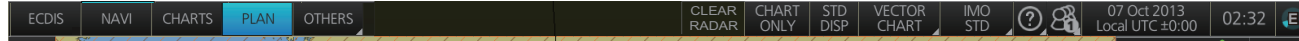


Display Layout

Status bar (See page 2.)



InstantAccess bar
(See page 3.)



Upper section

Lower section

Chart scale/presentation mode box

Cursor position box



Electronic chart area

Overlay/NAV Tools box

EBL1 box,
EBL2 box

Permanent warnings box

VRM1 box,
VRM2 box

Sensor information box

HDG	356.4°	GYRO1
SPD	25.1kn	FILT BT
	0.0kn	
COG	356.4°	FILT
SOG	25.1kn	
POSN	60°39.191' N	
FILT	024°56.591' E	
Offset		
WGS84	Non-ENC data	

Own ship functions box

Offset
WGS84
TM/CU Reset

Route information box

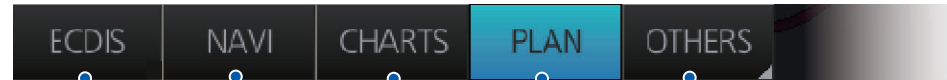
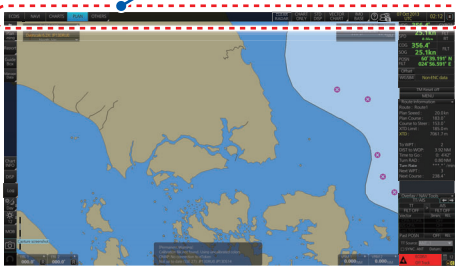
Route Information	
Route :	Route1
Plan Speed :	20.0 kn
Plan Course :	183.0°
Course to Steer :	153.0°
XTD Limit :	185.0 m
XTD :	7061.7 m
To WPT :	2
DIST to WOP :	3.92 NM
Time to Go :	0: 4'42"
Turn RAD :	0.80 NM
Turn Rate :	*** ** /min
Next WPT :	3
Next Course :	238.4°

Alert box



Status Bar

Status bar



OTHERS: Sets system in standby; plays back data.

PLAN: Selects the Voyage planning mode.

CHARTS: Selects the Chart maintenance mode.

NAVI: Selects the Voyage navigation mode.

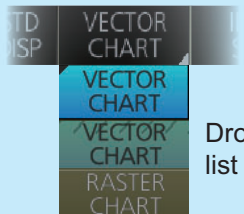
Display mode: Not used. (Fixed at "ECDIS".)

How to open a drop-down list

Indicates a drop-down list.



Click button



Drop-down list



CLEAR RADAR:
Hide TT, AIS and radar displays, when the radar overlay is active. Greyed out otherwise.

Chart priority:
Selects which chart type to display, vector or raster, when both are available.

User profiles, Settings menu:
Manages user profiles; opens the Setting menu.

Working indicator:
Rotates clockwise if the system is working properly.

Time:
Time (local or UTC).

STD DISP:
Restores IMO standard display.

Chart database:
Displays the operator's manual, ECDIS program no. and system information.

Date:
Displays the date; selects the time to use, local or UTC.

CHART ONLY:
Shows only the chart, when left button is pressed and held down.

Chart database:
Selects the chart database (IMO base, IMO Primary, IMO Standard, IMO All or PERSONAL).

Instant Access Bar

Upper section (by operating mode)

Voyage navigation mode

MSG
Opens the Message dialog box for managing AIS Safety and NAVTEX messages.

Safety MSG **NAV-TEX MSG**

Manual Update:
Opens the manual update dialog box to insert chart update symbols manually.

Mini Conning:
Shows, hides the mini conning display.

Weather Overlay:
Activates or deactivates the weather overlay.

Route:
- Select/Unselect monitored route.
- Switch monitored route to Voyage planning mode for editing.

Instant Track:
Provides a temporary track to return to or deviate from the monitored route.

User Chart:
Select/unselect monitored user chart.

Monitor INFO:
Show Monitor [Information] dialog box.

Stop Monitor:
Stop monitoring route, user chart.

Chart maintenance mode

Gate-1*:
Automatically installs Gate-1 provided charts and licenses.

AUTO Import:
Starts automatic installation of the chart data (CD or DVD ROM).

Manage Charts:
Manages chart cells (grouping, deleting, etc.).

Cell Status:
Shows the chart catalog to get info about charts installed in the system.

License: Manages chart licenses.
Public Key: Manages public keys.

Sync Config: Selects units to synchronize.
Sync Status: Checks synchronization status.
Gate-1 Config*: Gate-1 chart management.
Reconvert: Reconverts SENC data.
Clear Charts: Clears charts.

