.



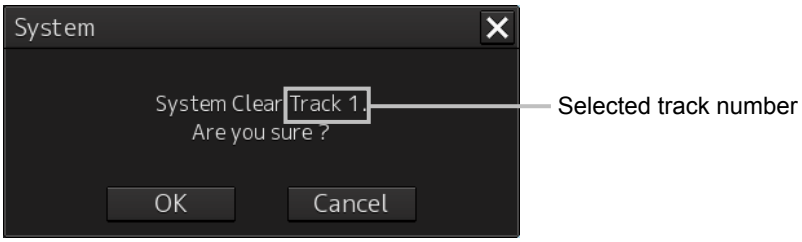
2 To execute erasing, click on the [OK] button. To cancel erasing, click on the [Cancel] button or the [X] button.

Erasing by specifying a track number

1 Select the number of other ship's track to be erased from the [Track Number] combo box.

Options of the track to be erased include All, Track 1, Track 2, Track 3,Track 4, Track 5,Track 6, Track 7, Track 8, Track 9, Track 10, and Track 11 – 20. When a target track is erased by specifying the number, the setting of the target track color is set to Off.

An erase confirmation message dialog is displayed.



2 To execute erase, click the [OK] button. To cancel erase, click the [Cancel] button or the [x] button.

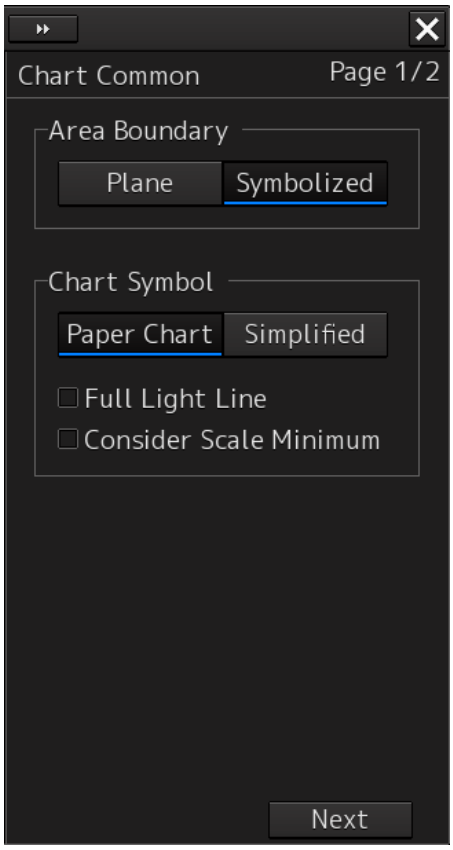
16.2.9 Setting up the display of Chart Common

When you select [Chart Common] in the classification pane, the "Chart Common" dialog is displayed in the edit pane.

The edit pane is divided into two dialogs.

To advance to the next dialog: Click on the [Next] button.

To return to the previous dialog: Click on the [Back] button.



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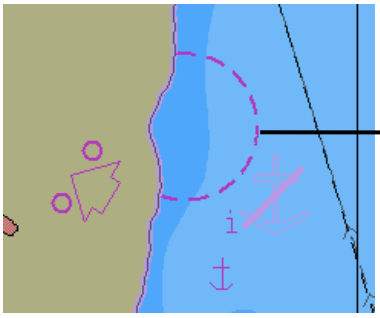
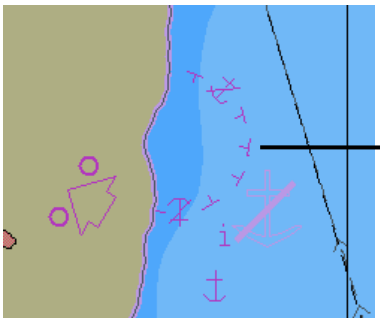
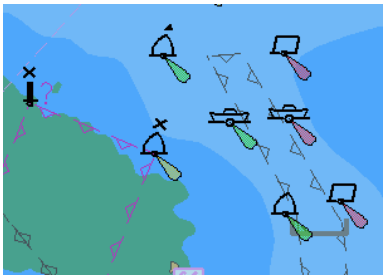
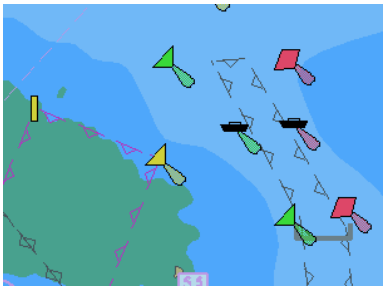
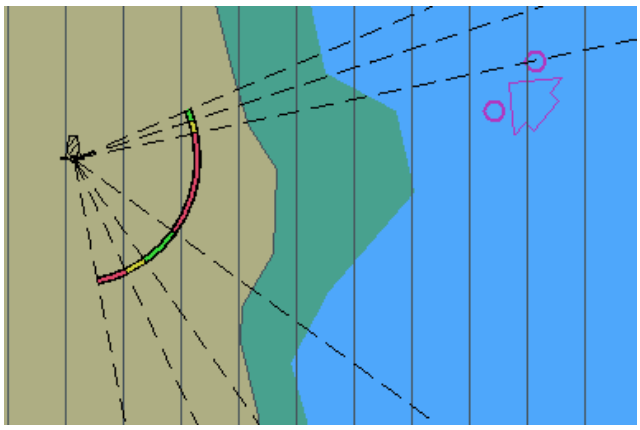
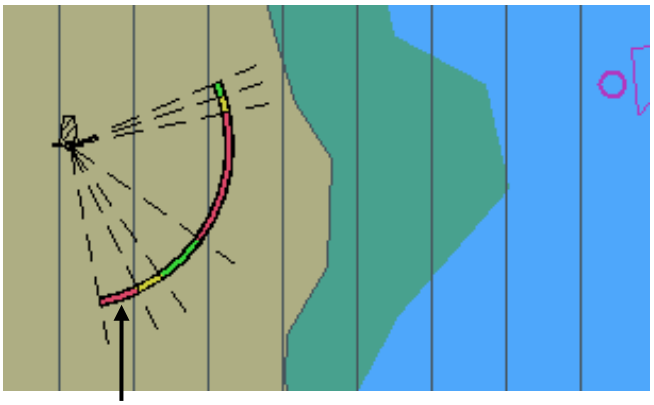
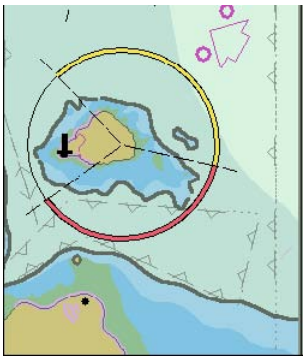
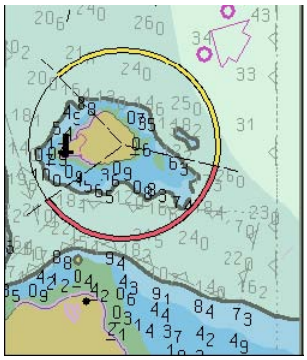
Setting Item	Description of Setting	Setting Value
Area Boundary	Select a display method of area boundary by clicking on the corresponding button. Plane: Displays a plane boundary (an area boundary is indicated by dotted lines).  Symbolized: Displays a symbol boundary (an area boundary is indicated by symbol lines).  	Plane, Symbolized
Chart Symbol	Select a type of chart symbols you want to use on the chart by clicking on the corresponding button. Paper Chart: The same symbols on paper charts are used as symbols for lighthouses, etc.  Simplified: Colored symbols are displayed. 	Paper Chart, Simplified

