FURUNO

Total Control, Simply Refined

NAVnet
TZtouch2

www.furuno.com

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

www.navnet.com

Total Control, Simply Refined

With a sleek all glass front, refined graphical user interface, built-in RezBoost™ Fish Finder, and internal GPS antenna, NavNet TZtouch2 is a beauty to behold and use.
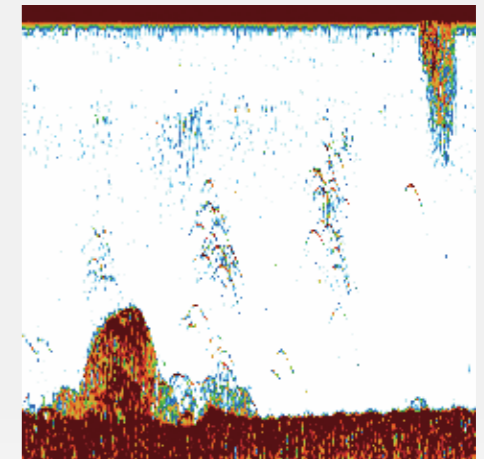
NEW

RezBoost™

NavNet TZtouch2 features a built-in Fish Finder that uses revolutionary new RezBoost™ technology.

>> See page 13 for details

Instrument Display & Customization

An instrument display like nothing you have seen before. Totally customizable, totally simple.

>> See page 6 for details

Refined User Interface

The User Interface has been completely reworked and refined, ensuring quick and easy operation.

>> See pages 5-6 for details
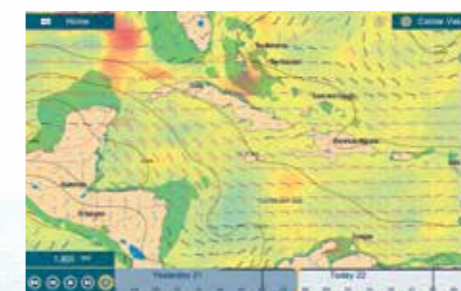
Wireless Hotspot Connectivity

With an internet connection, NavNet TZtouch2 can wirelessly access real-time weather data, Community Charts*, Cloud Data Services* and more.

>> See page 8 for details   *Coming soon

iOS™ & Android™ Apps

View information from your NavNet TZtouch2 and control it on your iOS™ and Android™ devices.

>> See page 7 for details

TimeZero · MTC · RezBoost · BDS · ACCU-FISH · AUTO · Target Tracking · AIS · TruEcho CHIRP

Enhanced Sunlight Viewable · Bonded LCD · Polarized Friendly · GPS Internal Antenna · FISH FINDER Internal · Ethernet Plug&Play · CAN bus · NMEA2000 Certified · VIDEO IN/OUT · UHD Ultra High Definition

Simply refined, simply beautiful

Following in the footsteps of the original NavNet TZtouch, TZtouch2 features a refined user interface that is all about usability. Whether you are searching for hot fishing grounds, plotting your next route, using your Radar to navigate through the fog, you can expect smooth operation with familiar touch gestures.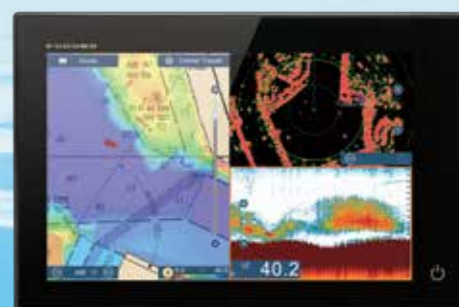 Sporting an edge-to-edge glass front, NavNet TZtouch2 is beautifully designed, allowing you to build a navigation suite that is not only functional, but offers a luxurious look and feel.

All-glass front, smooth to the touch

TZTL12F

12.1" Multi Function Display

Resolution: WXGA (1280 x 800 pixels)
Brightness: 1300 cd/m² (typical)

Model **TZTL15F**

15.6" Multi Function Display

Resolution: FWXGA (1366 x 768 pixels)
Brightness: 1100 cd/m² (typical)

Bonded LCD - Clear Readability

Our bonded LCDs offer a fog-free design that is used in both the TZTL12F and TZTL15F. This bonding ensures that the display is protected from condensation by sudden temperature changes. Optical bonding works by closing the air gap between the LCD and the cover glass, something that also enhances contrast.

Polarized Friendly - Clearly Remarkable

NavNet TZtouch2 TZTL12F and TZTL15F have an LCD screen that does not "black out" when wearing polarized sunglasses. You are free to move around the vessel while maintaining clear visibility from virtually any angle.

Multi Touch Control

With NavNet TZtouch, FURUNO introduced the industry's first multi touch MFD, and NavNet TZtouch2 is no disappointment. Improved touch control gives better response, as well as allowing you to swipe your fingers from the edge of the screen. Looking around your vessel in 3D, with the comprehensive charts available, Multi Touch Control makes navigating as simple as touch... and go!

