



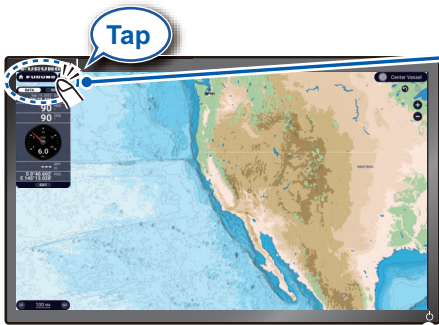
This guide provides the basic operating procedures for this equipment. For detailed information, see the Operator's Manual, available on our homepage. Connection of sensors required.

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The layout of the screen illustrations in this guide may differ depending on your system configuration and settings.

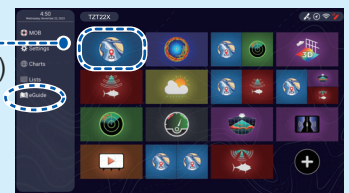
Operational Overview

Icon (home/displays), power switch operations



[FURUNO] icon
Displays the home page.

Display icons (max. 16 on home page)
"eGuide" provides an abbreviated operator's guide.



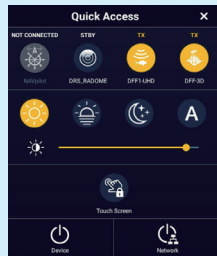
Home page

Power off

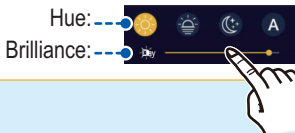
Device: Powers off this unit.
Network: Powers off all NavNet TZtouch series units in network.

Power switch

- Turns on power.
- Shows [Quick Access] window.

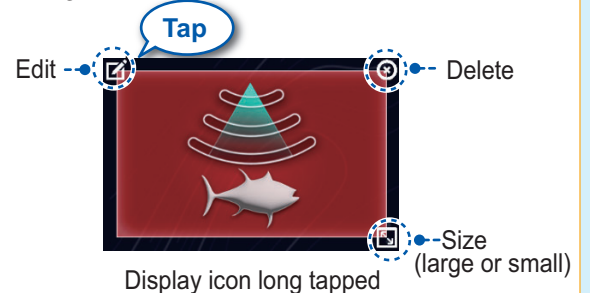


Brilliance, Hue



How to edit a display icon

Long tap a display icon to edit, delete, resize, or change its location.



How to select a display

S

- Tap a display icon on the home page (see illustration above).
- Tap a display icon on the Quick page.



Swipe downward from top of display.



Quick page



Touchscreen operations

Tap



- Select an item on a menu.
- Tap the display or an object to show the corresponding pop-up menu.

Drag, swipe



- Move the chart.
- Scroll the menu.
- Show Slide-out menu, Layers menu.

Pinch



Zoom in



Zoom out

- Zoom in, zoom out the chart plotter and weather displays.
- Change the range on the radar and fish finder displays.

Range buttons



Two finger (long) tap



Do the function assigned to [Two Finger (Long) Tap Function] in the [Settings] - [General] menu.

Two finger drag



Change the viewpoint position on the 3D display.

Menu operation

Pop-up menu



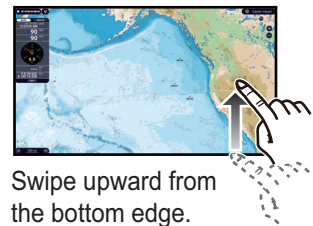
Tap screen (applicable point, object, etc.).

Pop-up menu



Tap the required function. (" $>$ " indicates additional options.)

Layers menu



Swipe upward from the bottom edge.

Layers menu



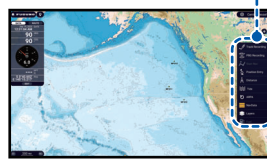
Tap the required function. (To switch between menus, swipe or tap applicable tab.)

Slide-out menu



Swipe leftward from the right edge.

Slide-out menu



Tap the required function.

Icon color and function state
Yellow: ON, White: OFF

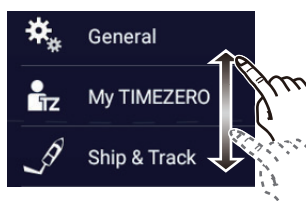
Settings menu



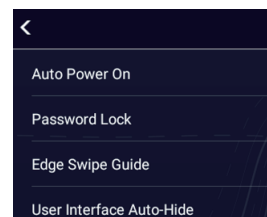
Tap the [FURUNO] icon.



Tap [Settings].

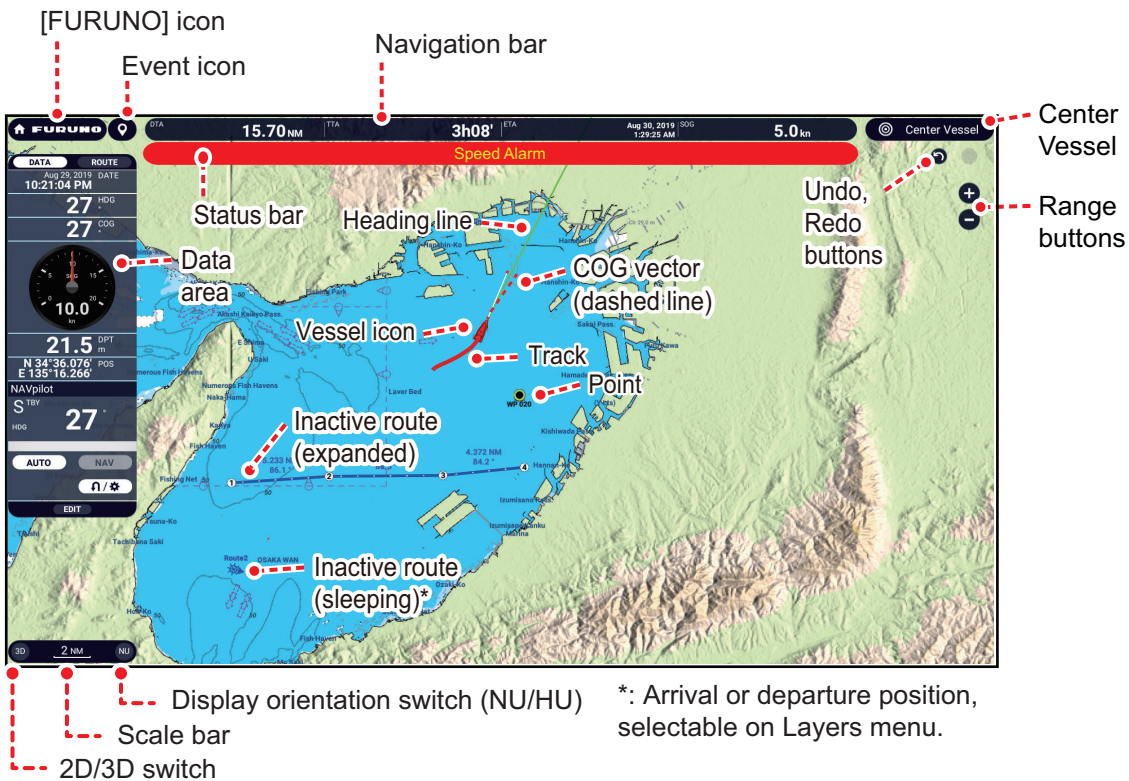


Drag to find required menu, then tap item.