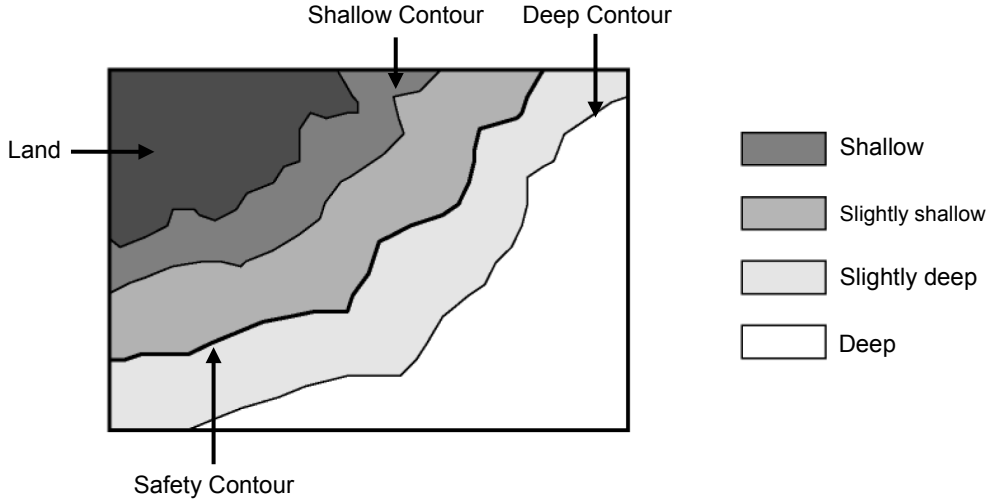
Setting Item	Description of Setting	Setting Value
Full Light Line	When selected, display of maximum length of full light line is enabled.  When [Full Light Line] is enabled  Light range of lighthouse When [Full Light Line] is disabled.	To enable: Select. To disable: Clear.
Consider Scale Minimum	When selected, scale display smaller than the minimum scale setting value is disabled.  When [Consider Scale Minimum]is enabled  When [Consider Scale Minimum] is disabled	To enable: Select. To disable: Clear.
Depth	Refer to "Depth."	
C-MAP Ed.3 Database	Select this to show a chart database chart. *Only the imported chart databases can be selected.	Shown: Selected Hidden: Clear

Depth

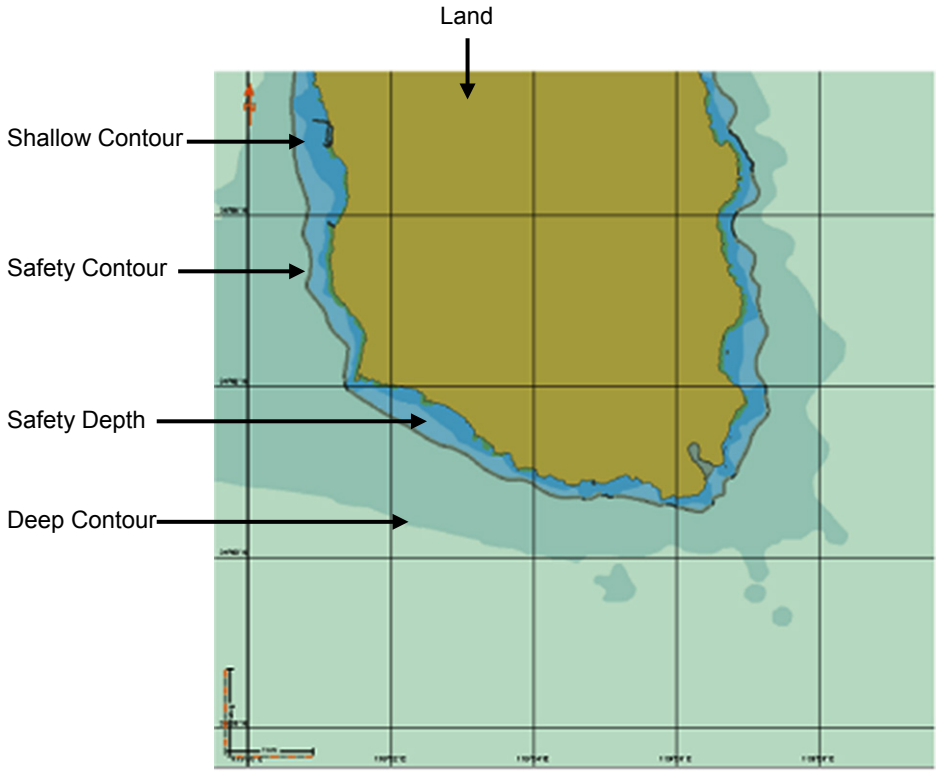
Use [Depth] items to set up the depth.

Setting Item	Description of Setting	Setting Value
Shallow Contour	The shallow contour displayed on the chart is displayed at the set depth. For the display example, refer to "(1) Example of displaying Shallow Contour/Safety Contour/Deep Contour."	0 to 200
Safety Depth	The spot depth that is lower than the set value is highlighted for display.	0 to 200
Safety Contour	The set depth value on the chart (or depth that is lower than the set value) is highlighted for display. In the sea area that is shallower than the set value, an alarm occurs. *If the safety contour appropriate to the set depth is not provided on the chart, the safety contour that is deeper than the set value is displayed. For the display example, refer to "(1) Example of displaying Shallow Contour/Safety Contour/Deep Contour."	0 to 200
Deep Contour	The deep contour displayed on the chart is displayed at the set depth. For the display example, refer to "(1) Example of displaying Shallow Contour/Safety Contour/Deep Contour."	0 to 200
Two Color Depth	Normally, the sea is displayed on the chart by four colors at each depth. When [Two Color Depth] is enabled, the sea is displayed by two colors with [Safety Contour] as a boundary. This item is set to clearly separate the sea into the safe area and the area where navigation requires caution. For the display example, refer to "(2) Example of Displaying Two Color Depth."	To enable: Select. To disable: Clear.
Shallow Pattern	Of depth that can be set at 4 levels, a lattice-like line is added to the shallow sea set in [Shallow Contour] and [Safety Contour]. This item is set to display the area where navigation requires caution conspicuously. For the display example, refer to "(3) Example of Displaying Shallow Pattern."	To enable: Select. To disable: Clear.
Show Isolated Danger In Shallow Water	A dangerous route obstacle existing in the sea area that is shallower than safety contour is displayed by ⊗ mark. For the display example, refer to "(4) Show Isolated Danger In Shallow Water."	To enable: Select. To disable: Clear.

