

FURUNO

MULTI FUNCTION DISPLAY



Model **TZTL12F/TZTL15F**

Operator's Guide

This guide provides the basic operating procedures for this equipment. For detailed information, see the Operator's Manual in the supplied CD-ROM. You can get the latest version of the manual by accessing the quick response code at the back of this guide. Connection of sensors required.

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Operational Overview

Home icon, power switch operations



Home icon
Displays the home screen.

Display icons
(max. 16 on home screen)



"eGuide" provides an abbreviated operator's guide.

Home screen

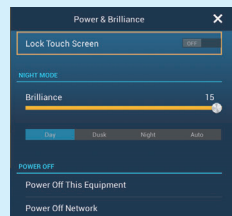
Power off

Power off function only: Powers off this unit.

Power off linked function: Powers off all NavNetTZ touch2 units in network.

Power switch

- Turns on power
- Shows [Power & Brilliance] window.

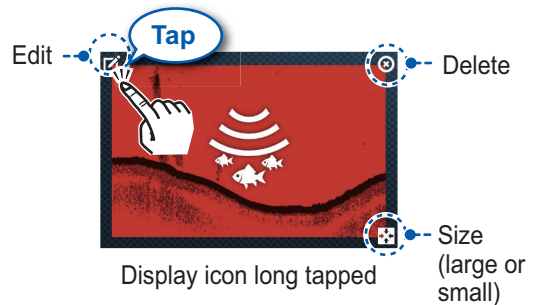


Brilliance, Hue



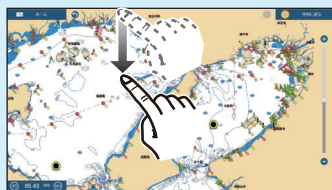
How to edit a display icon

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



How to select a display

- Tap a display icon on the home screen.
- Tap a display icon on the quick page.



Swipe downward from top of display



Quick page



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www.furuno.com

Touchscreen operations

Tap



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

Drag, swipe



- Move the chart.
- Scroll the menu.
- Show slide menu, layer menu.

Pinch



Zoom in Zoom out

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

Slider bar

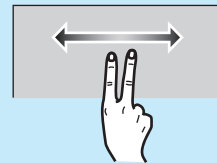
Tap operation also available.

Two finger tap



Do the function assigned to [Function Gesture] in the [Settings] - [General] menu.

Two finger drag



Change the viewpoint position on the 3D display.

Menu operation

Pop-up menu

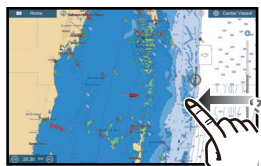


Tap screen (applicable point, object, etc.)

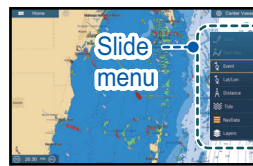


Tap the required function. (">" indicates additional options.)

Slide-out menu

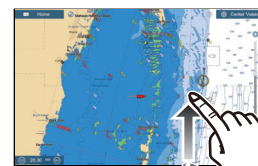


Swipe leftward from the right edge.



Tap the required function.
Icon color and function state
Yellow: ON, White: OFF

Layer menu



Swipe upward from the bottom edge.



Tap the required function.

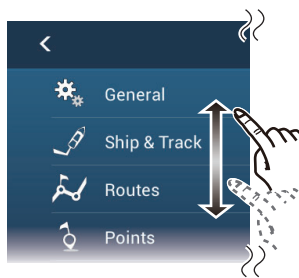
Settings menu



Tap the [Home] icon.



Tap [Settings].

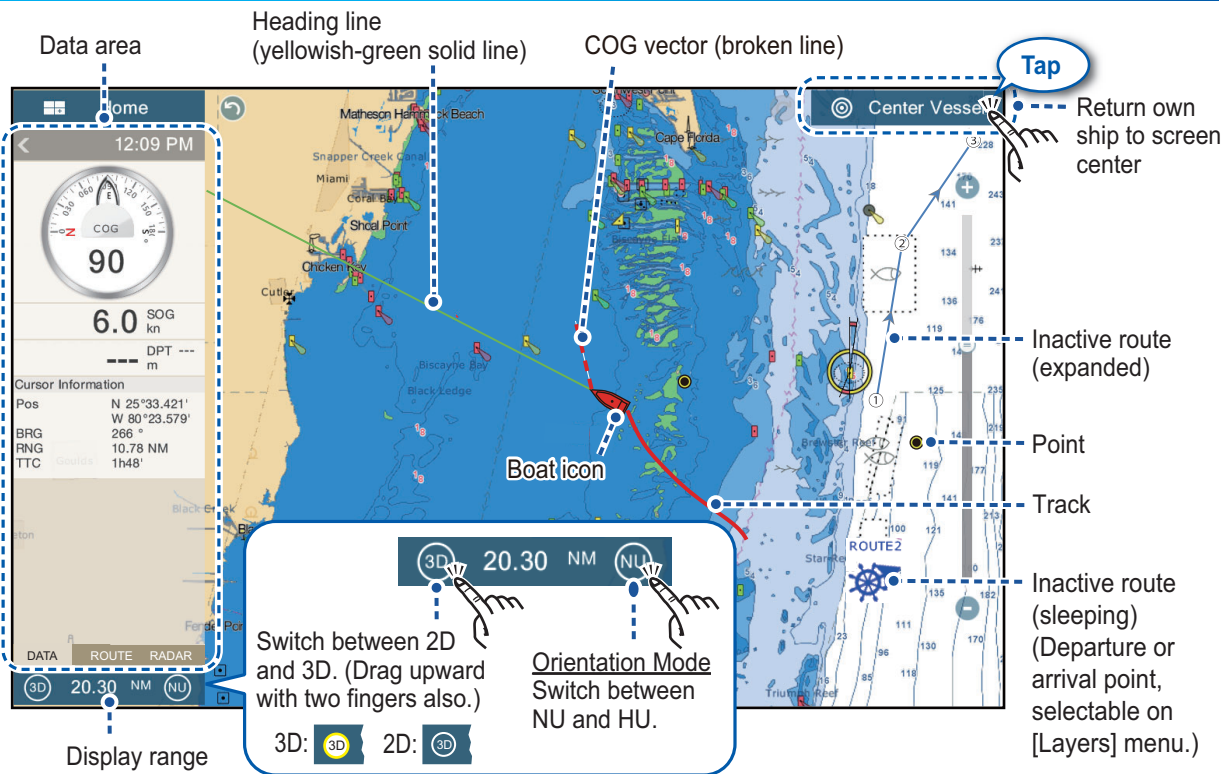


Drag menu to find required item, then tap item.