New Graphical User Interface

NavNet TZtouch2 features a graphical user interface that has been renewed and refined, focusing on usability and ease of operation.


Quick Page

Swiping your finger down from the top edge of the screen displays the Quick Page. As the name implies, the Quick Page allows you to quickly change between the different screens from your current display. With bold colors, the previews are easy to differentiate and quickly choose from.
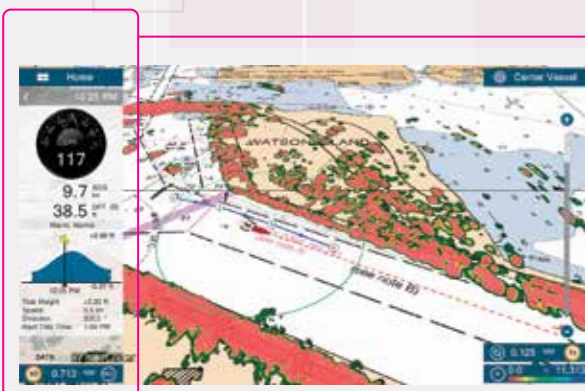
NavData

Swiping from the left edge of the screen reveals the NavData panel, where you can customize contents to simplify navigation and chart usage. You can set the autopilot, check tide information and much more.
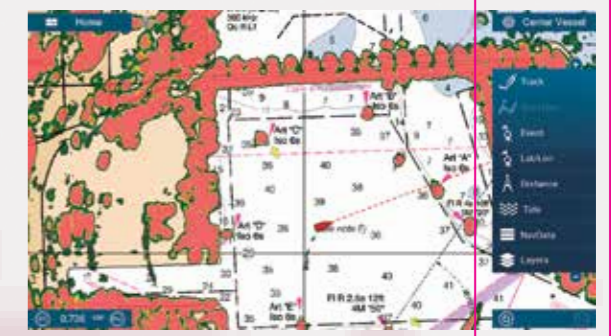
Slide-Out Menu

The slide-out menu provides quick and easy access to often-used functions, and is available in every mode.

Home Screen

The new home screen, with its bright and crisp graphics, is easy to understand and operate. The colors and icons have been carefully chosen to provide maximum visibility, allowing you to know instantly which screen is displayed, just by seeing the color and icon. Changing to different display screens is just a simple matter of dragging and dropping.

Layers

One of the new features is the layers menu, just swipe up from the bottom edge of the screen. The layers menu is a practical way of changing settings on the fly without having to venture into deeper menu systems. Since the screen is visible at all times, understanding and using the different settings becomes a breeze.

Fully Customizable

Arrange instruments by the touch of your finger. You are free to customize the display to precisely fit your unique needs. Also note that instruments can overlap each other, giving you even more space to work with.

Instruments

The instrument page is impressive just on its own rights, but where it really shines is it's customizability. No matter if it is for navigation, engine and tank monitoring, autopilot control or all together, data can be displayed according to your personal tastes and needs.

APPS

View information from your NavNet TZtouch2 and control it on your iOS™ and Android™ devices.

NavNet Viewer App

Conveniently view instruments, as well as the fish finder of your NavNet TZtouch2 on your smart devices over a Wireless LAN network. Key navigational information such as Depth, Temperature, Wind, COG and Engine information can all be accessed from the palm of your hand. Even if you change the display on your NavNet TZtouch2, you can still view the fish finder on your smart devices.

Download on the App Store **ANDROID APP ON Google play**

NEW

NavNet Controller App

Wirelessly control any NavNet TZtouch2 MFD with touch controls. With a scroll pad, cursor pad and dedicated keys within the app, controlling NavNet TZtouch2 is simple and straightforward.

ANDROID APP ON Google play

*Available on App Store for iOS™ devices later in 2015

WIRELESS

Marine Weather Forecast

The weather tool is completely free and easy to use, giving you unlimited access to weather forecasts worldwide 24 hours a day provided by NavCenter. Select the coverage you want, what type of data it is you need and for what time period, then it is simply a matter of choosing how to download the data. Navnet TZtouch2 can display up to 16 days of downloaded weather forecasting.

ActiveCaptain*

With access to the ActiveCaptain database from the convenience of your NavNet TZtouch2, there are many new discoveries ahead. After downloading the latest information to your TZtouch2, you can browse and discover new points of interest shared by other users. Find recent information about fuel rates at nearby harbors, fishing grounds and much more.

*Coming soon

Community Charts*

Community Charts is a new layer of the MapMedia charts where users can update and modify chart information. Users can report changes such as chart depth, position of chart symbols, temporary obstructions, sunken ships, etc. which will get reviewed by MapMedia and shared among all the NavNet TZtouch2 users. Every time you connect your NavNet TZtouch2 to the internet you will automatically get the very latest chart information.