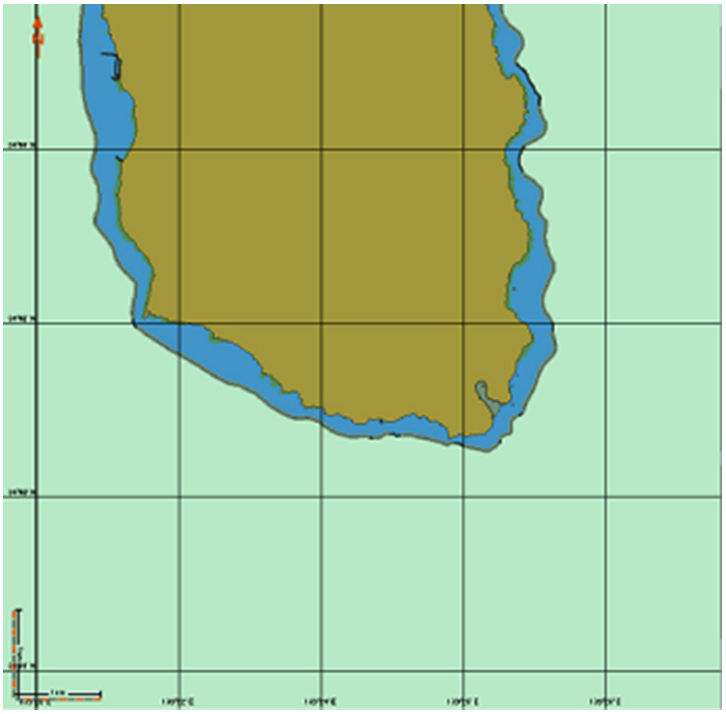
(1) Example of displaying Shallow Contour/Safety Contour/Deep Contour



(2) Example of displaying Two Color Depth

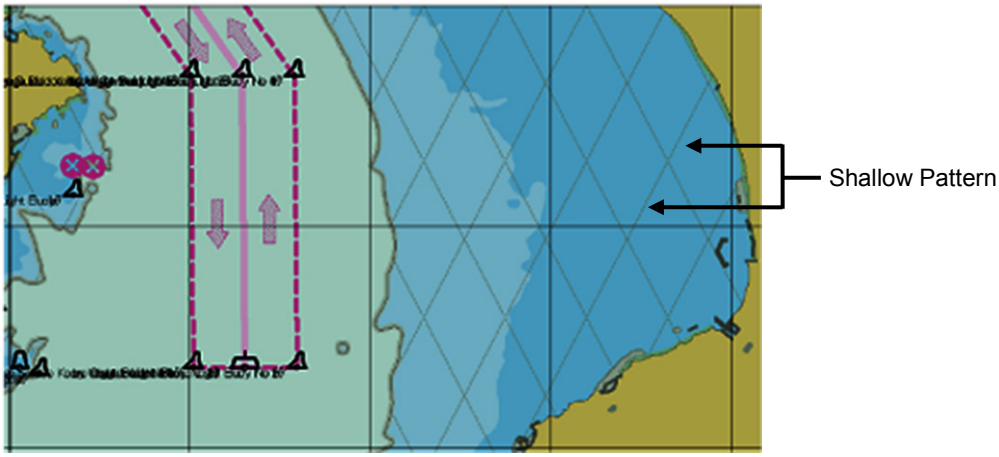


When [Two Color Depth] is disabled (the sea area is displayed by four colors.)

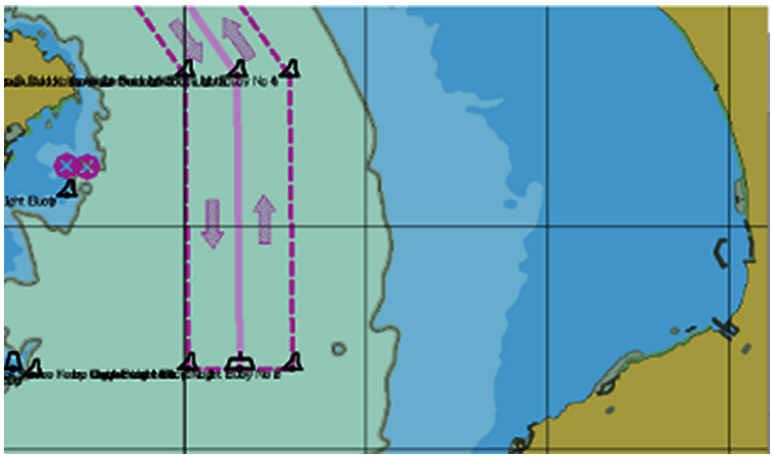


When [Two Color Depth] is enabled (the sea area is displayed by two colors.)

(3) Example of displaying Shallow Pattern

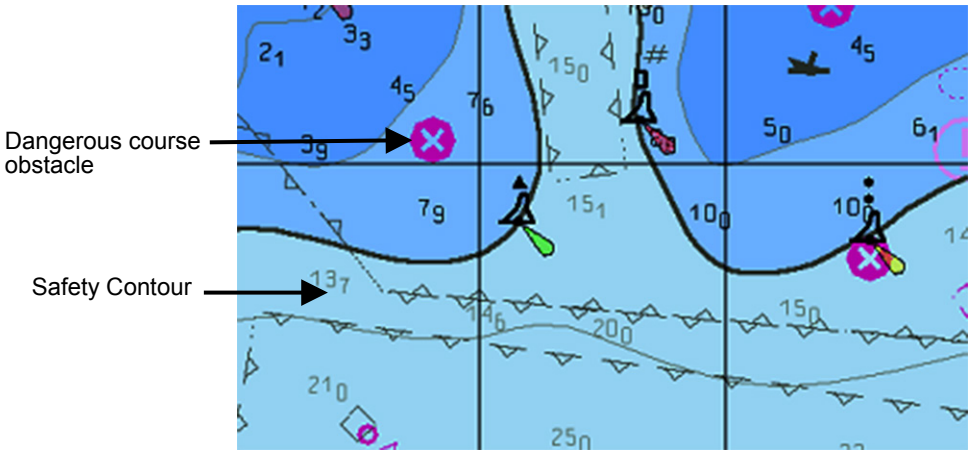


When [Shallow Pattern] is enabled (the shallow pattern is displayed)

