FURUNO



MULTI FUNCTION DISPLAY

Model TZT10X/13X/16X/22X/24X/BBX

Operator's Guide

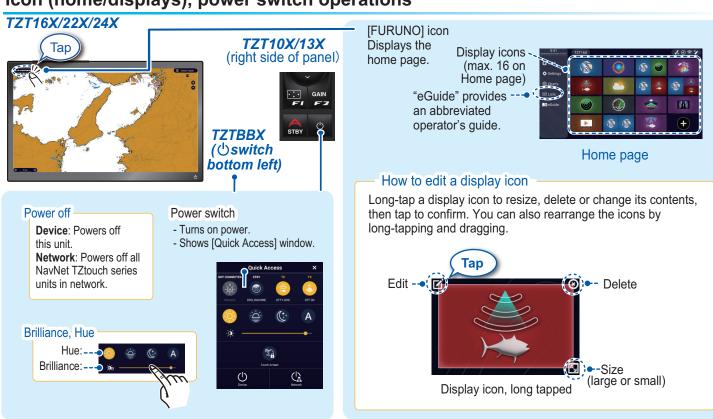
This guide provides the basic operating procedures for this equipment. For detailed information, see the Operator's Manual, available on our homepage. Connection of sensors required.

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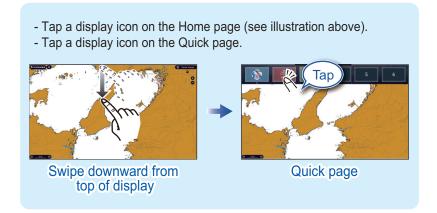
The layout of the screen illustrations in this guide may differ depending on your system configuration and settings.

Operational Overview

Icon (home/displays), power switch operations



How to select a display





Touchscreen operations





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

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



Does the function assigned to [Two Finger (Long) Tap Function] in the [Settings] - [General] - [This Display]

Two finger drag



Change the viewpoint position on the 3D display.

Menu operation





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



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

Slide-out menu



Swipe leftward from the right edge.

Tap the required function.

Icon color and function state

Yellow: ON, White: OFF

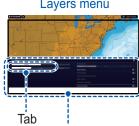
Layers menu



the bottom edge.



Layers menu



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

Settings menu



Tap the [FURUNO] icon.

Tap [Settings].

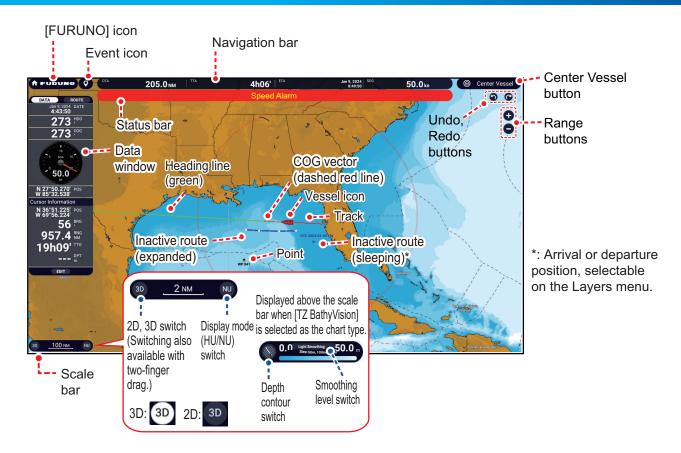


Drag to find required menu, then tap item.



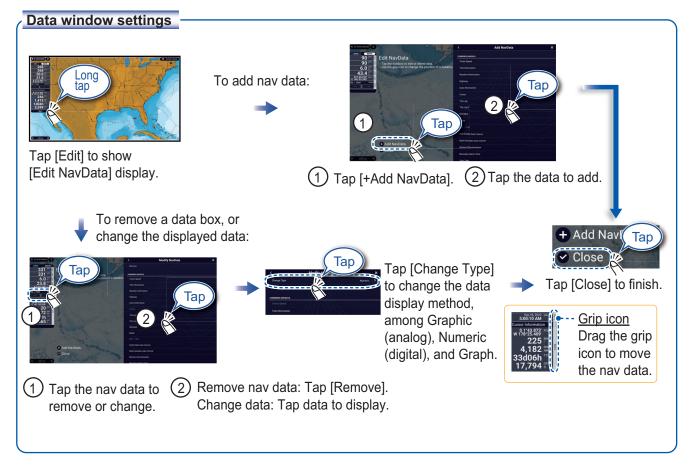
Tap the required menu item.