*Coming soon

My TimeZero Cloud Data Service*

My TimeZero cloud data service allows you to back up your data and synchronize it among your TimeZero devices, as well as sharing it with your friends. Just connect your NavNet TZtouch2 to the internet and create a TimeZero account, and your points, routes, tracks and settings are automatically backed up to a remote server. You won't have to worry about losing your data ever again. Plan routes on your iPad at home and transfer them to your NavNet TZtouch2 instantaneously through cloud services. Sharing data, such as favorite fishing spots and cruising routes with your friends couldn't be any simpler.

*Coming soon

NEW

BBWX3 – Sirius Satellite Weather Receiver*

Keeping track of weather is easier than ever with Furuno's BBWX3 Third-Generation Sirius Satellite Weather Receiver! The weather information is obtained from the weather industry's leading experts and is delivered via digital receiver through Sirius' Marine Weather services. You can receive high-quality and comprehensive weather information and forecasting for use while navigating.

*Satellite weather receiver service is available for all NavNet TZtouch2, TZtouch and NavNet 3D models. Requires Sirius weather service subscription, sold separately. Sirius weather coverage is currently available only in U.S and Canada.

NavNet TZtouch2 Network

NAVnet Connect

Perfect match!

NavNet TZtouch2, NAVpilot-711C and the FI-70 have been designed to match each other beautifully, both in appearance and in function. Sporting a clean and functional design in all black, they will make a great addition to your helm.

NavNet TZtouch2　　NAVpilot-711C　　FI-70

RADAR

Radar Sensor
DRS2D/DRS4D/DRS4DL*
DRS4A/DRS6A/
DRS12A/DRS25A
CAN bus　Ethernet
*DRS4DL is Ethernet only

AUTOPILOT

NAVpilot-700
CAN bus　NMEA0183

NAVpilot-711C
CAN bus　NMEA0183

FISH FINDER*1

Network Fish Finder
DFF1-UHD/DFF1/DFF3
Ethernet

Bottom Discrimination Sounder
BBDS1
Ethernet

COMPASS

Satellite Compass
SC-30
CAN bus　NMEA0183

Integrated Heading Sensor
PG-700
CAN bus

AIS

AIS Receiver
FA-30
Ethernet

Class-B AIS Transponder
FA-50
Ethernet

Class-A U-AIS Transponder
FA-150
NMEA0183

GPS*3

GPS/WAAS
Receiver Antenna
GP-330B
CAN bus　NMEA0183

GPS Navigator
GP-33
CAN bus　NMEA0183

WEATHER/ PC PLOTTER

MaxSea/Nobeltec
TimeZero PC Software
Ethernet

Network Weather
Facsimile Receiver
FAX-30
Ethernet

Network Satellite Weather
and Radio Receiver
BBWX3*2
Ethernet

SENSOR

Depth/Speed/Temp Sensor
DST-800
CAN bus

CAMERA/AUDIO

Marine Entertainment System
MS700 Series, etc.
Ethernet

Analog Camera
Video

GPS Internal Antenna　Internal GPS Antenna

FISH FINDER Internal　Internal Fish Finder
with RezBoost™ technology

INSTRUMENT

FI-70
CAN bus

CONVERTER

NMEA Data Converter
IF-NMEA2K2
CAN bus　NMEA0183

Analog NMEA Data Converter
IF-NMEAFI
CAN bus　NMEA0183

NMEA2000 Certified

NavNet TZtouch2 is NMEA2000 certified. NMEA2000 offers improved data transfer rates and true plug-and-play operation.

OPTION

Remote Control Unit
MCU-002
USB

SD Card Unit
SDU-001
USB

*1 External Fish Finders can also be connected to NavNet TZtouch2. The internal and external Fish Finder cannot operate simultaneously.
　 Through the settings menu it is possible to choose which one to use.

*2 Sirius weather coverage is currently available only in U.S and Canada. Sirius subscription required.

*3 External GPS antennas and navigators can also be connected to NavNet TZtouch2. Through the settings menu it is possible to choose which one to use.

Nothing Is Faster Than TimeZero™

NavNet TZtouch2's TimeZero™ technology delivers chart processing like you've never seen before – seamless chart handling, zooming and panning without the screen disappearing. TimeZero™ technology redefines the meaning of stress-free operation by smoothing out your chart handling actions.

TimeZero
Designed by MAXSEA

The Only Acceptable Wait Time is Zero:
TimeZero™ Technology Changes Your Perspective on Chart Redraw

Equipped with powerful TimeZero™ technology, NavNet TZtouch2 will completely transform the way you navigate. You can scroll, pan, zoom in/out with a smooth, fast and seamless graphics engine. Navigating in a 3D environment offers you a true perspective and wider area of view around the ship, which allows you to better plan your routes. TimeZero™ technology updates the information on your screen with virtually no redraw as you go.