*Shown only with Gate-1 connection.

Voyage planning mode

Report:
See reports on waypoints and voyage planning related routes and user charts.

Route: Creates a route (see page 4).
User Chart: Creates a user chart (see page 6).

Guide Box:
Provides range and bearing information between the last waypoint and the cursor position when creating a route.

Manage Data:
Deletes, imports routes and user charts.

SAR:
Shows the Search and Rescue Settings dialog box.

Lower section

SET:
Shows, hides chart features; sets chart alerts.

TWO DISP:
Splits the screen in two, horizontally or vertically.

NtoM:
Displays Notice to Mariners info.

Chart Legend:
Finds data about current chart.

Viewing Dates:
Sets "display date" and "approved until" dates.

Chart 1:
Provides overview of ECDIS chart symbols.

Log:
Records user/position events to the event log; accesses various logs.

Day:
Selects a color palette.

86:
Adjusts brilliance of monitor.

MOB:
Marks man overboard position.

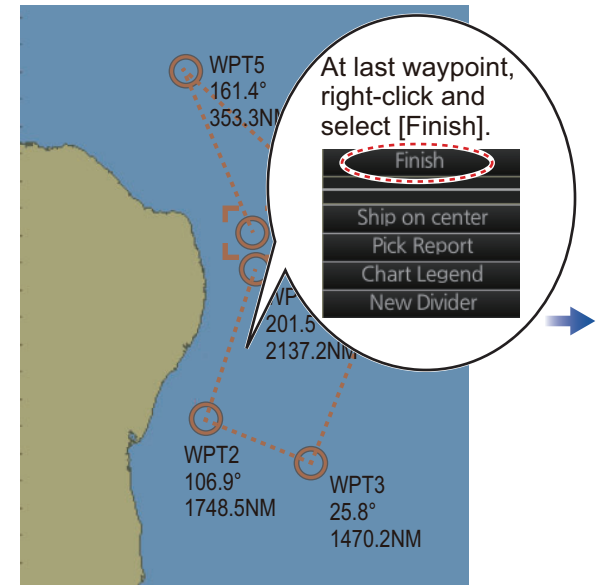
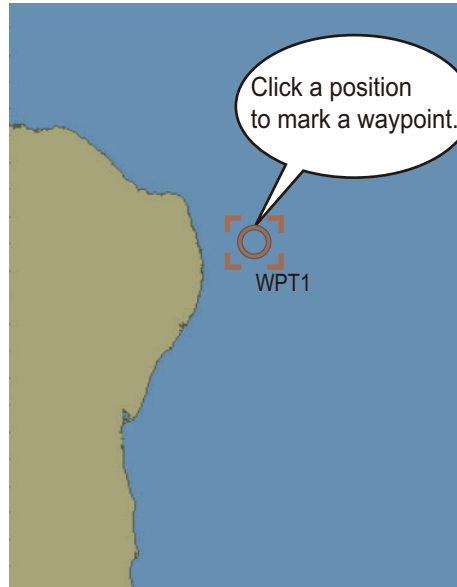
Camera icon:
Takes a screenshot.

Undo icon:
Undoes past action (route, user chart).

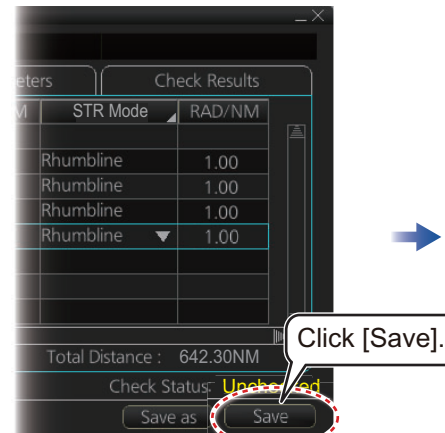
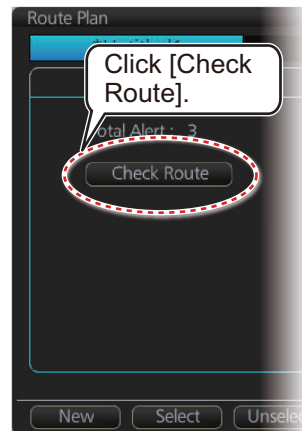
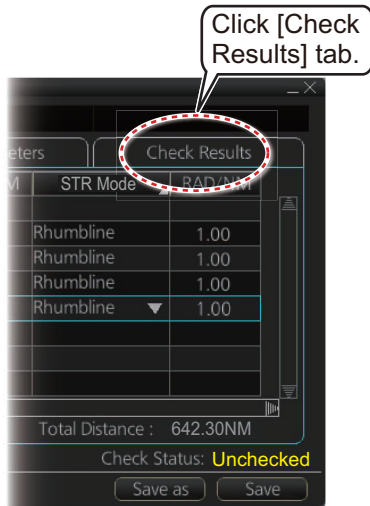
Routes

How to create, check a route

PLAN → Plan-ning → Route



Continue entering waypoints.