Chart Plotter



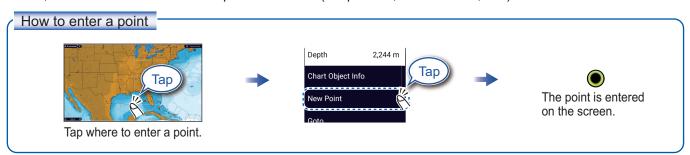
Data Window

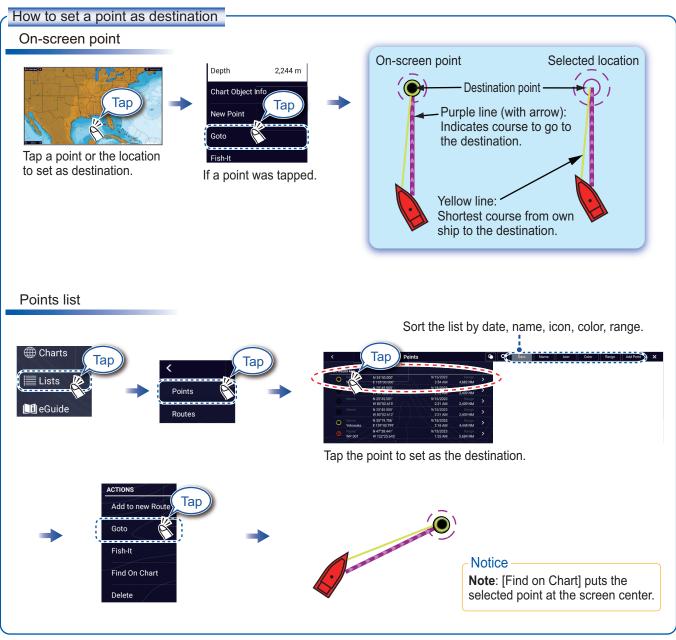
Swipe from the left edge of the screen rightward to show the Data window, which shows nav data at the left edge of the screen. To hide the window, swipe the box leftward or tap the [NavData] indication (yellow) in the Slide-out menu.

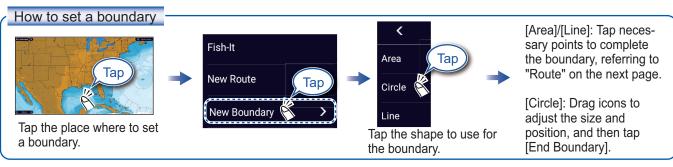


Points/Boundaries

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.).