Tap the required menu item.

Chart Plotter



Data Area (Data Box)

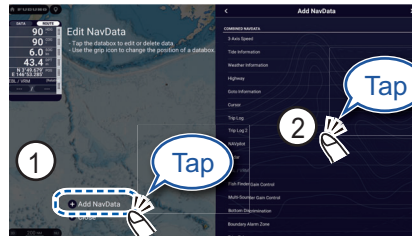
Swipe from the left edge of the screen rightward to show navigation data in the data area at the left edge of the screen. To hide the data area, swipe the data area leftward or tap the [NavData] indication (yellow) in the Slide-out menu.

Data box settings



Tap [Edit] to show [Edit NavData] display.

To add a data box;



① Tap [+Add NavData]. ② Tap a data to add.

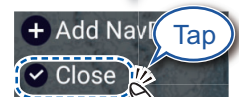
To remove a data box, or change the displayed data:



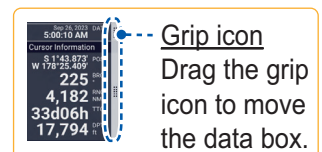
① Tap the data box to remove or change. ② Remove a data box: Tap [Remove]. Change data: Tap data to display.



Tap [Change Type] to change the data display method, among Graphic (analog), Numeric (digital) and Graph.



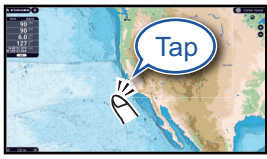
Tap [Close] to finish.



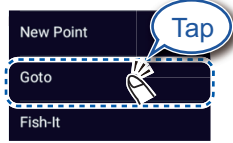
Points/boundaries

Points can be entered on the chart plotter display (radar, fish finder and weather displays also) to mark important locations such as a good fishing spot. Point attributes (position, symbol type, color, etc.) are recorded to the Points list. Also, boundaries can be set at the position desired (net position, area to avoid, etc.).

How to enter a point



Tap where to enter a point.



The point is entered on the screen.

How to set a point as destination

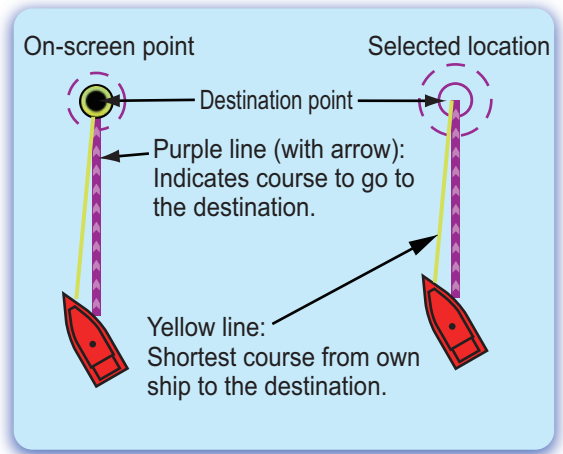
On-screen point



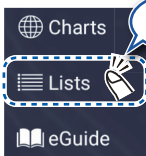
Tap a point or the location to set as destination.



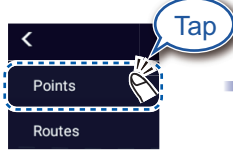
If a point was tapped.



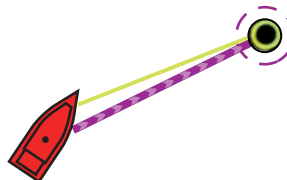
Points list



Tap [Lists] on the home page.



Sort the list by date, name, icon, color, range.



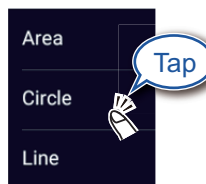
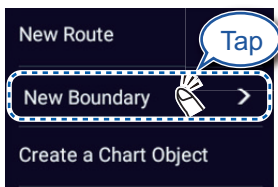
Notice

Note: [Find on Chart] puts the selected point at the screen center.

How to set a boundary



Tap the position where to set a boundary.



Tap the shape to use for the boundary.

[Area]/[Line]: Tap necessary points to complete the boundary, referring to "Route" on the next page.

[Circle]: Drag icons to adjust the size and position, and then tap [End Boundary].

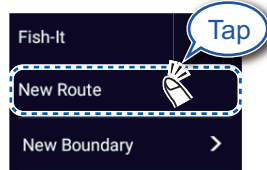
Routes

A route is comprised of a series of waypoints leading to a destination. Routes are saved to the routes list.

How to create a new route

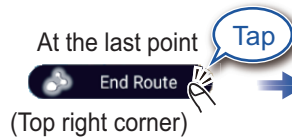
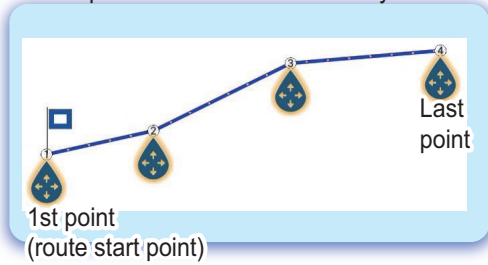


Tap the first point for the route.



Select [Manual] or [AI Routing]*.

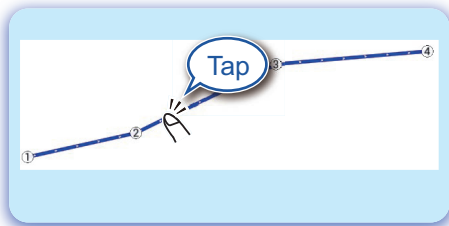
*: For AI Routing, tap only 2 points (1st and last). The optimum route is automatically created.



Enter a name for the route, then tap [✓].

How to follow a route

On-screen route



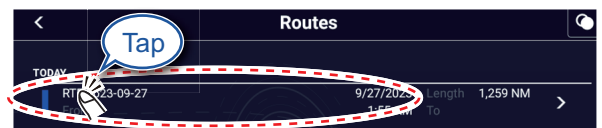
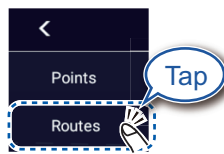
Tap a leg of the route.



