

Display Layout

Status bar (See page 2.)



InstantAccess bar
(See page 3.)

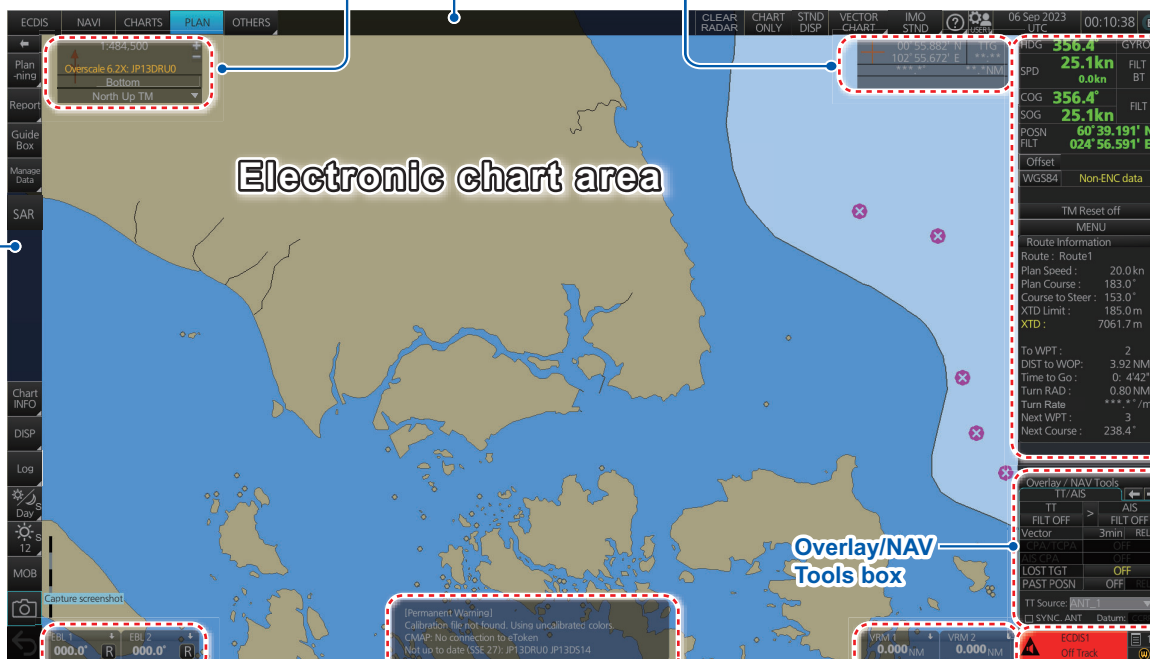


Upper section

Lower section

Chart scale/stabilization mode/
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	

Own ship functions box

Offset
WGS84
TM/CU Reset

Route information box

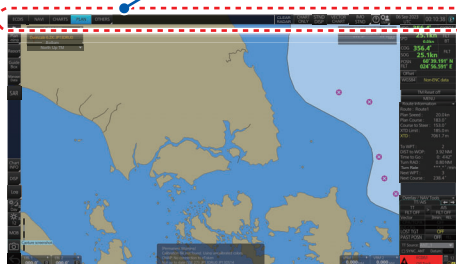
Route Information	
Route :	Route1
Plan Speed :	20.0 kn
Plan Course :	183.0°
Course to Steer :	153.0°
XTD Limit :	185.0 m
XTD :	7061.7 m
To WPT :	2
DIST to WOP:	3.92 NM
Time to Go :	0: 4'42"
Turn RAD :	0.80 NM
Turn Rate :	*** **/min
Next WPT :	3
Next Course :	238.4°

Alert box

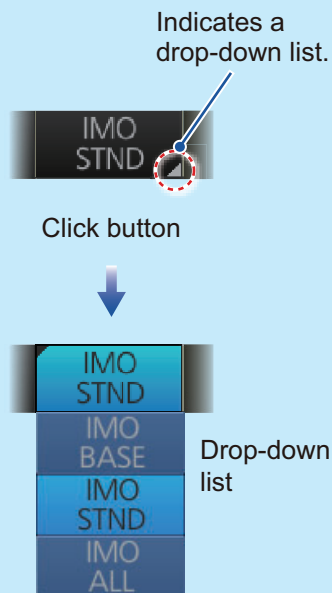


Status Bar

Status bar



How to open a drop-down list



OTHERS: Sets system in harbour mode; 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".)



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.

STND DISP:
Restores IMO standard display.

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

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

Chart database
Selects the chart database (IMO BASE, IMO STND, IMO ALL or CUSTOM) for displayed ENC.

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

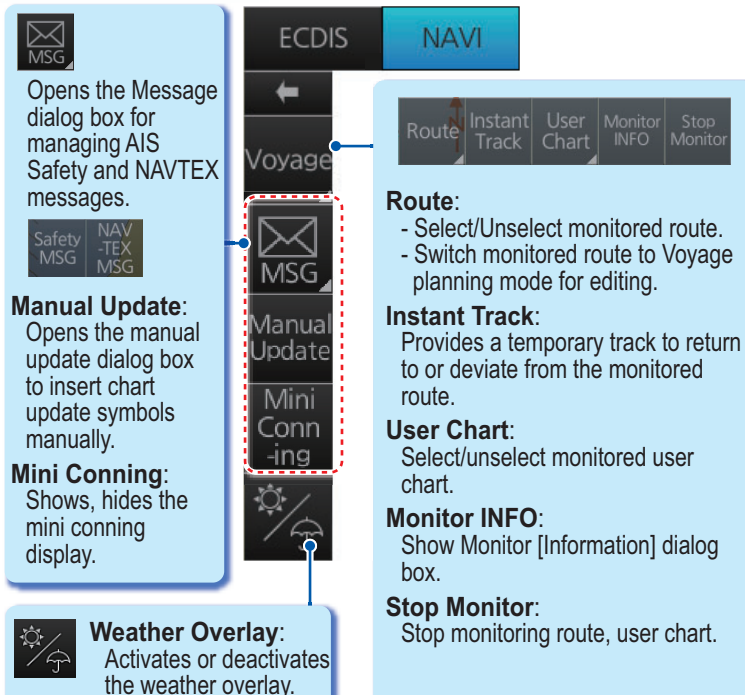
Time:
Time (local or UTC).

