

FURUNO

MULTI FUNCTION DISPLAY

TZT9/TZT14/TZTBB**User's Handbook**

This guide provides the basic operating procedures for this equipment. For detailed information, see the Operator's Manual.

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Most of the screenshots in this manual are for TZT9/TZT14.

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Controls

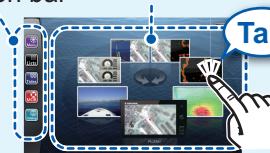
Key control

TZT9/TZT14**Home key**

- Opens the display selection window.
- Displays the menu icon bar.

For TZTBB:

Displayed on the screen as an icon.

Menu icon bar**Display selection window****TZTBB (Switch box)****Power key**

- Turns the power on.
- Adjusts the brilliance of the display.

For TZTBB:

- Adjusts the brilliance of the power indicator.
- Turns the power off. (Device or Network)

RotoKey™

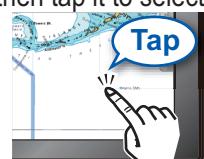
- Push:**
Opens the RotoKey menu or validates the selected item.

Rotate:

- Selects an item on the RotoKey menu.
- Selects the range scale on the chart plotter or the radar screen.

Displayed only on TZT9/TZT14**For TZTBB:**

Tap the screen to display the RotoKey menu. If the menu you are looking for is not shown, select [More...] (then drag the menu items) then tap it to select.

**FURUNO ELECTRIC CO., LTD.**

Touch control

Tap with finger



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

Drag with finger



- Pan the charts.
- Scroll the menu.

Pinch with two fingers

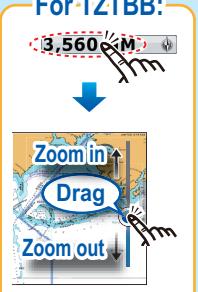


Zoom in Zoom out

- Zoom in or out the chart scale in the 2D/3D modes or weather display.
- Select radar range on the radar display.

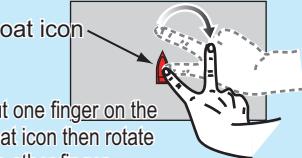
Tap with two fingers



- For TZTBB:


Execute the function which is selected in [General] - [Function Gesture] of the main menu.

Rotate with two fingers



Boat icon
Put one finger on the boat icon then rotate the other finger.

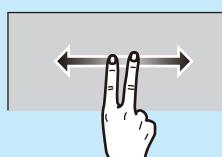
Switch between head up and north up in the 2D/3D modes.

Drag with two fingers



Switch from 2D to 3D.

Orientate 3D view.



or



How to operate the menus

Main menu

TZT9/TZT14:



Home key

TZTBB: Tap the Home icon.

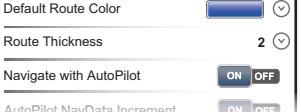
Select an icon.



Select a menu.



Select an item then set.



RotoKey menu

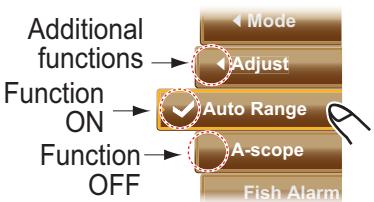
TZT9/TZT14:



RotoKey™

TZTBB: Tap the screen.

Additional functions →



Function ON →

Function OFF →

Select a menu.

Pop-up menu



Select an object or position to display the pop-up menu.

Select a menu.

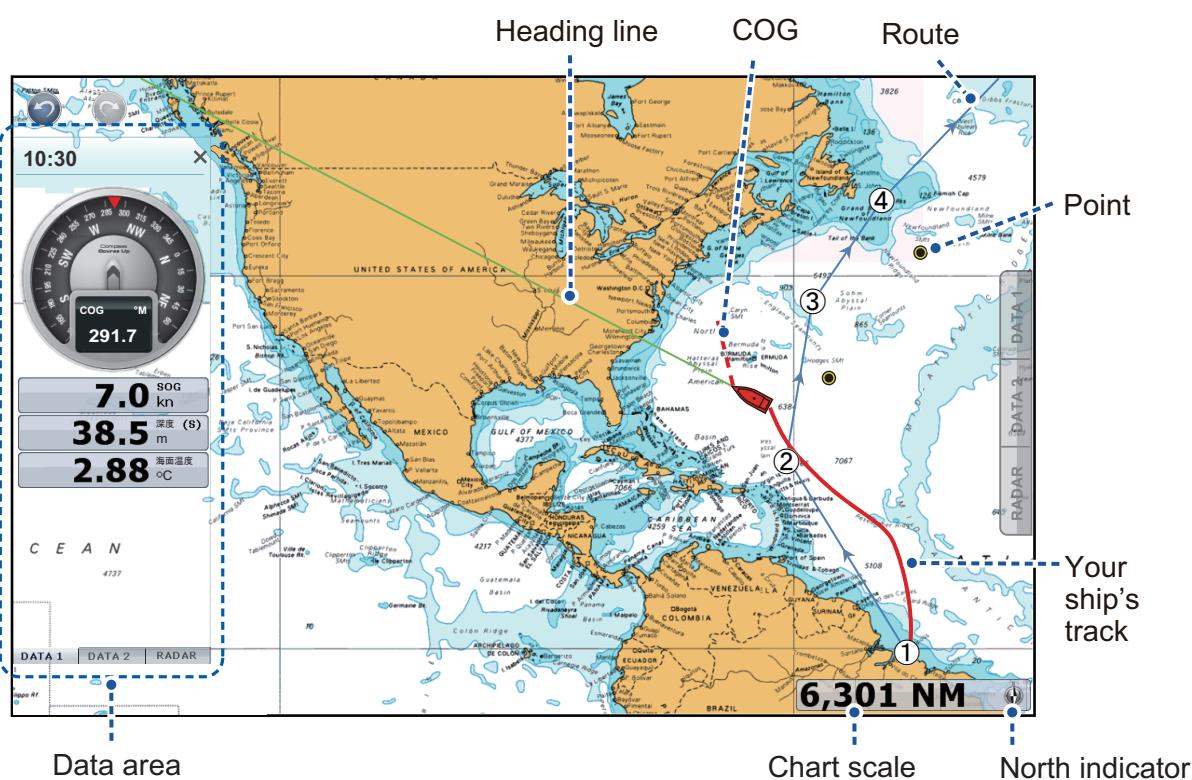


- The “◀” mark indicates a multi-function soft control. Push the **RotoKey™** (or tap the menu) to go to the next level.