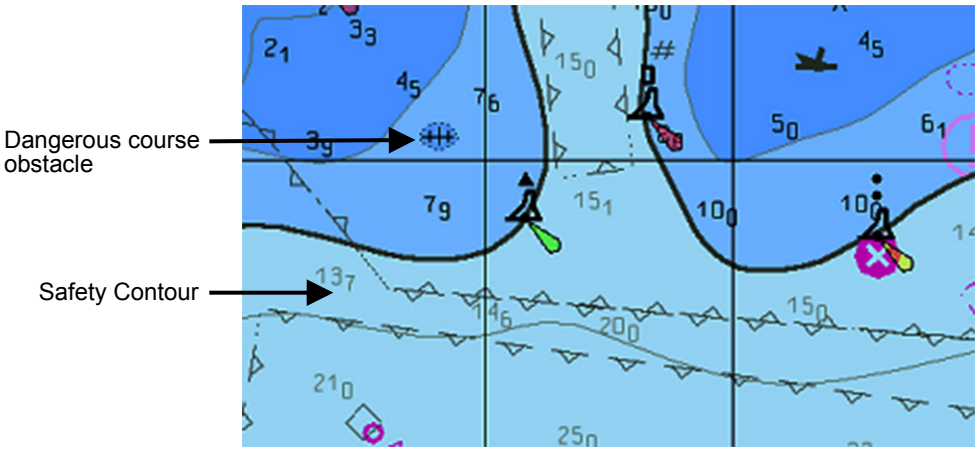


When [Shallow Pattern] is disabled (the shallow pattern is not displayed)

(4) Example of displaying Isolated Danger In Shallow Water



When Isolated Danger In Shallow Water is enabled



When Isolated Danger In Shallow Water is disabled

Restrictions on [Safety Contour] and [Deep Contour]

1) When entering in [Shallow Contour]
   If “Safety Contour < Shallow Contour ≤ Deep Contour”, the Safety Contour value is corrected to the Shallow Contour value.
   If “Safety Depth < Shallow Contour ≤ Deep Contour”, the Safety Contour is corrected to the Shallow Contour value.
   If Safety Contour, Safety Depth ≤ Deep Contour < Shallow Contour”, the Safety Contour, Safety Depth, and Deep Contour values are corrected to the Shallow Contour value.
2) When entering in [Deep Contour]
   If “Shallow Contour ≤ Deep Contour < Safety Contour”, the Safety Contour value is corrected to the Deep Contour value.
   If “Shallow Contour ≤ Deep Contour < Safety Depth”, the Safety Depth value is corrected to the Deep Contour value.
   If “Deep Contour < Shallow Contour ≤ Safety Contour, Safety Depth”, the Safety Contour, Safety Depth, and Shallow Contour values are corrected to the Deep Contour values.
3) When entering in [Safety Contour]
   If “Shallow Contour ≤ Deep Contour < Safety Contour”, the Deep Contour value is corrected to the Safety Contour value.
   If “Safety Contour < Shallow Contour ≤ Deep Contour”, the Shallow Contour value is corrected to the Safety Contour value.
4) When entering [Safety Depth]
   If “Shallow Contour ≤ Deep Contour < Safety Depth”, the Deep Contour value is corrected to the Safety Depth value.
   If “Safety Depth < Shallow Contour ≤ Deep Contour”, the Shallow Contour value is corrected to the Safety Depth value.

The compensated setting values are flashed temporarily.

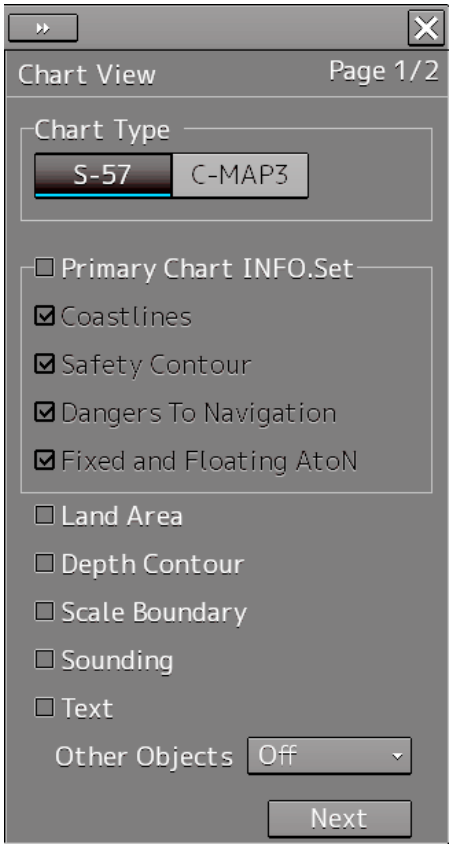
16.2.10 Setting up the display of RADAR Chart

When you select [Chart View] in the classification pane, the "Chart View" dialog is displayed in the edit pane.

The edit pane is divided into two dialogs.

To advance to the next dialog: Click on the [Next] button.

To return to the previous dialog: Click on the [Back] button.



The chart information uses the same reference and display mode as the radar / AIS, including CCRP, geodetic datum, display scale, motion mode, and bearing mode.

The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Chart Type	Select a type of charts to be displayed by click on the corresponding button. S-57: Shows S-57 charts. C-Map 3: Shows C-Map Ed3 charts.	S-57/C-Map 3
Text Size	Drag the control on the slider and set up the text size (7 levels). Clicking on the [Def.] (factory presetting) button resets the current value to the default value.	0 to 6
Primary Chart INFO. Set[*1]	Select to enable to show Primary Chart INFO. Set, and then select the items you want to display.	To enable: Select. To disable: Clear. **Display items** Coastline, Safety Contour, Dangers To Navigation, Fixed and Floating Aids to Navigation
Land Area	Selecting this enables to display land areas.	To enable: Select. To disable: Clear.
Depth Contour	Selecting this enables to display depth contours.	To enable: Select. To disable: Clear.
Scale Boundary	Selecting this enables the display of scale boundary.	To enable: Select. To disable: Clear.
Sounding	Selecting this enables the display of sounding.	To enable: Select. To disable: Clear.
Text	Selecting this enables to display text.	To enable: Select. To disable: Clear.
Other Objects	Select a display method of objects other than land, depth contour and text from the combo box. Off: Hides other objects. Base: Shows objects other than the above which are included in the display category [Base]. Standard: Shows objects other than the above which are included in the display category [Standard].	Off/Base, Standard

[*1] The primary chart information set is chart features and symbols defined in source documents of IMO Resolution A.817(19) and IEC 61174.