Tap the required option.

Plotter



Data Area (Data Box)

Swipe from the left edge of the screen rightward to show the data area at the left edge of the screen. Tap “<” to hide the data area.

Data box settings

How to add a data box

Tap an unoccupied space.

Tap the data to add.

Ex. “Cursor” data added to the data box

How to remove or change the contents of a data box

Tap the data to remove or change.

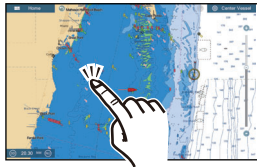
Remove: Tap [Remove].
Change: Tap the data to use.

Use flipswitch to set data format. (ON: Analog, OFF: Digital)

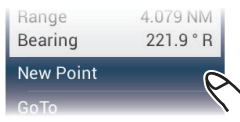
Points

Points can be entered on the plotter display (radar and fish finder 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.

How to enter a point



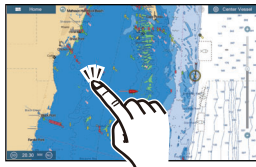
Tap where to enter a point.



The point is entered on the screen.

How to set a point as destination

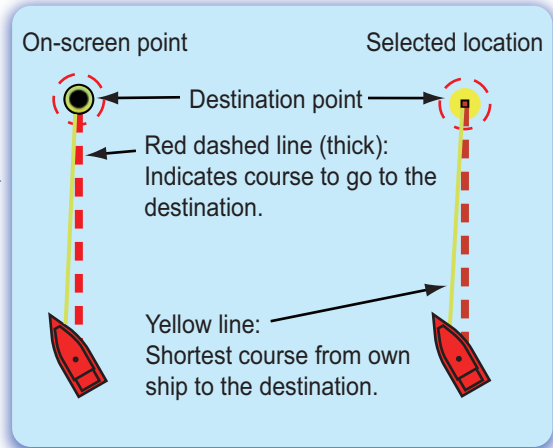
On-screen point



Tap a point or the location to set as destination.



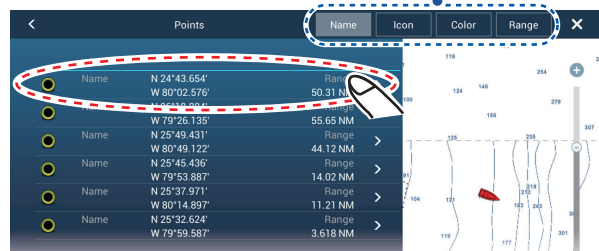
If a point was tapped.



Points list

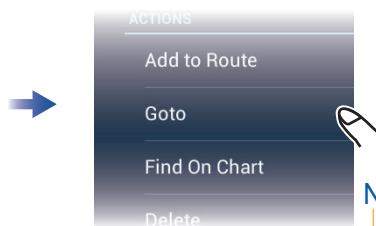


Tap [List] on the home screen.



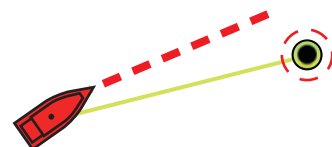
Tap the point to set as the destination.

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



Notice

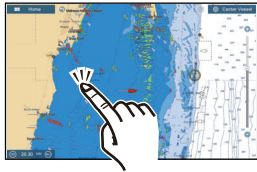
Note: [Find on Chart] puts the selected point at the screen center.



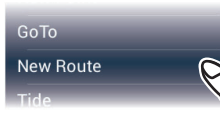
Routes

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

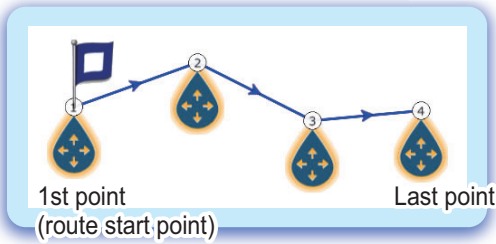
How to create a new route



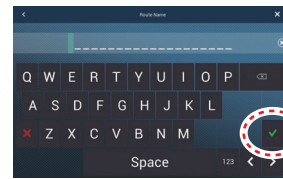
Tap the first point for the route.



Tap the next point for the route. Repeat to enter all points for the route.



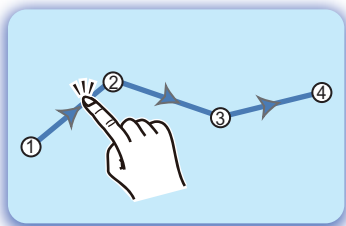
At the last point
(Top right corner)



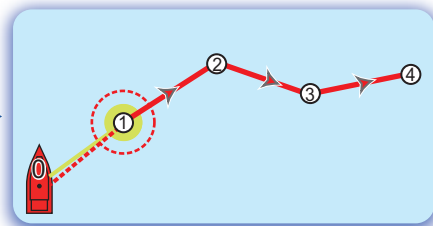
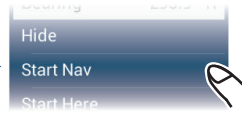
Enter a name for the route, then tap [✓].

How to follow a route

On-screen route

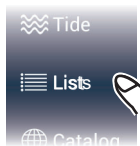


Tap a leg of the route.