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

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.

ECDIS **NAVI**

Voyage

Route **Instant Track** **User Chart** **Monitor INFO** **Stop Monitor**

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

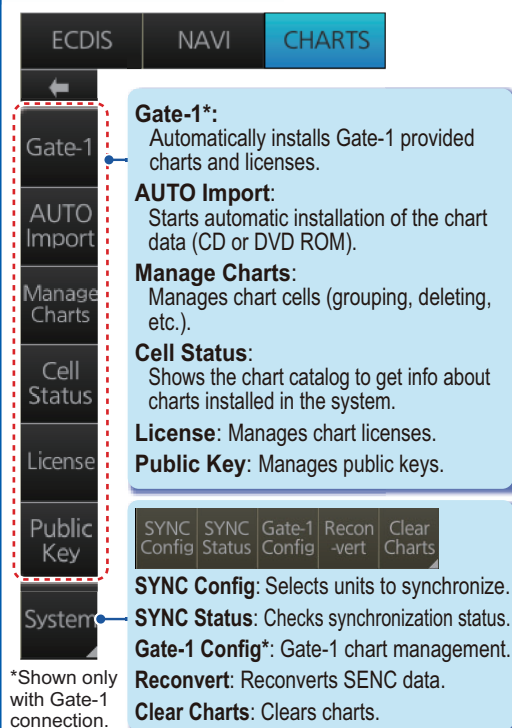
Instant Track:
Provides a temporary track to return to or deviate from the monitored route.

User Chart:
Select/unselect monitored user chart.

Monitor INFO:
Show Monitor [Information] dialog box.

Stop Monitor:
Stop monitoring route, user chart.

Chart maintenance mode



ECDIS **NAVI** **CHARTS**

Gate-1
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.

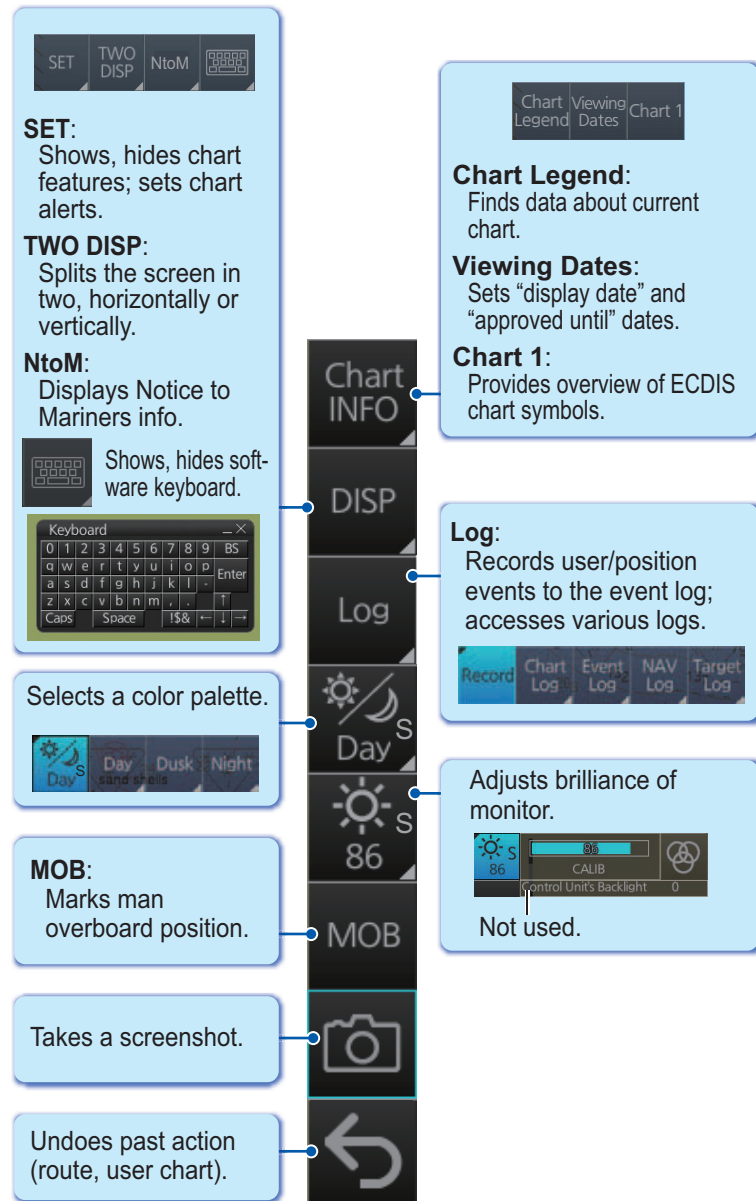
System

SYNC Config **SYNC Status** **Gate-1 Config** **Recon-vert** **Clear Charts**

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.

Lower section



SET **TWO DISP** **NtoM** **Keyboard**

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

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

NtoM:
Displays Notice to Mariners info.

Keyboard:
Shows, hides software keyboard.

Chart INFO **DISP** **Log** **Day** **86** **MOB** **Camera** **Undo**

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.

Record **Chart Log** **Event Log** **NAV Log** **Target Log**

Selects a color palette.

Day **Day** **Dusk** **Night**

Adjusts brilliance of monitor.