Chart Plotter

Mapmedia Vector and Raster Chart Library

With NavNet TZtouch2 it's possible to freely choose the charts that fit your individual needs. With the optional NOAA raster and vector charts, Mapmedia brings an authentic vector and raster chart library to your NavNet TZtouch2. "C-MAP by Jeppesen" as well as "Datacore by Navionics" vector cartography are optional charts that can be downloaded to your TZtouch2 with ease. Mapmedia cartography integrates cutting edge algorithms with high resolution image processing techniques to deliver a fusion of digital navigation charts and satellite photography.

2D Raster

2D Vector

Satellite PhotoFusion™

Satellite photography is included in the Mapmedia Raster and Vector charts, simply called Satellite PhotoFusion™. Land areas (zero depth) are completely opaque, displayed as satellite photos on the chart. As the depth increases, the satellite image is merged with the chart data to provide you with added detail on seabed areas in shallow water, without losing vital chart information. In deeper water, where the satellite photos have no detail to offer, the chart is displayed without alteration.

Raster+Satellite

Vector+Satellite

Depth Shading

A depth color scale can be applied to both 2D and 3D vector and raster charts. Transparency levels can be adjusted so that chart data is visible beneath the color shading. This unique feature allows you to view water depths at-a-glance with vibrant colors. No more searching for depth numbers, when you can simply set depths to your specified colors. Whether you want to see the depth for navigation or fishing purposes, this feature makes it easier than ever before.
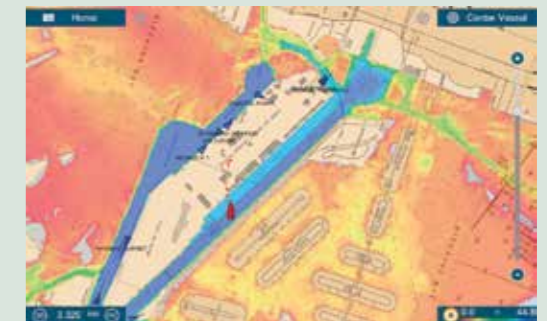
AIS Target Tracking

When connecting a FURUNO FA-30/50/150 AIS unit to your NavNet TZtouch2, up to 100 AIS targets can be tracked and displayed on the Chart Plotter screen. The Automatic Identification System (AIS) improves safety during travel by sharing the status and position of your vessel with other AIS-equipped vessels nearby. You can easily read detailed information about AIS-equipped vessels nearby such as speed, heading, Closest Point of Approach and Time to Closest Point of Approach.
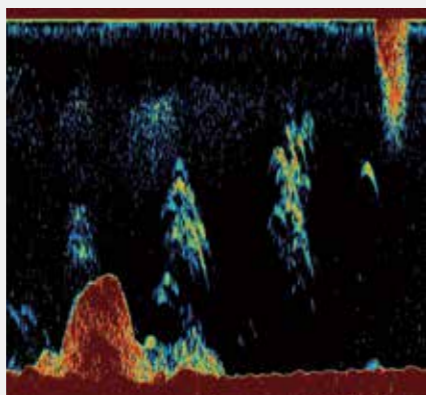
Fish Finder

NavNet TZtouch2 is the first product from FURUNO to feature the brand new RezBoost™ technology. Accurately spot individual fish and increase your catch.
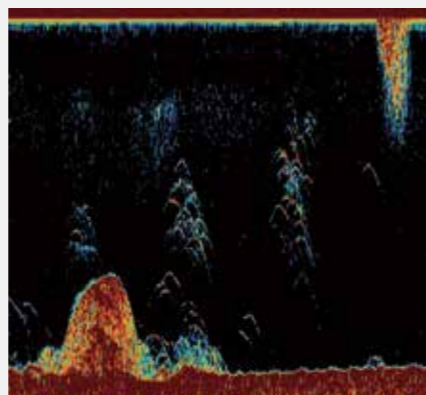
NEW

RezBoost™

Rezboost™ is a revolutionary new technology utilizing FURUNO's advanced digital signal processing to provide fantastic resolution without having to change your transducer.

Conventional Signal Processing

RezBoost™ Signal Processing

RezBoost™ improves target separation close to the seabed, as well as giving an unprecedented boost in resolution. With RezBoost™ technology, resolution and target separation previously limited to FURUNO commercial-grade Fish Finders can now be achieved. RezBoost™ technology makes it easier to spot individual fish in tightly packed fish schools, as well as discerning game fish from bait fish. Since RezBoost™ technology is software based, you can use transducers* already installed on your vessel.

* For compatible transducers see FURUNO.com for further information.
  In-hull mounted transducers not compatible with RezBoost™ technology.