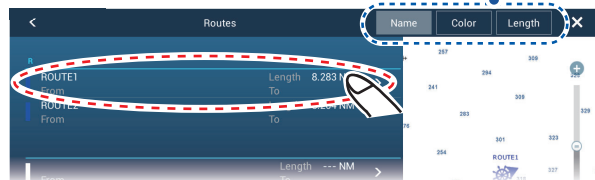
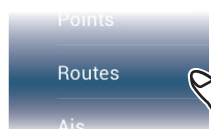


Routes list

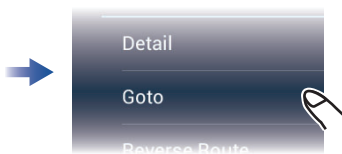
Sort list by name, color, or total length.



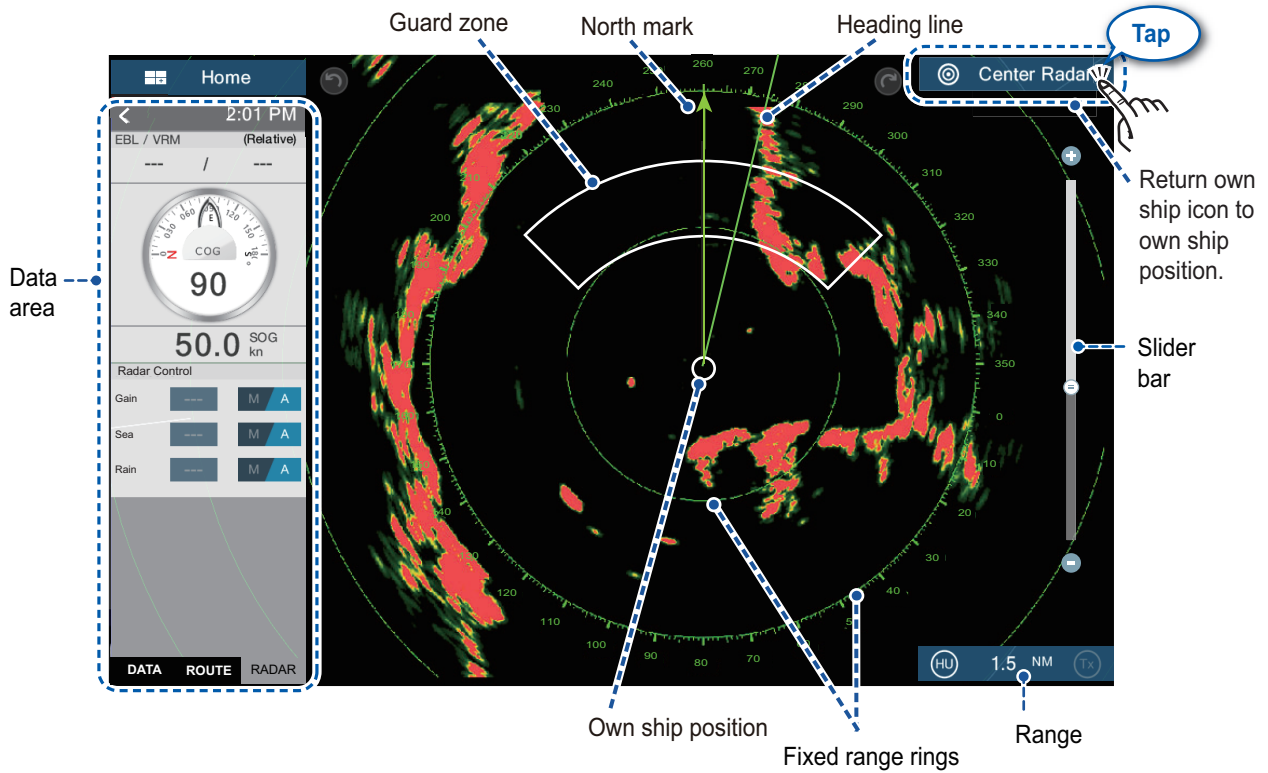
Home screen



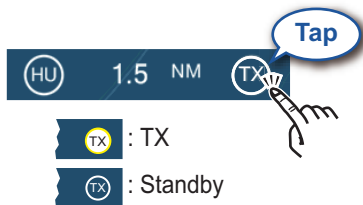
Tap the route.