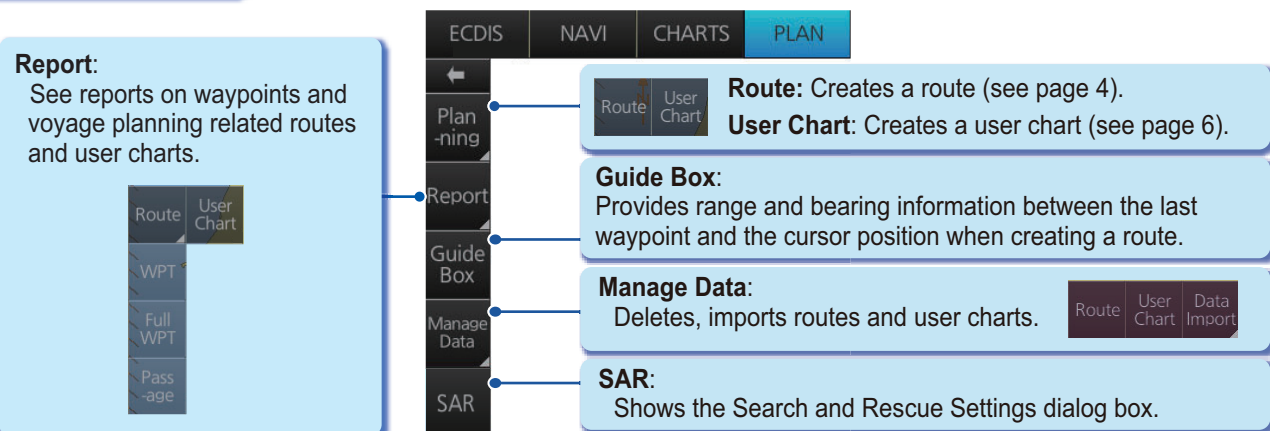
86 **CALIB** **Control Unit's Backlight** **0**

MOB:
Marks man overboard position.

Takes a screenshot.

Undoes past action (route, user chart).

Voyage planning mode



ECDIS **NAVI** **CHARTS** **PLAN**

Plan-ning **Route** **User Chart**

Report **Guide Box** **Manage Data** **SAR**

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.

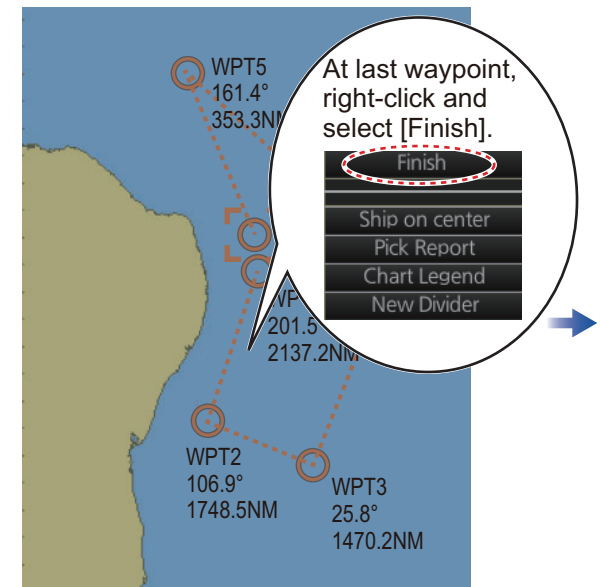
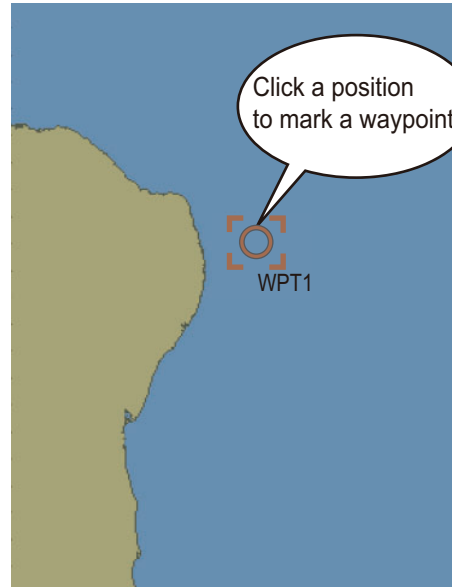
Routes

How to create, check a route

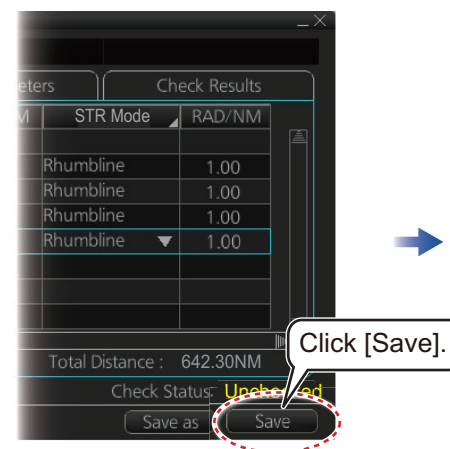
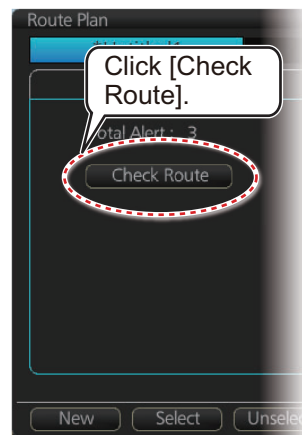
PLAN

Plan
-ning

Route

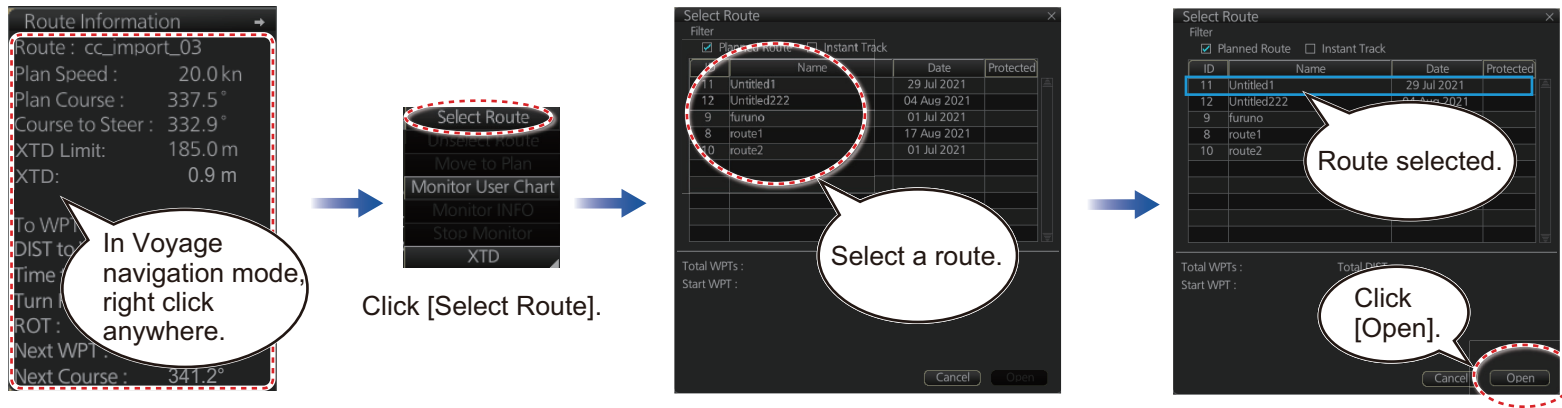


Continue entering waypoints.