FURUNO Digital Filter (FDF™) Fish Finder

FURUNO Digital Filter (FDF™) fish finders feature advanced filtering capabilities and digital auto tuning, which eliminates noise. FURUNO FDF™ fish finders deliver the ability to spot individual fish with clarity, accuracy and detail. Whether in shallow or deep water, FURUNO FDF™ fish finders give you what you would expect from a fish finder at all times. Includes post-processing gain control, which is applied to all existing returns on the display history.

FDF
**F**URUNO **D**igital **F**ilter

Find More Fish With TruEcho CHIRP™ Fish Finder

An advanced technology for both professional and enthusiast fishermen. Designed to operate across a wide range of frequencies utilizing a broadband transducer, the TruEcho CHIRP™ network fish finder delivers significant advantages in signal clarity and target definition. Due to the constant sweep of frequencies the TruEcho CHIRP™ network fish finder is capable of gathering more and higher quality data than a traditional single frequency fish finder. The clear presentation marks individual game fish and bait fish, even when tightly schooled together.
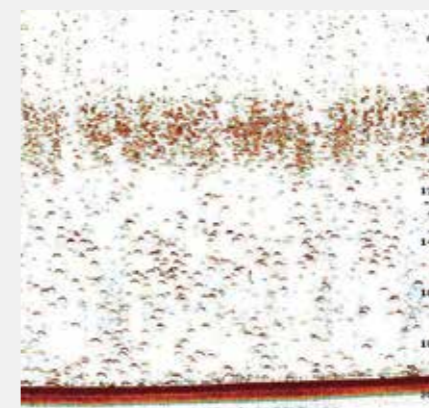
High Frequency CHIRP
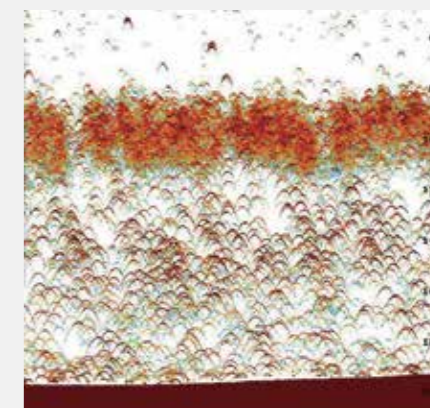
Low Frequency CHIRP

### ACCU-FISH™ (Fish Size Analyzer)

The ACCU-FISH™ algorithm analyzes echo returns in order to compute individual fish size. The algorithm is capable of computing fish size ranging from 10 cm up to 199 cm long. Fish depth can also be displayed.

In some instances, fish size indicated on the NavNet TZtouch2 may differ from its actual size. Please carefully read the operator's manual prior to utilizing this feature.

Bottom Discrimination Display

BDS
Bottom **D**iscrimination **S**ounder

Bottom discrimination provides detailed information about Knowing the make-up of the seabed, categorizing it into four different categories; "Rocks", "Gravel", "Sand" and "Mud". The make-up of the seabed can be tremendously helpful information when looking for fishing grounds, as well as for finding good anchoring spots.

FISH FINDER Internal
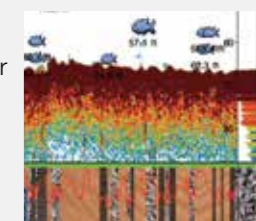
BLACK BOX NETWORK FISH FINDER

BLACK BOX NETWORK FISH FINDER

	Internal Fish Finder	DFF1-UHD	DFF3
Frequency	Dual frequency 50kHz and 200 kHz	Dual frequency 50±20 and 200±25 kHz	The synthesized transducer works with dual frequencies between 28 and 200 kHz
Range Scale	Up to 1,200 m		Up to 1,500 m
Transducers	600 W or 1 kW*	1 kW	1, 2 or 3 kW
ACCU-FISH™	Available		
Bottom Discrimination	Available		N/A
TruEcho CHIRP™	N/A	Available	N/A
RezBoost™	Available	N/A	

DFF1/BBDS1 are fully compatible with NavNet TZtouch2.
*Matching Box MB-1100 required for some specific FURUNO transducers.

Radar

Model **DRS12A**
Model **DRS25A**

Model **DRS4A**

Model **DRS6A**

Model **DRS2D**
Model **DRS4DL** (NEW)

Model **DRS4D**

Radar Sensors

Ethernet Plug&Play

NMEA

Winner of the NMEA awards 2008, 2009, 2010, 2011, 2012, 2013 and 2014

Ultra High Definition (UHD™) Digital Radar

FURUNO has taken its NMEA award-winning radar technology to the next level with Ultra High Definition Digital Radar. UHD™ offers crystal clear target presentation with automatic real-time digital signal processing. The antenna rotation speed (24/36/48 rpm) is automatically shifted according to the pulse length needed for optimal performance. Commercial-grade radar performance is now available in the ultimate MFD navigation suite.

