NAVnet
TZtouch2

TZTL12F and TZTL15F

Software Version 8.01
OVERVIEW OF CHANGES

Index

1.1. FLIR Cameras – Display and Control via Ethernet

TZtouch2 v8.01 can be networked with the latest FLIR M-series cameras. While previous versions could only use analog video images, v8.01 can now use video from the networked M300 series camera via IP streaming. Also available is the ability to set the camera to **Park** or **Home** position via TZTl12F or 15F. This was previously only available with the JCU.

With v8.01, the FLIR M232 camera can be set to **Park** from the TZTL12F and TZTL15F Layers menu.

1.2. Video Encoder for IP Streaming

Video images can now be networked via off-the-shelf video encoders. This enables the use of cameras other than FLIR or AXIS to be utilized. Example of this feature, Sonar images from the CSH8L Mk2 can be streamed to all TZtouch2/3 MFDs in order to monitor fish targets at both the main and fly bridges. When inputting Sonar images to the MFD, a dedicated Sonar page icon can be created. See separate **IP Video Streaming** document for setup procedures.
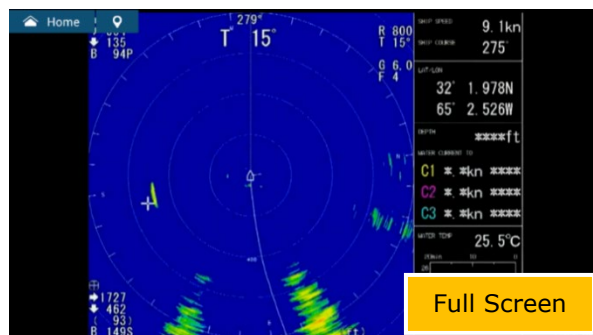
1.3. FUSION-Link via NMEA2000

TZtouch2 MFDs can now be networked with stereos from Fusion Entertainment via NMEA2000. Previous versions were networkable via Ethernet only. This limited the available connectable stereos to high end models with an Ethernet port. V8.01 offers more options to FUSION-Link stereos, which have an NMEA2000 interface only. See separate **Fusion Setup** document for details of FUSION-Link.

Diagram from Fusion Entertainment

Note:

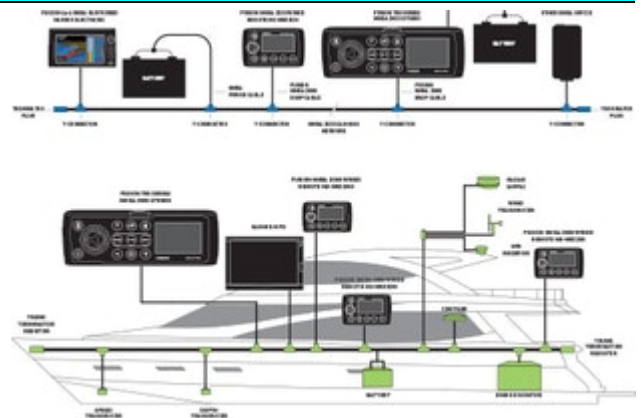When Fusion stereos are networked via NMEA2000, artwork will not be shown on the FUSION-Link page nor on the media bar of the TZtouch2 MFD. The artwork will be shown only with an Ethernet connection.

1.4. Anchor Watch via TZ ecosystem

Anchor Watch Alarm is now available for the **TZ ecosystem**. The Anchor Watch Alarm is automatically synchronized on the local network like an active route and is available on all TZ devices. This allows you to drop the Anchor Watch conveniently from your iPhone or iPad and see and adjust it from the TZtouch2 MFD (by local sync).

It also allows you to be alerted from any TZ devices (phone or tablet). If Internet access is available to login to the My TIMEZERO account with the TZ device(s), the connected device will report the position (Position Reporting) and the anchor watch
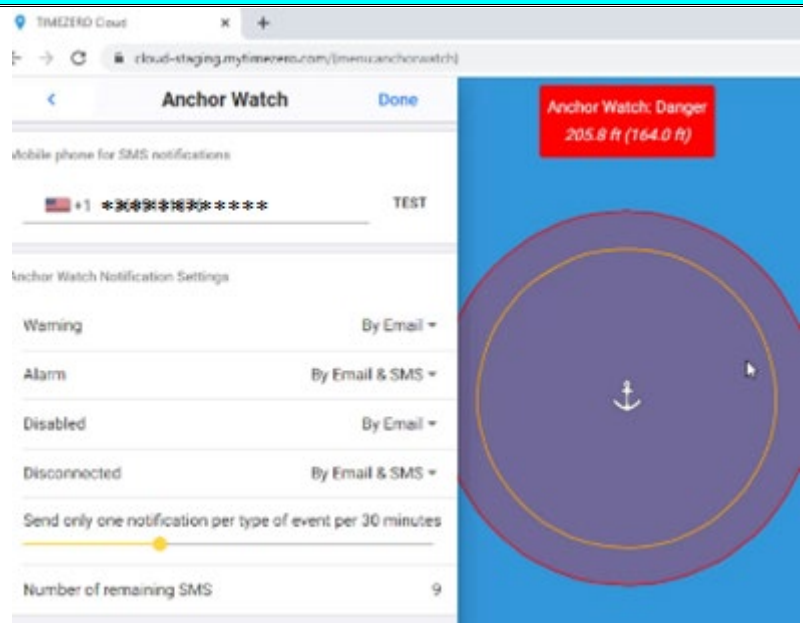
Sample – Anchor Watch status shown on a web browser

status will be sent to the TZ Cloud. Status can be viewed remotely from any location using a web browser (cloud.mytimezero.com). If you are logged in to the My TIMEZERO account with your phone, the TZ Cloud server can send you a text alert automatically in SMS. See separate **TZ Echo System** document for more details.

Note:

The UI of Anchor Watch operation on a TZtouch2 MFD v8.01 is also improved as described in **Section 6.5**.

1.5. Fleet Tracking via TZ Cloud

The Fleet Tracking feature available with TZ Professional V4.1 software is partially available with TZtouch2 MFDs v8.01. Fleet Tracking provides the ability to share and transfer vessel positions, speeds, points, routes, boundaries, etc. between the fleet and the land station.
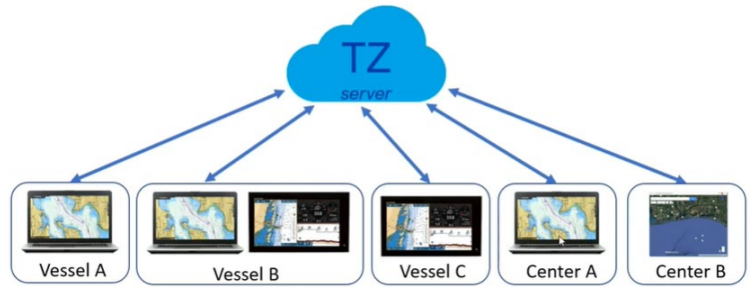
See separate **Fleet Tracking** document for details of this feature, as well as available functions on the TZtouch2 MFDs.

2. Refined Triple Beam Sonar Operation – DFF3D

2.1. More Access via the Layers Menu

The content of the Layer menu of the DFF3D slide up page was improved to allow for more adjustments without accessing the Settings page.

Note:

The Layer menu on the Fish Finder page was also improved, see **Section 3.1**.

E.g., Multi-Sounder
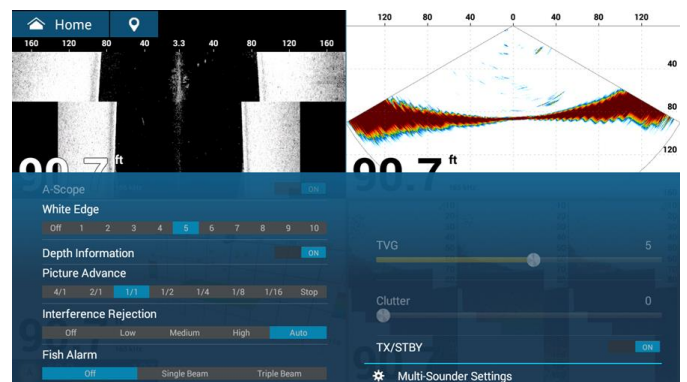
Comparison with previous versions with less menu items

2.2. Bottom Zoom and Bottom Lock on Multi-Sounder Mode

Bottom Zoom and **Bottom Lock** functions are now available on the DFF3D when in Triple beam mode. The following example is from the Triple Beam display with the bottom zoomed and locked, so that you can focus on bottom targets at the port, center, and starboard sides.

Bottom Zoom	Bottom Lock

Notes:

(1) The image on the Bottom Zoom and Bottom Lock modes are **digitally zoomed** to fit in the screen. When the range scale is deep, the resolution of zoomed images can be low.