- The “✓” mark indicates ON status (selected). The “✓” mark disappears with OFF status (deselected). Push the **RotoKey™** (or tap the menu) to switch ON or OFF.

- There is no mark on a soft control that does the function labeled on the control. Push the **RotoKey™** (or tap the menu) to process the menu.

Chart Plotter



Data area (Data box)

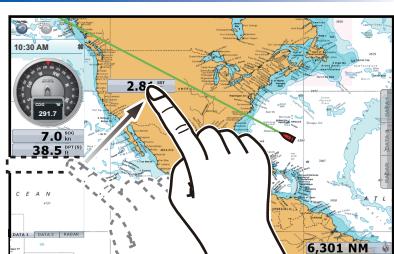
The data area at both sides of the screen shows the navigation data, with data boxes. You can select the data to display in the area, and show or hide the data boxes as necessary.

How to set the data boxes

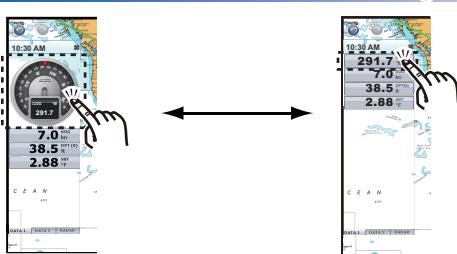
How to add a data box to a data area



How to delete a data box



How to switch the indication between analog and digital



Points

You can put points on the chart plotter display. The position of the point, symbol and color information are saved to the points list.

How to put a point



The point is put on the screen.

Select the position to set as a point.

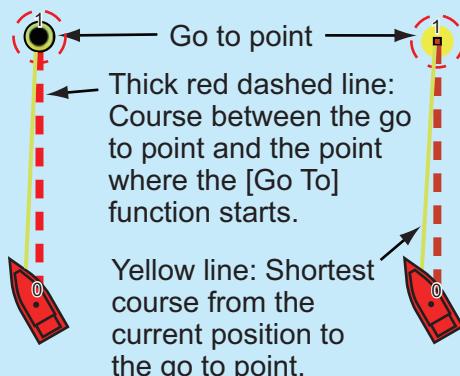
How to go to a point

On the screen



Saved point

Selected position



Select the point or position to set as a point to go to.

From the points list

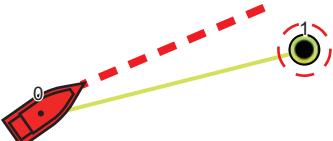
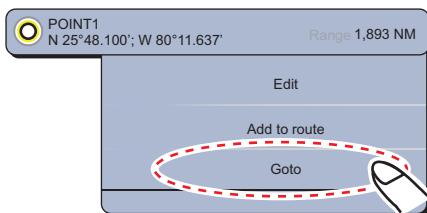


Main menu

Points List

Points List	
Sort by : Name Color Icon Range	
P	
POINT1 N 43°04.617'; W 65°42.642'	Range 1,893 NM
POINT10 N 36°43.818'; W 56°56.134'	Range 0,705 NM

Select the point to go to.



Routes

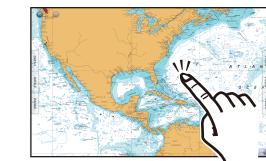
A route is a series of route points entered in the order to use for navigation. The routes are saved to the routes list.

How to create a new route



Select the 1st route point for the route.

New Route



Select the next route point in the route. Repeat this step to enter all route points.

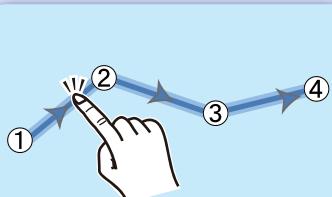


At the last route point,

End Route

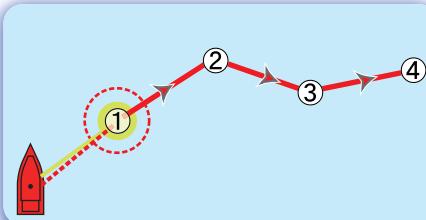
How to follow a route

On the screen



Select a route leg of the route to follow.

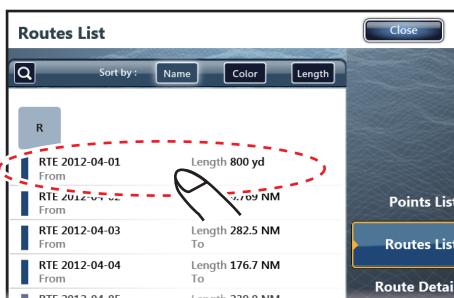
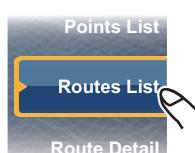
Activate