UHD
Ultra **H**igh **D**efinition

Radar-Chart Overlay

A Radar image of spot-on accuracy can be overlaid onto the chart screen on your NavNet TZtouch2. It's not just available in the conventional 2D chart format, but it can also be projected onto a 3D chart presentation. Depending on the range scale selected, the Radar-Chart Overlay adjusts accordingly. This allows you to view the Radar-Chart Overlay at whatever magnification level you find comfortable.
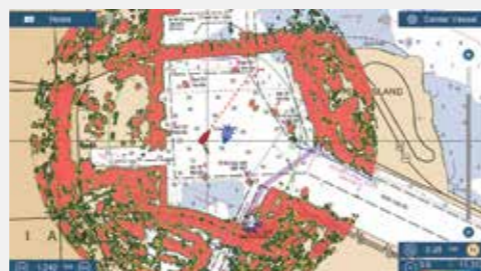
ARPA Target Tracking

With ARPA Target Tracking enabled, up to 30 different targets can be tracked simultaneously. Targets can be acquired either manually or fully automatically. Automatic Radar Plotting Aid (ARPA) calculates the tracked objects course and speed, as well as the CPA (Closest Point of Approach). With this information, the Radar is capable of predicting possible collision courses and sound relevant alarms. In combination with AIS, this spells increased security and ease of mind on your vessel.

Not available on DRS4DL

Real-Time Digital Auto Gain/Sea Controls

NavNet TZtouch2 employs revolutionary real-time digital auto Gain/Sea controls to deliver a crystal clear radar presentation. With this new technology, NavNet TZtouch2 computes and applies an adaptive omni-directional anti-clutter filter with variable intensity according to vessel bearing. With the use of this technology, automatic gain and sea clutter have achieved such a high level of proficiency that one rarely needs to venture into the manual modes. Set the Radar to auto and focus on more important things at hand.
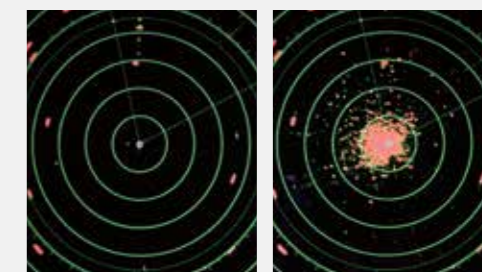
Auto Gain/Sea Controls On   Auto Gain/Sea Controls Off
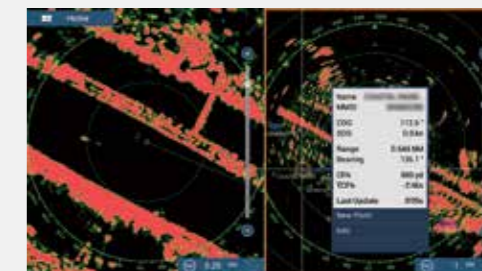
Simultaneous Dual Range Radar Scanning

Simultaneous scanning technology sends out a dual progressive scan that is processed and presented on the NavNet TZtouch2. This technology allows for two different radar ranges to be displayed simultaneously, each range with autonomous control over gain and anti-clutter settings. One of the many things that can be done with dual range scanning is, for example, to set one range for bird detection and the other for navigation.

Not available on DRS4DL
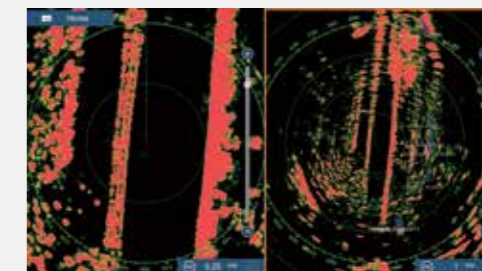
AIS Target Tracking

When connecting a FURUNO FA-30/50/150 AIS unit to the NavNet TZtouch2, up to 100 AIS targets can be tracked and displayed on the Radar screen. The Automatic Identification System (AIS) improves safety during travel by sharing the status and position of your vessel with other AIS-equipped vessels nearby. You can easily read detailed information about AIS-equipped vessels nearby such as speed, heading, Closest Point of Approach and Time to Closest Point of Approach.

NavNet TZtouch2 Radar Sensor Options

		DRS2D	NEW DRS4DL	DRS4D	DRS4A	DRS6A	DRS12A	DRS25A
Output Power		2.2 kW	4 kW	4 kW	4 kW	6 kW	12 kW	25 kW
Size		19 inch	19 inch	24 inch	3.5 ft	4 ft	4 ft/6 ft	4 ft/6 ft
Antenna Type		Radome	Radome	Radome	Open	Open	Open	Open
Beam Width	Horizontal	5.2°	5.2°	4.0°	2.3°	1.9°	1.9°/1.4°	1.9°/1.4°
	Vertical	25°	25°	25°	22°	22°	22°/22°	22°/22°
Max. Range		24 nm	36 nm	36 nm	48 nm	64 nm	72 nm	96 nm
48 rpm Capability		•		•	•	•	•	•
Power Amp Unit required		PSU-017	—	PSU-017	PSU-012	PSU-012	PSU-012	PSU-013
Functions		Head-up, North-up*, Echo Trail, Target Tracking	Head-up, North-up*	Head-up, North-up*, Echo Trail, Target Tracking	Head-up, North-up*, Echo Trail, Target Tracking	Head-up, North-up*, Echo Trail, Target Tracking	Head-up, North-up*, Echo Trail, Target Tracking	Head-up, North-up*, Echo Trail, Target Tracking
Dual Range Scanning		•	—	•	•	•	•	•
ARPA		•	—	•	•	•	•	•