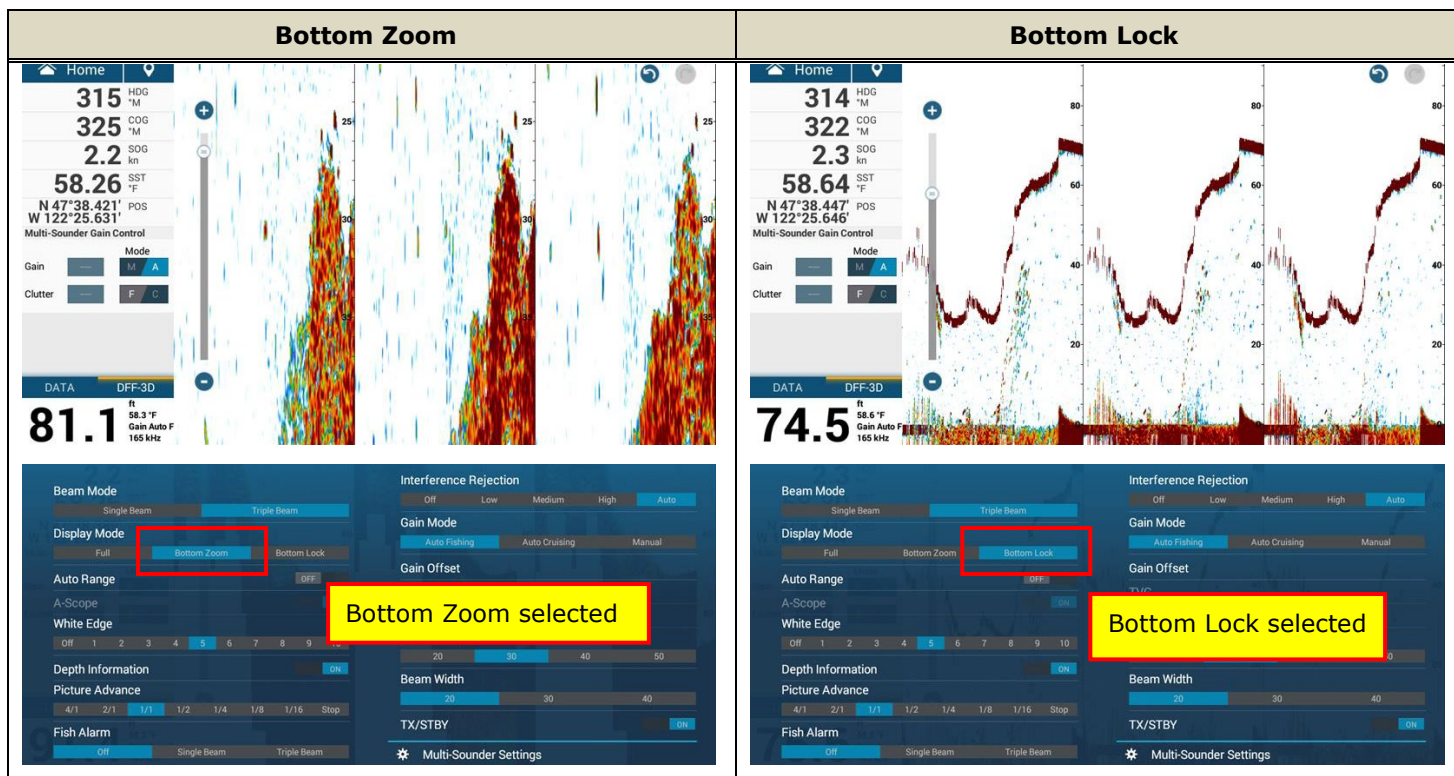(2) The DFF3D screen shows only zoomed images on one screen. (Fish Finders show the full range screen at the right side and the zoom screen at the left.)

2.3. Depth Box with updated Information

The depth indication box (legend) is refined to show more information at a glance.

- Depth unit
- Water temperature
- Gain mode – Auto or Manual gain value
- Frequency
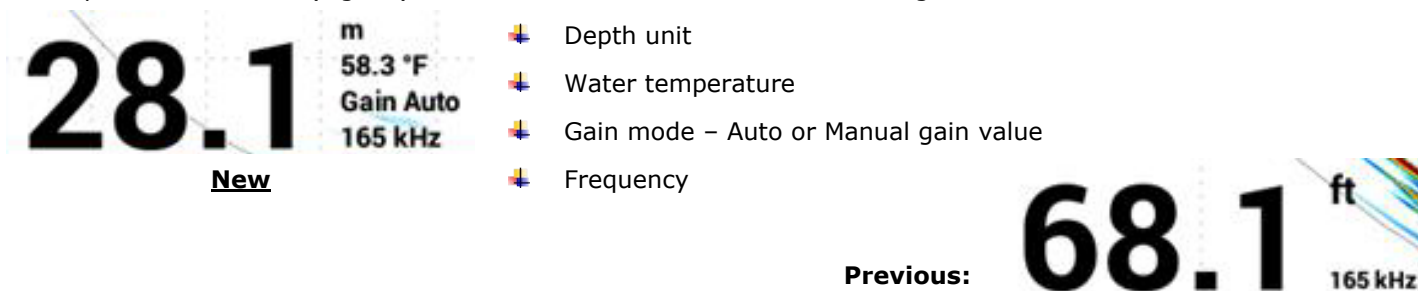
2.4. Smoothed Depth Scale Bar

The depth indication in the depth scale bar has been reduced to better display echoes on the right side.

New – V8.01	Previous Versions
The depth indication is smoothed and looks cleaner, so that echoes at the right side are easily visible.	The depth indication is so precise that latest echoes at the right side of screen can be masked by range figures.

2.5. Background Color – Blue
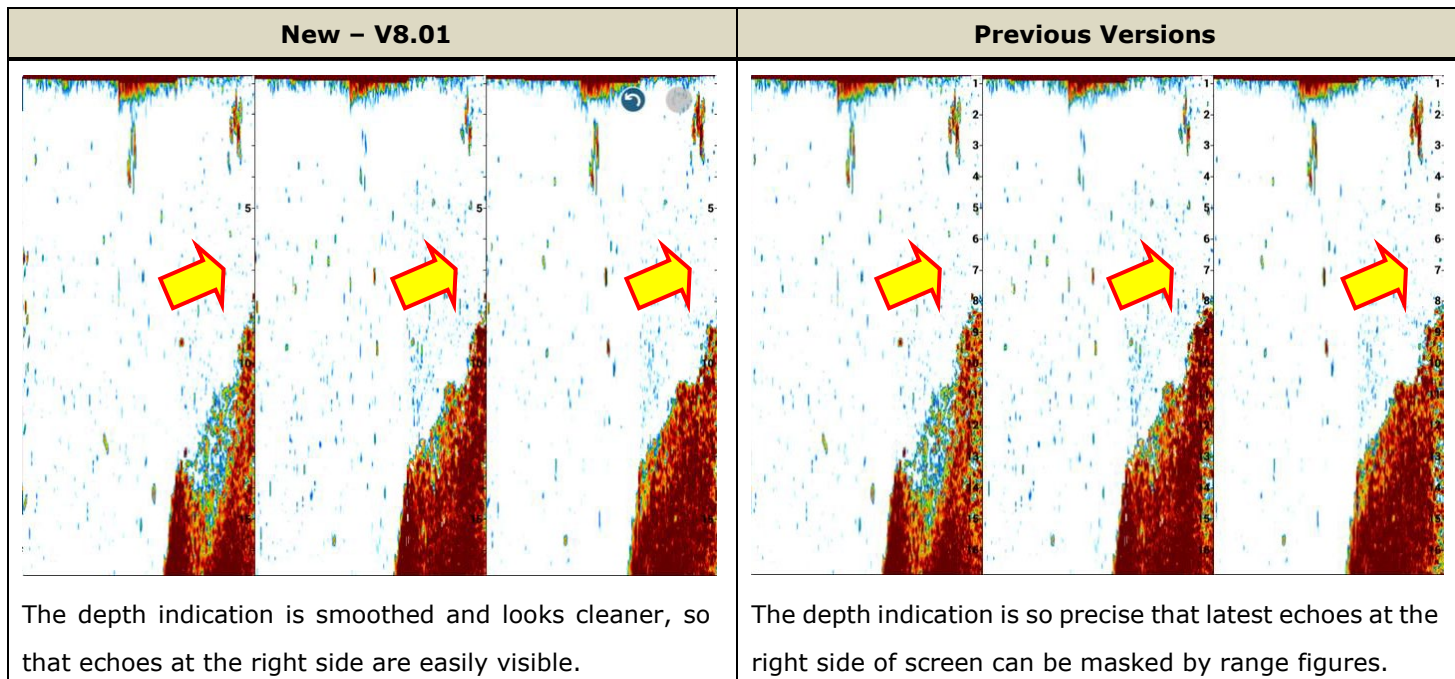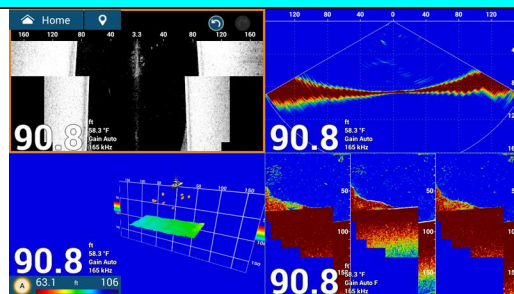
The **Blue** background color is added to the DFF3D and Fish Finder screens. This is the same color available with standalone Fish Finders such the FCV-1900. In order to change the color, access [Home] – [Multi Beam Sonar] – [Day Background Color] or [Night Background Color] and set to [**Blue**]. For Blue images on the Fish Finder screen, see **Section 3.7**.