Routes (con't.)

How to select a route to monitor

Route Information
Route : cc_import_03
Plan Speed : 20.0 kn
Plan Course : 337.5°
Course to Steer : 332.9°
XTD Limit: 185.0 m
XTD: 0.9 m
To WPT :
DIST to :
Time :
Turn :
ROT :
Next WPT :
Next Course : 341.2°

In Voyage navigation mode, right click anywhere.

- Select Route
- Unselect Route
- Move to Plan
- Monitor User Chart
- Stop Monitor
- XTD

Click [Select Route].

Select Route

Filter
 Planned Route Instant Track

ID	Name	Date	Protected
11	Untitled1	29 Jul 2021	
12	Untitled222	04 Aug 2021	
9	furuno	01 Jul 2021	
8	route1	17 Aug 2021	
10	route2	01 Jul 2021	

Total WPTs :
Start WPT :

Cancel Open

Select a route.

Select Route

Filter
 Planned Route Instant Track

ID	Name	Date	Protected
11	Untitled1	29 Jul 2021	
12	Untitled222	04 Aug 2021	
9	furuno	01 Jul 2021	
8	route1	17 Aug 2021	
10	route2	01 Jul 2021	

Total WPTs :
Start WPT :

Cancel Open

Route selected.

Click [Open].

To stop monitoring a route:

How to view route waypoint information

Route Information
Route : cc_import_03
Plan Speed : 20.0 kn
Plan Course : 337.5°
Course to Steer : 332.9°
XTD Limit: 185.0 m
XTD: 0.9 m
To WPT :
DIST to :
Time :
Turn :
ROT :
Next WPT :
Next Course : 341.2°

In Voyage navigation mode, right click anywhere.

- Select Route
- Unselect Route
- Move to Plan
- Monitor User Chart
- Monitor INFO
- Stop Monitor
- XTD

Click [Monitor INFO].

Monitor Information

Route : Untitled1

Waypoints

To WPT : 9.53NM Departure : 23:35 17 Aug 2021
Actual Average SPD : 20.0kn

WPT	Name	Latitude	Longitude	ETA	Plan SPD
1		34.003° E			20.0
2		39.362° E		00:04 18 Aug 2021	20.0
3		40° 12.017' E		00:36 18 Aug 2021	

Total WPTs : 3 Total Distance : 14.58NM

Route check is not done in PLAN mode

Close

Click [Waypoints] tab.

How to delete a route



Route Data Management

Filter
 Planned Route Instant Track

ID	Name	Date	Protected
11	Untitled1	29 Jul 2021	
12	Untitled222	04 Aug 2021	
9	furuno	01 Jul 2021	
8	route1	17 Aug 2021	
10	route2	01 Jul 2021	

Total WPTs :
Start WPT :

Total DIST :
Final WPT :

Route transfer(LAN)

Delete Close

Check route(s) to delete.

Click [Delete].

User Charts

How to create a user chart

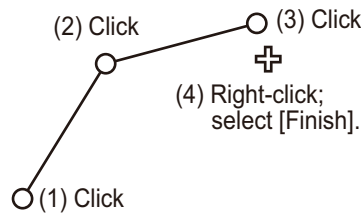


Click object to draw.

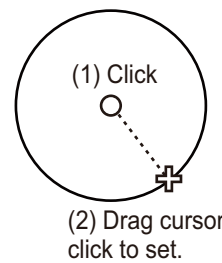
Tidal: - Current - Predicted		Area
Line: - Coast - Route - Nav - Depth		Circle
Clearing line: - NMT - NLT		Label: - Label - Triangle - Point - Polygon - Circle - Pin