16.2.11 Setting up the display of ECDIS Chart

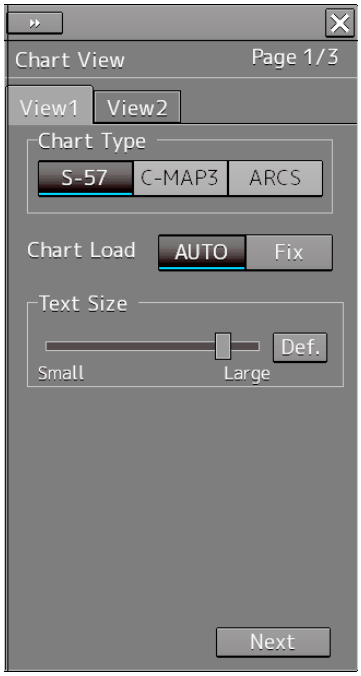
When you select [Chart View] in the classification pane, the "Chart View" dialog is displayed in the edit pane.

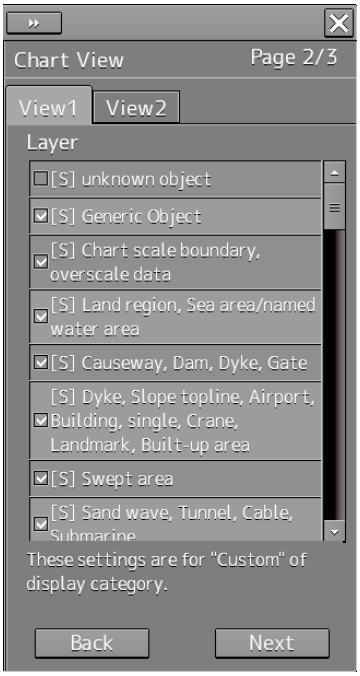
The edit pane is divided into three dialogs.

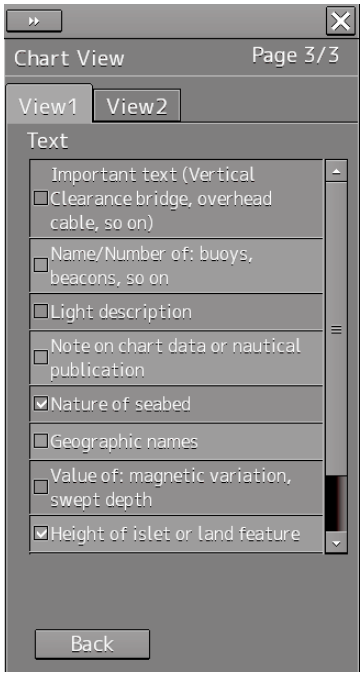
To advance to the next dialog: Click on the [Next] button.

To return to the previous dialog: Click on the [Back] button.

You can set up the same values on both the [View1] and [View2] tabs.





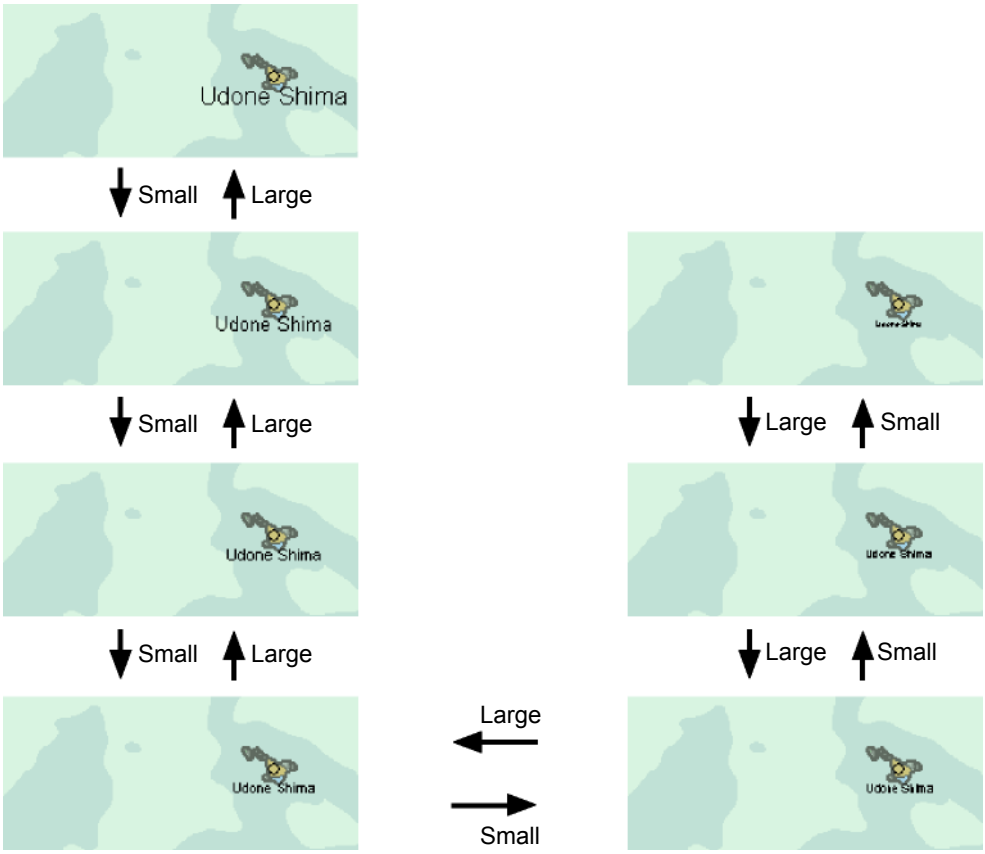


The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Chart Type	Select a type of charts to be displayed by clicking on the corresponding button. S-57: Shows S-57 charts. C-Map 3: Shows C-Map Ed3 charts. ARCS: Shows ARCS charts.	S-57, C-Map 3, ARCS
Text Size	Drag the control on the slider and set up the text size (7 levels). Clicking on the [Def.] (Factory settings) button resets the text size to the factory preset value. For the details of the examples of changing text size, refer to “Example of changing text size”.	0 to 6
Chart Load	Select a display switching mode for the S-57 chart by clicking on the button. [AUTO]: Automatically switches and shows charts. [Fix]: Fixes and shows the chart being currently displayed.	AUTO, Fix
Layer	When showing S-57/C-MAP charts, select the objects you want to display by selecting the check boxes of desired objects.	Refer to "Contents to be displayed as layers".
Text	When showing S-57/C-MAP charts, select the texts you want to display by selecting the check boxes of desired texts.	Refer to "Contents to be displayed as texts".