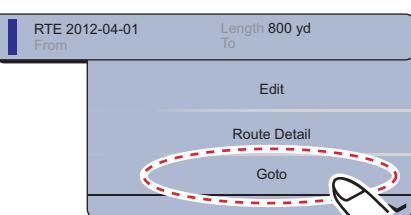
From the routes list



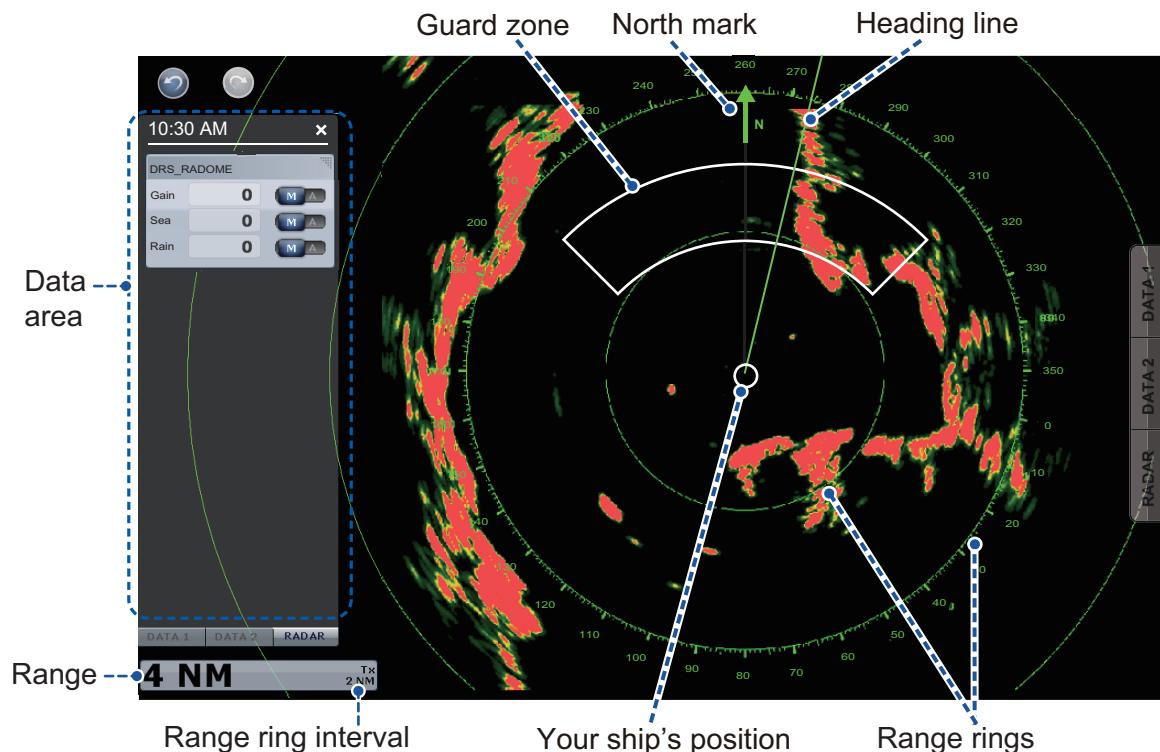
Main menu



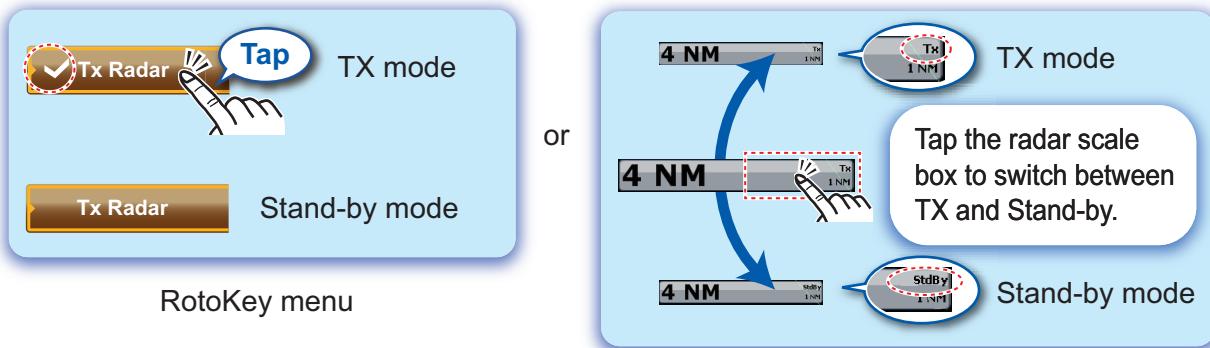
Select the route to go to.