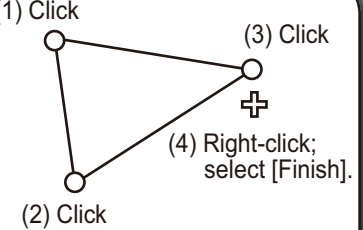
How to create a line



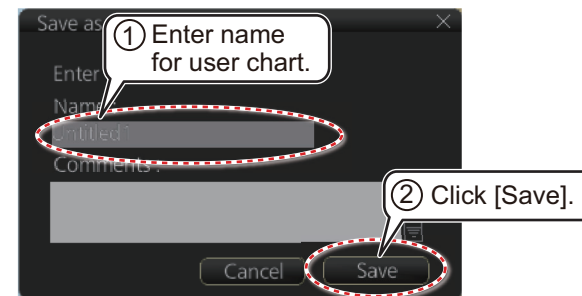
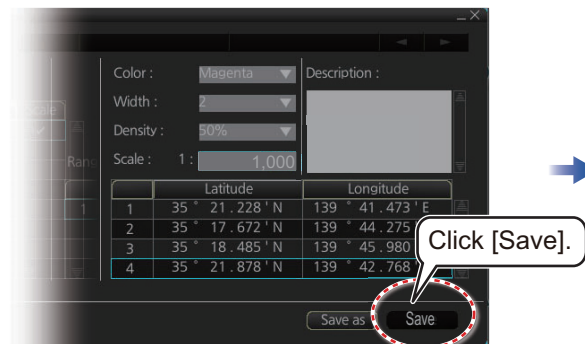
How to create a circle



How to create an area

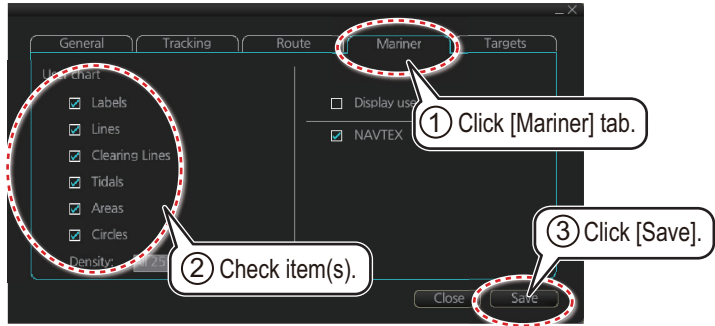


Example objects

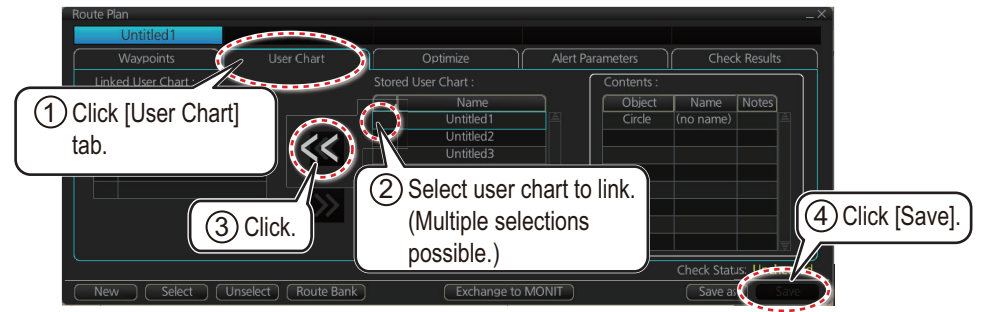
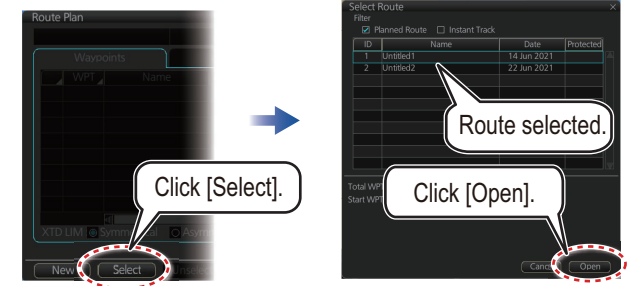
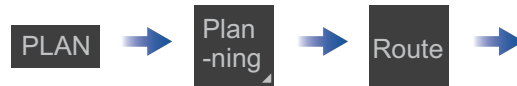


User Charts (con't)