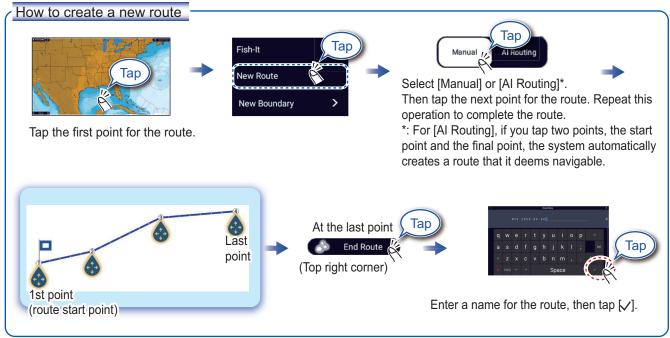


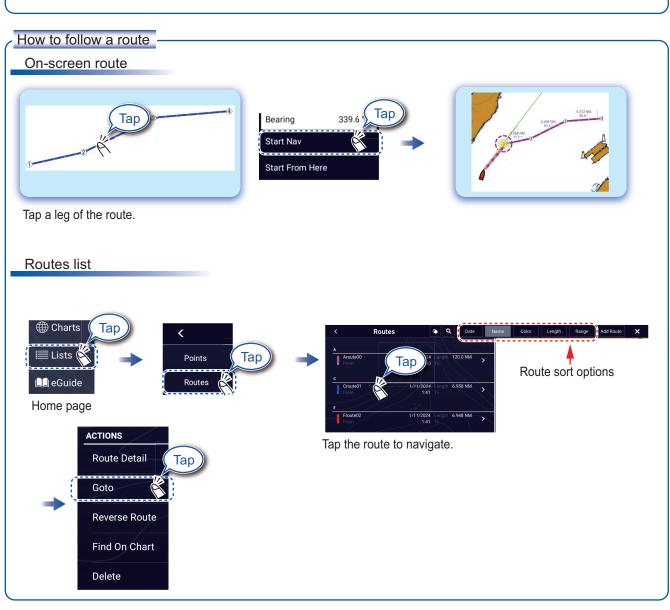




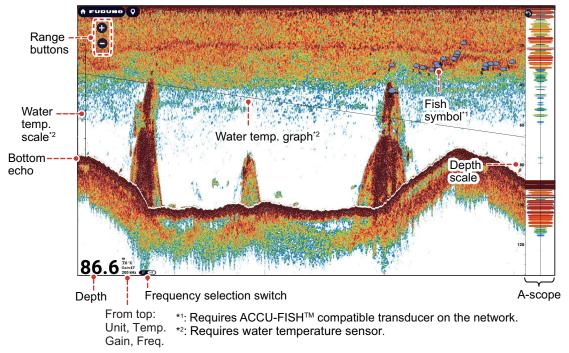
Routes

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



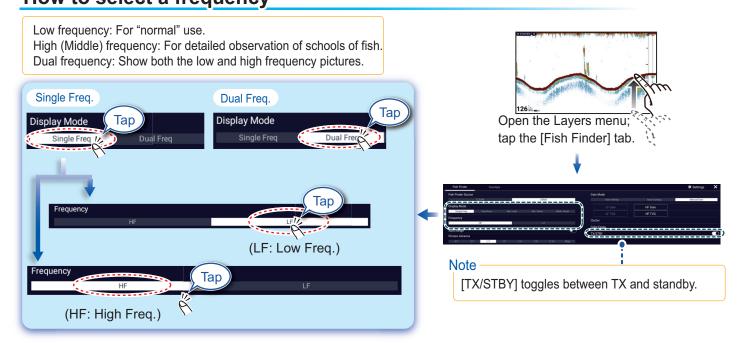


Fish Finder

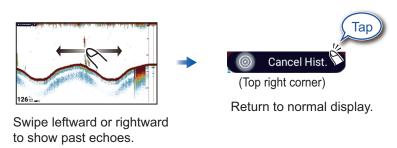


- Note 1: Names of menu items may be different depending on the transducer connected on the network.
- **Note 2**: TZT10X/13X/16X: Compatible with built-in or network fish finders. TZT22X/24X/BBX: Compatible with network fish finders.