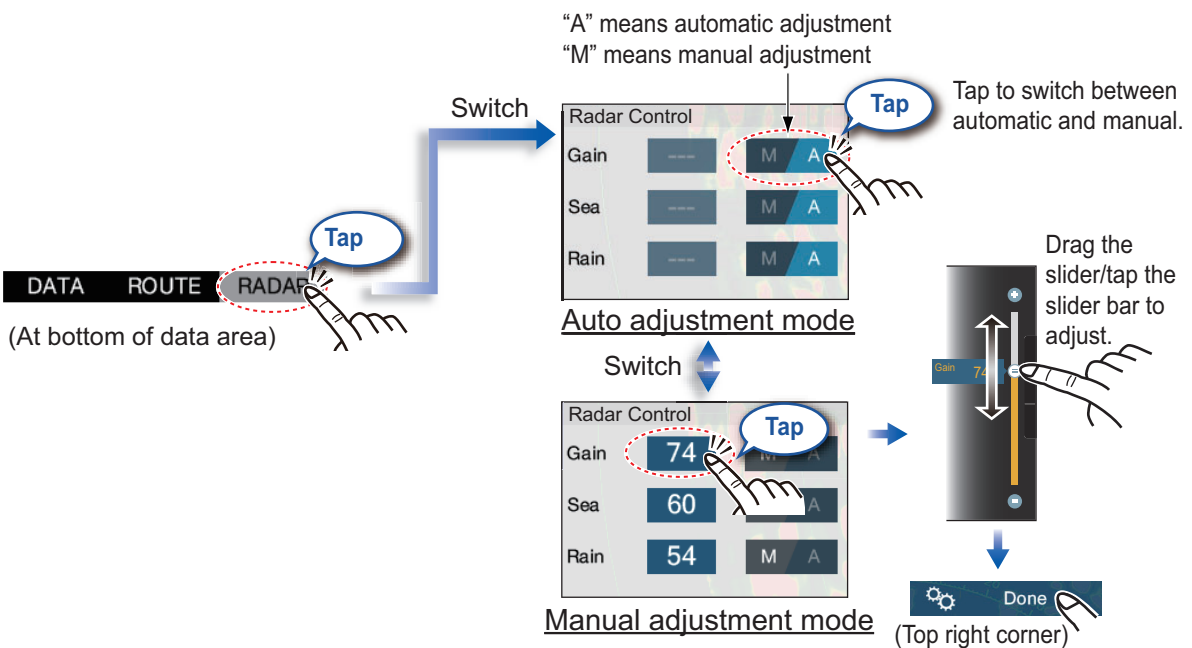
Radar



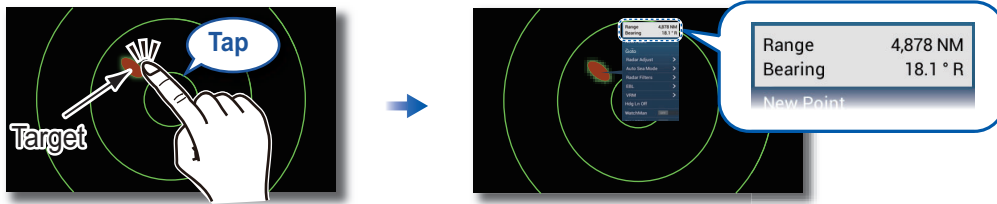
How to switch between standby and TX



How to adjust the gain / sea clutter / rain clutter



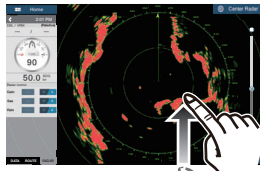
How to measure the range, bearing from own ship to a target



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

How to set a guard zone

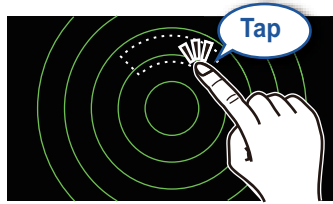
A guard zone alerts you (with aural and visual alarms) when a radar target enters the area you specify.



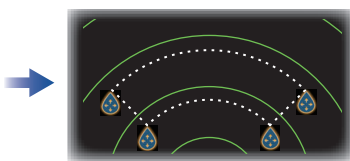
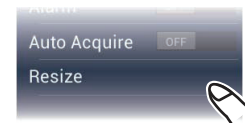
Open the [Layers] menu.



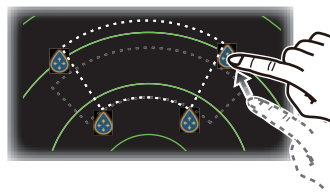
The guard zone appears in dashed lines.



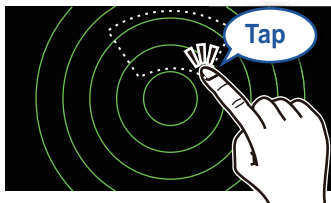
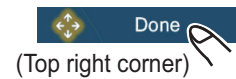
Tap dashed line on guard zone.



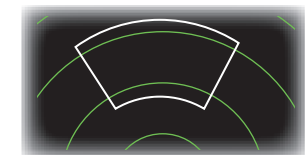
An icon appears at each corner of the guard zone.



Drag the icons to set guard zone.



Tap the guard zone again.

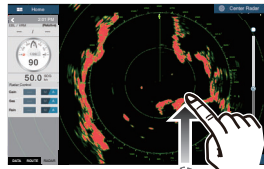


The dashed lines change to solid lines, indicating the guard zone is active.

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.

ARPA Targets

ON

ARPA symbols ON

ARPA Targets

OFF

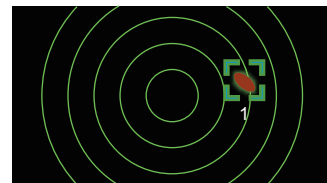
ARPA symbols OFF

How to manually acquire a target



Tap the target to acquire.

Acquire



ARPA symbols



At acquisition

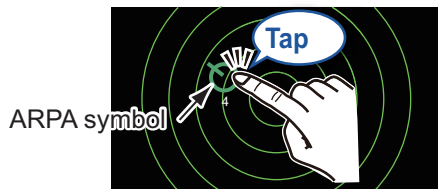


Within 30 seconds after acquisition



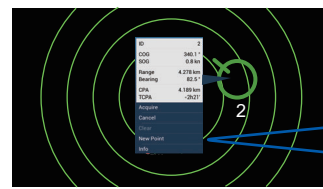
Lost target

How to display target data



ARPA symbol

Tap an ARPA target to show its data.



| | |
|-----------|----------|
| ID | 2 |
| COG | 340.1 ° |
| SOG | 0.8 kn |
| Range | 4.278 km |
| Bearing | 82.5 ° |
| CPA | 4.189 km |
| TCPA | -2h21' |
| Acquire | |
| Cancel | |
| Clear | |
| New Point | |
| Info | |

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



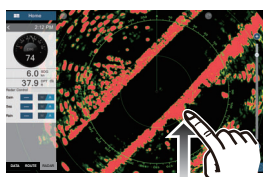
How to acknowledge the CPA/TCPA alarm

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



AIS (Automatic Identification System)

How to show or hide AIS target symbols



Open the [Layers] menu.



