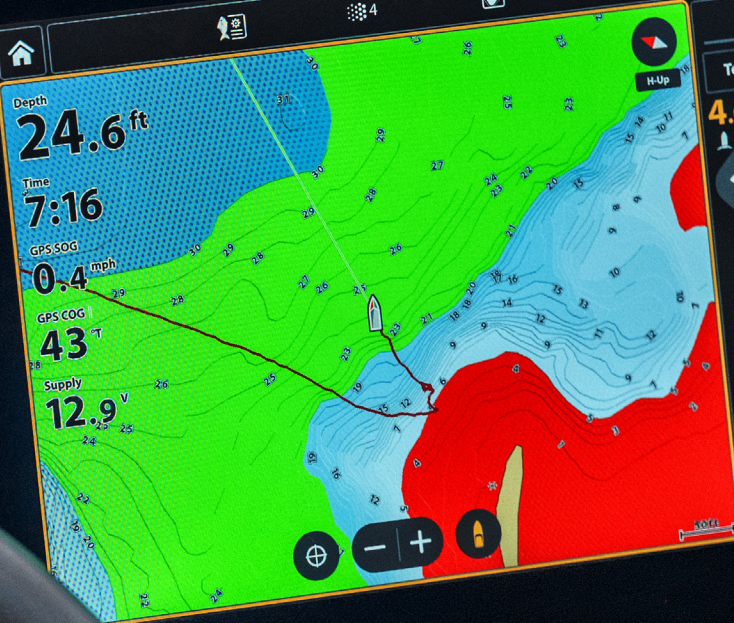




 **MINN KOTA**



Terrova Quest

4.0 Prop SOG 0.3 mph

Speed

Left Right

MINN KOTA

Spot Lock Nav

AutoPilot Drift

75

Home Menu

Back Forward

Left Right

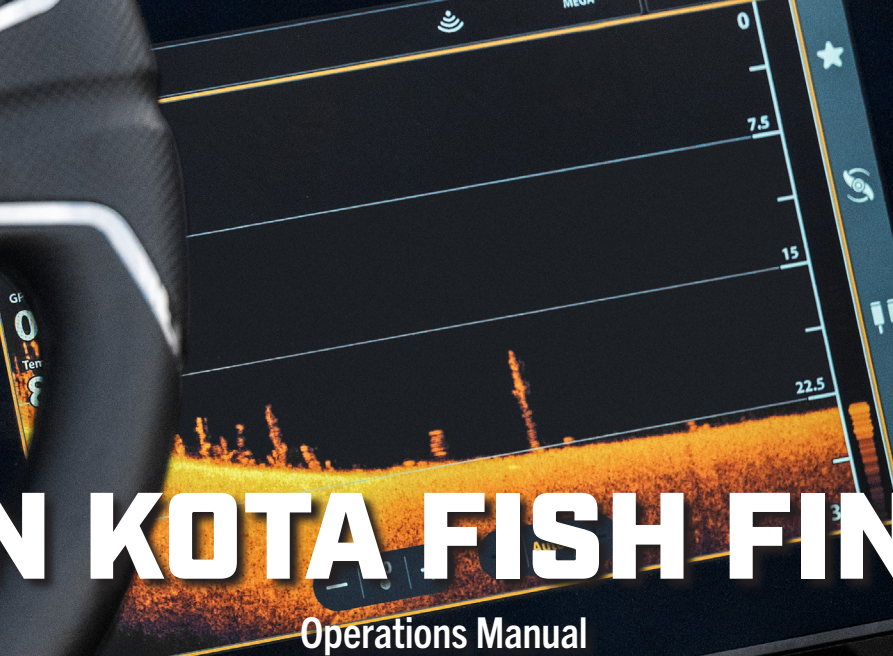
Checkmark X

Location Power

1 2 3

 **MINN KOTA**

MEGA



Home Menu

Back Forward

Left Right

Checkmark X

Location Power

1 2 3

MINN KOTA FISH FINDER

Operations Manual

HUMMINBIRD
IMAGING

COMPLIANCE STATEMENTS

NOTICE: Some features discussed in this manual require a separate purchase, and some features are only available on international models. Every effort has been made to clearly identify those features. Please read the manual carefully in order to understand the full capabilities of your model.

NOTICE: The illustrations in this manual may not look the same as your product, but your unit will function in a similar way.

NOTICE: The procedures and features described in this manual are subject to change without notice. This manual was written in English and may have been translated to another language. Minn Kota is not responsible for incorrect translations or discrepancies between documents.

NOTICE: Product specifications and features are subject to change without notice.

NOTICE: Minn Kota verifies maximum stated depth in saltwater conditions, however actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition, and slope.

NOTICE: To purchase accessories or any additional equipment for your fish finder configuration, contact Minn Kota Technical Support through our Web site at minnkota.johnsonoutdoors.com.