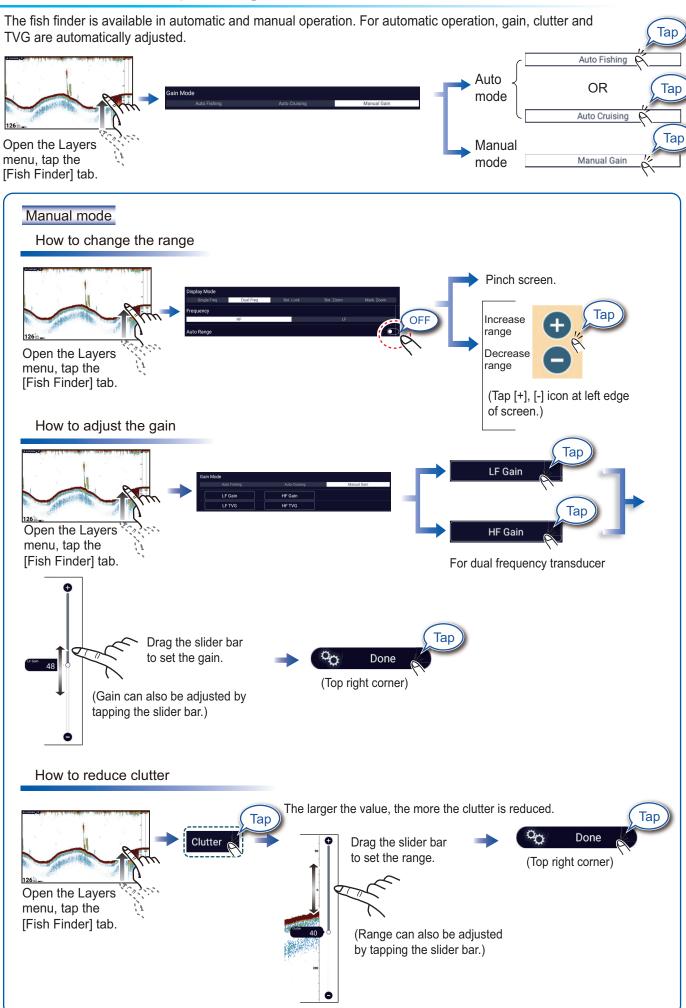
How to select a frequency



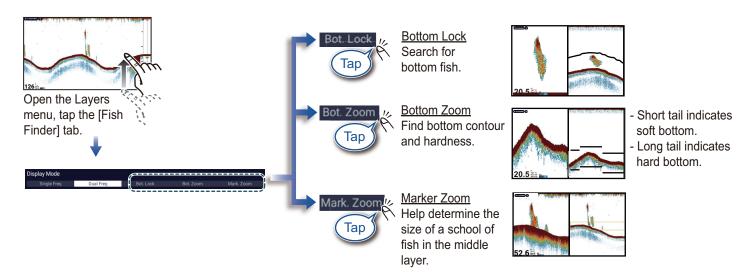
How to show past echoes (echo history)