2.6. Range Slider Bar Operation

While the Plotter and Radar ranges are zoomed in by tapping [+] and out by [-], the DFF3D and Fish Finder screens zoomed in/out oppositely with the previous versions. With v8.01 software, the operation is now the same. Tap [+] to reduce the FF range and [-] to increase the range.
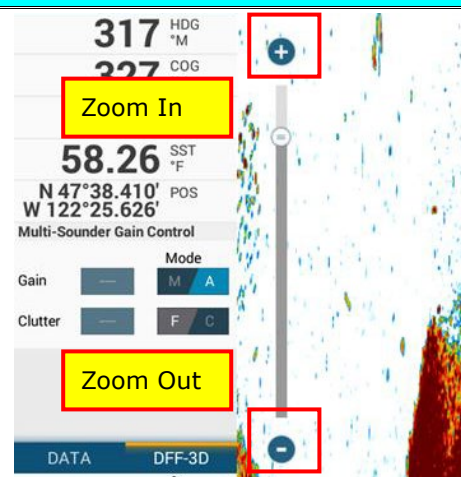
3. Refined Fish Finder Operation

3.1. More Access via the Layer Menu

The content of Layer menu of Fish Finder page accessible by bottom edge swipe is increased for more adjustment without accessing the Settings page.

E.g., TZTL15F

Display Mode, **Frequency**, **Auto Range**, and **Gain Mode**, which were selectable in the contextual menu are available in the Layer menu. The new **Bottom Search Mode** (**Section 3.10**) is also accessible from the Layer menu.

C.f. Comparison with previous versions for less menu item
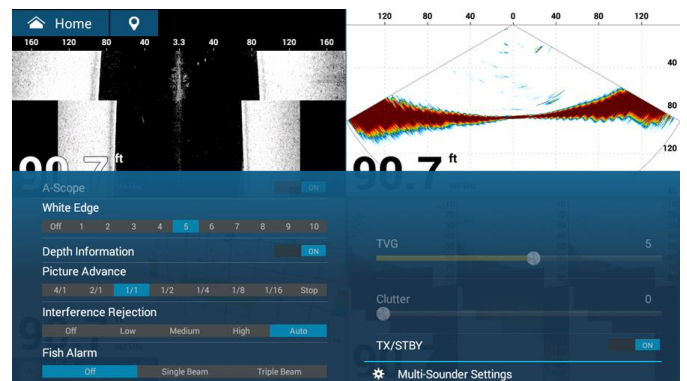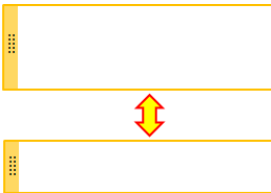
3.2. Marker Zoom Mode

In addition to conventionally available Bottom Zoom and Bottom Lock modes, a **Marker Zoom** mode is added. Once the Marker Zoom mode is selected, the right side shows whole echo images with the yellow marker to intuitively indicate the zoom area, and the left side shows zoomed images. The zoom area can be easily adjusted by shifting the yellow marker up and down and adjusting the marker height by touch operation, MCU-002/004/005, or TEU001 Touch Encoder.
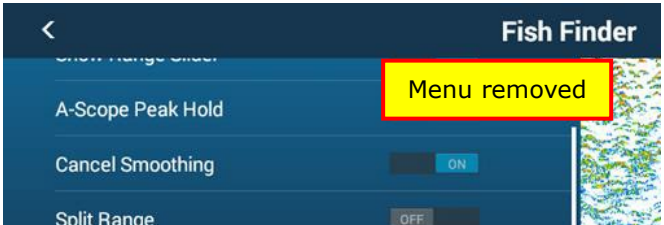
Action	Operation
Shift the marker up/downwards	✦ Touch: Drag the marker. ✦ MCU-002: Press [+]/[-] keys. ✦ MCU-004/005/TEU001: Rotate the rotary knob (RotoKey™). ✦ Menu: [Fish Finder] – [Marker Zoom Shift]
Change the marker height	✦ Touch: Pinch to zoom on the marker. ✦ Touch: Adjust it on the slider bar at the left side. ✦ Contextual Menu: Tap on the Fish Finder page, select [Adjust Marker Zoom], and enter a required length. ✦ Menu: [Fish Finder] – [Zoom Range Span]

Note:

While zoom reference lines are shown on the right-side of the screen on Bottom Zoom and Bottom Lock modes, the Marker Zoom mode will not show the line: Utilize the zoom indication bar, which is more intuitive.

3.3. Zoom Reference Lines – Always ON

The zoom reference lines always appear on the Bottom Zoom and Bottom Lock modes. The previous versions had ON/OFF settings in the menu. [Zoom Reference Lines] – [ON]/[OFF] menu is removed with v8.01.

Zoom Reference Line **ON**
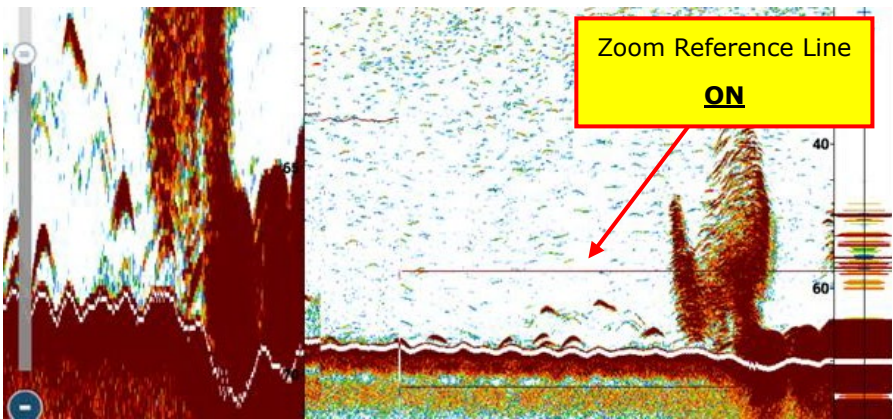
New – V8.01	Previous Versions

3.4. Updated Fish Finder Depth Box

The depth indication box is refined to show a variety of information at a glance. By tapping on the depth box or LF/HF box, the frequency mode can be switched between LF and HF.

- ↓ Depth Unit
- ↓ Water Temperature
- ↓ Gain Mode (Auto Fishing or Auto Cruising) and Manual Gain Level
- ↓ Frequency
- ↓ Display Mode: BZ (Bottom Zoom), BL (Bottom Lock), and MZ (Marker Zoom)
- ↓ Selected Frequency Mode: LF or HF

C.f. Previous:
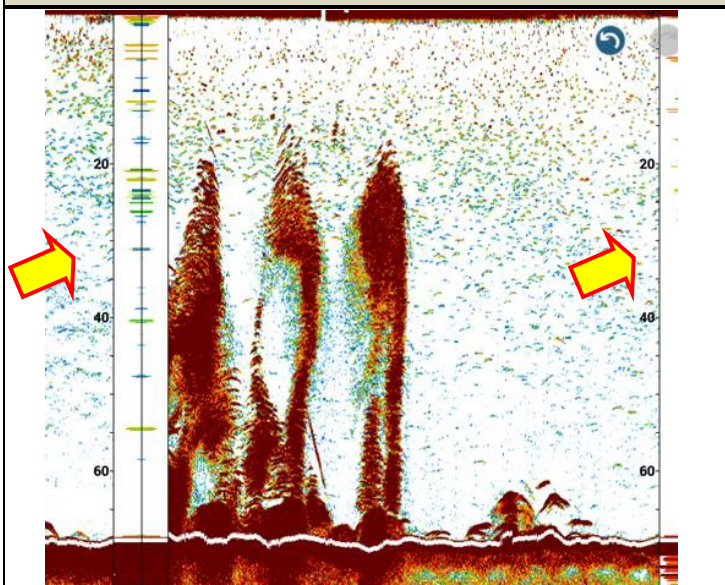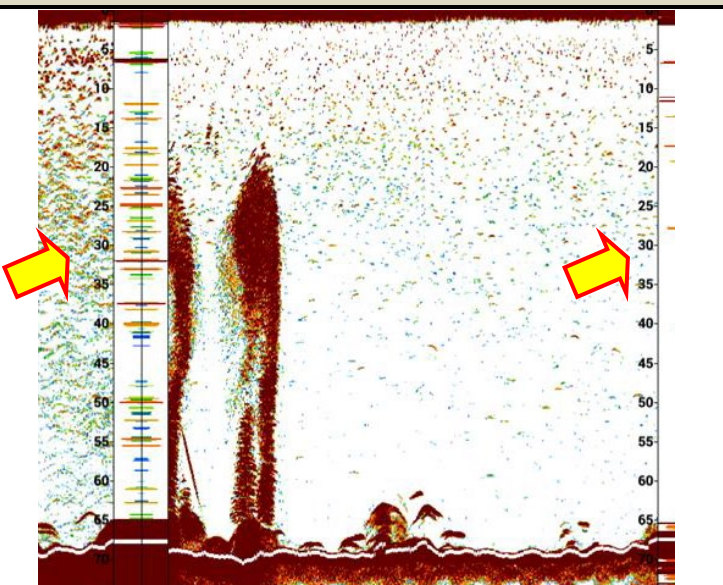
3.5. Background Color – Blue

A new **Blue** background color is added to the Fish Finder and DFF3D screens. This is the same color available with standalone Fish Finders such the FCV-1900. In order to change the color, access [Home] – [Multi Beam Sonar] – [Day Background Color] or [Night Background Color] and set to [**Blue**]. For Blue images on the DFF3D screens, see **Section 2.6**.
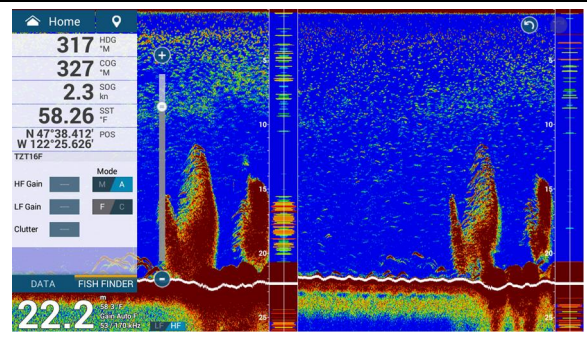
3.6. Smoothed Depth Scale Bar

The depth indication in the depth scale bar is smoothed with more areas for echoes secured than previous versions.