Example of changing text size

Standard



Contents to be displayed as layers

Set up the items to be displayed when the chart display category is [Custom].

There are three types of layers: [-], [S] and [A].

[-]: Items whose display categories are none of [BASE], [STD] nor [All].

[S]: Items to be displayed when the display category is [STD].

[A]: Items to be displayed when the display category is [All].

Type	ENC layer
[S]	unknown object
	Generic Object
	Chart scale boundary, overscale data
	Land region, Sea area/named water area
	Causeway, Dam, Dyke, Gate
	Dyke, Slope topline, Airport, Building, single, Crane, Landmark, Built-up area
	Swept area
	Sand wave, Tunnel, Cable, Submarine
	Navigation line
	Recommended track
	Ferry route
	Radar range, Radar line, Radio calling in point
	Restricted area
	Ferry route, Military practice area, Offshore production area
	Caution area, Fairway
	Fishing ground, Marine farm/ aquaculture
	Anchorage area, Anchor berth
	Cable area, Pipeline area
	Dumping ground, Cargo transshipment area, Incineration area
	Archipelagic sea lane
	Buoy, Beacon, Light float, Mooring buoy, Light Vessel
	Daymark
	Navigational system mark
	topmarks
	light
	Fog signal, Retro-reflector, Radar transponder beacon, Radar reflector
	Pilot boarding place, Signal station, Traffic, Signal station, Warning

Type	ENC layer
[A]	Quality of data, Low accuracy data
	Nautical publication information
	Coverage, Compilation scale of data
	Local magnetic anomaly, Magnetic variation
	Sloping ground, Land elevation, Slope topline
	Vegetation, Lake, Rapids, River, Water fall, Tideway
	Building, Fortified structure, Land mark, Silo/Tank, Airport, Road, Railway
	Check point, Harbor facility
	Distance mark
	Berth, Crane, Drydock, Mooring/Warping facility, Gate
	Sounding
	Depth area, Depth counter, Label for contour
	Water turbulence, Tide..., Current-non-gravitational
	Seabed area, Weed/Kelp, Spring
	Fishing-facility
	Obstruction, Wreck, Underwater/Awash rock
	Cable, Submarine, Pipeline, Submarine/on land
	Continental shelf area
	Custom zone, Free port area, Harbor area
	Fishery zone
	Administration area, Contiguous zone, Exclusive economic zone
	Radar station, Radio station, Coastguard station, Rescue station
	ENC edition date
	most recent chart update number
	graticule
[-]	Updated Objects

Type	C-MAP Ed.3 Layer
[S]	Generic Object
	Chart scale boundary, overscale data
	Land region, Sea area/named water area
	Causeway, Dam, Dyke, Gate
	Dyke, Slope topline, Airport, Building, single, Crane, Landmark, Built-up area
	Swept area
	Sand wave, Tunnel, Cable, Submarine
	Navigation line
	Recommended track
	Ferry route
	Radar range, Radar line, Radio calling in point
	Restricted area
	Ferry route, Military practice area, Offshore production area
	Caution area, Fairway
	Fishing ground, Marine farm/aquaculture
	Anchorage area, Anchor berth
	Cable area, Pipeline area
	Dumping ground, Cargo transshipment area, Incineration area
	Archipelagic sea lane
	Buoy, Beacon, Light float, Mooring buoy, Light Vessel
	Daymark
	Navigational system mark
	Fog signal, Retro-reflector, Radar transponder beacon, Radar reflector
	Pilot boarding place, Signal station, Traffic, Signal station, Warning

Type	C-MAP Ed.3 Layer
[A]	Quality of data, Low accuracy data
	Nautical publication information
	Coverage, Compilation scale of data
	Local magnetic anomaly, Magnetic variation
	Sloping ground, Land elevation, Slope topline
	Vegetation, Lake, Rapids, River, Water fall, Tideway
	Building, Fortified structure, Land mark, Silo/Tank, Airport, Road, Railway
	Check point, Harbor facility
	Distance mark
	Berth, Crane, Drydock, Mooring/Warping facility, Gate
	Sounding
	Depth area, Depth counter, Label for contour
	Water turbulence, Tide..., Current-non-gravitational
	Seabed area, Weed/Kelp, Spring
	Fishing-facility
	Obstruction, Wreck, Underwater/Awash rock
	Cable, Submarine, Pipeline, Submarine/on land
	Continental shelf area
	Custom zone, Free port area, Harbor area
	Fishery zone
	Administration area, Contiguous zone, Exclusive economic zone
	Radar station, Radio station, Coastguard station, Rescue station
	graticule

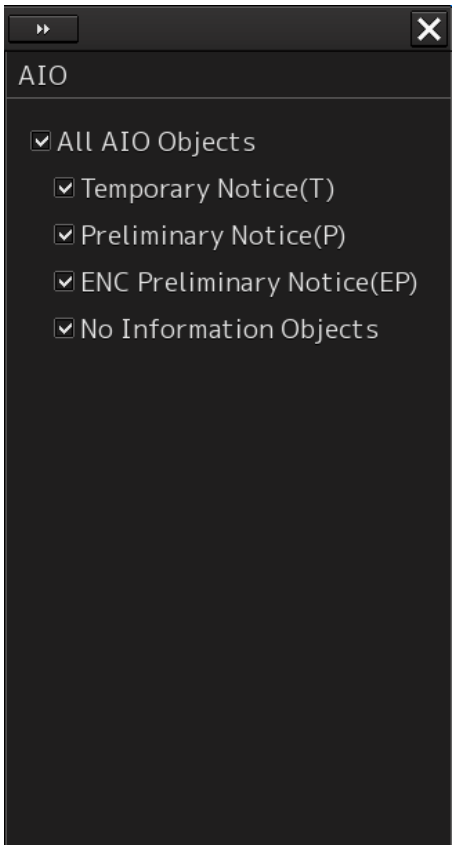
Contents to be displayed as texts

ENC Text
Important text (Vertical Clearance bridge, overhead cable, so on)
Name/Number of: Buoys, beacons, so on
Light description
Note on chart data or nautical publication
Nature of seabed
Geographic names
Value of: magnetic variation, swept depth
Height of islet or land feature
Berth number
National language

C-MAP Ed.3 Text
Important text(Vertical Clearance bridge, overhead cable, so on)
Other text (Name of building so on)
Light description
Note on chart data or nautical publication
Geographic names
National language

16.2.12 Setting up AIO display

When you select [AIO] in the classification pane, the "AIO" dialog box appears in the edit pane.