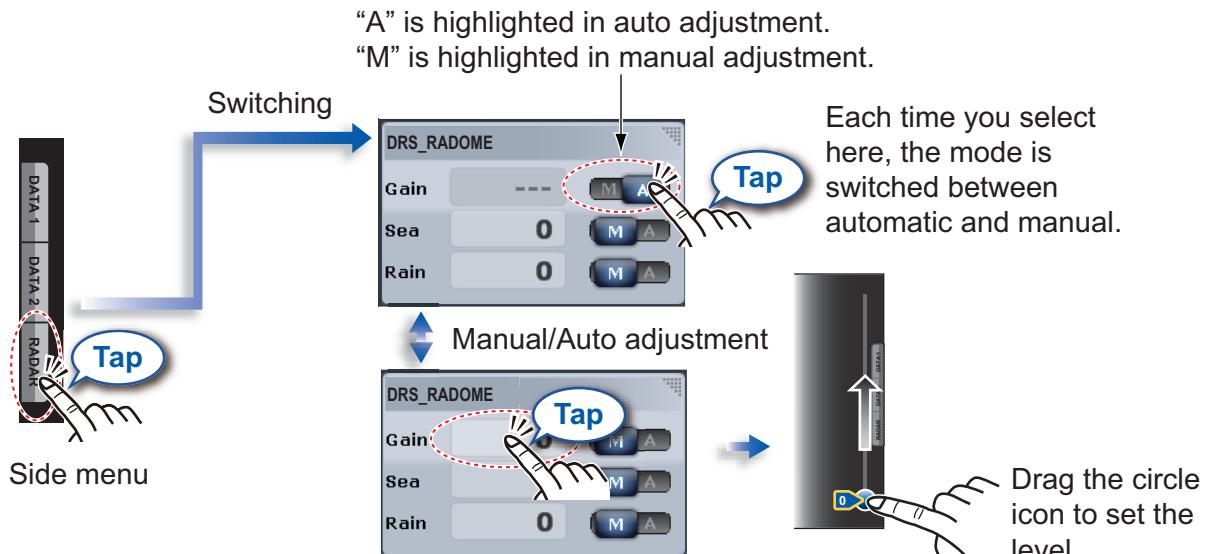
Radar



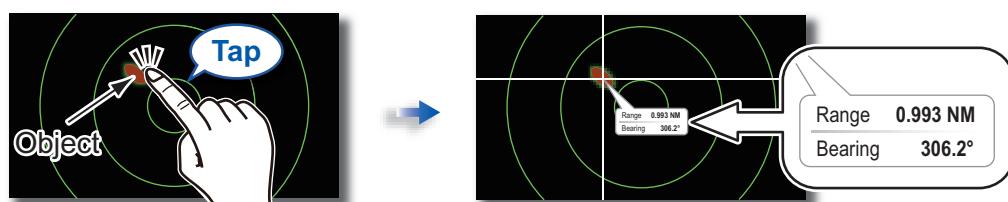
How to toggle TX and Stand-by



How to adjust the gain, sea and rain clutters



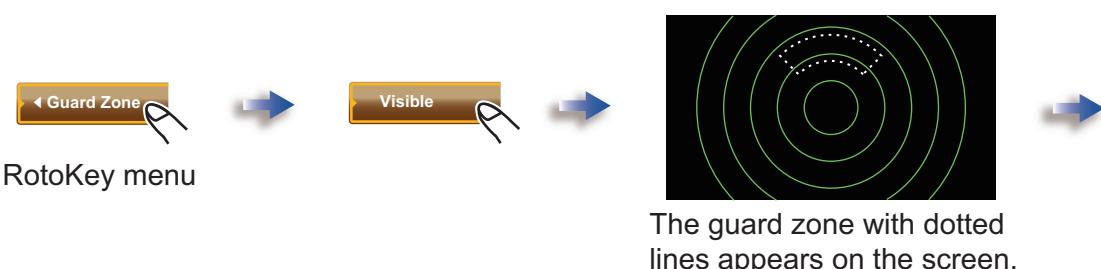
How to measure the range and bearing from your ship to a target



Select an object to get the range and bearing.

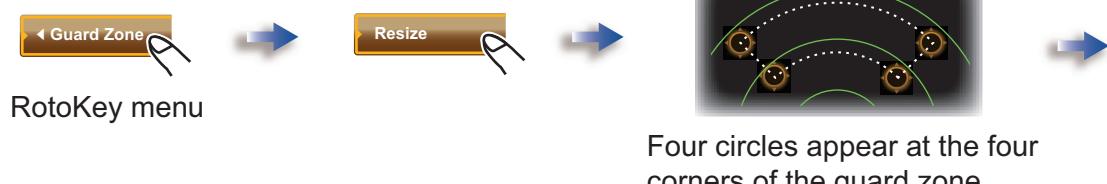
How to set and activate the guard zone

The guard zone alerts you with audio and visual warnings when a target enters the area you set.



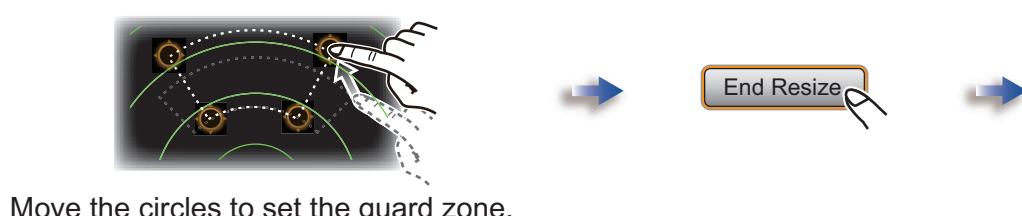
RotoKey menu

The guard zone with dotted lines appears on the screen.

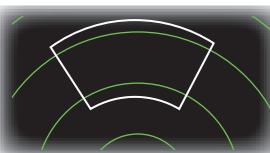


RotoKey menu

Four circles appear at the four corners of the guard zone.



Move the circles to set the guard zone.



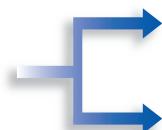
RotoKey menu

The dotted lines turn to solid lines.

ARPA

The ARPA (Automatic Radar Plotting Aid) is a radar function for target tracking and collision avoidance. ARPA tracks targets and provides target's navigation information. You can track targets automatically, manually or a combination of both.

How to show or hide the ARPA display

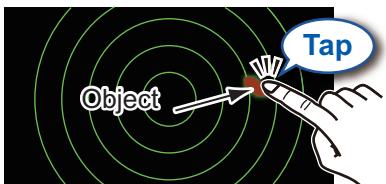


Show the ARPA display.

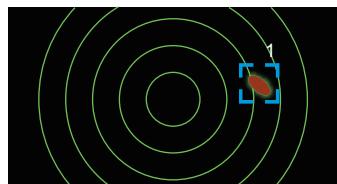


Hide the ARPA display.

How to manually acquire a target



Select an object to acquire as a target.



ARPA target symbols



Target being acquired



Acquired target
(30 s after
acquisition)

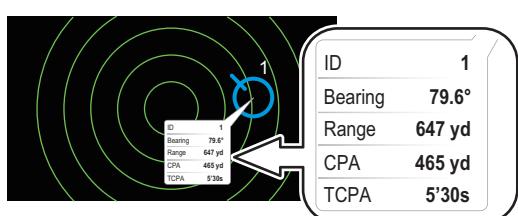


Lost target

How to display the target data



Select an ARPA target to get its data.

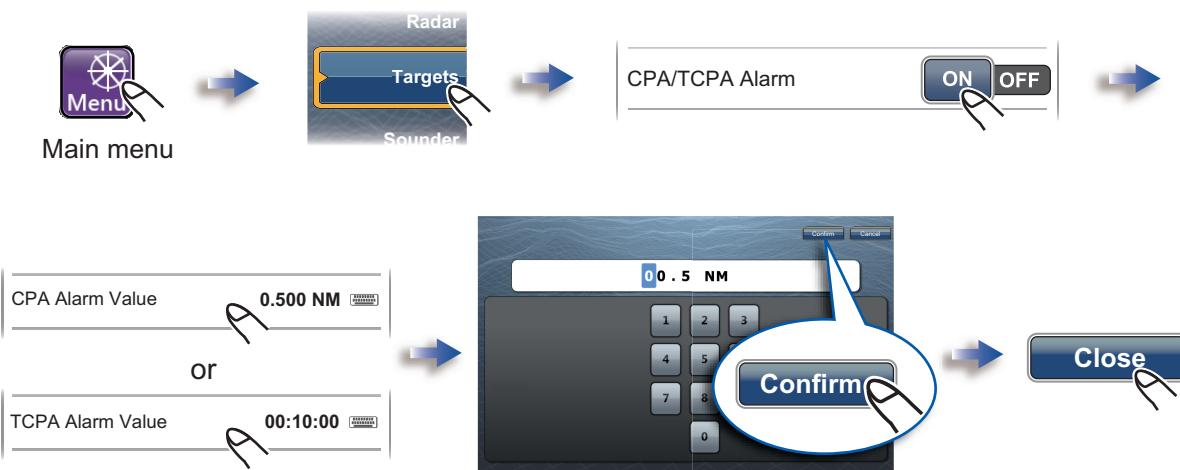


CPA/TCPA alarm

The CPA/TCPA alarm alerts you with the audio and visual alarms when a tracked target violates the limits selected.