Routes list



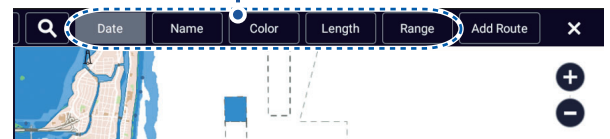
Home page



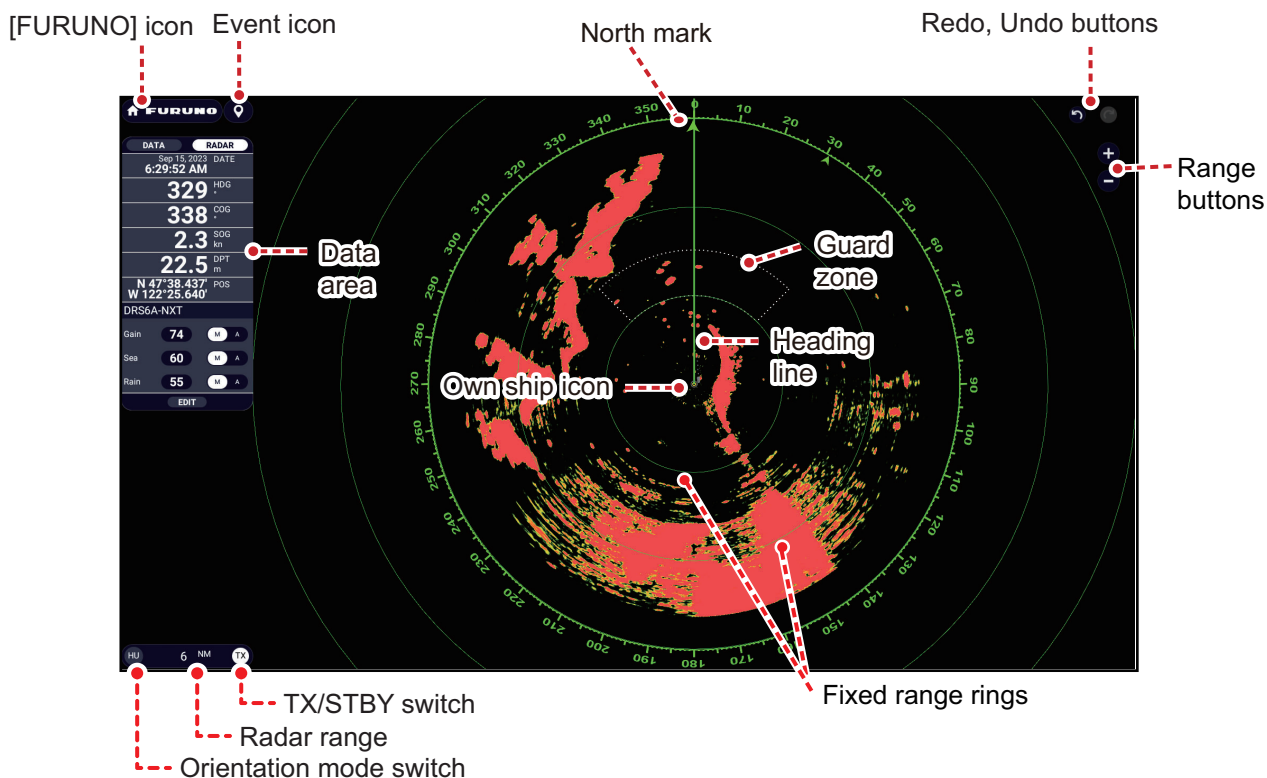
Tap the route to use.



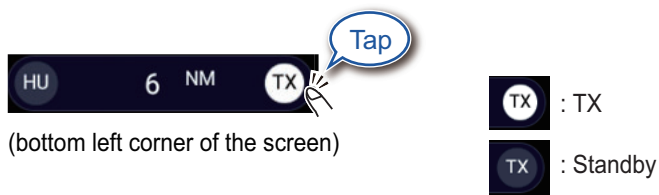
Sort list by date, name, color, length, or range.



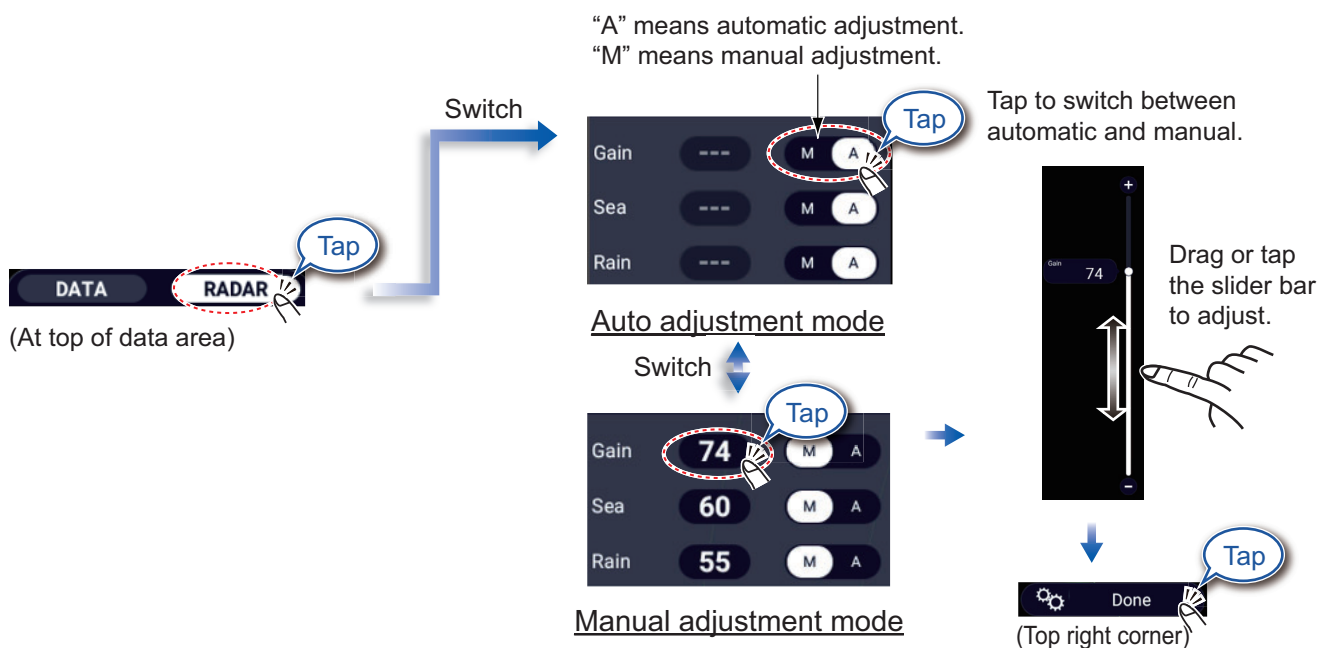
Radar



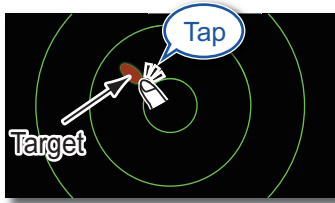
How to switch between standby and TX



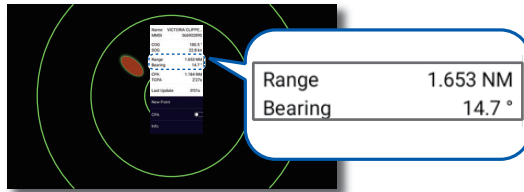
How to adjust the gain / sea clutter / rain clutter



How to measure the range, bearing from own ship to a target

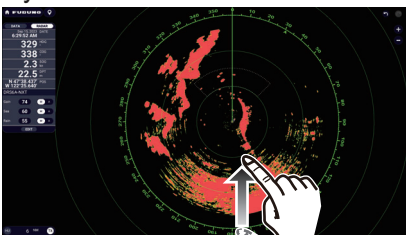


Tap a target to show its range and bearing from own ship.