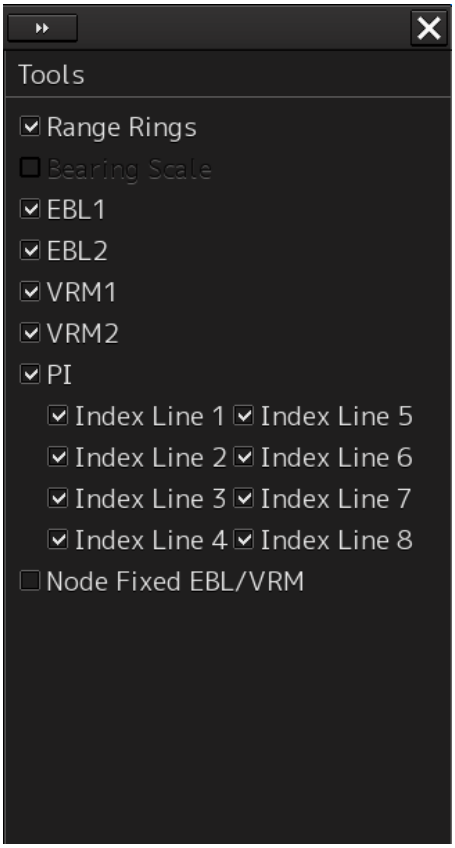


The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
All AIO Objects	Select and enable the display of all AIO objects.	To enable: Select. To disable: Clear.
Temporary Notice (T)	Select and enable the display associated with Temporary Notice (T).	To enable: Select. To disable: Clear.
Preliminary Notice (P)	Select and enable the display associated with Preliminary Notice (P).	To enable: Select. To disable: Clear.
ENC Preliminary Notice (EP)	Select and enable the display associated with ENC Preliminary Notice (EP).	To enable: Select. To disable: Clear.
No Information Objects	Select and enable the display associated with No Information Objects.	To enable: Select. To disable: Clear.

16.2.13 Setting up the display of range/bearing measurement function

When you select [Tools] in the classification pane, the "Tools" dialog is displayed in the edit pane.



The descriptions of settings are shown in the table below.

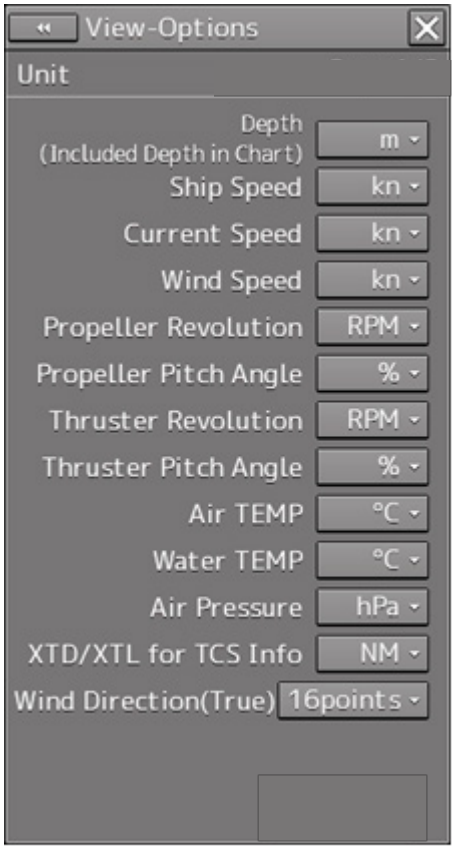
Setting Item	Description of Setting	Setting Value
Range Rings	Selecting this enables to display range rings.	To enable: Select. To disable: Clear.
Bearing Scale	Selecting this enables to display the bearing scale. **Note** This item is displayed on the ECDIS screen only. This item is enabled only when overlay is set to On.	To enable: Select. To disable: Clear.
EBL1/EBL2	Selecting this enables to display the EBL1/EBL2 markers.	To enable: Select. To disable: Clear.
VRM1/VRM2	Selecting this enables to display the VRM1/VRM2 markers.	To enable: Select. To disable: Clear.
PI (parallel line cursor)	Select this to enable to display the PI cursors, and then select the PI cursors you want to display by selecting them.	To enable: Select. To disable: Clear. **PI cursor selections** Index Line 1 to Index Line 8
Node Fixed EBL/VRM	Selecting this enables to display the node fixed EBL/VRM.	To enable: Select. To disable: Clear.

16.2.14 Setting up the display of Unit of Setting Value

Note

Some items may not be displayed depending on the installation setting.

When you select [Unit] in the classification pane, the "Unit" dialog is displayed in the edit pane.



The descriptions of settings are shown in the table below.

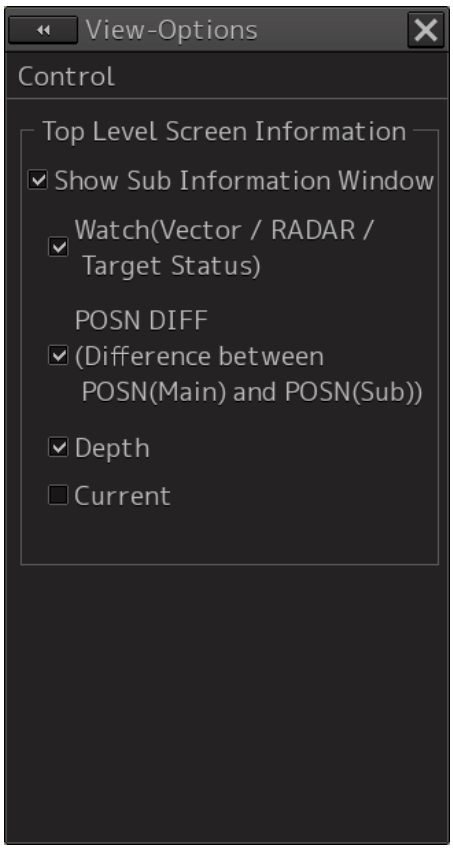
Setting Item	Description of Setting	Setting Value
Depth (water depth)	Select a unit of water depth from the combo box.	m, ft, fm
Ship Speed	Select a unit of the ship speed from the combo box.	kn, m/s, km/h
Current Speed	Select a unit of the current speed from the combo box.	kn, m/s, km/h
Wind Speed	Select a unit of the wind speed from the combo box.	kn, m/s, km/h
Propeller Revolution	Select a unit of the propeller's revolution per minute from the combo box.	RPM, min-1
Propeller Pitch Angle	Select a unit of the propeller's pitch angle from the combo box.	°/%
Thruster Revolution	Select a unit of the thruster's revolution per minute from the combo box.	RPM, min-1
Thruster Pitch Angle	Select a unit of the thruster's pitch angle from the combo box.	°, %
Air TEMP	Select a unit of the air temperature from the combo box.	°C, °F
Water TEMP	Select a unit of the water temperature from the combo box.	°C, °F
Air Pressure	Select a unit of the air pressure from the combo box.	hPa, mbar
Wind Direction(True)	Select a wind direction (true) display method from the combo box.	16points, Degree

16.2.15 Setting up display of Own Ship Track Control, display format of Own Ship/Cursor Position and display of Sub-Information dialog

When you select [Control] in the classification pane, the "Control" dialog is displayed in the edit pane.