CPA: Closest Point of Approach
TCPA: Predicted Time to CPA

How to set the CPA/TCPA alarm



Set the value then select [Confirm].

How to acknowledge the CPA/TCPA alarm

The CPA/TCPA alarm sounds and the alarm indication appears when the CPA and TCPA of an ARPA target are within the CPA/TCPA alarm range.



AIS (Automatic Identification System)

How to show or hide the AIS symbols

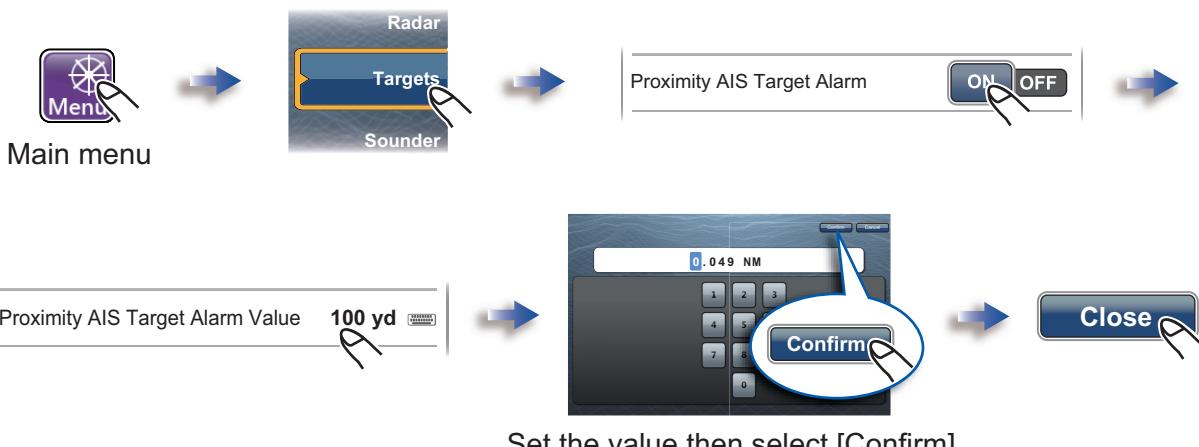


AIS target symbols

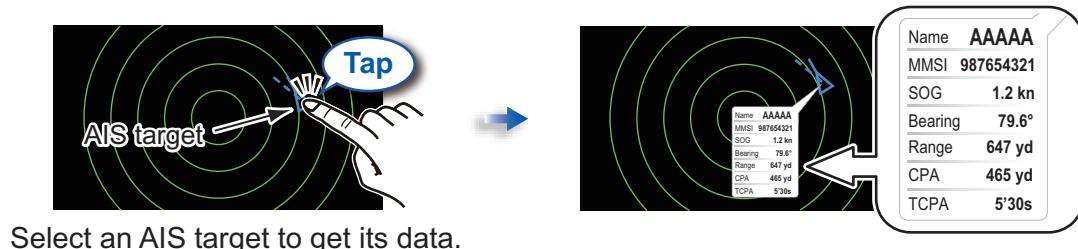
	Class A AIS	Class B AIS	BFT AIS
Activated target	SOG and COG vector Color: Blue	SOG and COG vector Color: Green	SOG and COG vector Color: Blue (filled)
Dangerous target	Color: Red Flashing		
Lost target	Color - AIS target: Blue - Cross: Red	Color - AIS target: Green - Cross: Red	Color - AIS target: Blue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

Proximity AIS target alarm

The proximity AIS target alarm alerts you with the audio and visual alarms when an AIS target is within the distance you set here.