AIS target symbols

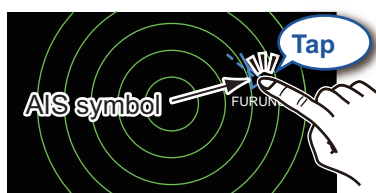
| | Class A AIS | Class B AIS | BFT AIS |
|------------------|---|--|--|
| Activated target | SOG and COG vector Color: Blue | SOG and COG vector Color: Green | SOG and COG vector Color: Blue (filled) |
| Dangerous target | Color: Red ← Flashing | | |
| Lost target | Color - AIS target: Blue - Cross: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

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

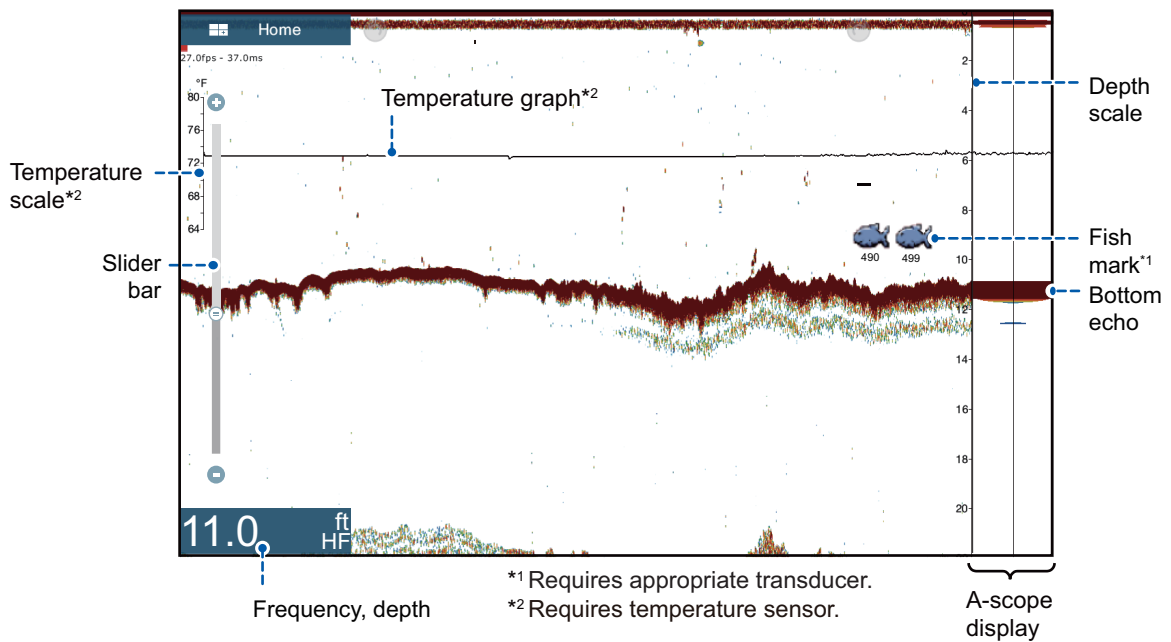


Tap an AIS target to show its data.



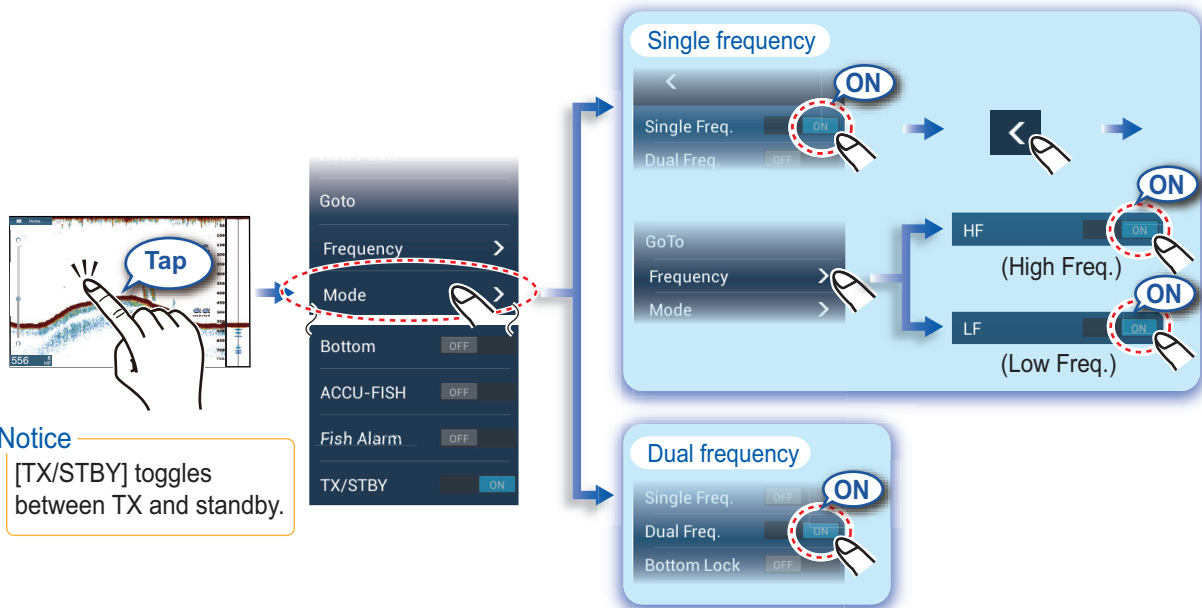
| | |
|-------------|-----------|
| Name | FURUNO |
| MMSI | 987654321 |
| COG | 173.0° |
| SOG | 0.1 kn |
| Range | 20.61 NM |
| Bearing | 354.6° |
| CPA | 20.55 NM |
| TCPA | -16'05s |
| Last Update | 0'39s |
| New Point | |

Fish Finder

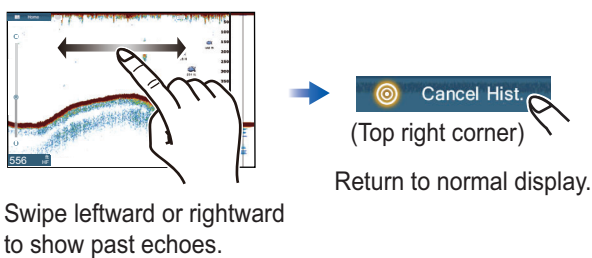


How to select a frequency

- Low frequency: For "normal" use.
- High frequency: For detailed observation of schools of fish.
- Dual frequency: Show both the low and high frequency pictures.