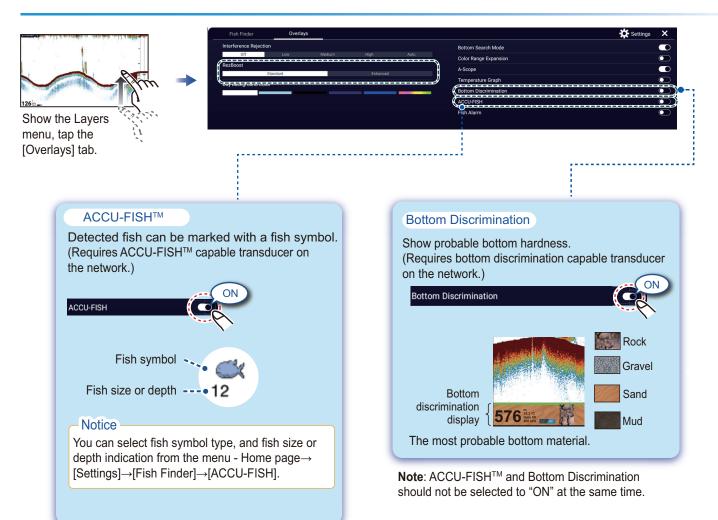
How to select the operating mode

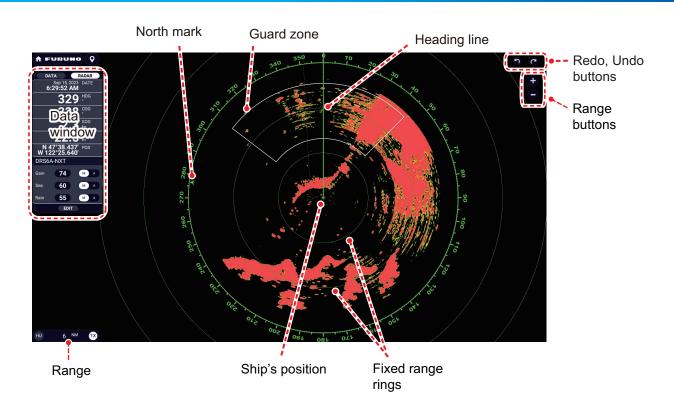


Zoom display

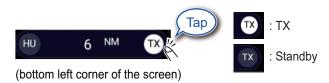


ACCU-FISH™/Bottom Discrimination

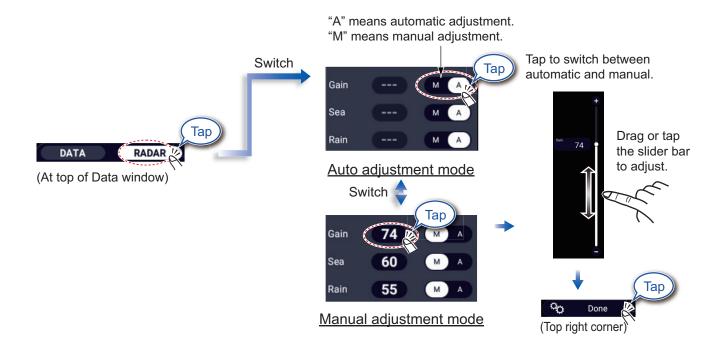


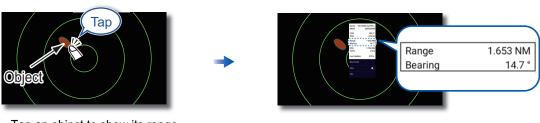


How to switch between standby and TX



How to adjust the gain / sea clutter / rain clutter

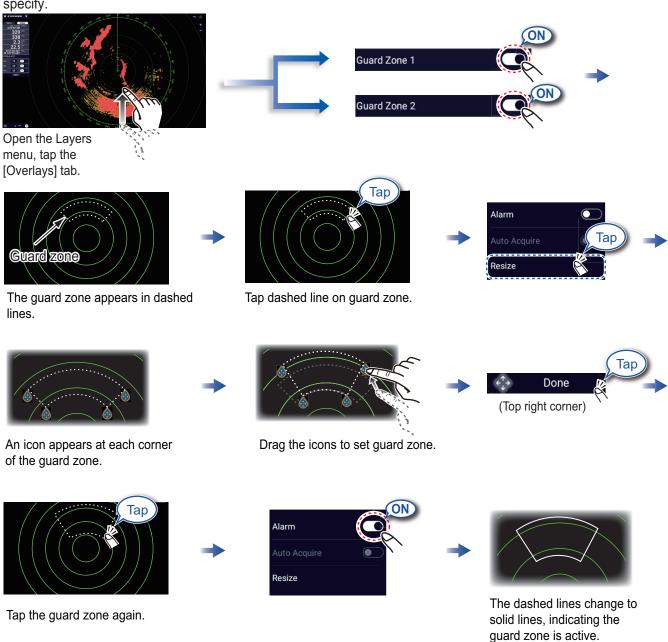




Tap an object to show its range and bearing from own ship.