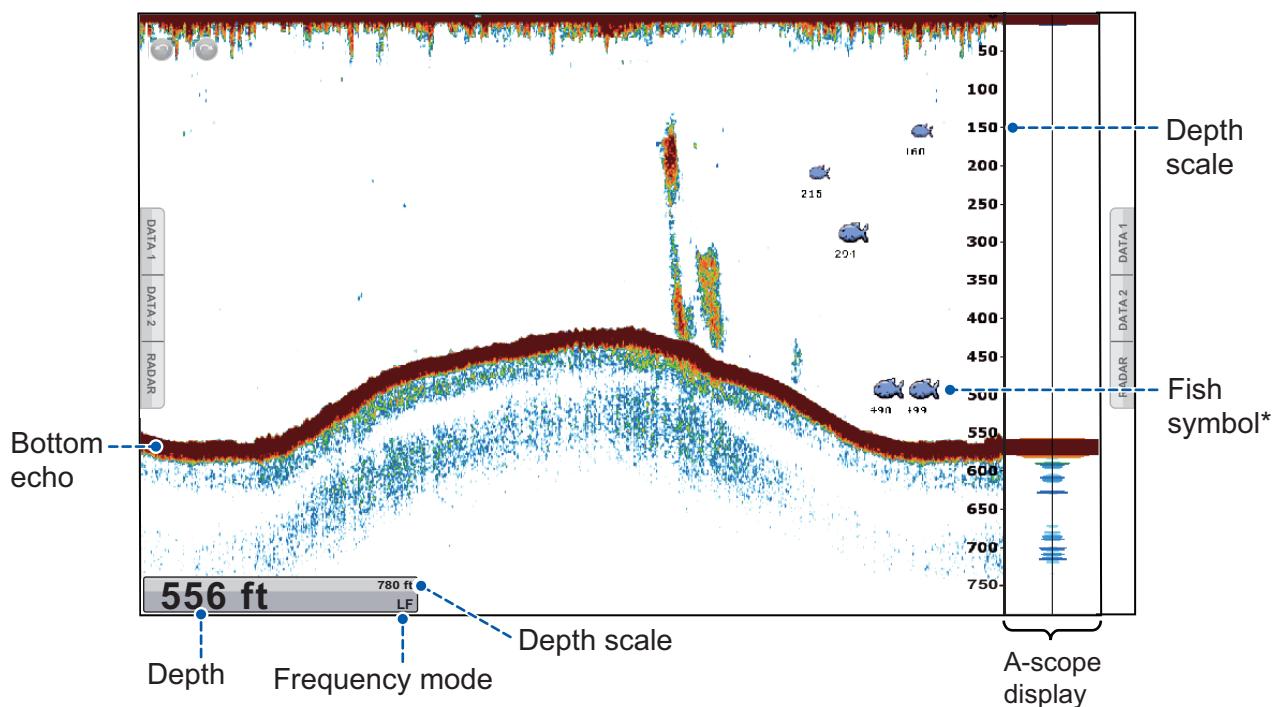


How to display the target data



Select an AIS target to get its data.

Fish Finder



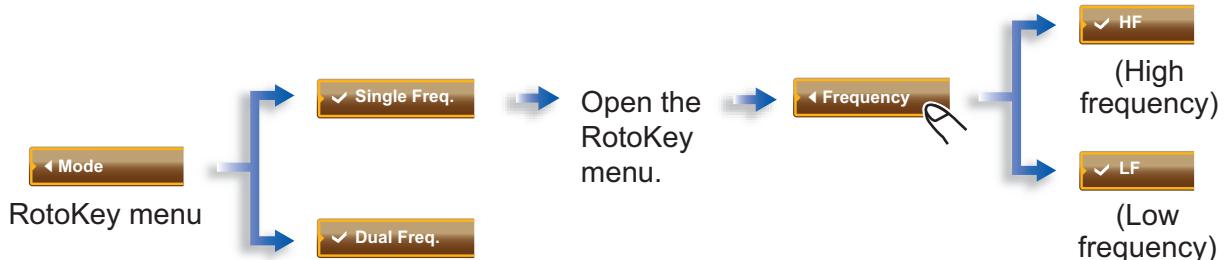
*: The ACCU-FISH™ feature estimates the length of each fish and shows a fish symbol and depth value or fish length. This feature requires appropriate transducer and either Sounder BBDS1, DFF1, DFF3, DFF1-UHD or FCV-1150.

How to select the frequency

Low frequency: Use for general search and to find bottom conditions.

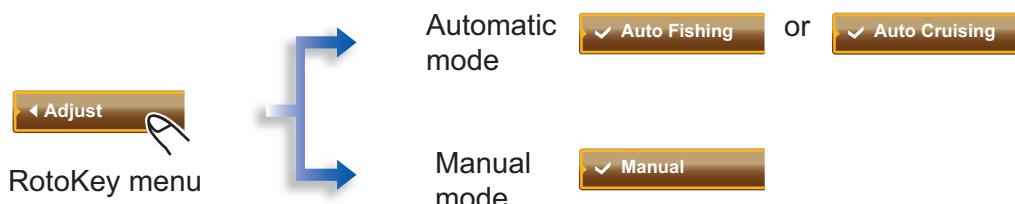
High frequency: Use to inspect a school of fish.

D u a l : Both low and high frequencies. Use to compare the same picture with two different sounding frequencies.



How to select the fish finder mode

Your fish finder can be operated automatically or manually. In automatic operation, range, gain and clutter are automatically adjusted.



Manual operation

How to set the range

Clear the mark.



RotoKey menu

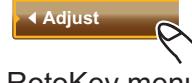
TZT9/TZT14:



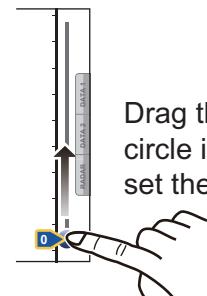
Right: Decrease the range.
Left: Increase the range.

TZTBB: Pinch the screen.

How to adjust the gain



RotoKey menu

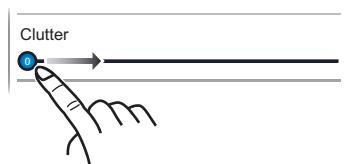


Drag the
circle icon to
set the gain.