New – V8.01	Previous Versions
The depth indication is smoothed and looks cleaner, so that echoes at the right side is easily visible.	The depth indication is so precise that latest echoes at the right side of screen can be masked by range figures.

3.7. Range Slider Bar Operation

While the Plotter and Radar ranges are zoomed in by tapping [+] and out by [-], the DFF3D and Fish Finder screens zoomed in/out oppositely with the previous versions. With v8.01 software, the operation is now the same. Tap [+] to reduce the FF range and [-] to increase the range.
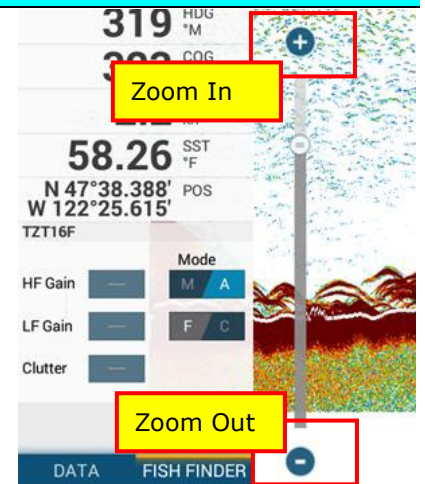
3.8. Transducer Draft Offset with Zero Line Rejection– Shifting Screen

Previous software versions displayed images from the area above the preset transducer draft. As an example, the transducer is located at 1 m below the draft and the water depth is only 5m: The top 1m area is masked in brown and only the other 4m area is displayed. New v8.01 with **Zero Line Rejection – ON automatically offsets the preset draft area** to show only the echoes on the Fish Finder screen. The masked area is not displayed.

New – v8.01	Previous Versions
The preset draft area is automatically shifted. In this example, the top of the Fish Finder screen starts from 2 m.	The draft area (top 1 m) is masked in brown.

3.9. Bottom Search Mode – OFF

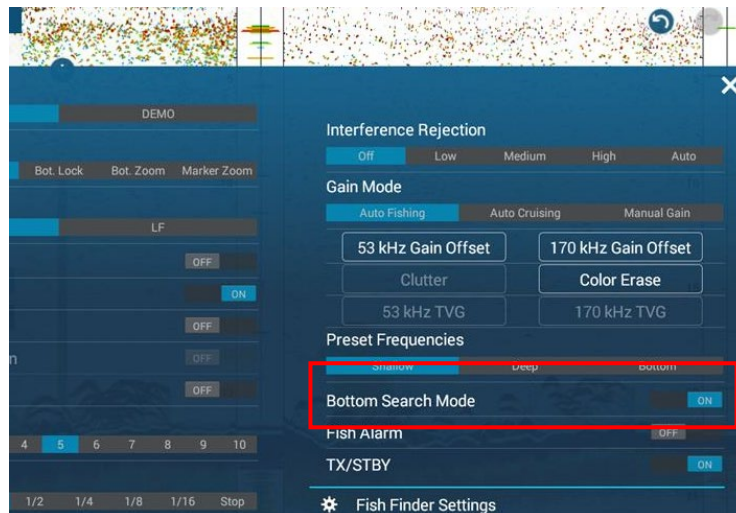When searching at the surface to the middle layer of deep water, you may shift or zoom the screen to show such layers without showing the bottom echoes on the screen. However, the transmission speed can be slow if the bottom is always searched at deep water. In order to increase the transmission speed, the **Bottom Search Mode** can be turned off: Bottom edge swipe on the Fish Finder page to show the Layer and access [**Bottom Search Mode**] – [**OFF**].

Bottom Search – OFF	Bottom Search – ON
TX → TX → TX → TX → TX → TX	TX → TX → **Stop** (for search) → TX → TX → **Stop** (for search)
With the [Bottom Search Mode] – [**OFF**], the Fish Finder will keep transmitting faster by 1.5 times compared with [ON]. **Note:** The Bottom Search can be turned off with the Manual Gain mode only.	While the screen shows only the surface to middle layer, i.e., no bottom displayed, the Fish Finder will stop the transmission once in three times in order to detect the bottom depth. **Note:** The Bottom Search mode is always ON with the Auto Gain mode.

Compatible Fish Finders for Bottom Search Mode – OFF

The following models are compatible with Bottom Search Mode – **OFF**.

Internal TZTL12F and 15F Fish Finders are **not** compatible with **Bottom Search Mode On/Off.**

♦ **TZT9F/12F/16F/19F v8.01** with Built-in Fish Finder	♦ **BBDS1** v8.01
♦ TZT12F/16F/19F v8.01 with **DI-FFAMP**	♦ **DFF3** v8.01
♦ **DFF1** v3.01	♦ **DFF1-UHD** v3.01

4. Refined Fishing Operation – Fish-It & Drift-It!

Drift over Required Spot for Fishing

When good echoes from fish are shown on a Fish Finder, you want to stay on the spot for fishing. Usually, you can enter a point on the spot, where good echoes appeared, and move to the point. As it is difficult to stay right on the point due to tidal current and wind, you may drift the boat around the target point while fishing. However, it is also difficult to effectively drift right over the required point. The boat may be drifted away from the spot even if you stop the boat close to the point.

The **NEW Fish-It & Drift-It** feature helps you to locate the spot, where you start drifting the boat, in order to effectively drift right over the required point. **TZtouch2 MFDs will calculate and display the position where you should start drifting the boat in order to pass right over the specified point in 3 minutes**. (The period of 3 minutes can be changed to 5, 10, 15, or 20 minutes by setting.)

In order to use this feature, **position, SOG, and COG** information are all required – **A heading sensor is not required**. As long as the MFD is used as the chart plotter, the data should already be available. You can Fish-It and Drift-It with the minimum configuration of the TZtouch2 MFDs with a GPS input.

Step 1 – Find a Fishing Spot!

If good echoes are observed on the Fish Finder or DFF3D screen, enter a point on that area: Tap on the echo and select [New Point] to enter a point.

OR

You can directly go to Step 2 by selecting [**Fish-It**].
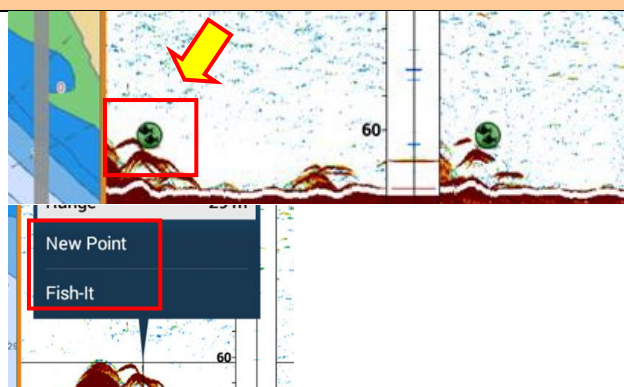
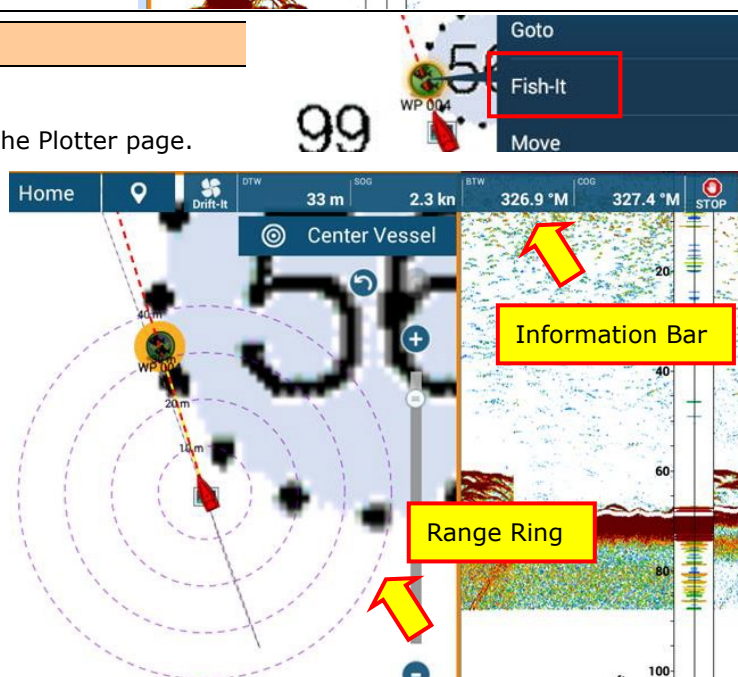| Step 2 – Start "Fish-It" |
| --- |

(1) If you intend to drift over the entered point, show the Plotter page.