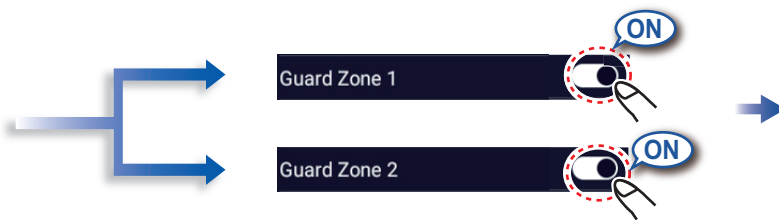


How to set a guard zone

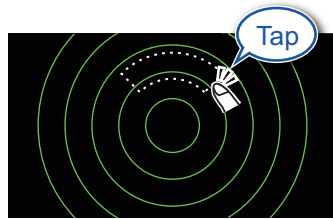
A guard zone alerts you (with aural and visual alarms) when a radar target enters the area you specify.



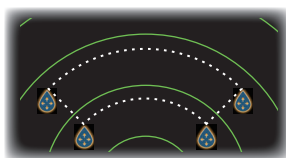
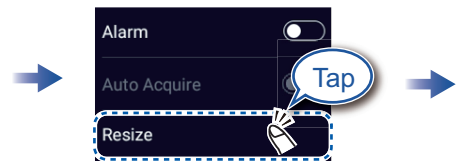
Open the Layers menu, tap the [Overlays] tab.



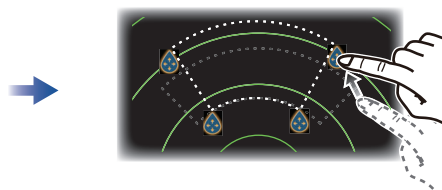
The guard zone appears in dashed lines.



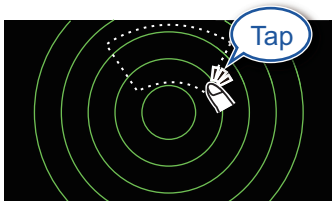
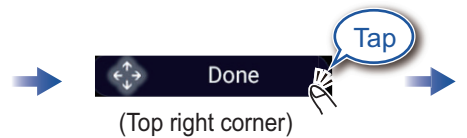
Tap dashed line on guard zone.



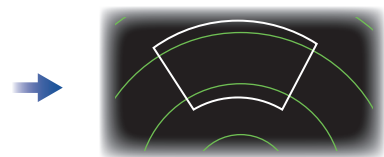
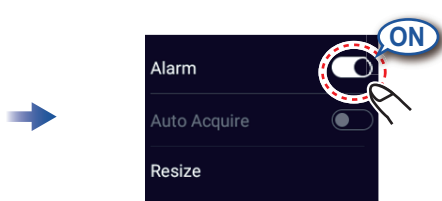
An icon appears at each corner of the guard zone.



Drag the icons to set guard zone.



Tap the guard zone again.

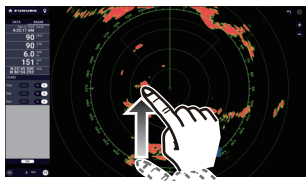


The dashed lines change to solid lines, indicating the guard zone is active.

ARPA Operation

ARPA is an anti-collision aid that tracks the movement of other ships to help prevent collision. ARPA not only tracks other ships but also provides their navigation data. Targets can be acquired manually, automatically, or both automatically and manually.

How to show, hide ARPA symbols



Open the Layers menu, tap the [Overlays] tab.

ARPA Targets



ARPA symbols ON

ARPA Targets



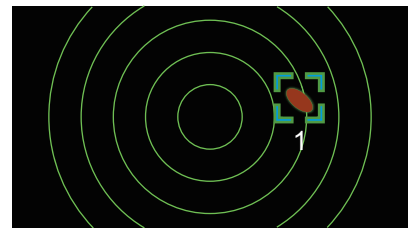
ARPA symbols OFF

How to manually acquire a target

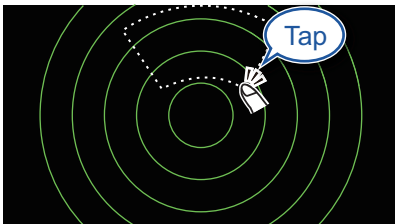


Tap the target to acquire.

Acquire

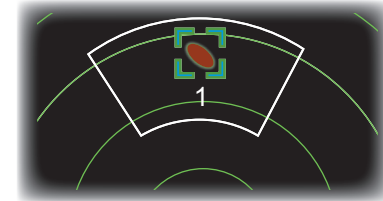


How to automatically acquire a target



Set a guard zone, then tap the guard zone.

Auto Acquire



The dashed lines change to solid lines, indicating the guard zone is active.

ARPA symbols



At acquisition

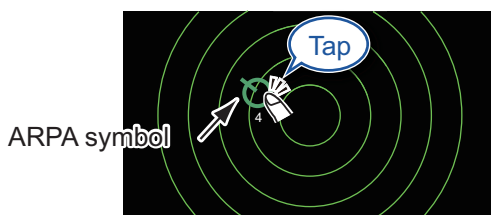


30 seconds
after acquisition



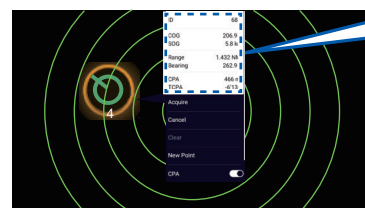
Lost target

How to display target data



ARPA symbol

Tap an ARPA target to show its data.



ID	68
COG	206.9 °
SOG	5.8 kn
Range	1.432 NM
Bearing	262.9 °
CPA	466 m
TCPA	-6'13s