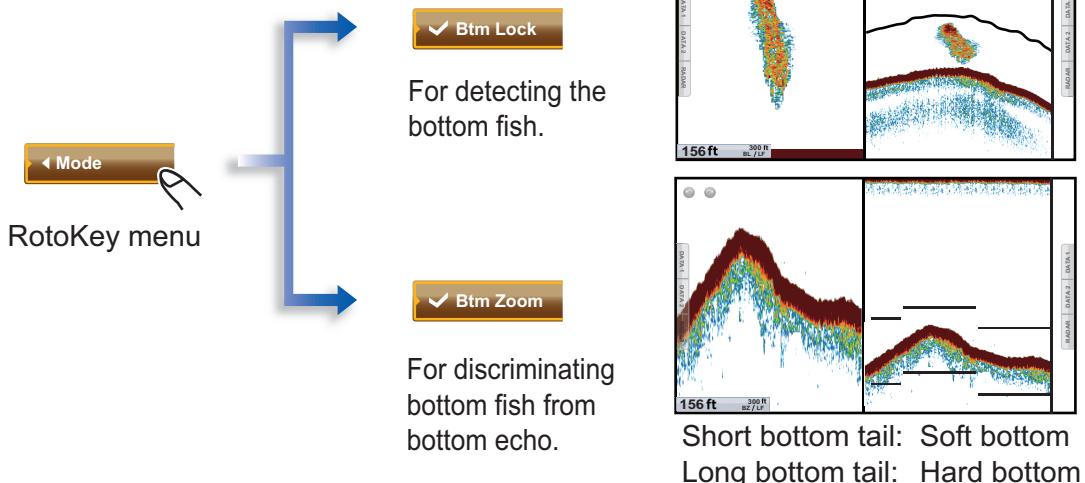
How to reduce the clutter



Main menu



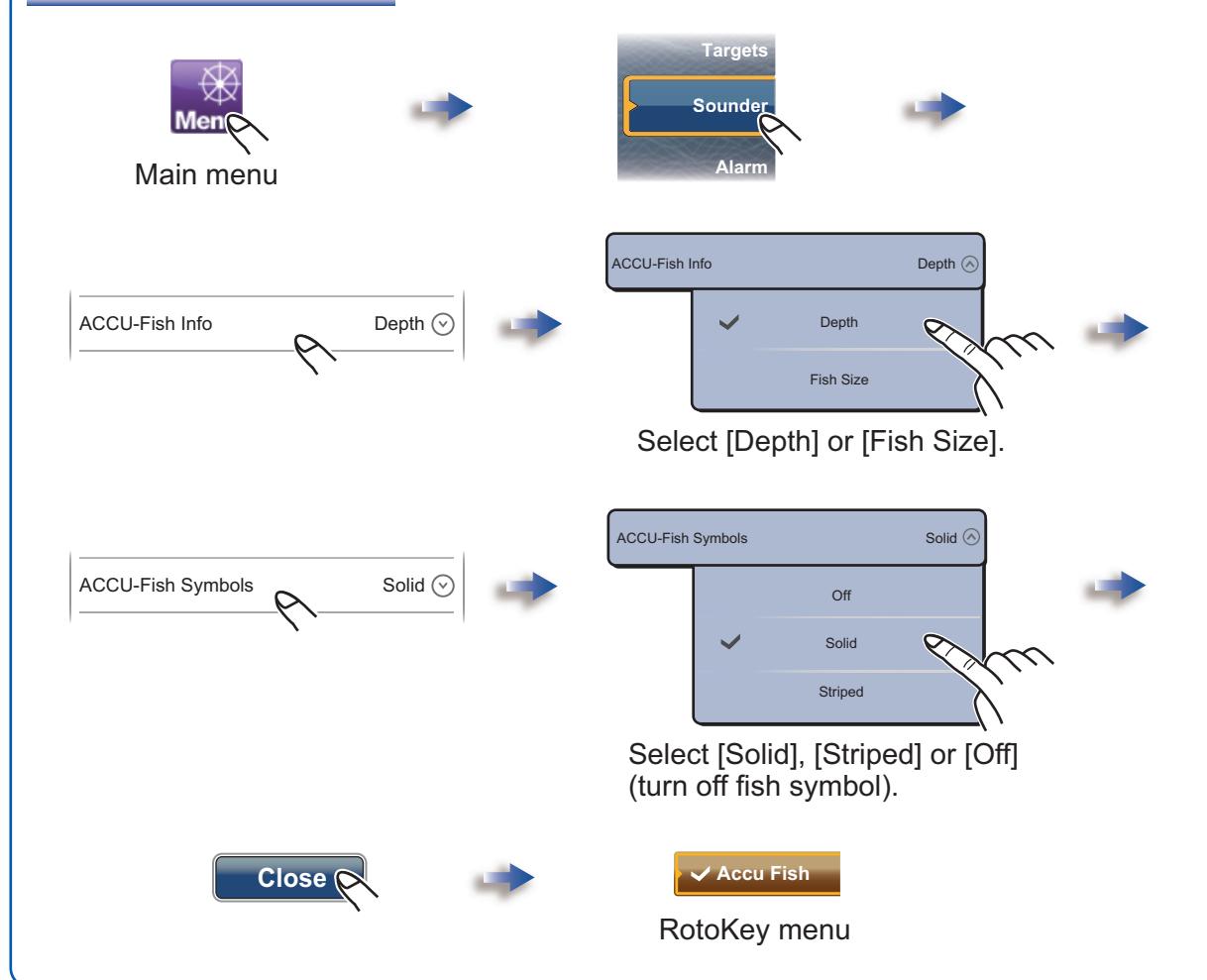
Zoom display



ACCU-FISH™

The ACCU-FISH™ feature estimates the length of each fish and shows a fish symbol and depth value or fish length.