(2) Tap the point and select [**Fish-It**].

- A range ring, looking like VRM of Radar, will appear to help identify the distance between the point and own ship.
- An information bar will appear at the top of the screen to show the distance and bearing to the point, as well as SOG and COG of own ship.

(1) After activating "Fish-It", **stop the boat and let it drift as it is**.

(2) Tap [**Drift-It**] on the information bar.

✦ The TZtouch2 MFD will calculate the best spot to start drifting the boat.

✦ The message [Drifting to Compute Drift-It Start Point] will appear during the calculation.

✦ After the boat **drifts for approximately 100ft at a speed under 6 knots**, a purple icon will appear at the appropriate location, where you should start drifting the boat.

✦ The message [!!!Drift-It Start Point Calculated!!!] will appear after the calculation finishes.

(3) Move to the spot and stop: Start drifting the boat and start fishing while drifting to the Fish-It point.

Start drifting from here!
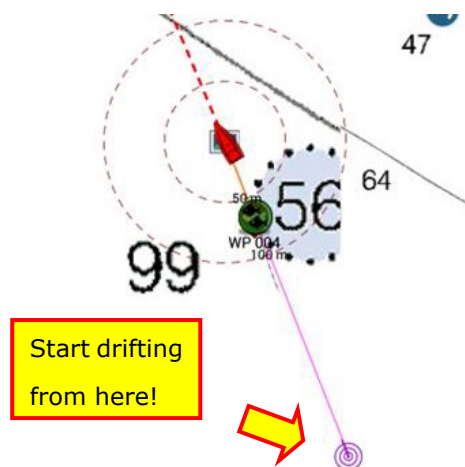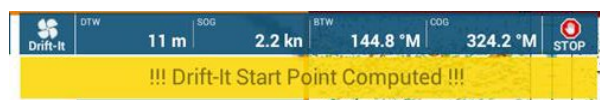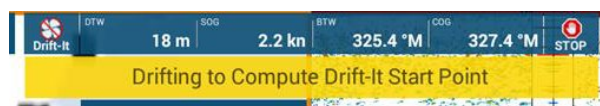
Tips:

By default setting, the purple icon is the spot where you should start drifting the boat in order to pass right over the specified point in **3 minutes**. (The period can be set as introduced in the following tips.)

As an example, the distance between the Fish-It point and Drift-It point is measured with a ruler. The information bar indicates the TTG (Time to Go) of apprx. 3 minutes if the boat maintains the currenty running (drifting) speed.

Ruler
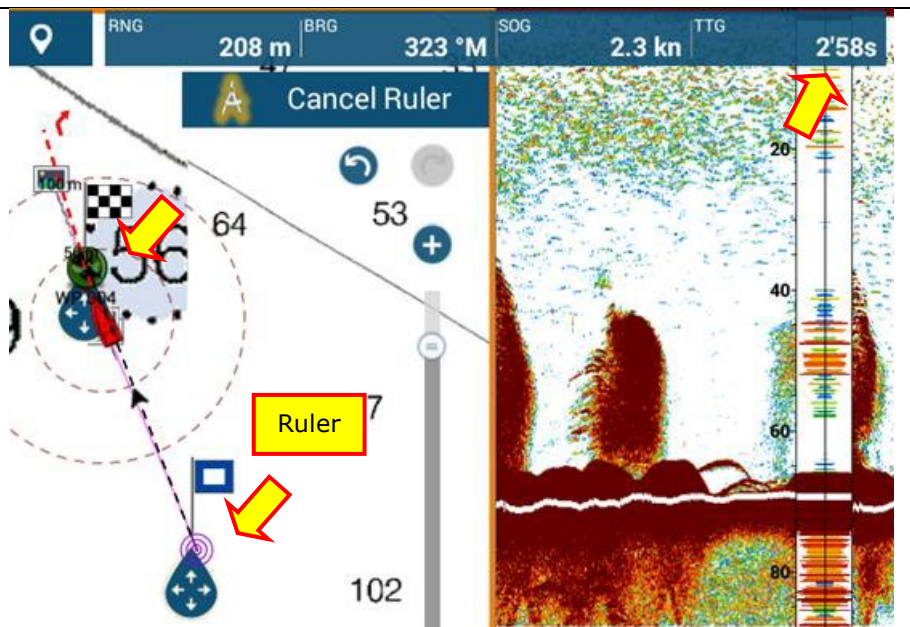
Tips for longer Drift-It period:

If you tap the purple icon, the drifting time can be adjusted between 3 (default), 5, 10, 15, and 20 minutes.

As an example, if the setting is changed from [3'00s] to [10'00s], the starting point in purple will be shifted to a further location, so that you may drift the boat for a longer time from the further location.

Notes:

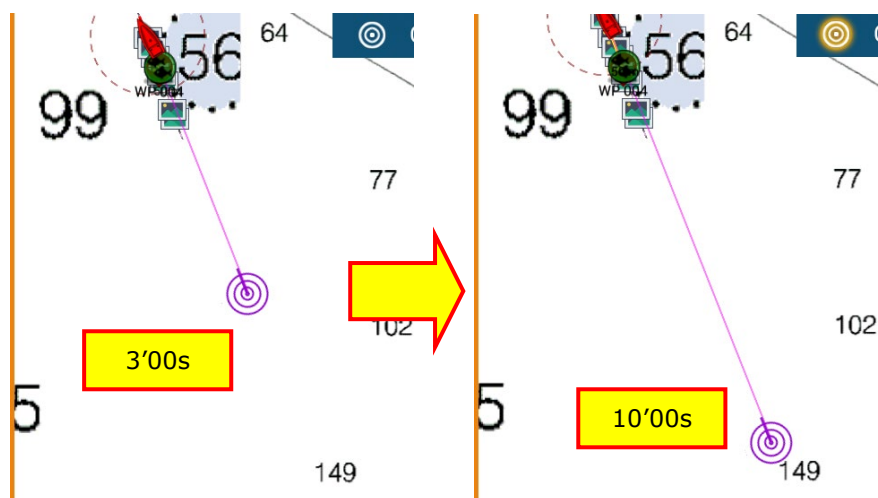(1) Make sure to drift the boat for **30m (100ft) at a speed under 6 knots** in order to calculate the spot to start drifting. If the boat is drifted slowly due to no tidal current or wind, the calculation may take a long time.

(2) If the wind and current condition has changed since the calculation, the boat may not be drifted over the specified point.

For non-fishing operation purposes…

The [Fish-It] menu is accessible in the contextual menu on the Plotter, Fish Finder, and DFF-3D pages by default. If this function is not required, it can be removed in [Home] – [Settings] – [Chart Plotter] – [**Show Fish-It on Pop-up Menu**] – [**OFF**].
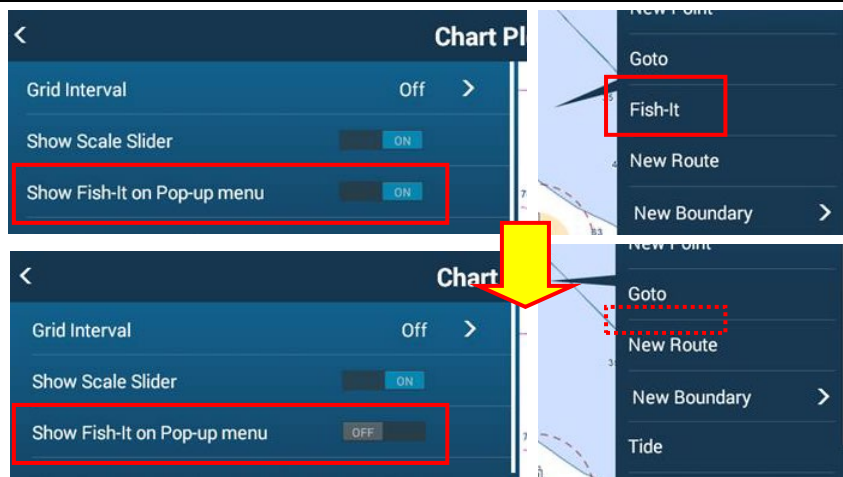
5. Refined Data and List Management

5.1. Enhanced Screenshot Management

Saved Internally as Photo

Screenshots can be taken with short or long dual tap gesture, as well as pressing the function key on the MCU-002/004/005 or TEU001. While the previous versions saved screenshots to an inserted USB jump drive only, the new v8.01 software can also save the data to the MFD as Photo data. If a USB jump drive is inserted, the data is saved to both the USB and MFD.
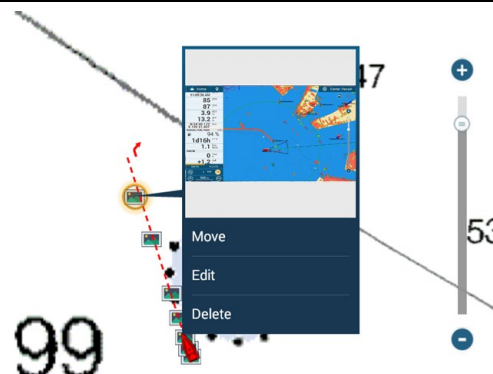
Saved screenshots are shown with icons at the locations where they are taken. Tapping on the contextual menu, the screenshot can be shown in full screen.