* Heading input required.
The radar antenna complies with IEC62252 Ed.1:2004 (Clauses 4.33, 5.33, Annex D) relevant to radio characteristic.

Specifications

Model **TZTL12F**

Bracket is optional supply.

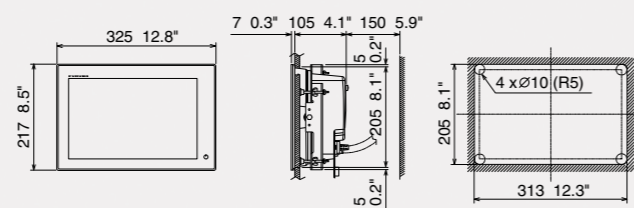| MULTI FUNCTION DISPLAY		TZTL12F
DISPLAY UNIT		
Type		Color TFT multi touch LCD
Screen Size		12.1" Wide
Screen Resolution		WXGA 1280 x 800
Screen Brightness		1300 cd/m^2 (typical)
Language		English (US & UK), French, Spanish, German, Italian, Dutch*, Turkish*, Portuguese, Swedish, Danish, Norwegian, Finnish, Greek, Russian*, Chinese (simplified Chinese chracters), Japanese *Available in future update.
GPS/WAAS		
Receiver Type	GPS	56 channels
	SBAS	1 channel (C/A mode, WAAS)
Receiving Frequency		L1 (1575.42 MHz)
Time to First FIX		100 s (cold start)
Tracking Velocity		999 kn
SBAS		WAAS, EGNOS, MSAS
ACCURACY		
Internal Antenna	GPS	10 m Max
	WAAS	3 m Max
	MSAS	7 m Max
CHART PLOTTER		
Cartgraphy		MapMedia mm3d chart (Jeppesen/Navionics/NOAA)
Memory Capacity		30,000 user points, 30,000 points for ship's tracks, 200 planned routes (500 points per route)
Alarms		Anchor Watch, XTE, Proximity, Depth, Temperature, Speed, etc.
RADAR		
Display Modes		Head-up, North-up* *Heading input required.
Target Tracking**		30 Targets* *Heading input required.
FISH FINDER (Built-in)		
Transmit Frequency		50/200 kHz
Transmission Power		600 W or 1 kW* *Matching Box MB-1100 required for some specific FURUNO transducers
Modes		RezBoost™, ACCU-FISH™, Bottom Discrimination, A-Scope, Auto (Fishing/Cruising/Manual), Bottom Zoom, Bottom Lock
INTERFACE		
CAN bus/NMEA2000		1 Port
Interface (CAN bus/NMEA2000)	Input	059392, 0593904, 060928, 061184, 065280, 126208, 126720, 126992, 126996, 127237, 127245, 127250, 127251, 127257, 127488, 127489, 127505, 128259, 128267, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129041, 129538, 129540, 129793, 129794, 129798, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129041, 129538, 129540, 129793, 129794, 129798, 129808, 129809, 129810, 130306, 130310, 130311, 130312, 130313, 130314, 130577, 130578
	Output	059392, 059904, 060928, 061184, 126208, 126464, 126720, 126992, 126993, 126996, 127250, 127251, 127257, 127258, 128259, 128267, 129025, 129026, 129029, 129033, 129283, 129284, 129285, 130306, 130310, 130312, 130313, 130314
NMEA0183		1 Integrated Output Port
Interface (NMEA0183)	Output	CUR, DPT, GGA, GSA, HDG, HDT, MDA, MTW, MWV, RSA, ROT, VDM, VHW, VTG, XDR, ZDA
LAN		1 Port (100 BASE-TX)
USB		1 Port (USB2.0)
Video Output		1 Port (HDMI)
Video Input		2 Ports (NTSC/PAL)
AUX I/O		1 Port (External Event/MOB Input/Operator Fitness/Alarm Output)
SD Cart Slot		1 Slot (Micro SDXC, rear), 2 Slots Card Unit (optional)
Wireless LAN		IEEE802.11b/g/n, Transmit frequency: 2.4 GHz band
Transducer		1 Port
ENVIRONMENT		
Temperature (IEC60945)		-15°C to +55°C
Waterproofing		IP56
POWER		
		12-24 VDC
		3.0-1.5 A

** Not available with DRS4DL

Multi Function Display (Tabletop Mount) TZTL12F
3.8 kg 8.4 lb
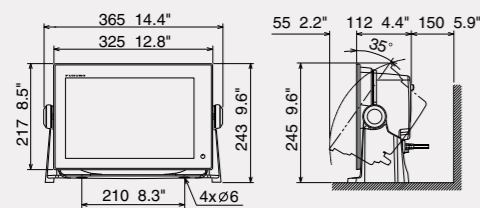
Multi Function Display (Flush Mount) TZTL12F
3.7 kg 8.2 lb

Bracket is optional supply.