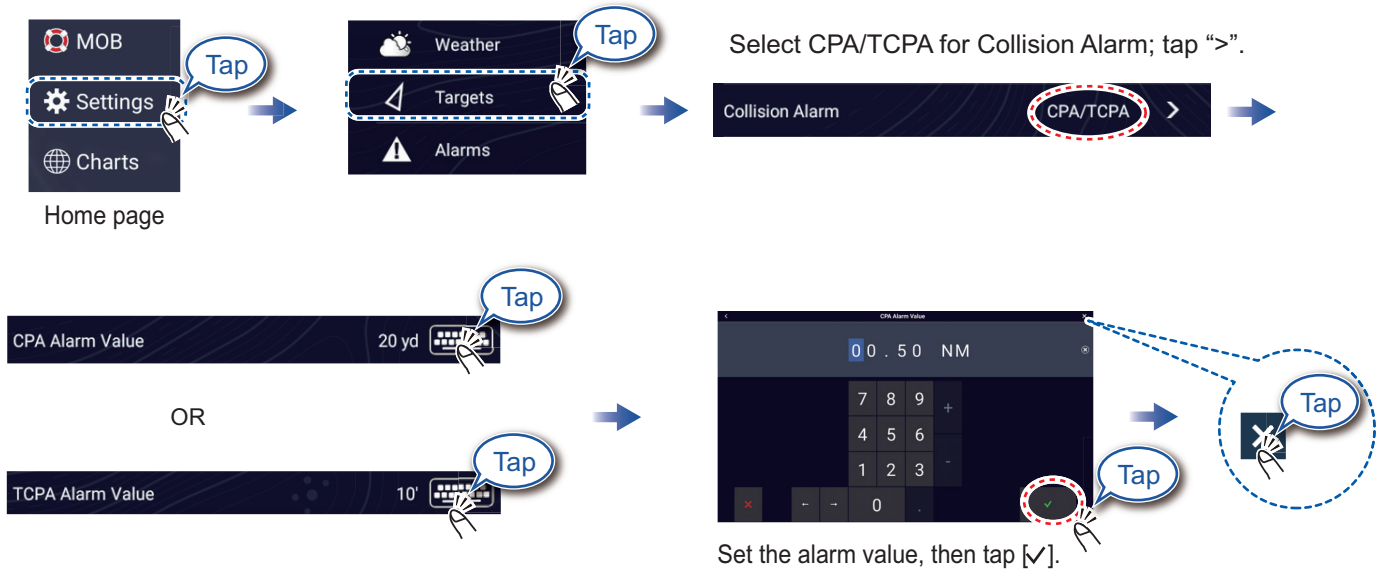
CPA/TCPA alarm

The CPA/TCPA alarm releases an aural alarm and a visual alarm (message in Status bar) when both the CPA and TCPA of a tracked target are equal to or lower than the CPA/TCPA alarm setting.

CPA: Closest point of approach

TCPA: Time to closest point of approach

How to set the CPA/TCPA alarm



How to acknowledge the CPA/TCPA alarm

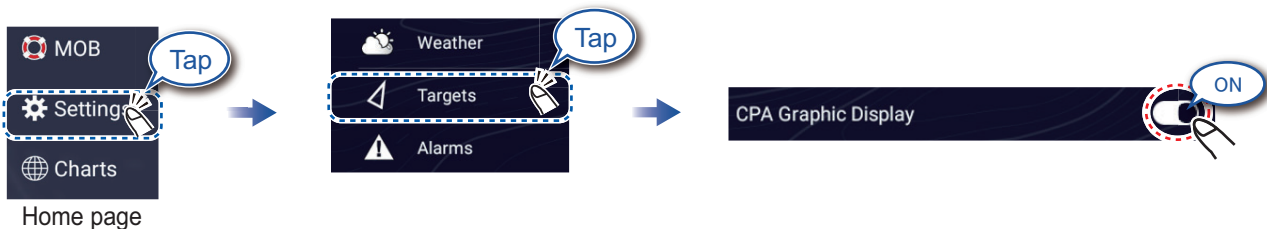
Tap the alarm message (top of screen) to acknowledge the alarm and stop the aural alarm.



CPA Line

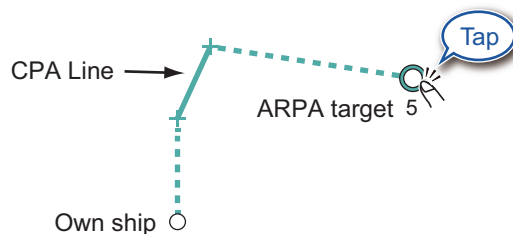
The CPA Line feature gives you a visual line that depicts the closest point of approach to a selected ARPA target. To use this feature, own ship position and heading data are required.

How to enable the CPA Line feature



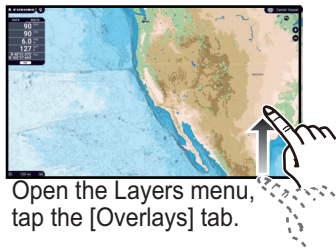
How to show the CPA Line

Tap an ARPA target (condition: target's CPA/TCPA must be a positive value) on the radar or chart plotter.



AIS (Automatic Identification System)

How to show or hide AIS target symbols



AIS Targets



AIS symbols ON

AIS Targets



AIS symbols OFF

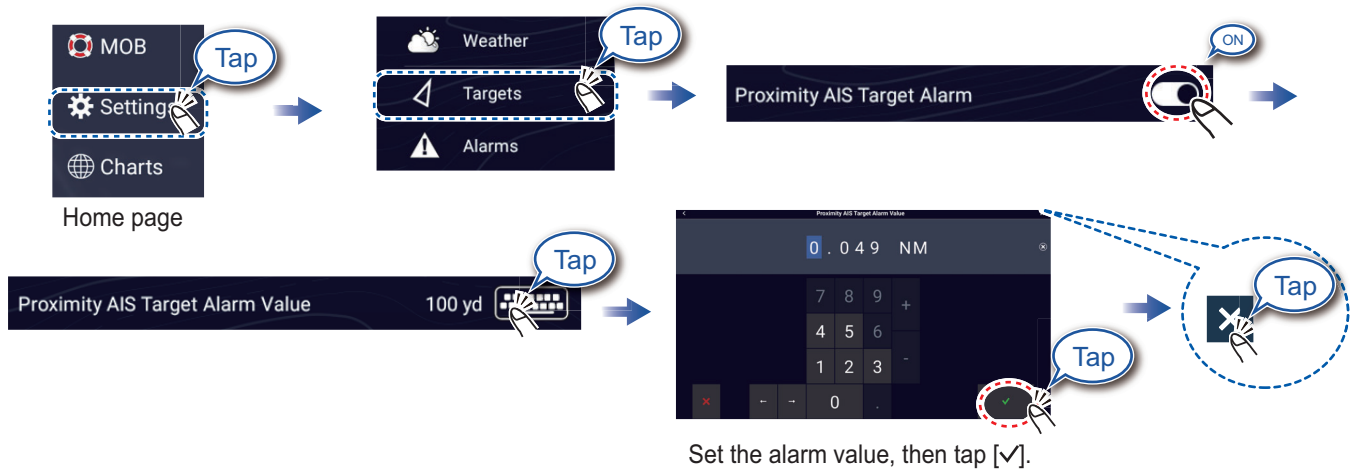
AIS target symbols

	Class A AIS	Class B AIS	BFT* AIS
Activated target	SOG and COG vector Color: Blue	SOG and COG vector Color: Green	SOG and COG vector Color: Blue (filled)
Dangerous target	Color: Red		
Lost target	Color - AIS target: Blue - Cross: Red	Color - AIS target: Green - Cross: Red	Color - AIS target: Blue (filled) - Cross: Red

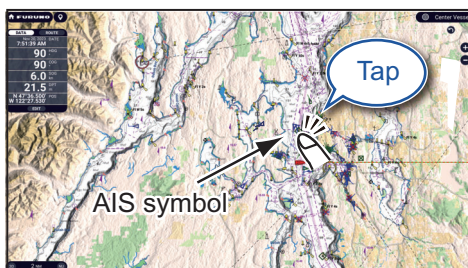
*: Blue Force Tracking

Proximity AIS target alarm

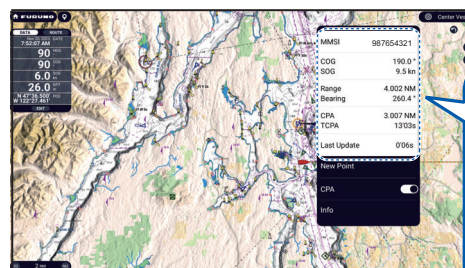
The proximity AIS target alarm releases aural and visual alarms when the distance between own ship and an AIS target is near the alarm value.