Screenshots Shared via Cloud

The saved screenshots on the TZTL2F and 15F v8.01 can be automatically uploaded to the TZ Cloud after one of the displays in the network is connected to the Internet. In the following example, the saved and uploaded screenshot is shared with the TZ First Mate app and TZ Cloud PC site.
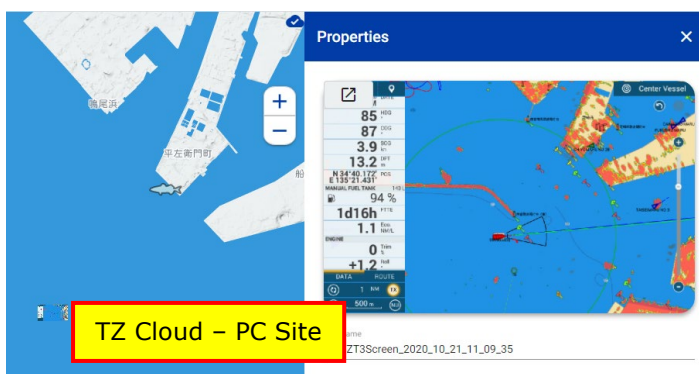
Note:

The shared screenshots cannot be downloaded to the local PC or smart devices.

Save Screenshot via Event

Screenshots can also be taken via the **Event mark window**: Tap the event icon next to the [Home] icon and select [**Screenshot**]. If the screenshot is taken in this procedure, the Two Finger Tap and Long Tap can be assigned to other functions.

No Acknowledgement Message Box	

When a screenshot is taken, the previous versions showed a pop-up window, which needed to be closed by tapping [OK]. The new v8.01 shows a small pop-up at the bottom of the screen which goes away on its own.
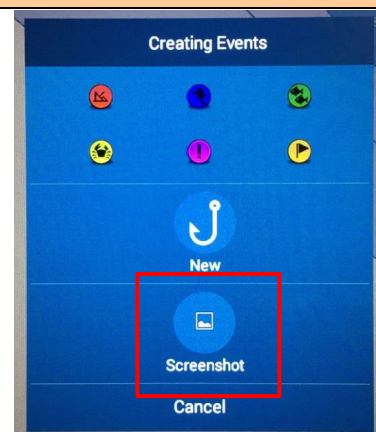
New – V8.01	Previous Versions and NavNet TZtouch2 Series
	 Sample image from TZTL12F
The box with [Screenshot taken] will appear for 5 seconds and disappear.	The message will appear: Click [OK] to close the box.

Note and Limitation	

(1) When the screenshot size is large, it may not be saved internally. While a screenshot is internally compressed by approx. 10% to be saved as Photos, the file with the size over 150 KB (approx.) after compression may not be saved. However, the compressed file size cannot be checked on the MFD. If the original screenshot (uncompressed) is saved to a USB jump drive, the size will be approx. 1.5 MB. If you find such a large file saved in the USB, you may notice that the screenshot is not found on the MFD. The full screen mode of Fish Finder with high gain of echoes or noise filled in full screen could be a large file, and therefore not saved.

(2) When attending a customer's boat to take screenshots onboard, make sure to delete the photo data from the display if the data is not required by the customer.

5.2. User Objects – Listing by Date

User objects (points, routes, boundaries, catches, and photos) can be listed by **Date**.

The example at right shows the Points List. While a variety of points are saved in the unit, they can be listed for [TODAY], [YESTERDAY], [MONDAY] (e.g.), [LAST WEEK], etc., in the order of new to old. It helps to intuitively identify the point entered in a specific timeframe and review the activity of the day.

Each data type is listed in the following rules.

- Point and Route : In the order of last update
- Boundary, Catch, and Photo : In the order of created date
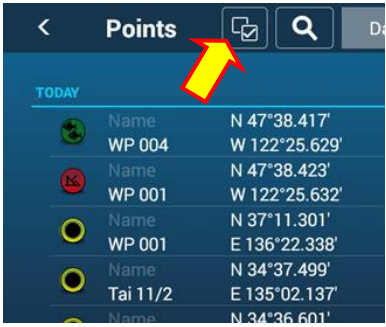
Note and Tips:

When user objects are entered while a demo file is running or without actual GPS time received, they may be registered with the system time, i.e., time kept by CPU, so that they may be listed in an incorrect category.

5.3. Editing Multiple User Objects

Multiple of user objects can be commonly edited to have the same color and shape, as well as common comments at once. The following example shows how multiple points are edited: All the points from today will be edited to have a common color.

Multi-Selection Icon	Selecting items to edit or delete

Editing at once	Today's points all in green fish icon

6. Refined Plotter Operation

6.1. Point Entry by Position – Edit and Find

Point Creation page is improved. When creating a point by position, i.e., L/L, swipe from the right side of Plotter screen and open the Create Point page to enter a required position. The created point can be edited in [**Edit**] and found on

the chart by [**Find**]. When the point is searched on the chart, the target point is highlighted in orange.

6.2. Track Color by Day and Trip

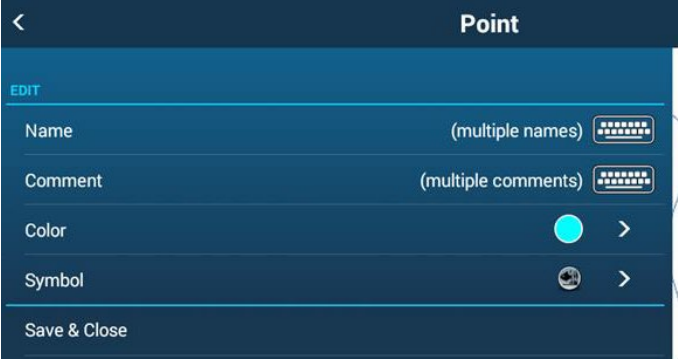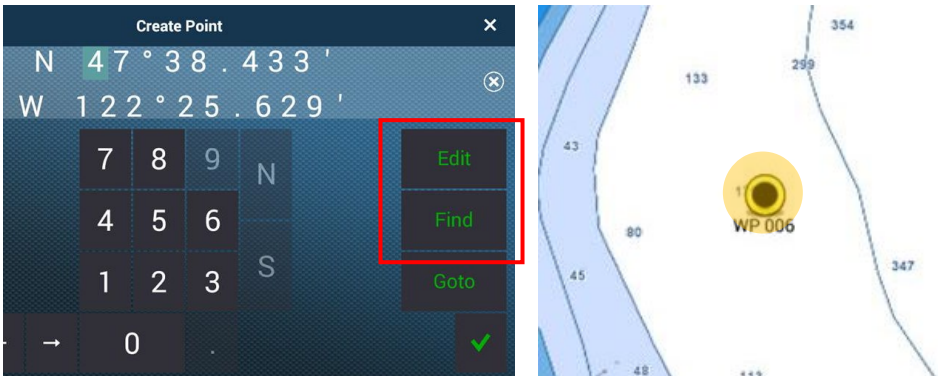In order to differentiate each log shown on the chart, you may change the track color for each fishing and navigation activity. However, if you forget to preset the color before leaving the harbor, the track will be drawn in the same color as the one from the previous trip.

New v8.01 has additional options to change the track color by [Day of the Week] and [Trip]: Access [Home] – [Ship & Track] – [TRACK] – [Variable Color] – [**Day of the Week**] or [**Trip**].
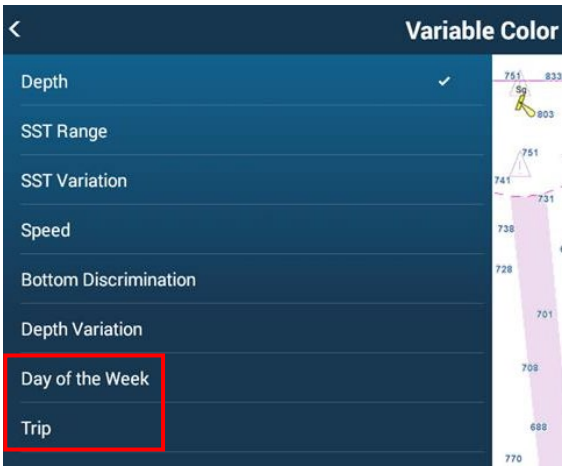
Day of the Week

Variable colors can be assigned from Monday to Sunday. The track will be drawn in the preset color of the day even if the display is restarted in the same day. If the time passes 00:00 and the day changes, the track color will change to the next one even while the Plotter is running. A common color can be assigned to multiple days.

Trip

The period while the display is turned on is regarded as one cycle of a trip. The track color will change in the order of Red, Cyan, Green, Yellow, Purple, Brown, Blue, and back to Red automatically at each trip.

Notes:

(1) The track color will not change even when the day changes to the next day.

(2) If the display is turned off for less than 4 hours, the track color will not change. As an example, if the display is temporarily turned off to refill the fuel or go out for lunch, the track will be drawn in the same trip color.

(3) The order of color variation cannot be changed, or the color type cannot be fixed to specific ones.

6.3. Improved Plotter Range Scale

V8.01 shows the range scale in the same indication as generic chart application such as Google Map.

New – v8.01	Previous Versions
The bar with its scale is indicated.	The distance from the right to the side edge on the chart is indicated.