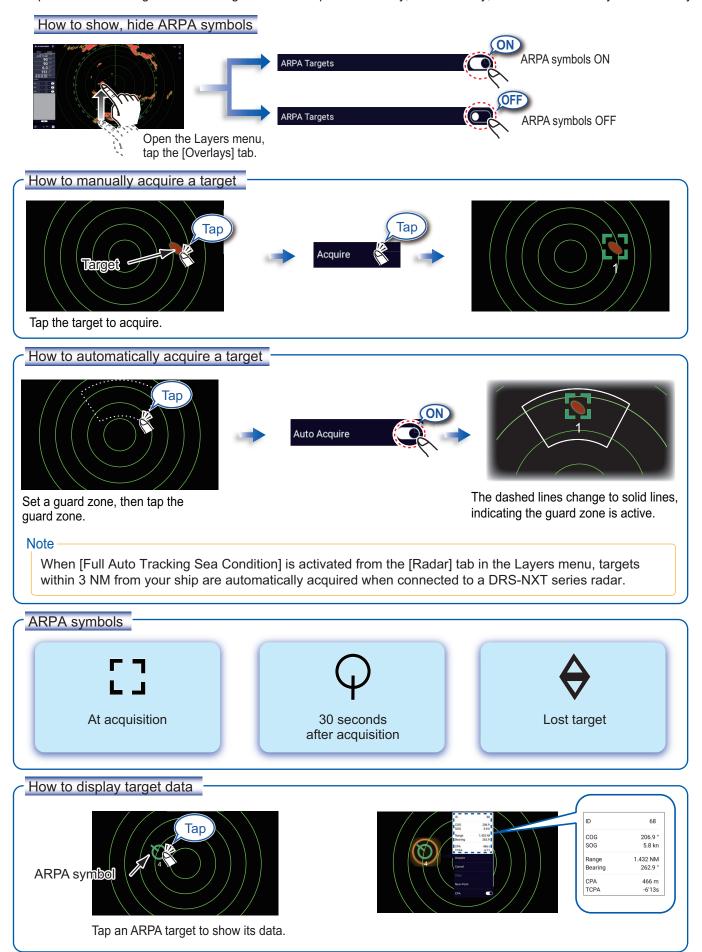
How to set a guard zone

A guard zone alerts you (with aural and visual alarms) when an object (ship, island, reef, etc.) enters the area you specify.



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.



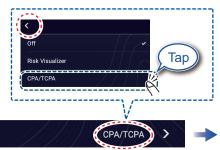
CPA/TCPA alarm

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





Set [Collision Alarm] to [CPA/TCPA], then tap ">".





Set the alarm value, then tap [].

Collision Alarm

How to acknowledge the CPA/TCPA alarm

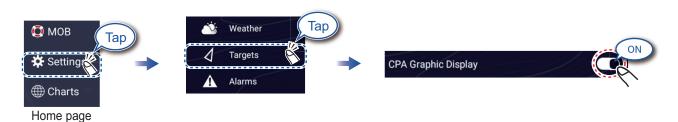
Tap the alarm message (top of screen) to acknowledge the alarm and stop the aural alarm.



CPA Line

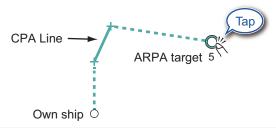
The CPA Line feature gives you a visual line that depicts the closest point of approach to a selected ARPA target. To use this feature, own ship position and heading data are required.

How to enable the CPA Line feature



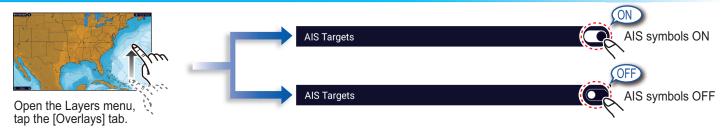
How to show the CPA Line

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



AIS (Automatic Identification System)

How to show or hide AIS target symbols



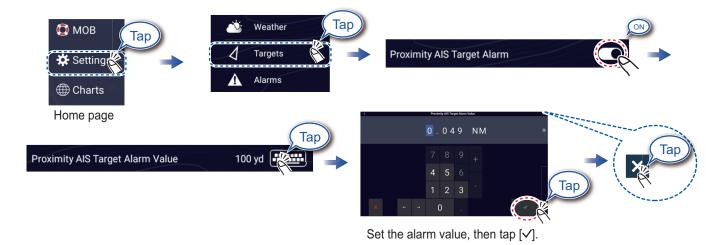
AIS target symbols

	Class A AIS	Class B AIS	BFT* AIS		
Activated target	SOG and COG vector	SOG and COG vector	SOG and COG vector		
	Color: Blue	Color: Green	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		

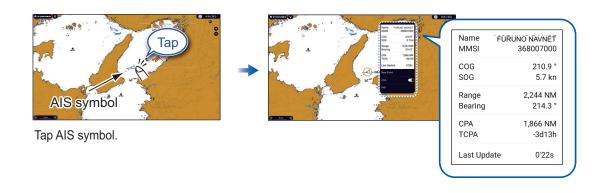
*: Blue Force Tracking

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.