How to show AIS target data

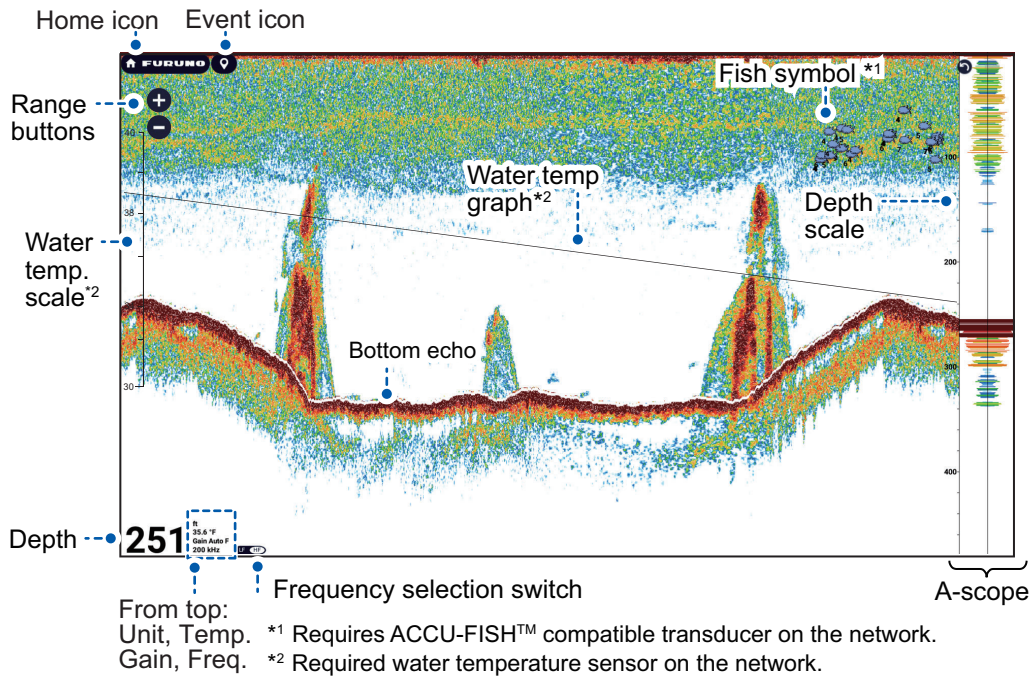


Tap AIS symbol.



MMSI	987654321
COG	190.0°
SOG	9.5 kn
Range	4.002 NM
Bearing	260.4°
CPA	3.007 NM
TCPA	13'03s
Last Update	0'06s

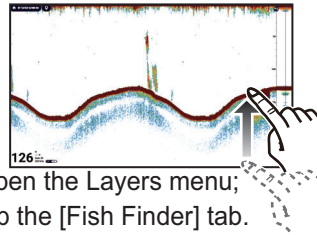
Fish Finder



Note: Names of menu items may be different depending on the transducer connected on the network.

How to select a frequency

Low frequency: For “normal” use.
High (Middle) frequency: For detailed observation of schools of fish.
Dual frequency: Show both the low and high frequency pictures.



Single Freq.



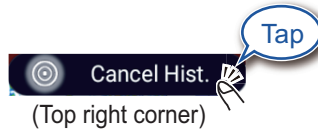
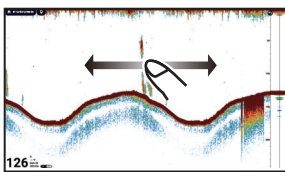
Dual Freq.



Note

[TX/STBY] toggles between TX and standby.

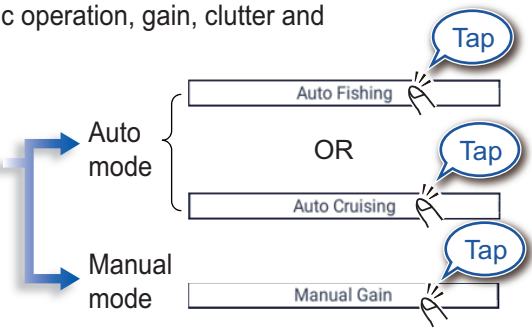
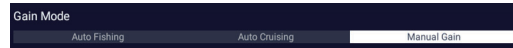
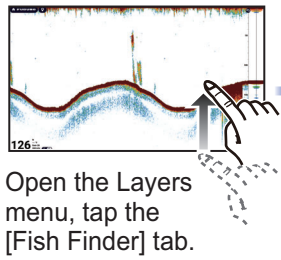
How to show past echoes (echo history)



Return to normal display.

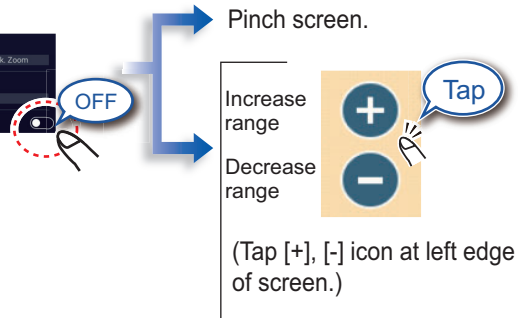
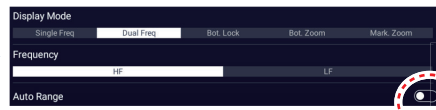
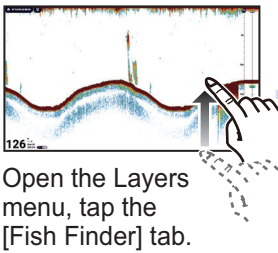
How to select the operating mode

The fish finder is available in automatic and manual operation. For automatic operation, gain, clutter and TVG are automatically adjusted.