6.4. ACCU-FISH™ Icon – OFF

ACCU-FISH™ icons can be turned off from the chart: Bottom edge swipe on the Plotter page to open the Layer and access [ACCU-FISH] – [**OFF**].
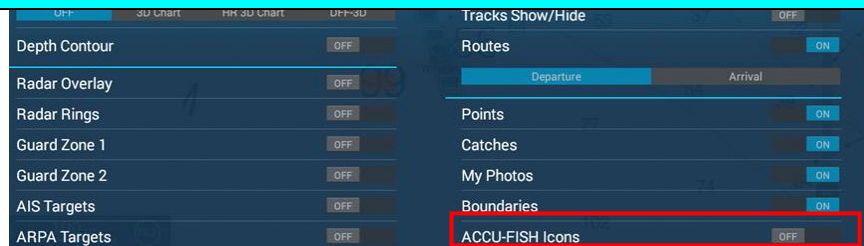
6.5. Advanced Anchor Watch Operation

The UI of Anchor Watch Alarm is improved to be much more intuitive compared to previous versions of software.
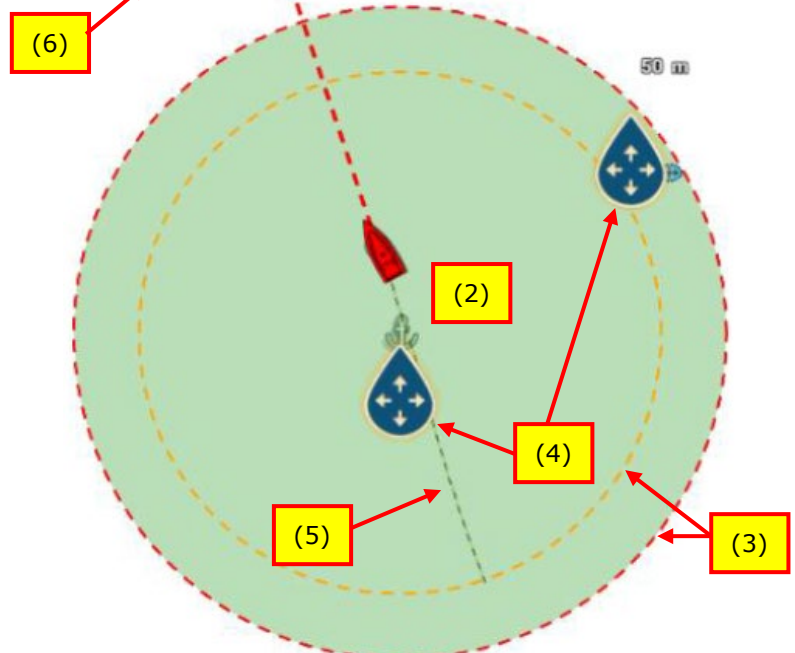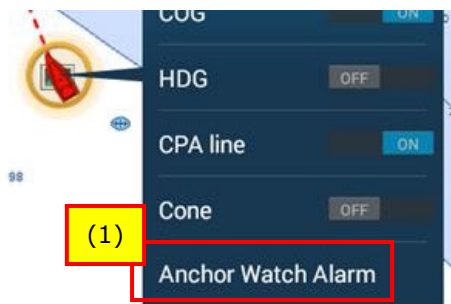
Content

(1) Alarm activation

(2) Anchor Icon

(3) Anchor Alarm: Warning and Alarm Zones

(4) Zone adjustment

(5) Trail

(6) Information bar

(7) Warning

(8) Alarm

Anchor Watch Warning	Anchor Watch Alarm
(7)	(8)
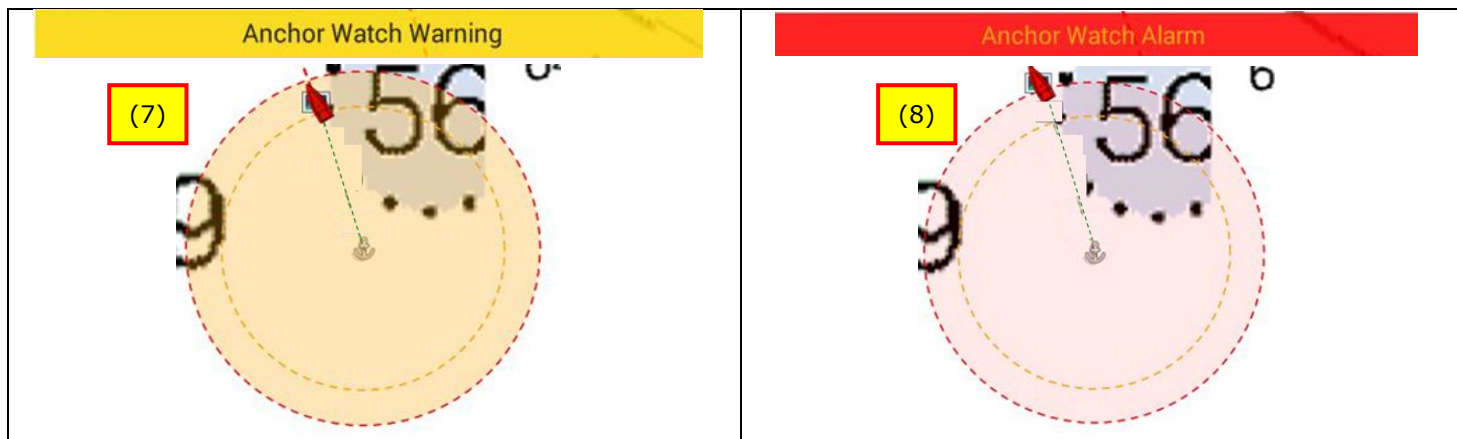
(1) The Anchor Watch Alarm can be activated from the **contextual menu** shown by tapping on the own ship icon.

(2) The anchor icon is dropped **at the bow of the bow**, not at the GPS position. (For accurate location of anchor drop, a heading sensor should be used.)

(3) **Dual circles** are drawn: **Red for alarm and yellow for warning at the 80% zone**. While the own ship is located inside the zone, the zone is shown in light green color.

(4) The alarm zone can be **easily moved and resized** by tapping on the anchor icon to select [**Edit Anchor Watch Alarm**].

(5) A **trail from the own ship icon** is shown automatically, which allows you to see how the boat has moved since the Anchor Watch Alarm was activated.

(6) While the alarm is set, the **information bar** shows the distance to the alarm line, as well as boat SOG, as well as depth and wind speed. The alarm can be stopped, or the anchor alarm location can be reset to the current location.

(7) When the own ship **reaches the 80% zone**, a **warning** will be generated. The alarm circle will change to **yellow**.

(8) When the own ship reaches or moves past the red circle, the **alarm** will be generated. The alarm circle will change to **red**.

Notes:

(1) The GPS position, which is used to trigger the anchor watch alarm, can be averaged in order to avoid false alarms when the condition of GPS signal reception is unstable.

(2) While averaging the position will delay the anchor watch alarm, we recommend that the alarm zone be adjusted to a smaller radius than usual.

(3) The Anchor Watch Alarm is synchronized across the TZ Echo system.

Comparison – Anchor Watch Alarm Operation with Previous Versions

- The anchor watch alarm can be activated in the Alarm menu only.
- The alarm zone can be resized in menu operation only.
- Once the alarm is set, a circle in orange dot will appear around the own ship.
- If the boat reaches the preset alarm zone, an alarm will be generated with the circle color changed to red.
- If the boat passes the alarm zone, turn on the alarm in the Alarm menu again to restart or stop the anchor watch.
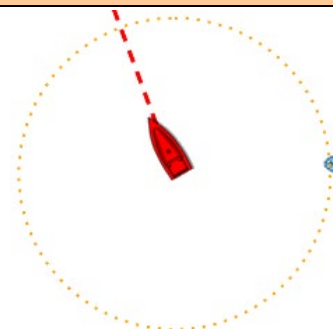
7. Refined Radar Operation
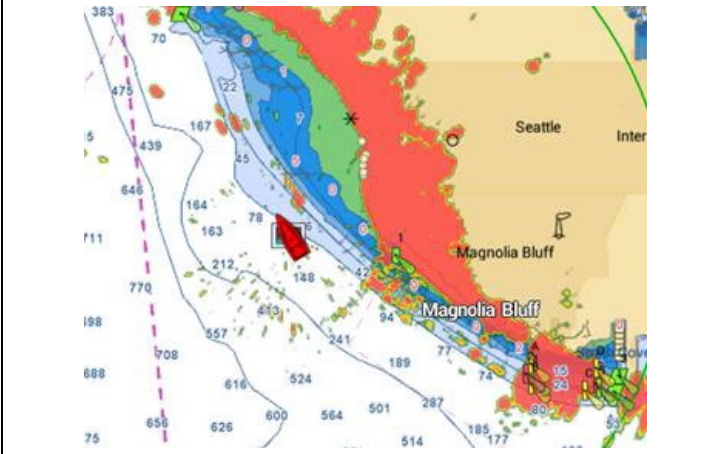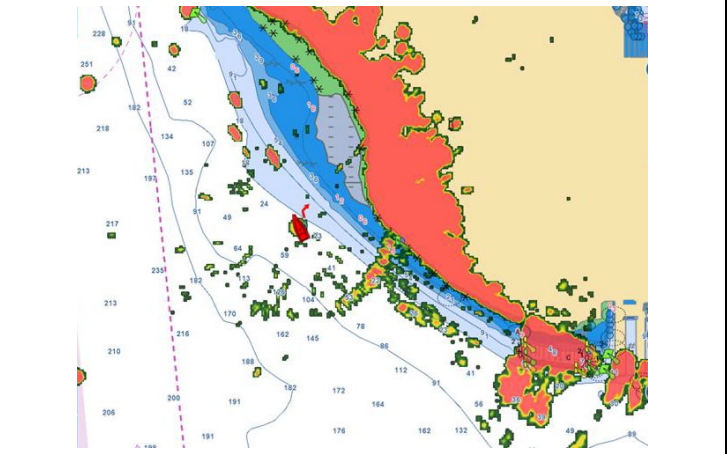
7.1. Switching Radar Source in Layer Menu