How to select objects to display in user chart

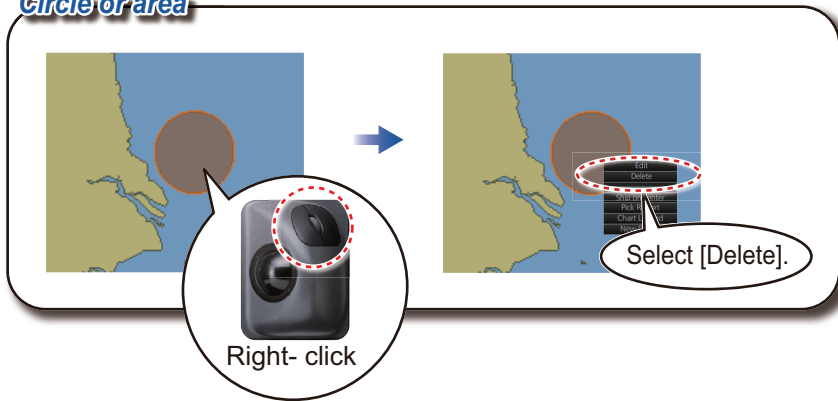


How to link a user chart to a route

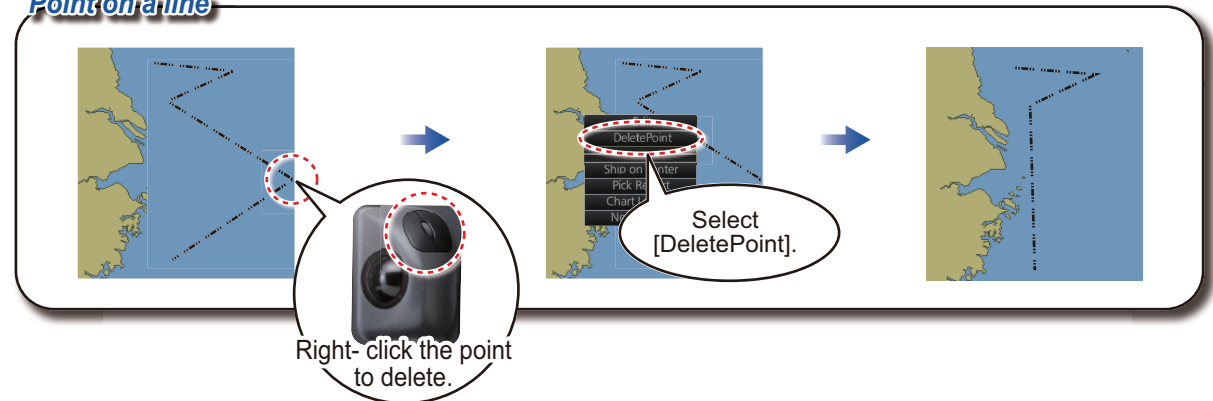


How to delete objects from a user chart

Circle or area



Point on a line



How to delete user charts

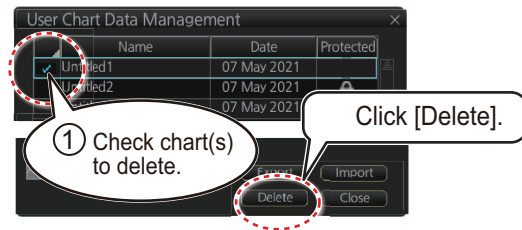


Chart Operations

How to control visibility of chart objects

DISP

SET

Basic Setting

Control basic chart settings

Chart DISP

Control chart objects

Symbol DISP

Control navigational features

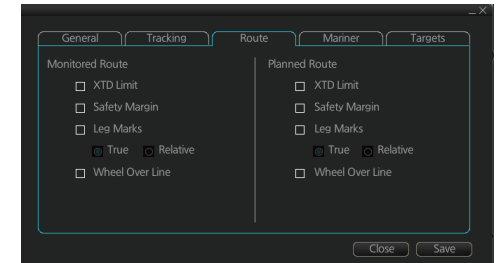
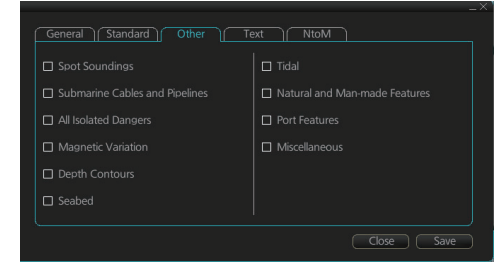