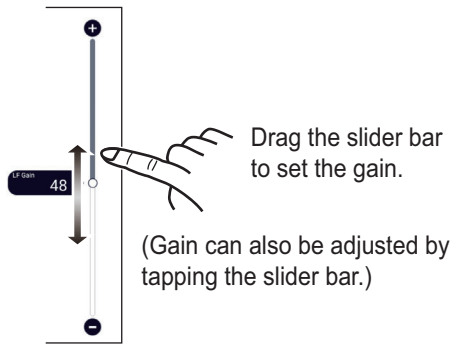
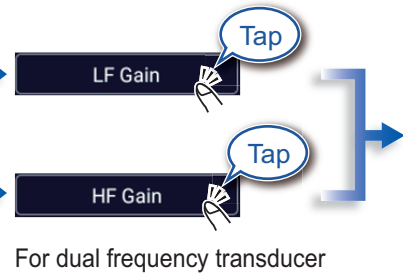
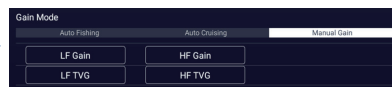
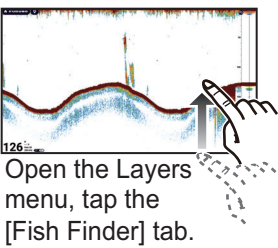


Manual mode

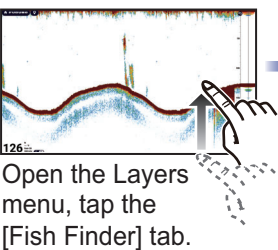
How to change the range



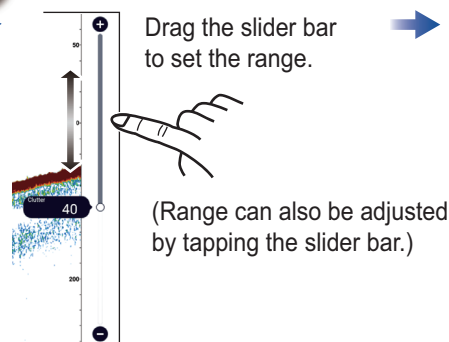
How to adjust the gain



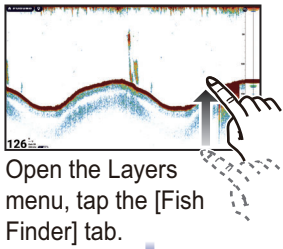
How to reduce clutter



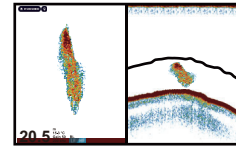
The larger the value, the more the clutter is reduced.



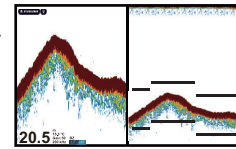
Zoom display



Bottom Lock
Search for bottom fish.



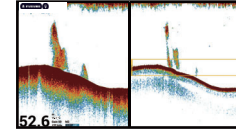
Bottom Zoom
Find bottom contour and hardness.



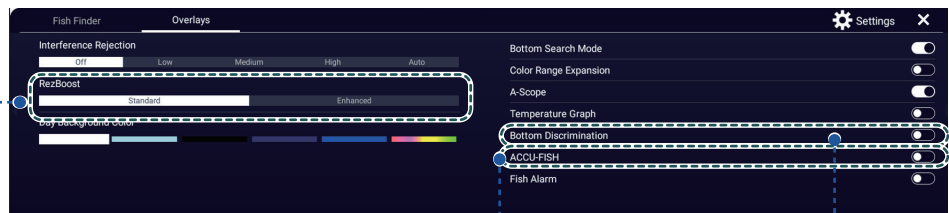
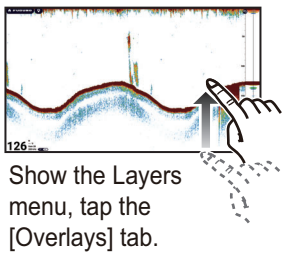
- Short tail indicates soft bottom.
- Long tail indicates hard bottom.



Marker Zoom
Help determine the size of a school of fish in the middle layer.

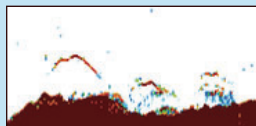
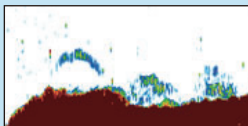


ACCU-FISH™/Bottom Discrimination/RezBoost™



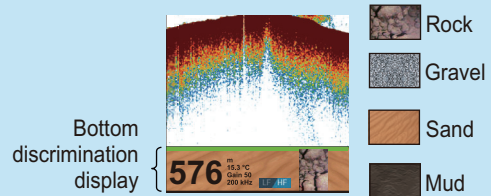
RezBoost™

Raise the echo resolution. (Requires RezBoost™ capable transducer on the network.)



Bottom Discrimination

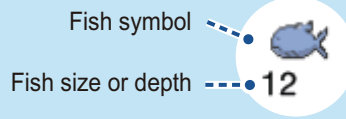
Show probable bottom hardness. (Requires bottom discrimination capable transducer on the network.)



The most probable bottom material.

ACCU-FISH™

Detected fish can be marked with a fish symbol. (Requires ACCU-FISH™ capable transducer on the network.)



Notice

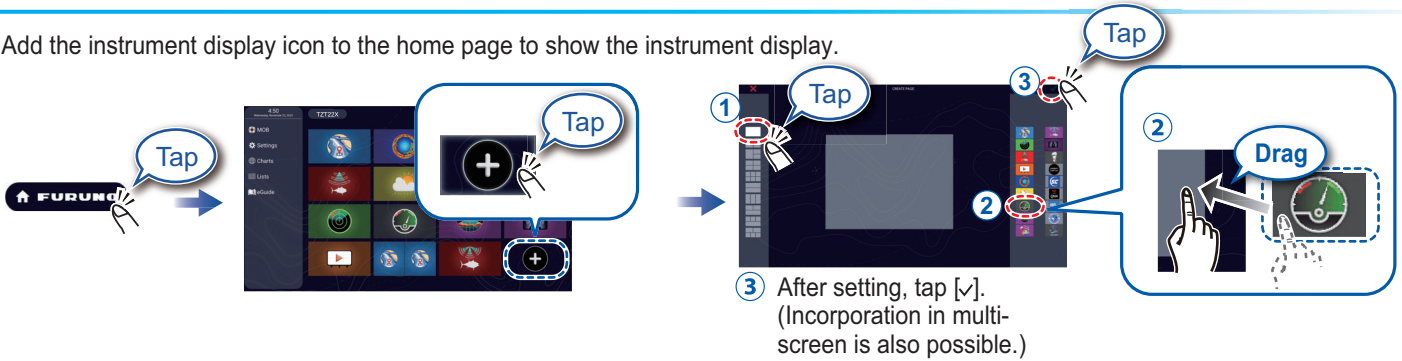
You can select fish symbol type, and fish size or depth indication from the menu - go to home page, [Settings], [Fish Finder].

Instrument Display

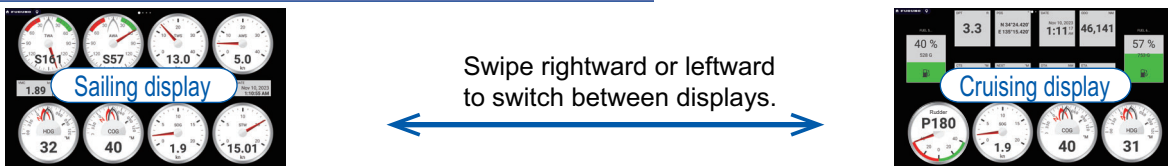
With connection of appropriate sensors, the instrument display shows various navigation data.