[RADAR Screen]

[ECDIS Screen]



The descriptions of settings are shown in the table below.

Setting Item	Description of Setting	Setting Value
Show Own Track Control	Selecting this enables to display own track control. **Note** This item takes effect only on the RADAR screen.	To enable: Select. To disable: Clear.
Show Sub Information Window (sub information dialog box display)	Select this to enable to display the sub information dialog box, and then select the tab(s) you want to display. **Note** The [Depth] tab can only be selected when equipped with a water depth sensor. The [Current] tab can only be selected when equipped with a GPS, a gyro and a log sensor.	To enable: Select. To disable: Clear. **Tab selections** Watch(Vector / Radar / Target status), POSN DIFF(Difference between POSN(Main) and POSN(Sub)), Depth, Current

16.2.16 Setting up the Water Depth display

When [Depth Graph] is selected on the classification pain, the [Depth Graph] dialog is shown on the Edit pain.

v

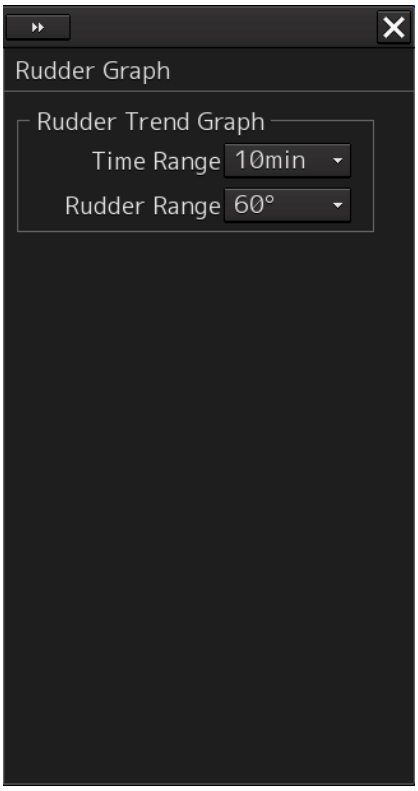
The following table shows the setting details:

Setting item	Description	Setting values
Depth Range(Docking)	Select a depth range for the docking depth graph from the combo box.	AUTO, 10 m, 25 m, 50 m
Depth Range(Voyage)	Select a depth range for the route depth graph from the combo box.	AUTO, 50 m, 100 m, 250 m
Time Range	Select a time range for the depth graph from the combo box.	10 min, 15 min, 30 min, 60 min, 12 hours
Reference	Select a reference for depth display from the combo box.	AUTO, Keel

16.2.17 Setting up the Rudder graph

When [Rudder Graph] is selected on the classification pain, the [Rudder Graph] dialog is displayed on the edit pain.

Note
This dialog may not be displayed depending on the equipment setting.



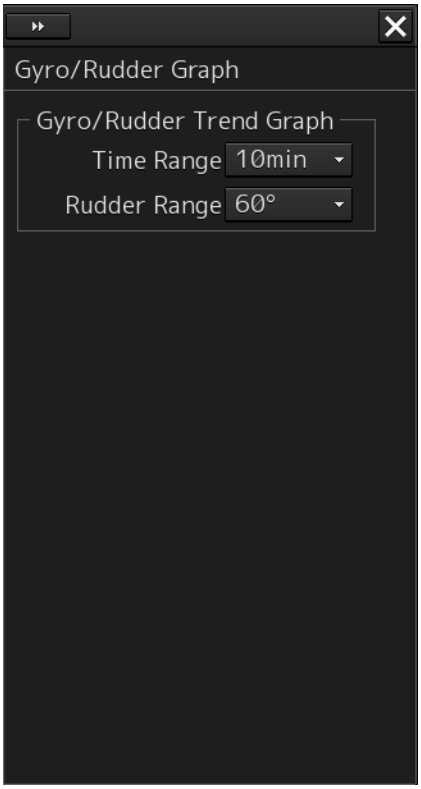
The following table shows the setting details:

Setting item	Setting	Setting value
Time Range	Select a time range for the Rudder graph from the combo box.	5 min, 10 min, 15 min, 30 min
Rudder Range	Select a rudder angle for the Rudder graph from the combo box.	30°, 40°, 50°, 60°, 70°, 80°

16.2.18 Setting up the Gyro/Rudder graph

When [Gyro/Rudder Graph] is selected on the classification pain, the [Gyro/Rudder Graph] dialog is displayed on the edit pain.

Note
This dialog may not be displayed depending on the equipment setting.



The following table shows the setting details:

Setting item	Setting	Setting value
Time Range	Select a time range for the Gyro/Rudder graph from the combo box.	5 min, 10 min, 15 min, 30 min
Rudder Range	Select a rudder angle for the Gyro/Rudder graph from the combo box.	30°, 40°, 50°, 60°, 70°, 80°

16.2.19 Setting up the Engine Graph

When [Engine Graph] is selected on the classification pain, the "Engine Graph" dialog is displayed on the edit pain.

Note
This dialog may not be displayed depending on the equipment setting.

The following table shows the setting details:

Setting item	Setting	Setting value
Time Range	Select a time range for the engine speed graph form the combo box.	10 min, 15 min, 30 min, 60 min
Maximum RPM	Select an engine speed on the Ahead side form the combo box.	AH100, AH200, AH300, AH500, AH1000
Minimum RPM	Select an engine speed on the Astern side form the combo box.	0, AS50, AS100

16.2.20 Setting up the graph range of the ROT slide bar

When [ROT] is selected on the classification pain, the "ROT" dialog is displayed on the edit pain.

The following table shows the setting details:

Setting item	Setting	Setting value
ROT Scale	Select a graph range for the ROT slide bar from the combo box.	30-0-30, 60-0-60, 90-0-90, 120-0-120, 150-0-150, 300-0-300