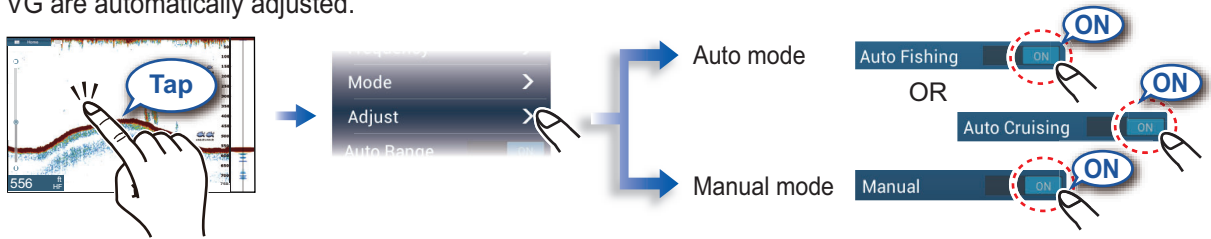


How to show past echoes (echo history)



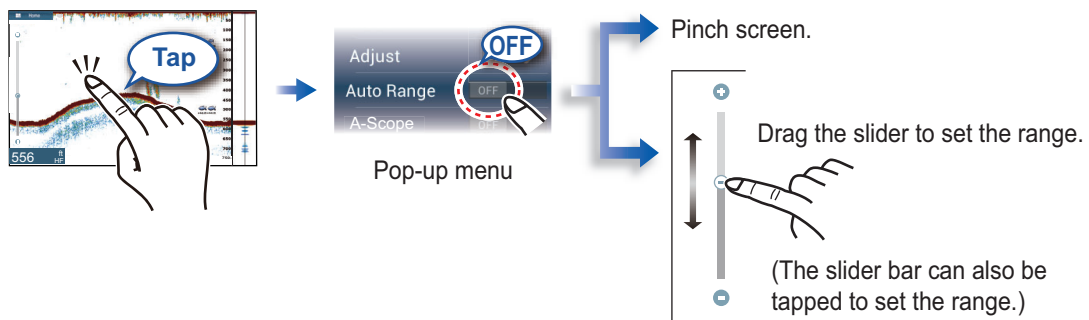
How to select the operating mode

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

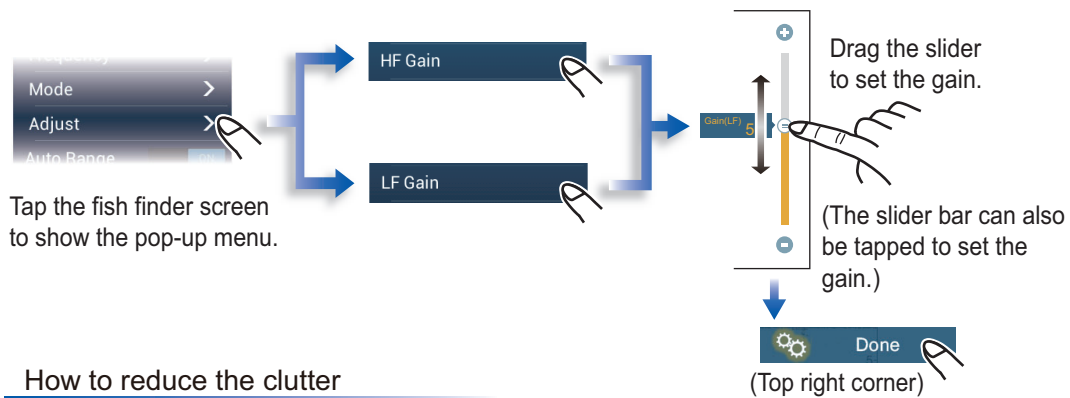


Manual mode

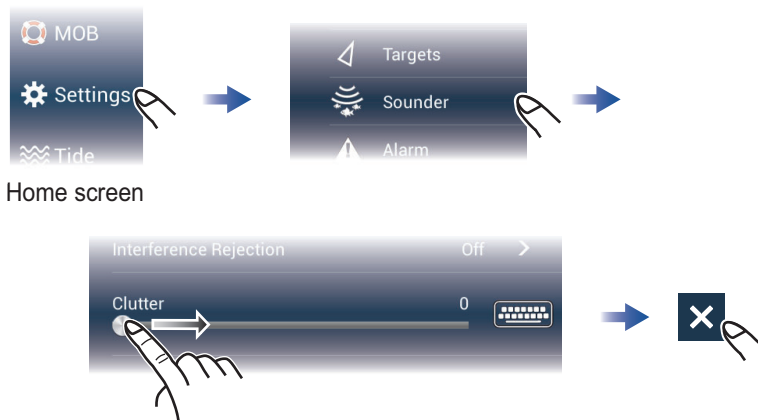
How to change the range



How to adjust the gain



How to reduce the clutter



Zoom display

Frequency >
Mode >
Adjust >

Bottom Lock **ON**
Search for bottom fish.

Bottom Zoom **ON**
Find bottom contour and hardness.

Short tail: Soft bottom
Long tail: Hard bottom

ACCU-FISH™/Bottom Discrimination/RezBoost™

Auto Range OFF
A-Scope OFF
RezBoost Standard
Temperature OFF
Bottom OFF
ACCU-FISH OFF
Fish Alarm OFF
TX/STBY ON

ACCU-FISH™
Detected fish can be marked with a fish symbol (requires ACCU-FISH™ capable transducer).

ACCU-FISH **ON**

Fish symbol
Fish size or depth **12**

Notice
You can select fish symbol type, and fish size or depth indication from the menu - go to home screen, [Settings], [Sounder].

Bottom Discrimination
Show probable bottom hardness (requires bottom discrimination capable transducer).

Bottom **ON**

Bottom discrimination display
The most probable bottom material.