Routes (continued)

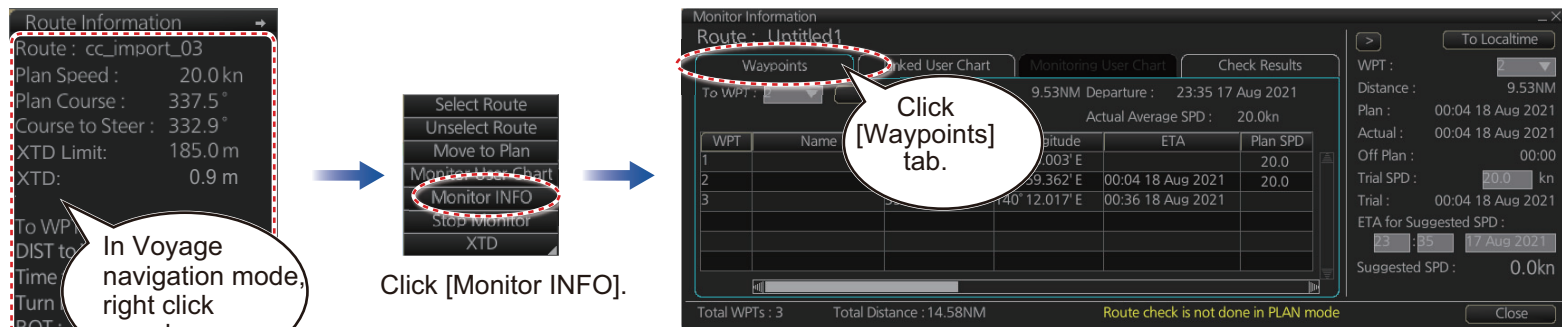
How to select a route to monitor



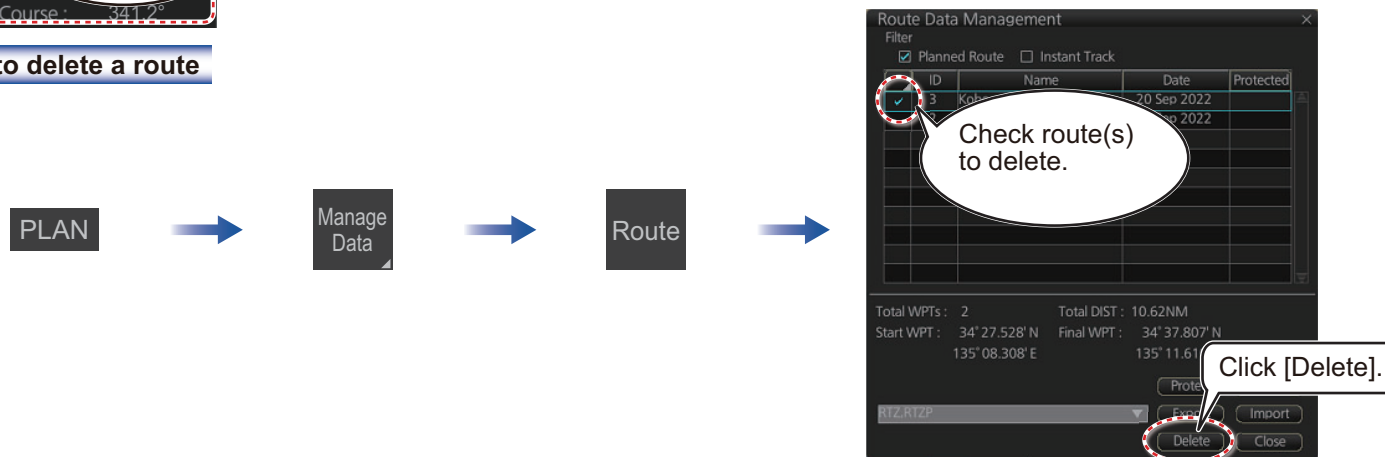
To stop monitoring a route:



How to view route waypoint information



How to delete a route



User Charts

How to create a user chart

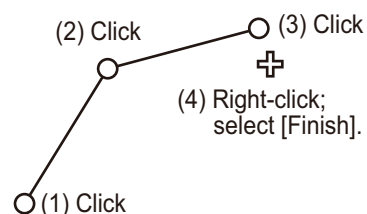


Click object to draw.

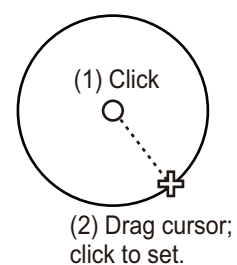
Tidal: - Current - Predicted		Area
Line: - Coast - Route - Nav - Depth		Circle
Clearing line: - NMT - NLT		Label: - Label - Triangle - Point - Polygon - Circle - Pin