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SAFETY CONSIDERATIONS

CAUTION

This device should not be used as a navigational aid to prevent collision, grounding, boat damage, or personal injury. When the boat is moving, water depth may change too quickly to allow time for you to react. Always operate the boat at very slow speeds if you suspect shallow water or submerged objects.

CAUTION

The electronic map in your Minn Kota unit is an aid to navigation designed to facilitate the use of authorized government charts, not to replace them. Only official government charts and notices to mariners contain all of the current information needed for the safety of navigation, and the captain is responsible for their prudent use.

CAUTION

Compass Safe Distance: The control head must be installed at least 4 feet (1.2 meters) from the compass or other magnetic equipment on the boat. Also, see your compass installation guide for details.

CAUTION

This device is granted for use in Mobile only configurations in which the antennas used for this transmitter must be installed to provide a separation distance of at least 8 inches (20 cm) from all person and not be co-located with any other transmitters except in accordance with FCC and Industry Canada multi-transmitter product procedures.

CAUTION

Minn Kota is not responsible for the loss of data files (waypoints, routes, tracks, groups, recordings, etc.) that may occur due to direct or indirect damage to the unit's hardware or software. It is important to back up your fish finder's data files periodically. Data files should also be saved to your computer before restoring the fish finder defaults or updating the software. Visit our Web site at minnkota.johnsonoutdoors.com and download your fish finder operations manual for details.

CAUTION

Disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty.

CAUTION

Do not travel at high speed with the unit cover installed. Remove the unit cover before traveling at speeds above 20 mph.

CAUTION

The user shall maintain 20 cm separation from the RF device to ensure compliance with RF exposure.

INTRODUCTION

The instructions in this manual describe the X Series, A Series, XPLORE, APEX and SOLIX fish finder operations. For an overview of functions, see the Quick Start Guide included with your product.

Build your Fishing System: Some of the features shown in this manual require a separate purchase. Minn Kota trolling motors, Minn Kota Live, Radar, Talon, Raptor, AIS, NMEA 2000 GPS Heading Sensor, Ethernet Switch, Advanced GPS Wireless Remote, etc. require a separate purchase. To install each accessory, use the installation guide provided with it, or download the guide from our Web site at minnkota.johnsonoutdoors.com.

Register and Update: As you build your Minn Kota fishing system, it is important to register your products and keep your software up to date. Visit our Web site at minnkota.johnsonoutdoors.com to register your Minn Kota products, update fish finder and accessory software, and purchase additional equipment. Also, see **Update Software** in this manual for more information.

USING THIS MANUAL ON YOUR COMPUTER OR MOBILE DEVICE »

The Minn Kota manuals for your fish finder and accessories can be downloaded to your mobile device or computer. If you prefer to use a hard copy for reference, this manual may be printed.

» Download the Manual to your Mobile Device

1. Download the free Adobe Acrobat Reader app to your mobile device.
2. Go to our Web site at minnkota.johnsonoutdoors.com, and click Support > Manuals.
3. Select the PDF for your fish finder model or accessory, and save it to your device.
4. Open the Adobe Acrobat Reader app.
5. Open the Minn Kota manual.

» Download the Manual to your Computer

1. Download the free Adobe Acrobat Reader software from <http://get.adobe.com/reader/>, and install it on your computer.
2. Go to our Web site at minnkota.johnsonoutdoors.com, and click Support > Manuals.
3. Select the PDF for your fish finder model or accessory, and save it to your computer.
4. Open Adobe Acrobat Reader.
5. Open the Minn Kota manual.

Jump to a Section: Click a section name in the Bookmarks panel. Bookmarks can be expanded and collapsed by clicking on the plus (+) or minus (-) icons.