- Rock
- Gravel
- Sand
- Mud

RezBoost™
Raise the echo resolution (requires RezBoost™ capable transducer).

RezBoost Enhanced

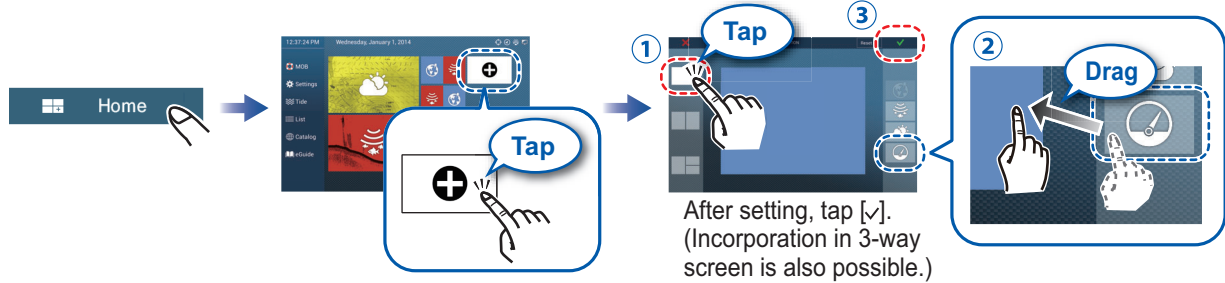
Standard (Standard mode)
Enhanced (High resolution mode)

Instrument Display

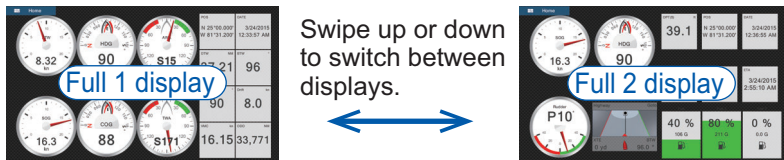
With connection of appropriate sensors, the instrument display shows various navigation data.

How to enable the instrument display

Add an instrument display icon to the home to screen to show the instrument display.



How to switch instrument displays (ex. full display)



How to edit an instrument display



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



A blue line surrounds each indication.

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

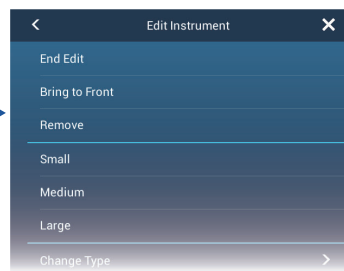
To end the edit mode

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.

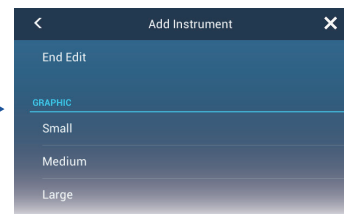


- Remove indication: Tap [Remove].
 - Change size: Tap [Small]*, [Medium], or [Large].
 - Change type: Tap [Change Type].
 - Change indication: Tap indication in [NAVIGATION DATA], [ROUTE INFORMATION], [WIND AND WEATHER].
- * Graphic, digital only

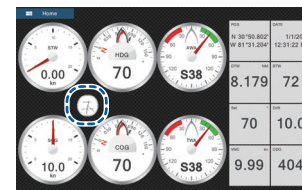
How to add an indication



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



Tap a size in desired category ([Graphic], [Numeric], Highway]).



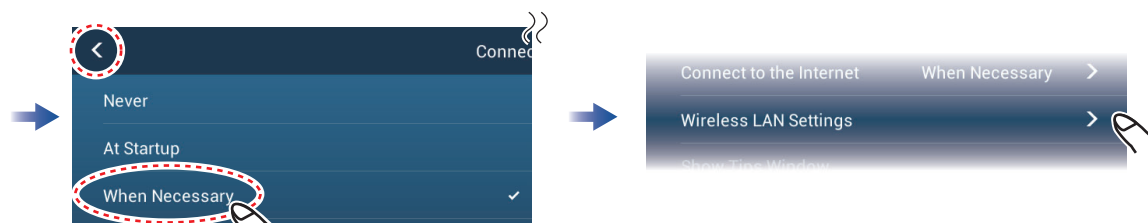
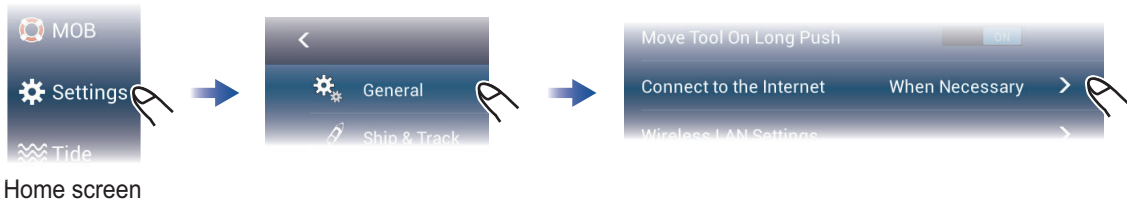
Added item appears at tapped location.

Wireless LAN Setting

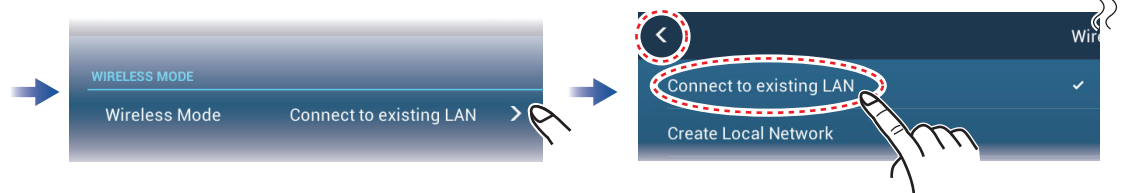
You can connect to the internet with the wireless LAN signal to download weather information and to connect to an iPhone, iPod, iPad, or Android™ device.