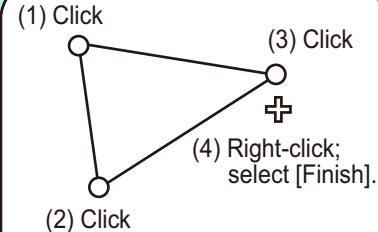
How to create a line



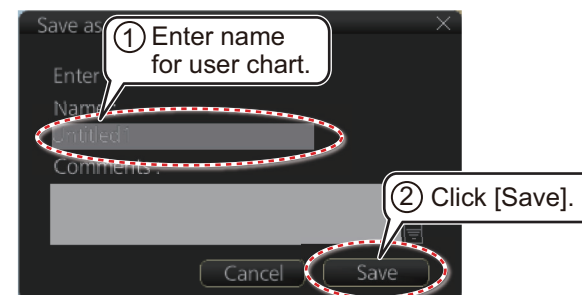
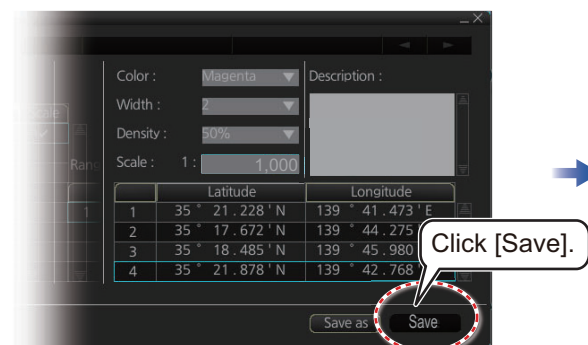
How to create a circle



How to create an area

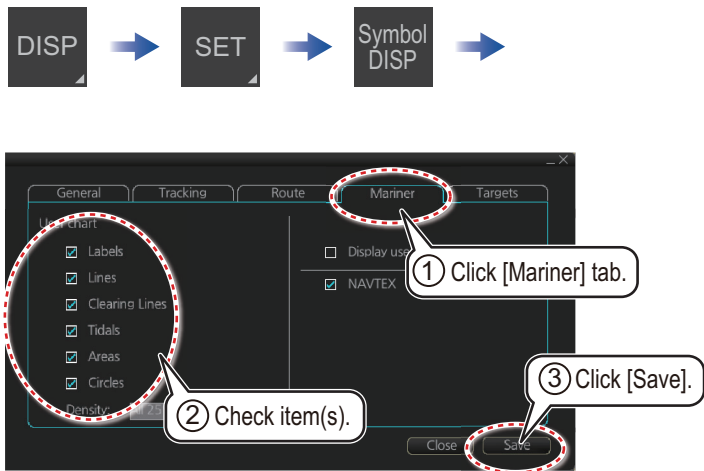


Example objects

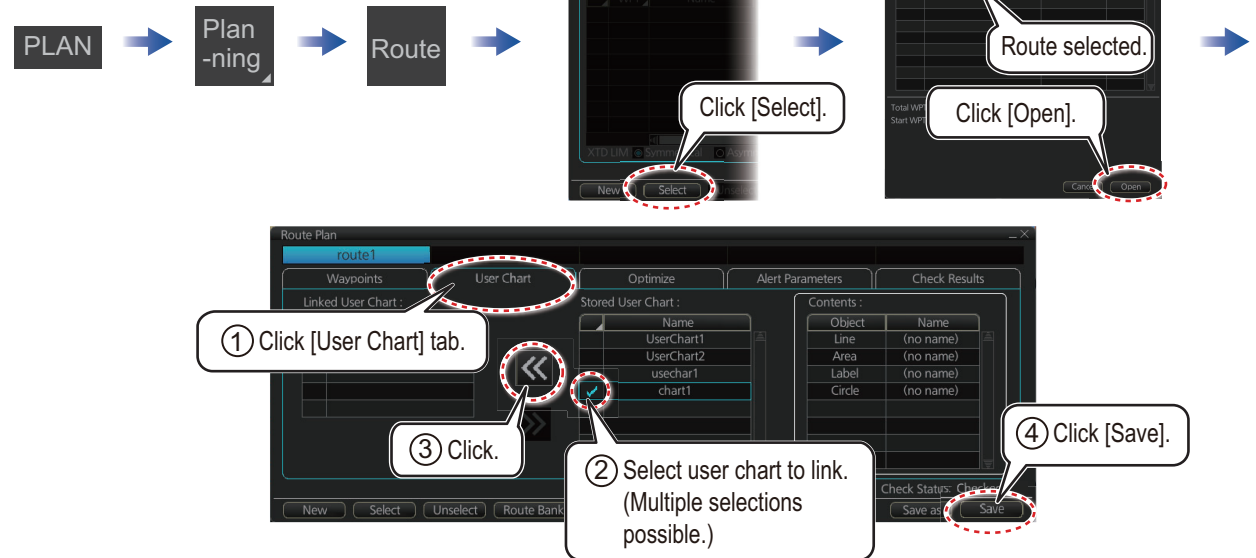


User Charts (continued)