How to enable the instrument display

Add the instrument display icon to the home page to show the instrument display.



How to switch instrument displays (ex. full display)



How to edit the instrument display



Tap the instrument display, then tap [Edit Page] on the pop-up menu.

Edit mode



A white line surrounds each indication.

In the edit mode, you can remove, change, add, rearrange indications.

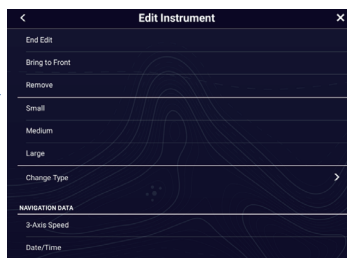
To end the edit mode

Tap the screen, then tap [End Edit] on the pop-up menu.

How to remove or change an indication



In the edit mode, tap the indication to remove or change.

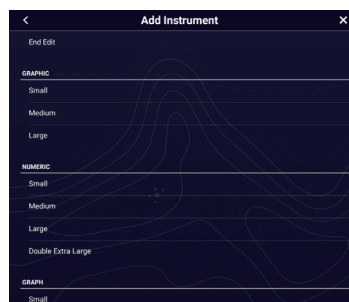


- Remove indication: Tap [Remove].
 - Change size: Tap [Small], [Medium], [Large], [Double Extra Large]*.
 - Change type: Tap [Change Type], then tap desired size.
 - Change indication: Tap indication in [NAVIGATION DATA], [ROUTE INFORMATION], [WIND AND WEATHER], and [ENGINE].
- *: Numeric displays only

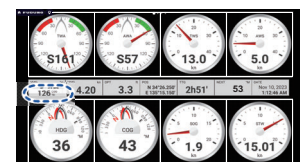
How to add an indication



In the edit mode, tap a location not occupied by an instrument display.



Tap a size in desired category.



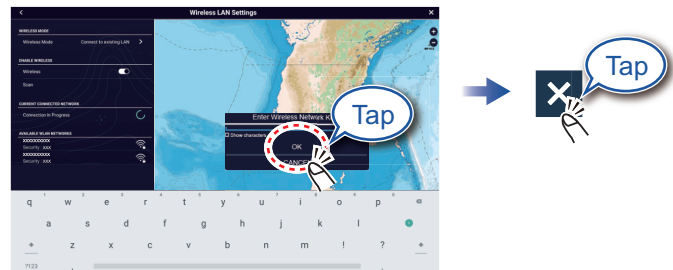
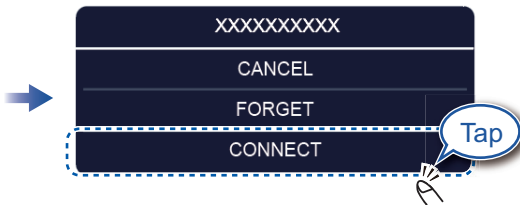
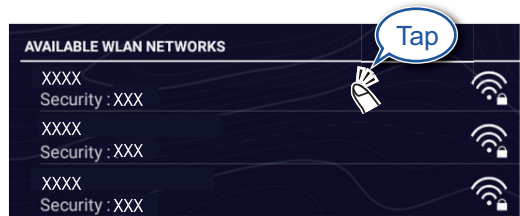
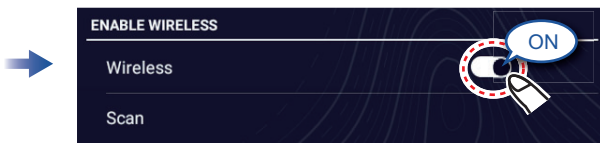
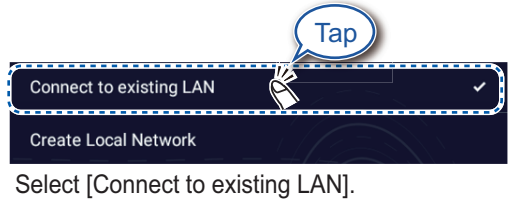
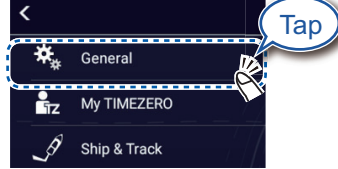
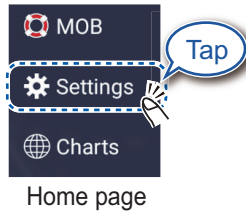
Tap added instrument display to change displayed data (see above).

Wireless LAN Settings

You can connect to the internet with the wireless LAN signal to download weather information, update the software, and connect to an iPhone, iPod, iPad, or Android™ device, to operate and monitor a NavNet TZtouch XL device.

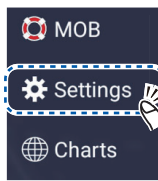
How to connect to an existing LAN

Connect to the existing LAN to download weather data or update the software. For smartphone and tablet settings, refer to appropriate manuals.

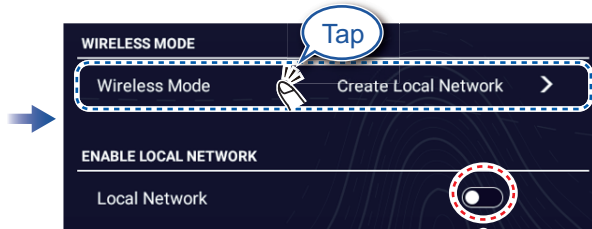
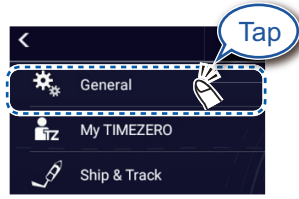


How to create a local wireless network

Create a local wireless network to enable operation, monitoring of the TZTtouch XL from a smartphone or tablet.



Home screen



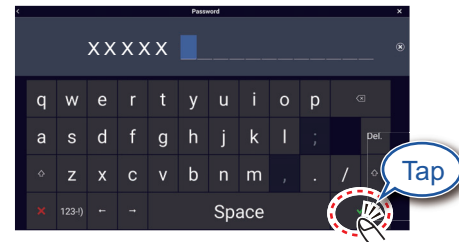
Check that [OFF] is selected.



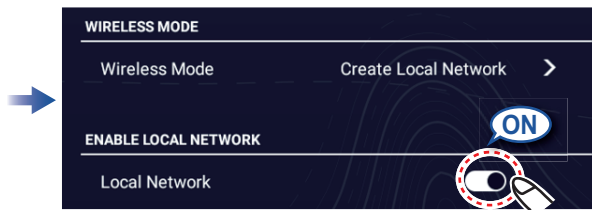
Select [Create Local Network].



Enter the name of the network, then tap [✓].



Enter the password, then tap [✓].



Connect to the NavNet TZtouch XL from the smartphone or tablet.