Model **TZTL15F**

Bracket is optional supply.

MULTI FUNCTION DISPLAY		TZTL15F
DISPLAY UNIT		
Type		Color TFT multi touch LCD
Screen Size		15.6" Wide
Screen Resolution		FWXGA 1366 x 768
Screen Brightness		1100 cd/m^2 (typical)
Language		English (US & UK), French, Spanish, German, Italian, Dutch*, Turkish*, Portuguese, Swedish, Danish, Norwegian, Finnish, Greek, Russian*, Chinese (simplified Chinese chracters), Japanese *Available in future update.
GPS/WAAS		
Receiver Type	GPS	56 channels
	SBAS	1 channel (C/A mode, WAAS)
Receiving Frequency		L1 (1575.42 MHz)
Time to First FIX		100 s (cold start)
Tracking Velocity		999 kn
SBAS		WAAS, EGNOS, MSAS
ACCURACY		
Internal Antenna	GPS	10 m Max
	WAAS	3 m Max
	MSAS	7 m Max
CHART PLOTTER		
Cartgraphy		MapMedia mm3d chart (Jeppesen/Navionics/NOAA)
Memory Capacity		30,000 user points, 30,000 points for ship's tracks, 200 planned routes (500 points per route)
Alarms		Anchor Watch, XTE, Proximity, Depth, Temperature, Speed, etc.
RADAR		
Display Modes		Head-up, North-up* *Heading input required.
Target Tracking**		30 Targets* *Heading input required.
FISH FINDER (Built-in)		
Transmit Frequency		50/200 kHz
Transmission Power		600 W or 1 kW* *Matching Box MB-1100 required for some specific FURUNO transducers
Modes		RezBoost™, ACCU-FISH™, Bottom Discrimination, A-Scope, Auto (Fishing/Cruising/Manual), Bottom Zoom, Bottom Lock
INTERFACE		
CAN bus/NMEA2000		1 Port
Interface (CAN bus/NMEA2000)	Input	059392, 0593904, 060928, 061184, 065280, 126208, 126720, 126992, 126996, 127237, 127245, 127250, 127251, 127257, 127488, 127489, 127505, 128259, 128267, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129041, 129538, 129540, 129793, 129794, 129798, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129041, 129538, 129540, 129793, 129794, 129798, 129808, 129809, 129810, 130306, 130310, 130311, 130312, 130313, 130314, 130577, 130578
	Output	059392, 059904, 060928, 061184, 126208, 126464, 126720, 126992, 126993, 126996, 127250, 127251, 127257, 127258, 128259, 128267, 129025, 129026, 129029, 129033, 129283, 129284, 129285, 130306, 130310, 130312, 130313, 130314
NMEA0183		1 Integrated Output Port
Interface (NMEA0183)	Output	CUR, DPT, GGA, GSA, HDG, HDT, MDA, MTW, MWV, RSA, ROT, VDM, VHW, VTG, XDR, ZDA
LAN		1 Port (100 BASE-TX)
USB		1 Port (USB2.0)
Video Output		1 Port (HDMI)
Video Input		2 Ports (NTSC/PAL)
AUX I/O		1 Port (External Event/MOB Input/Operator Fitness/Alarm Output)
SD Cart Slot		1 Slot (Micro SDXC, rear), 2 Slots Card Unit (optional)
Wireless LAN		IEEE802.11b/g/n, Transmit frequency: 2.4 GHz band
Transducer		1 Port
ENVIRONMENT		
Temperature (IEC60945)		-15°C to +55°C
Waterproofing		IP56
POWER		
		12-24 VDC
		3.6-1.8 A

** Not available with DRS4DL

Multi Function Display (Tabletop Mount) TZTL15F
5.5 kg 12.1 lb
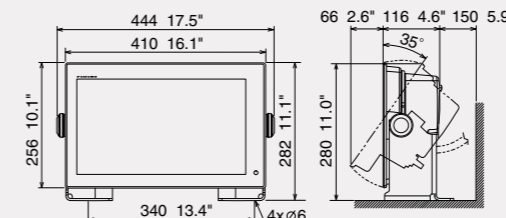
Multi Function Display (Flush Mount) TZTL15F
4.8 kg 10.6 lb

Bracket is optional supply.