How to set ACCU-FISH™

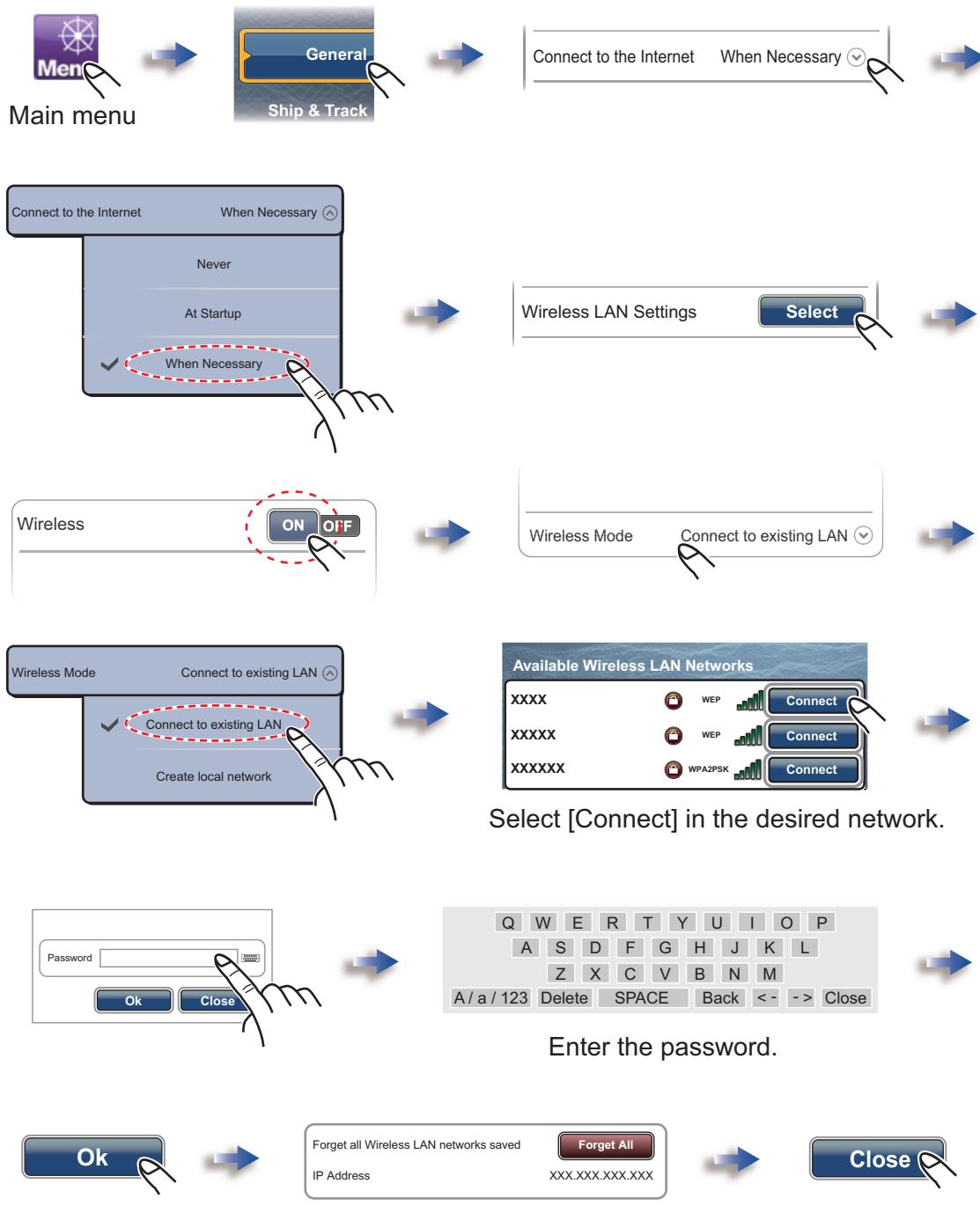


Wireless LAN Setting

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

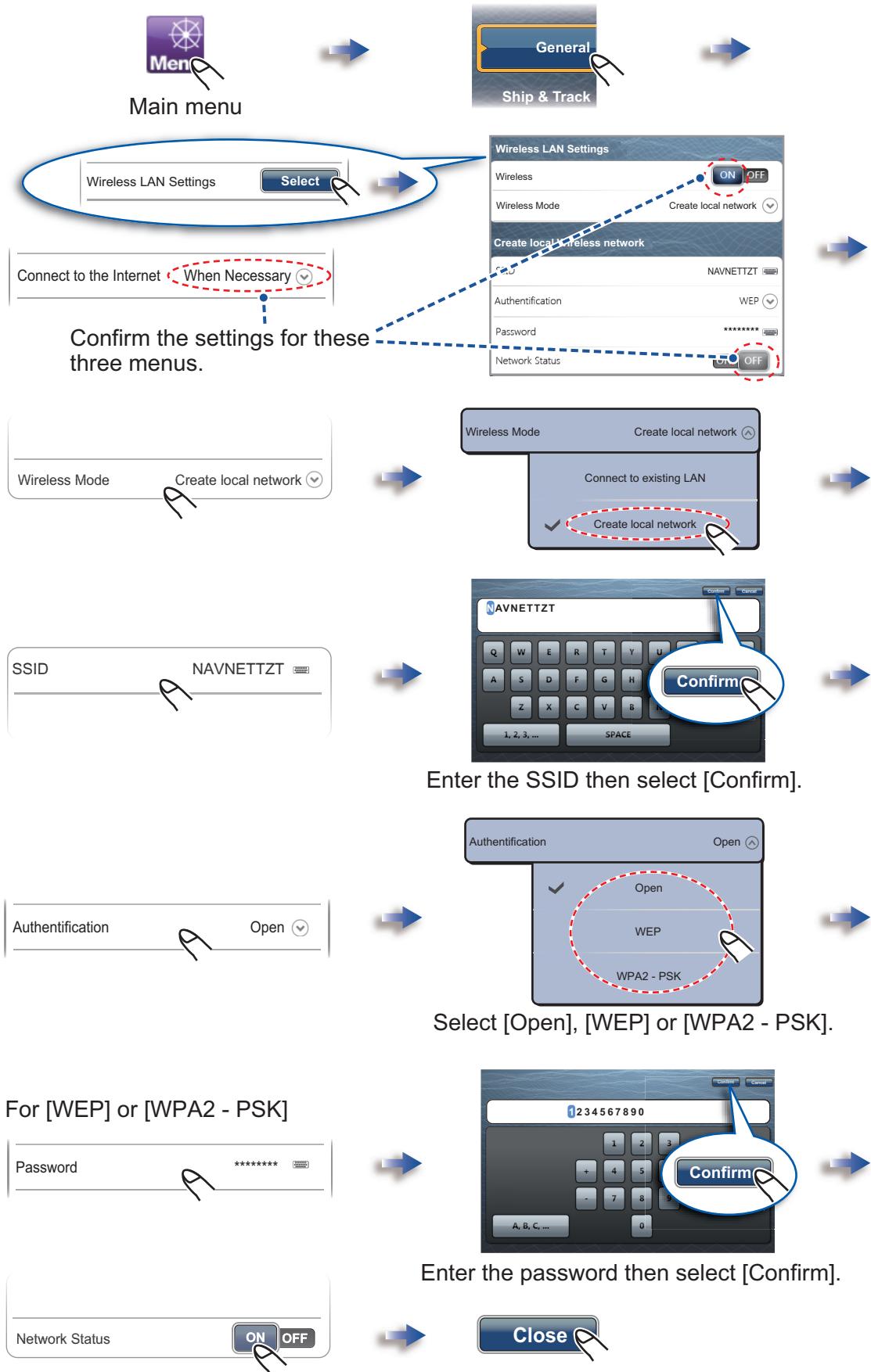
How to connect an existing LAN network

To download weather information, connect the existing LAN network.



How to create a local wireless network

To connect to an iPhone, iPod or iPad, create a local wireless network.



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