How to select objects to display in user chart

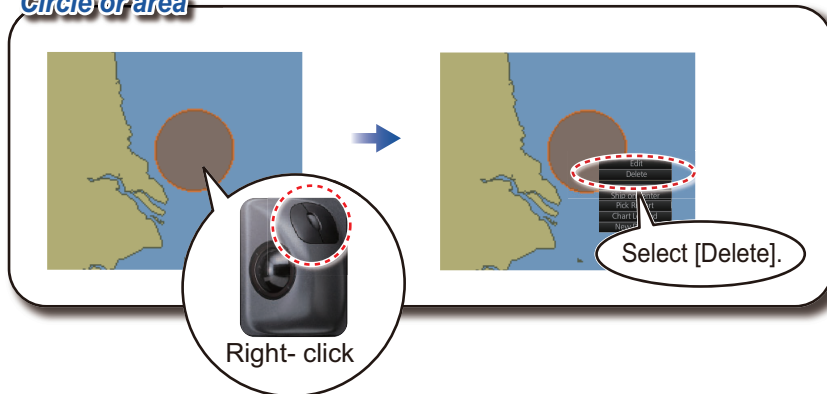


How to link a user chart to a route

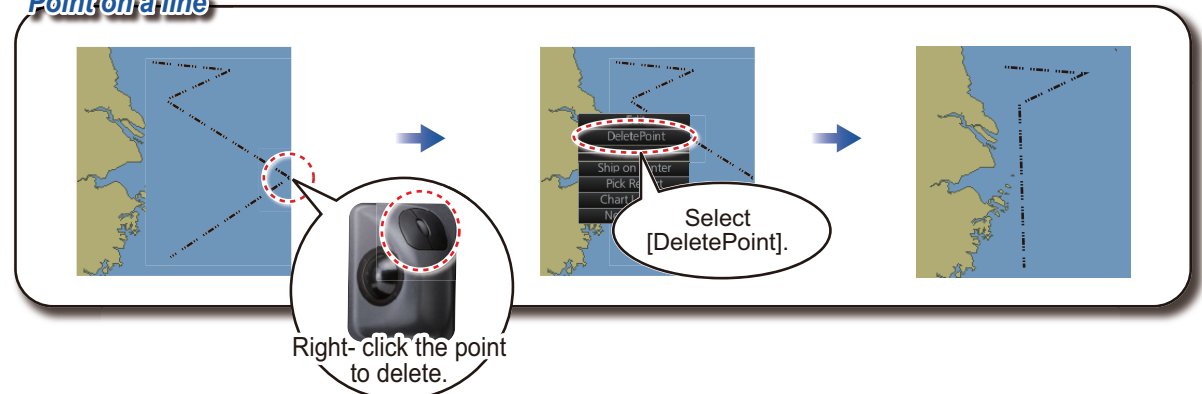


How to delete objects from a user chart

Circle or area



Point on a line



How to delete user charts

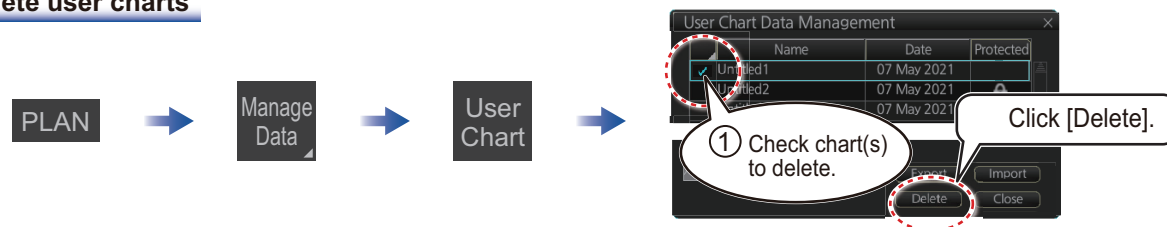
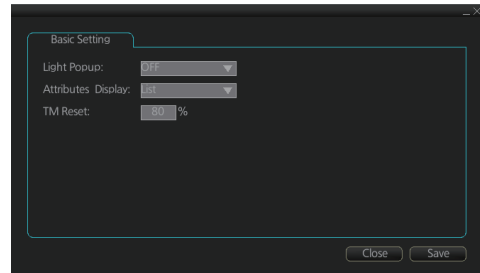


Chart Operations

How to control visibility of chart objects

Basic
Setting

Control basic
chart settings



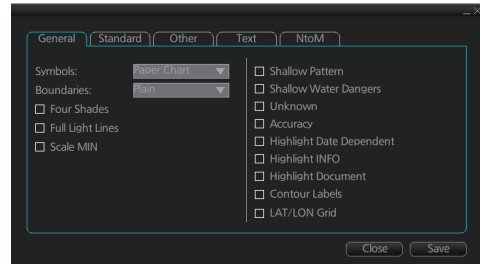
Basic Setting dialog box with the following controls:

- Light Popup: OFF
- Attributes Display: List
- TM Reset: 80 %

Buttons: Close, Save

Chart
DISP

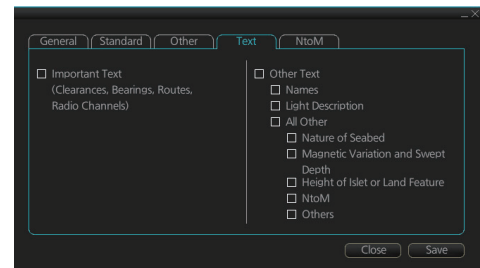
Control chart
objects



General tab of Chart DISP dialog box:

- Symbols: Paper Chart
- Boundaries: Plain
- ☐ Four Shades
- ☐ Full Light Lines
- ☐ Scale MIN
- ☐ Shallow Pattern
- ☐ Shallow Water Dangers
- ☐ Unknown
- ☐ Accuracy
- ☐ Highlight Date Dependent
- ☐ Highlight INFO
- ☐ Highlight Document
- ☐ Contour Labels
- ☐ LAT/LON Grid

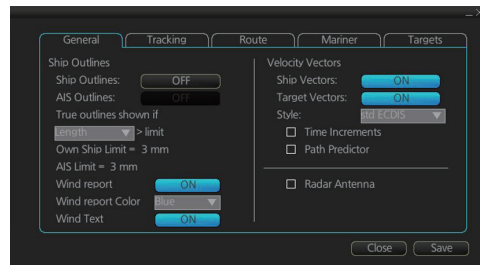
Buttons: Close, Save



Text tab of Chart DISP dialog box:

- ☐ Important Text (Clearances, Bearings, Routes, Radio Channels)
- ☐ Other Text
 - ☐ Names
 - ☐ Light Description
 - ☐ All Other
 - ☐ Nature of Seabed
 - ☐ Magnetic Variation and Swept Depth
 - ☐ Height of Islet or Land Feature
 - ☐ NtoM
 - ☐ Others

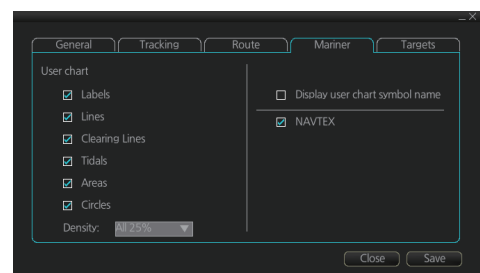
Buttons: Close, Save



Tracking tab of Chart DISP dialog box:

- General:
 - Ship Outlines: OFF
 - AIS Outlines: OFF
 - True outlines shown if: Length > limit
 - Own Ship Limit = 3 mm
 - AIS Limit = 3 mm
 - Wind report: ON
 - Wind report Color: Blue
 - Wind Text: ON
- Velocity Vectors:
 - Ship Vectors: ON
 - Target Vectors: ON
 - Style: 3d ECDIS
 - ☐ Time Increments
 - ☐ Path Predictor
 - ☐ Radar Antenna