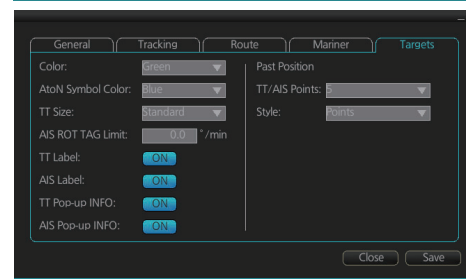
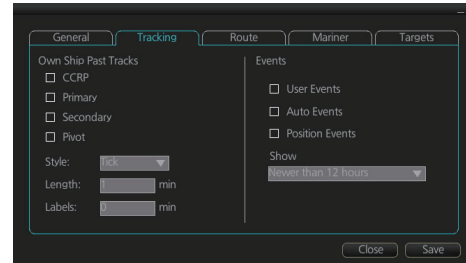
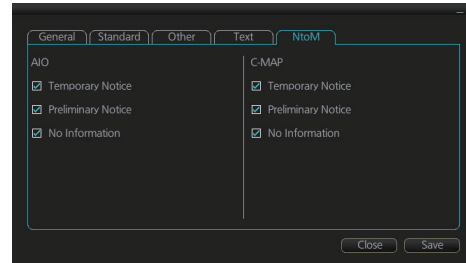
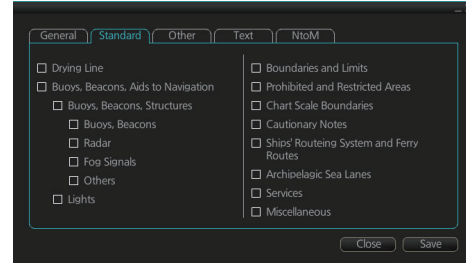
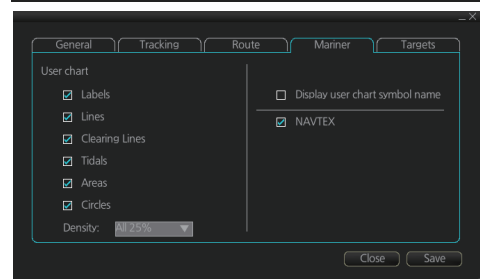
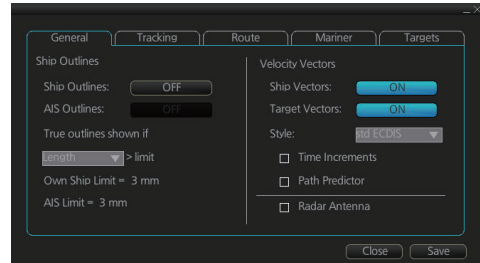
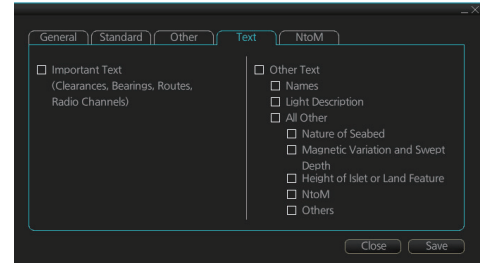
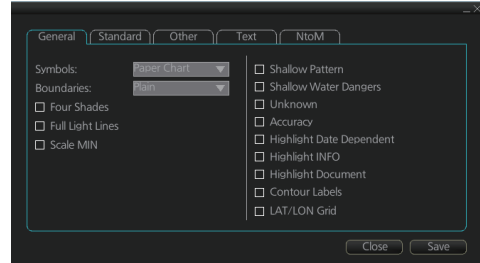
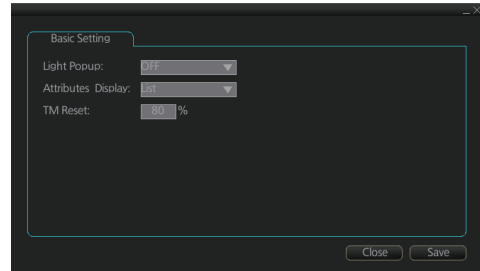
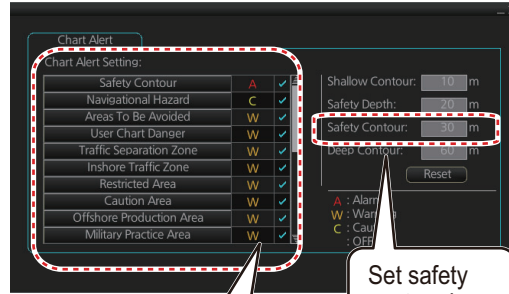


Chart Operations (con't.)

How to set safety contours and chart alerts



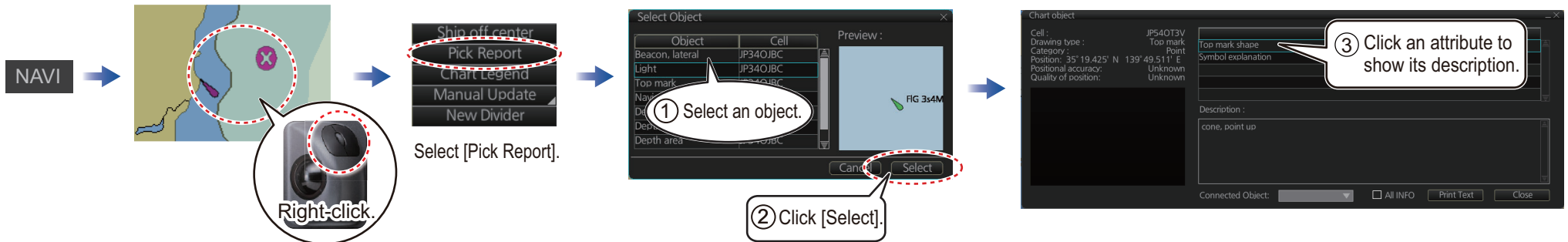
Click to select chart alert type:

- A** (Alarm): Audio+visual indications
- W** (Warning): Visual indication
- C** (Caution): No indication

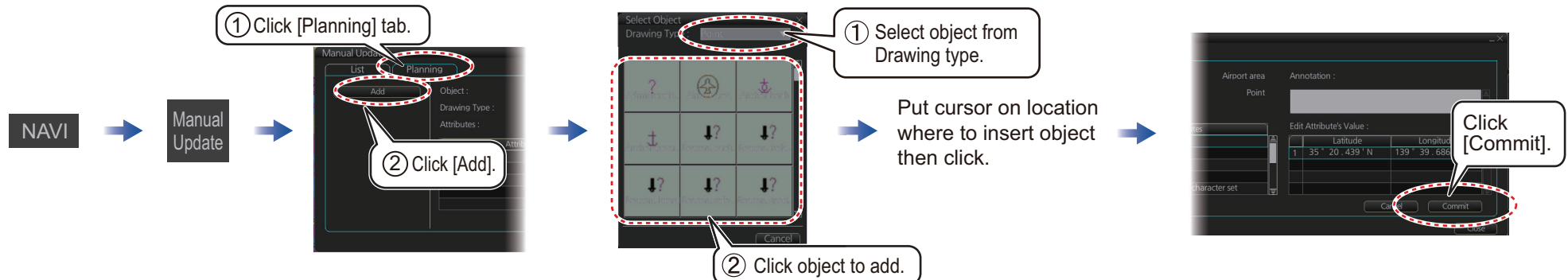
Click icon to switch between **C** and **W** vice versa.

To turn off display of a chart object in route monitoring, remove check mark from alert (alarm, warning, caution).

How to find chart object information (ENC chart)



How to manually insert a "new" chart object



TT/AIS Operations

How to find target info

Click a target to show its information.

TT Info (1/2)

TT No. TT 06

Bearing BRG 102.9° T

Range RNG 7.800 NM

Course over ground COG 270.0° T

Speed over ground SOG 10.0 kn

CPA CPA 0.100 NM

TCPA TCPA 00:06

Bow crossing range BCR *** NM

Bow crossing time BCT ***

TT symbols (main)

Symbol (Color)	Name
(Green) ●	Past position point
(Green) ○	Target under acquisition
(Green) ○	Acquired target

AIS Info (1/2)

MMSI MMSI 000001003

Vessel name VESSEL B

Bearing BRG 141.5° T

Range RNG 74.57 NM

Course over ground COG 90.0° T

Speed over ground SOG 14.0 kn

CPA CPA 28.58 NM

TCPA TCPA -79:29

Bow crossing range BCR 104.0 NM

Bow crossing time BCT >99:59

Position 34° 17.923' N
140° 39.636' E

Heading HDG 90.0° T

Rate of turn ROT +0.0° /min

Navigation status NAV status: Underway using engine

AIS symbols (main)

Symbol (Color)	Name
(Green) ●	Past position point
(Green) △	Sleeping AIS target
(Green, thick line) △ ^{ABC}	Activated AIS target

How to set up TT and AIS on the TT/AIS page in Overlay/NAV Tools box

Shows or hides TT symbols.

Shows or hides AIS symbols.

Set association method.

Sets past position point interval (time).

Setting cannot be changed from this equipment.

Sets vector time (shared AIS/TT).

Sets vector mode (shared AIS/TT).

Source of TT data (radar antenna or TTM sentence).

Datum selection (ANT or CCRP) is available for configurations where the radar does not meet the latest regulations. For all other configurations, this button is not selectable.

Checked when the antenna that displays radar echoes automatically feeds TT data.

No use.

Vector (ex. TT)

TT: FILT OFF

AIS: FILT OFF

Vector: 3min REL

CPA/TCPA: OFF

AIS CPA: OFF

Lost TGT: OFF

Past POSN: OFF REL

TT Source: ANT_1

SYNC. ANT: Datum: CCRP

TT/AIS Operations (con't)

Open the chart menu, select TT/AIS Setting and then Setting. The below menus can also be displayed by clicking the radio button on the pop-up menu that appears when an item other than TT/AIS is selected on the Overlay/NAV Tools box.