With dual Radar sensors installed onboard – combination of dome and open array for example, the Radar source can be switched when a boat moves from a harbor to the open sea. While the previous versions required access the Radar menu to switch the source, the operation with v8.01 is much easier and quicker: Bottom edge swipe on the Radar page to show the Layer and switch from one sensor to the other.
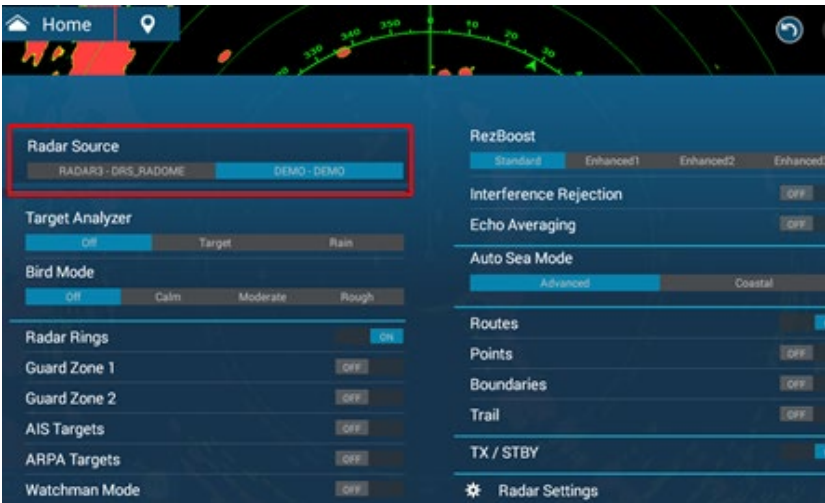
7.2. Improved Radar Overlay Color on Plotter

The previous versions of software displayed weak echoes in a dark, thick green color, when Radar echoes are overlaid on charts. Sometimes chart objects could be partially masked. New v8.01 shows such echoes in light green color to offer better visibility of charts.

New – V8.01	Previous Versions
Weak echoes like noise is shown in light color.	Even weak echoes are shown in dark color.

8. Refined Operation – Others

8.1. Customizable Startup Wallpaper

When the TZtouch2 MFD is turned on, it will start up with a NavNet TZtouch2 logo screen by default. The design of the startup screen can now be customized. Example, an image of a boat, photos, etc., can be set as the wallpaper. See separate **Custom Wallpaper document** for details of setup procedures.

E.g., TZT15F – Startup with boat image

8.2. Improved Home Icon Size and Layout

The previous versions always displayed the Plotter icon as a large size on the Home page. V8.01 now displays the Plotter icon as a small size by default. This allows all 16 icons to fit on the Home page. This layout is useful to allocate a variety of screen modes when many sensors are installed.

New – V8.01	Previous Versions

8.3. New Function Gestures

The following functions are added to the Function Gesture tap list. Two Finger tap or Two Finger long tap: Access [Home] – [General] – [Two Finger Tap Function] or [Two Finger Long Tap Function] and set to required function.

New Items	Descriptions
Gain Control	This is available in Fish Finder, Multi Beam Sonar (DFF3D), and Radar pages. Tapping on the screen, the gain adjustment bar will appear for manual adjustment in the same operation flow as the MCU-005 – [GAIN] key.

⚓ **Fish Finder**	: **Gain (HF)**	→ **Gain (LF)**	→ **Clutter**		→ **Close**
⚓ **DFF-3D**	: **Gain**	→ **Clutter**	→ **Close**		
⚓ **Radar**	: **Gain**	→ **Sea**	→ **Rain**		→ **Close**

	The adjustment bar can be closed by tapping [Done] or pressing the [CANCEL] key on the MCU-002/004/005.
Anchor Watch Alarm	An anchor watch alarm can be activated and deactivated with a two finger tap or long tap. (The previous versions required access to the Alarm menu to set the alarm on.) This function is also accessible through a contextual menu as introduced in **Section 6.5**.
Edge Swipe	The Edge Swipe function can be activated in the same procedure as pressing the MCU-004/005 – [EDGE] key and MCU-002 – [ENT] key.

8.4. Revised Default Settings

The factory default settings are changed.

Menu		New – V8.01	Previous Versions
General	Auto Scroll	**ON**	OFF
	Two Finger Long Tap	**Screen Capture**	Home
Ship & Track	COG Vector Time	**1 Hour**	2 minutes
	Heading Line Thickness	**3**	2
	Track Thickness	**3**	2
	Time Interval (for Track Interval – Time)	**30 seconds**	5 seconds
	Distance Interval (for Track Interval – Distance)	**0.01 NM**	0.02 NM
	Automatic Track Deleting	**ON**	OFF
Radar	Trail Length	**3 minutes**	15 seconds
Fish Finder	ACCU-FISH Info	**Fish Size**	Depth
	Transducer Draft	**0 ft / 0 m**	3 ft / 1 m
Multi Beam Sonar	Bottom Range Shift Area	**75%**	50%
Alarm	Notify when NAVpilot is engaged	**OFF**	ON
Initial Setup	External Transducer Draft	**0 ft / 0 m**	3 ft / 1 m
	Keel Draft	**0 ft / 0 m**	3 ft / 1 m

Note:

For displays already installed with the previous versions, the default settings above will not be reflected after update: The settings already applied will be kept even after updating to v8.01. Make sure to adjust each setting if any changes are required.

9. Others

(1) **New**: Turkish and Polish language menus are added.

(2) **New**: The Fluid Instance number of IF-NMEAFI can be set from 0 to 5, so that a maximum of six (6) analog tank level sensors can be connected. (Make sure that the IF-NMEAFI version is v1.02 or higher.

(3) **New**: In the Sensor List page, the Device Instance and System Instance of NMEA2000 sensors can be edited. In order to differentiate multiple sensors by instance numbers, this page can be utilized to assign unique numbers to each device.

(4) **Improvement**: While the display is turned on, AIS target information will be stored even after the target is lost.

(5) **Improvement**: AIS vessel names are shown at further ranges.

(6) **Improvement**: In the Initial Setup menu, detected engines and tanks are shown in the order of instance numbers. The previous versions showed them in the order of detection.

(7) **Improvement**: TTM sentence information is output to the Ethernet port. (Note that this function can be activated in the Service Menu for use with specific projects only.)

(8) **Improvement**: The brilliance on the Camera page (except HDMI IN screen) corresponds to the Brilliance mode setting. If the mode is changed to Dusk or Night, the Camera page will also dim down.

(9) **Improvement:** The login page for My TIMEZERO account is assessable without GPS connected for the actual date/time information. While the browser at the server has been revised prior to the v8.01 release, the login without GPS time is also possible.

(10) **Change**: While the Fleet Tracking function is added, the "My Friends" function is removed.

(11) **Fix**: In [Home] – [Settings] – [Points & Boundaries], the [Record Event Mark 1 Automatically] setting works properly.

(12) **Fix**: A CZone alarm can be removed by taping on the alarm bar. Critical level alarm is shown in red and others in yellow. After ACK, the alarm bar will disappear.

(13) **Fix**: When selecting [Catch] on the Fish Finder screen, the catch log icon will be shown on the tapped spot.

(14) **Fix**: The local time offset in PGN: 129033 is output. If TZTL12F and 15F v8.01 are used as the date/time source for other devices, this PGN output can be utilized.

(15) **Fix**: On the Plotter page with the Radar Overlay mode, the Radar range scale can be adjusted under 0.5 NM with the MCU-002.

(16) **Fix**: Icons on the Welcome Screen can be selected with RotoKey™ or rotary knob on MCU004/5 and TEU001.

(17) **Fix**: When the RotoKey™ on the MCU-005 was pressed, the area where the cross cursor was previously located reacted. This issue is fixed with v8.01.

(18) **Fix**: Layer menu operation with MCU-004 EDGE key is fixed.

(19) **Fix**: Data content in each Data Box tab is properly saved.

(20) **Fix**: Own ship vessel is stable when the chart is zoomed in. No [Center Vessel] icon will appear frequently.

(21) **Improvement**: Quick Page items can be selected with the RotoKey™ via the MCU-004/005 and TEU001.

(22) **Improvement**: DHCP Control ON/OFF setting is added in the Service Menu.

(23) **Fix**: Radar echoes will be shown immediately after TX (when using Netgear PoE hub GS108PE).

(24) **Improvement**: SiriusXM High Frequency Base Radar Extended Tiles – Weather Radar display will be updated every 2.5 minutes.

(25) **Improvement**: SiriusXM Weather Radar data will be displayed right after reception.

(26) **Fix:** MCU-004 key operation is properly detected.

(27) **Fix:** NavNet Remote app can be reconnected after disconnection.

(28) **Fix:** The DFF3D motion sensor source can be properly switched.

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