How to connect to an existing LAN

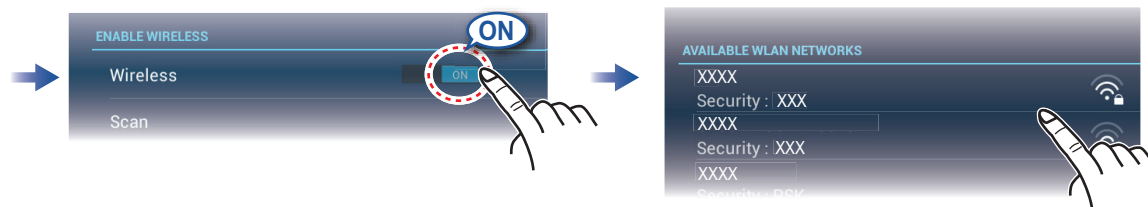
Connect to the existing LAN to download weather data or update the software.



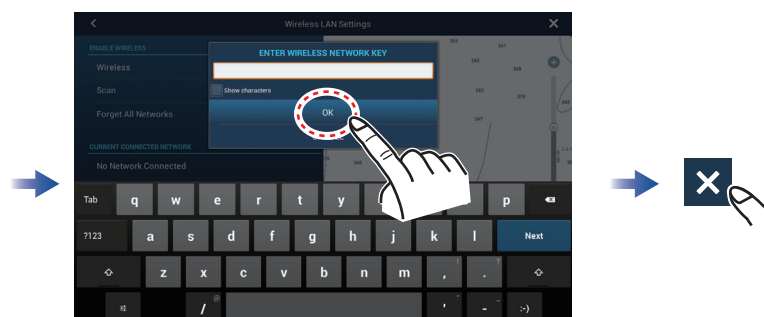
Select [When Necessary], then tap "<".



Select [Connect to existing LAN], then tap "<".



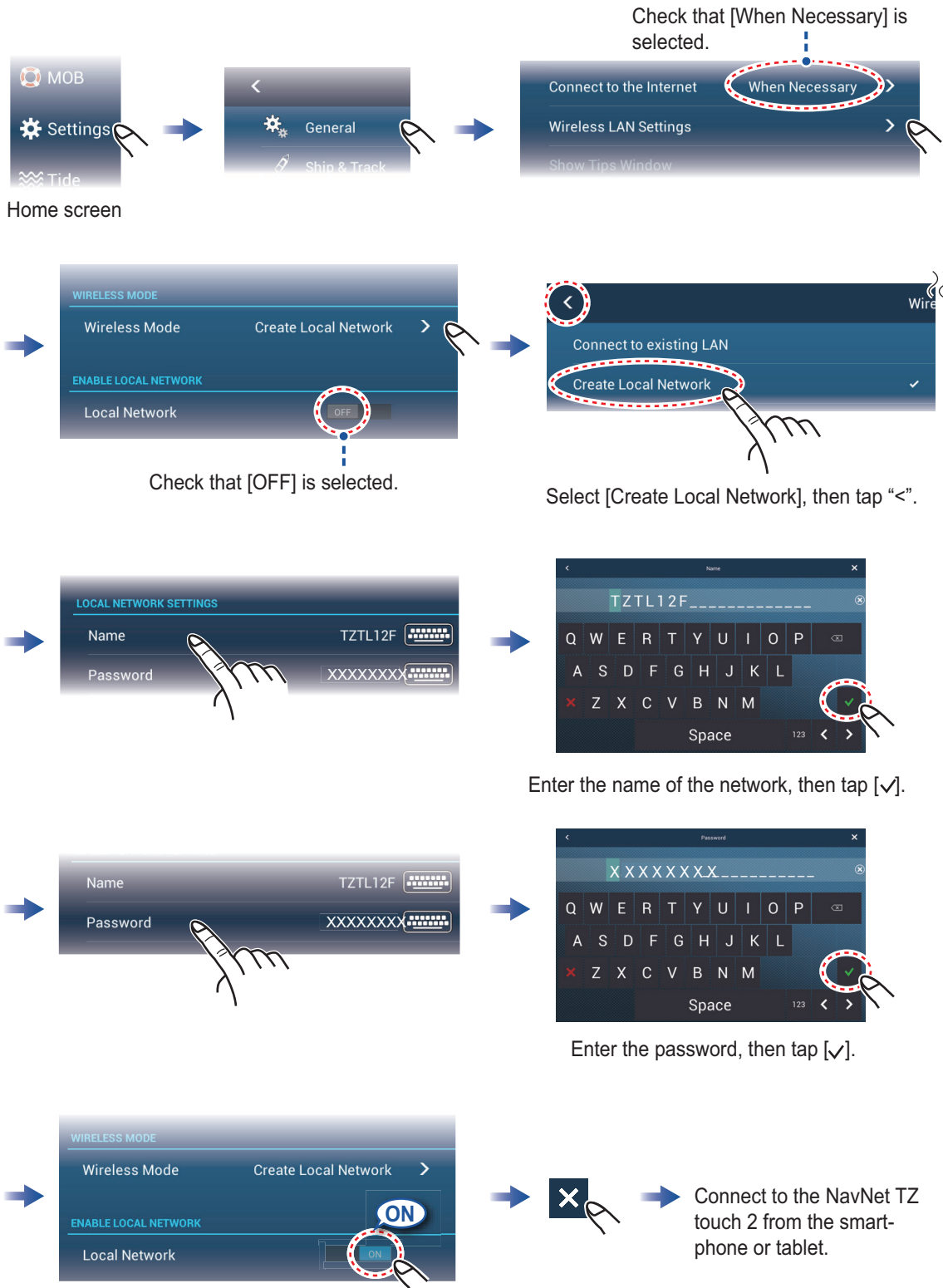
Tap network required.



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

How to create a local wireless network

Create a local wireless network to connect to an iPhone, iPod, iPad, or Android device.



Pub. No. OSE-44870-C
(1706, DAMI) TZTL12F/15F