Buttons: Close, Save



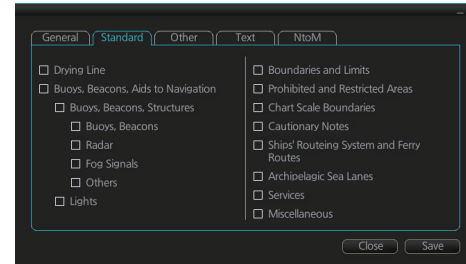
Mariner tab of Chart DISP dialog box:

- User chart:
 - ☒ Labels
 - ☒ Lines
 - ☒ Clearing Lines
 - ☒ Tidal
 - ☒ Areas
 - ☒ Circles
 - Density: All 25%
- ☐ Display user chart symbol name
- ☒ NAVTEX

Buttons: Close, Save

Symbol
DISP

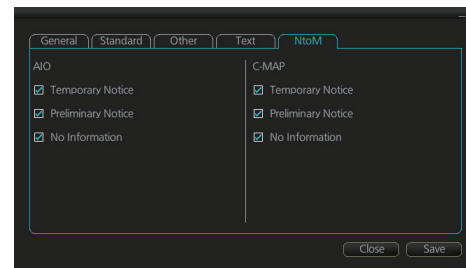
Control
navigational
features



Standard tab of Chart DISP dialog box:

- ☐ Drying Line
- ☐ Buoys, Beacons, Aids to Navigation
- ☐ Buoys, Beacons
- ☐ Radar
- ☐ Fog Signals
- ☐ Others
- ☐ Lights
- ☐ Boundaries and Limits
- ☐ Prohibited and Restricted Areas
- ☐ Chart Scale Boundaries
- ☐ Cautionary Notes
- ☐ Shield Routing System and Ferry Routes
- ☐ Archipelagic Sea Lanes
- ☐ Services
- ☐ Miscellaneous

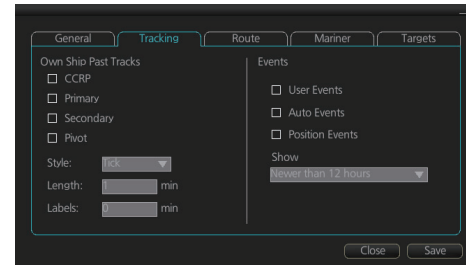
Buttons: Close, Save



NtoM tab of Chart DISP dialog box:

- AIO:
 - ☒ Temporary Notice
 - ☒ Preliminary Notice
 - ☒ No Information
- C-MAP:
 - ☒ Temporary Notice
 - ☒ Preliminary Notice
 - ☒ No Information

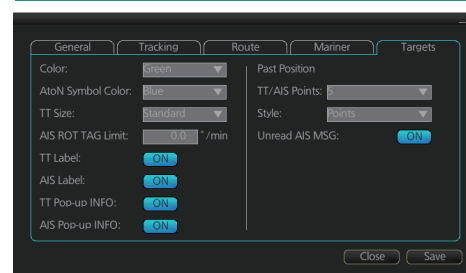
Buttons: Close, Save



Tracking tab of Chart DISP dialog box:

- Own Ship Past Tracks:
 - ☐ CCRP
 - ☐ Primary
 - ☐ Secondary
 - ☐ Pivot
 - Style: 100
 - Length: min
 - Labels: min
- Events:
 - ☐ User Events
 - ☐ Auto Events
 - ☐ Position Events
 - Show: longer than 12 hours

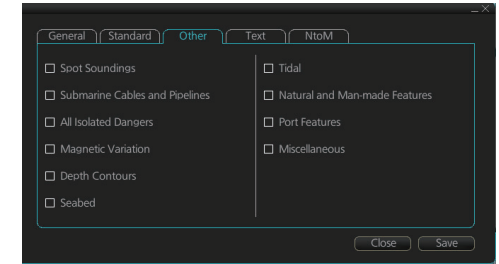
Buttons: Close, Save



Tracking tab of Chart DISP dialog box:

- Color: Green
- AtoN Symbol Color: Blue
- TT Size: standard
- AIS ROT TAG Limit: 0.0 /min
- TT Label: ON
- AIS Label: ON
- TT Pop-up INFO: ON
- AIS Pop-up INFO: ON
- Past Position:
 - TT/AIS Points: min
 - Style: points
 - Unread AIS MSG: ON

Buttons: Close, Save



Other tab of Chart DISP dialog box:

- ☐ Spot Soundings
- ☐ Submarine Cables and Pipelines
- ☐ All Isolated Dangers
- ☐ Magnetic Variation
- ☐ Depth Contours
- ☐ Seabed
- ☐ Tidal
- ☐ Natural and Man-made Features
- ☐ Port Features
- ☐ Miscellaneous

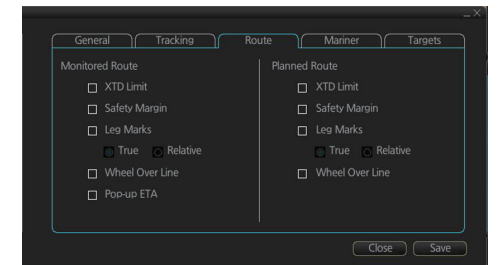
Buttons: Close, Save



Text tab of Chart DISP dialog box:

- ☐ Important Text (Clearances, Bearings, Routes, Radio Channels)
- ☐ Other Text
 - ☐ Names
 - ☐ Light Description
 - ☐ All Other
 - ☐ Nature of Seabed
 - ☐ Magnetic Variation and Swept Depth
 - ☐ Height of Islet or Land Feature
 - ☐ NtoM
 - ☐ Others

Buttons: Close, Save



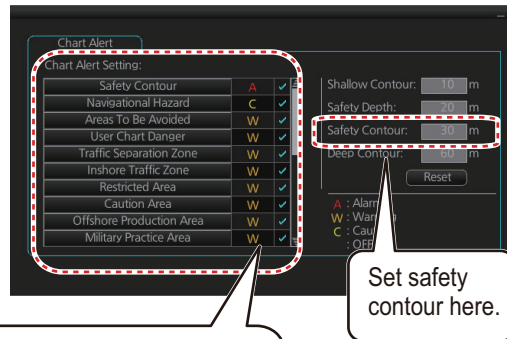
Route tab of Chart DISP dialog box:

- Monitored Route:
 - ☐ XTD Limit
 - ☐ Safety Margin
 - ☐ Leg Marks
 - ☐ Wheel Over Line
 - ☐ Pop-up ETA
- Planned Route:
 - ☐ XTD Limit
 - ☐ Safety Margin
 - ☐ Leg Marks
 - ☐ Wheel Over Line

Buttons: Close, Save

Chart Operations (continued)

How to set safety contours and chart alerts



Click to select chart alert type:

A (Alarm): Audio+visual indications

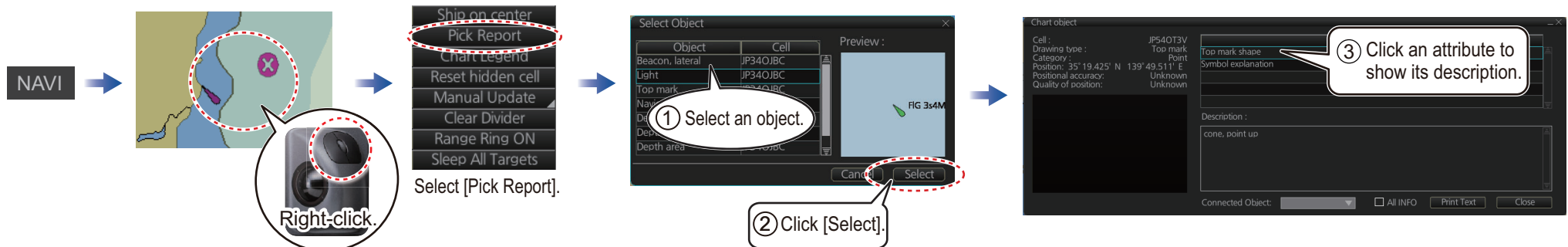
W (Warning): Visual indication

C (Caution): No indication

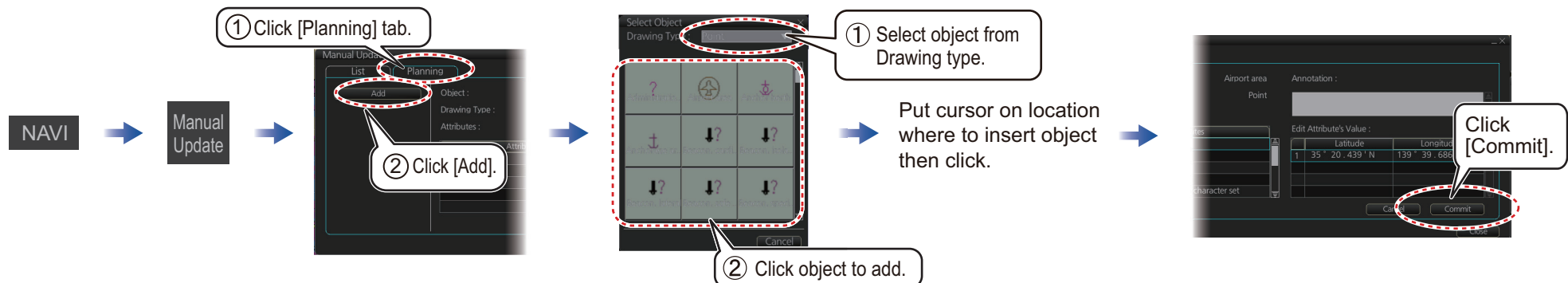
Click icon to switch between **C** and **W** vice versa.

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 (continued)

Open the menu, and select [TT/AIS], [Setting], [Setting. 1] in this sequence. 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

Filters AIS targets by range, speed.

Limit AIS display by AIS category.

Sleeps all activated AIS targets.

Set range (from own ship) to hide vessels beyond the range set

The screenshot shows a settings menu with two tabs: "Setting. 1" and "Setting. 2". Under "Setting. 1", there is an "AIS DISP Filter" section with options for Base Station, SAR Aircraft, SART, Synthetic Target, Physical AtoN, Virtual AtoN, and Synthetic AtoN, each with an "OFF" button. Below this is a "Sleep All Targets" button with a "Set" button next to it. Under "Setting. 2", there is a "Mobile Physical AtoN" and "Mobile Virtual AtoN" section, both with "OFF" buttons. Below that is a "Sleeping Target DISP Filter" section with "MAX Range" (OFF, 6 NM) and "MIN Ship Speed" (OFF, 0.0 kn). At the bottom is an "IT DISP Filter" section with "MAX Range" (OFF, 6 NM). At the very bottom are "Close" and "Save" buttons.

Radar Overlay

Activates, deactivates the radar overlay.

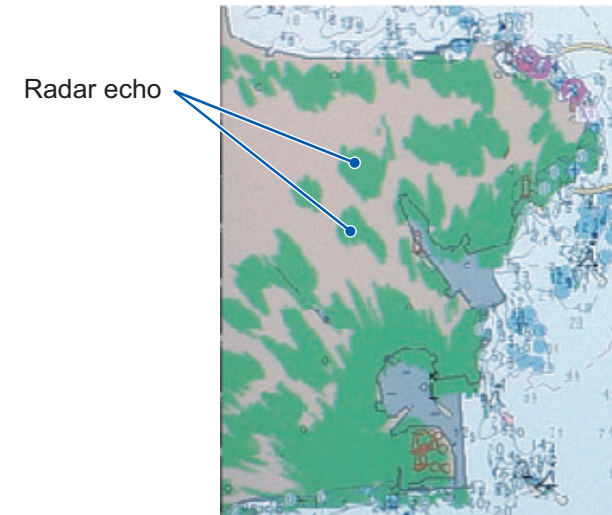
Adjusts the strength of radar echo. Put the cursor on the bar then roll the scrollwheel.

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".

The screenshot shows a menu titled "Overlay / NAV Tools" with a sub-menu "Echo". It has a "Display" button set to "ON". Below it is an "Echo Level" bar set to "100". Then there is a "Density" dropdown menu set to "100%". Below that is an "Antenna" dropdown menu set to "NO RADAR". At the bottom, the "Status" is "No Data".



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).