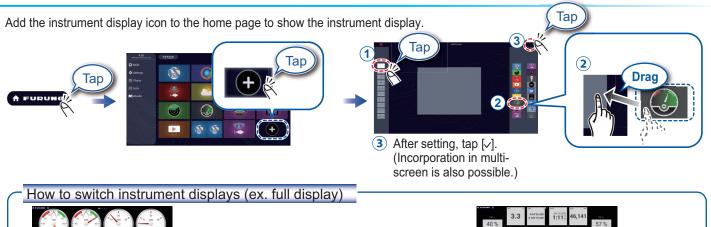
How to show AIS target data



Instrument Display

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

How to enable the instrument display



32 40 1.9" (15.0")

How to edit the instrument display



Sailing display

Tap the instrument display, then select [Edit Page] on the Pop-up menu.

Edit mode



Swipe rightward or leftward

to switch between displays.

A white line surrounds each indication.



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

To end the edit mode

Cruising display

Tap the screen, then select [End Edit] on the Pop-up menu.

How to remove or change an indication



- 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.



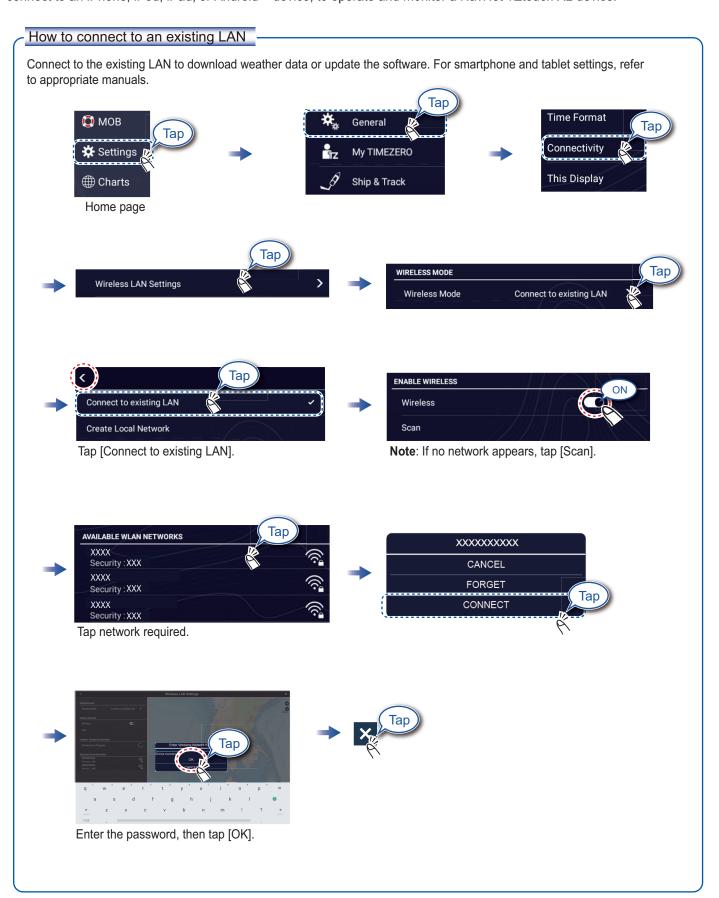
Select a size in desired category.