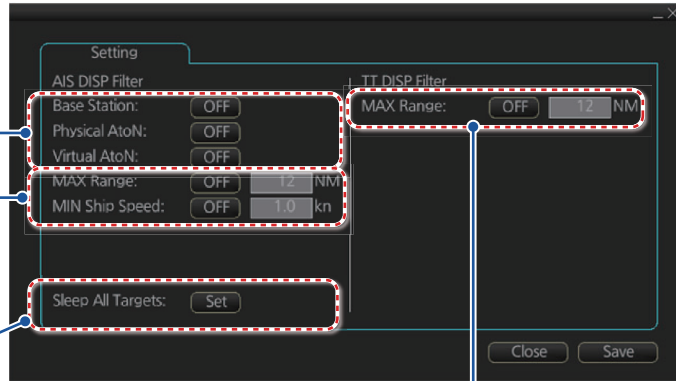


How to filter TT and AIS displays, sleep all targets

Limit AIS display by AIS category.

Filters AIS targets by range, speed.

Sleeps all activated AIS targets.



Hide vessels beyond the range set (from own ship).

Radar Overlay

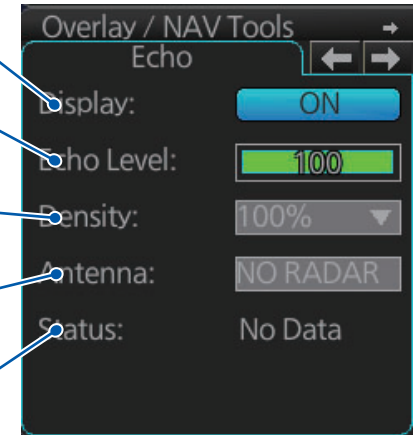
Activates, deactivates the radar overlay.

Adjusts the strength of radar echo. Put the cursor on the bar then roll the scrollwheel.

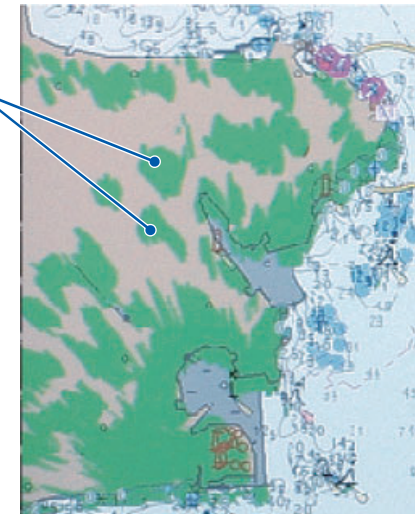
Sets the degree of transparency for the overlay.

Selects the antenna to feed the radar echo data.
















Status of the radar echo data, "OK" or "No Data".



Radar echo



Alert Icons and Their Meanings

Icon	Alert State	Icon Description
Alert Priority: Emergency		
1	 Cause not rectified	Display color: red, Display: flashing Displayed together with alert message.
Alert Priority: Alarm		
2	 Not acknowledged/Not rectified	Display color: red, Display: flashing Displayed together with alert message.
3	 Not acknowledged/Not rectified Buzzer temporarily silenced	Display color: red, Display: flashing Displayed together with alert message.
4	 Acknowledged/Not rectified	Display color: red, Display: lit Displayed together with alert message.
5	 Acknowledged/Not rectified Acknowledged by external device	Display color: red, Display: lit Displayed together with alert message.
6	 Not acknowledged/Rectified	Display color: red, Display: flashing Displayed together with alert message.
Alert Priority: Warning		
7	 Not acknowledged/Not rectified	Display color: yellow-orange, Display: flashing Displayed together with alert message.
8	 Not acknowledged/Not rectified Buzzer temporarily silenced	Display color: yellow-orange, Display: flashing Displayed together with alert message.
9	 Acknowledged/Not rectified	Display color: yellow-orange, display: lit Displayed together with alert message.
10	 Acknowledged/Not rectified Acknowledged by external device	Display color: yellow-orange, Display: lit Displayed together with alert message.
11	 Not acknowledged/Rectified	Display color: yellow-orange, Display: flashing Displayed together with alert message.
Alert Priority: Caution, Indication		
12	 Caution	Display color: yellow, Display: lit Displayed together with alert message.
13	 Indication	Display color: yellow, Display: lit Displayed together with alert message.
Other		
14	 Non-acknowledgeable alarm	Display color: red Displayed together with alarm icon (2, 3, 6).
15	 Non-acknowledgeable warning	Display color: yellow-orange Displayed together with warning icon (7, 8, 11).