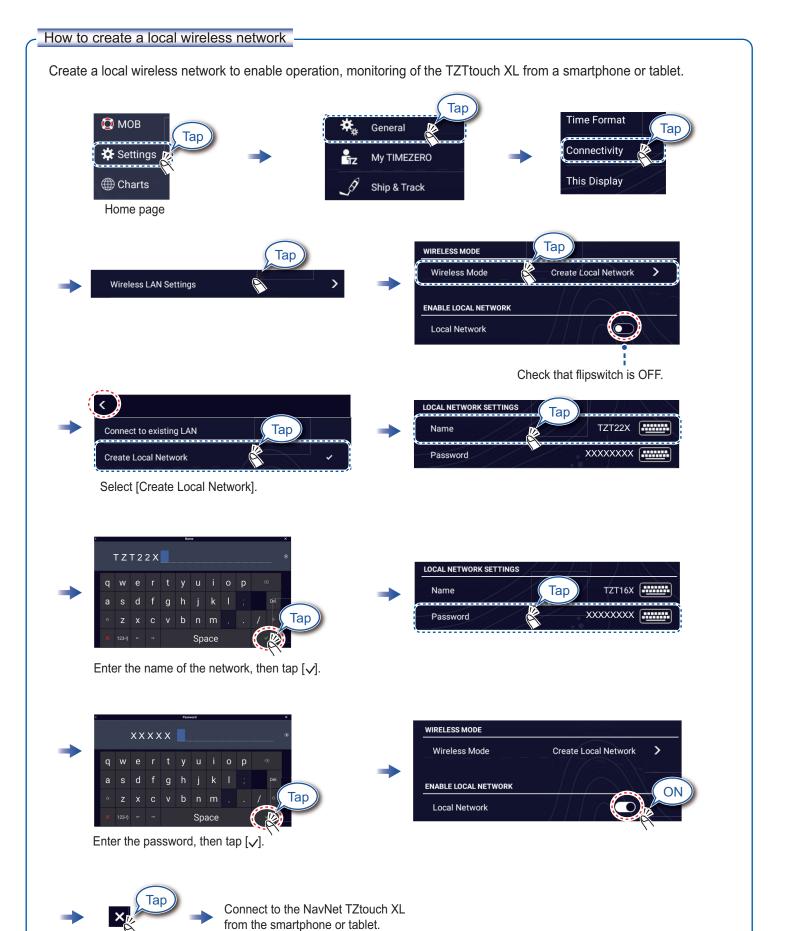


Tap added instrument display to change displayed data (see above).

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.









Publication No. SOCQA0045

PSTI Statement of Compliance

We	FURUNO ELECTRIC CO., LTD.						
	(Name of manufacturer of the product)						
	9-52 Ashihara-Cho, Nishinomiya City, 662-8580, Hyogo, Japan						
	(Address of manufacturer of the product)						
declare u	declare under our sole responsibility that the product						
MULTI FUNCTION DISPLAY, TZT10X, TZT13X, TZT16X, TZT22X, TZT24X							
	(Product type, batch)						
	May / 31 / 2029						
	(Support period for the product)						
	https://www.furuno.co.jp/en/csr/sociality/customer/product_security.html						
	(Weblink for latest information and contact to report to the manufacturer security issues)						
to which th	nis declaration relates conforms to the following standard(s) or other normative document(s)						
Prod	duct Security and Telecommunications Infrastructure Act 2022						
Prod	Product Security and Telecommunications Infrastructure (Security Requirements for						
Relevant Connectable Products) Regulations 2023 Schedule 1							
	4						
*	On behalf of Furuno Electric Co., Ltd.						

Nishinomiya City, Japan 24 May 2024

(Place and date of issue)

Department General Manager
Quality Assurance Department

(Signature, name and function of the





Publication No. SOCQA0049

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We	FURUNO ELECTRIC CO., LTD.					
	(Name of manufacturer of the product)					
71.00.00 TO TO THE RESIDENCE OF THE PERSON O	9-52 Ashihara-Cho, Nishinomiya City, 662-8580, Hyogo, Japan					
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	· ·					
	On behalf of Furuno Electric Co., Ltd.					

Nishinomiya City, Japan 6 June 2024

(Place and date of issue)

Akihiko Kanechika Department General Manager Quality Assurance Department

(Signature, name and function of the signatory)

FURUNO ELECTRIC CO., LTD.