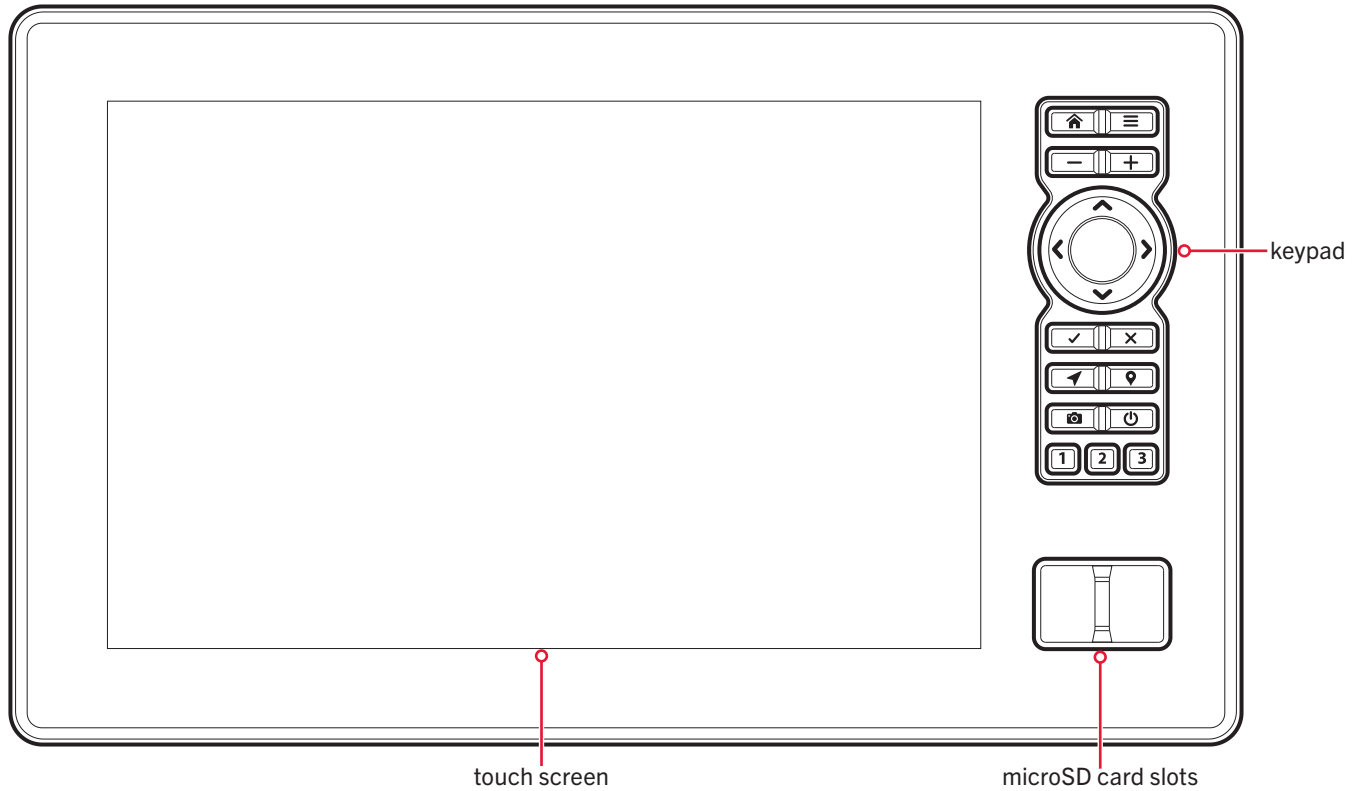
Search for Words or Phrases: Press and hold the Ctrl F keys on your keyboard. Type the word(s) into the text box.

Print: To print, confirm the page sizing is 8.5 x 11" and set to Fit. Set the page orientation to Portrait.

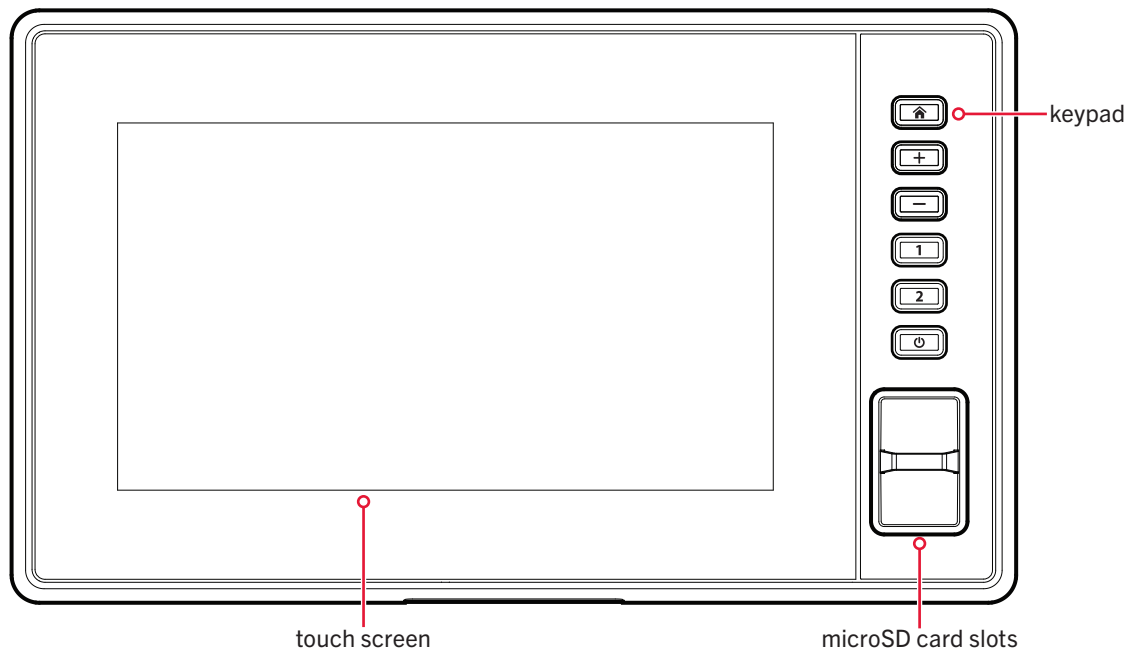
FISH FINDER OVERVIEW

Review this section for an overview of touch and keypad functions.

X Series and XPLORE

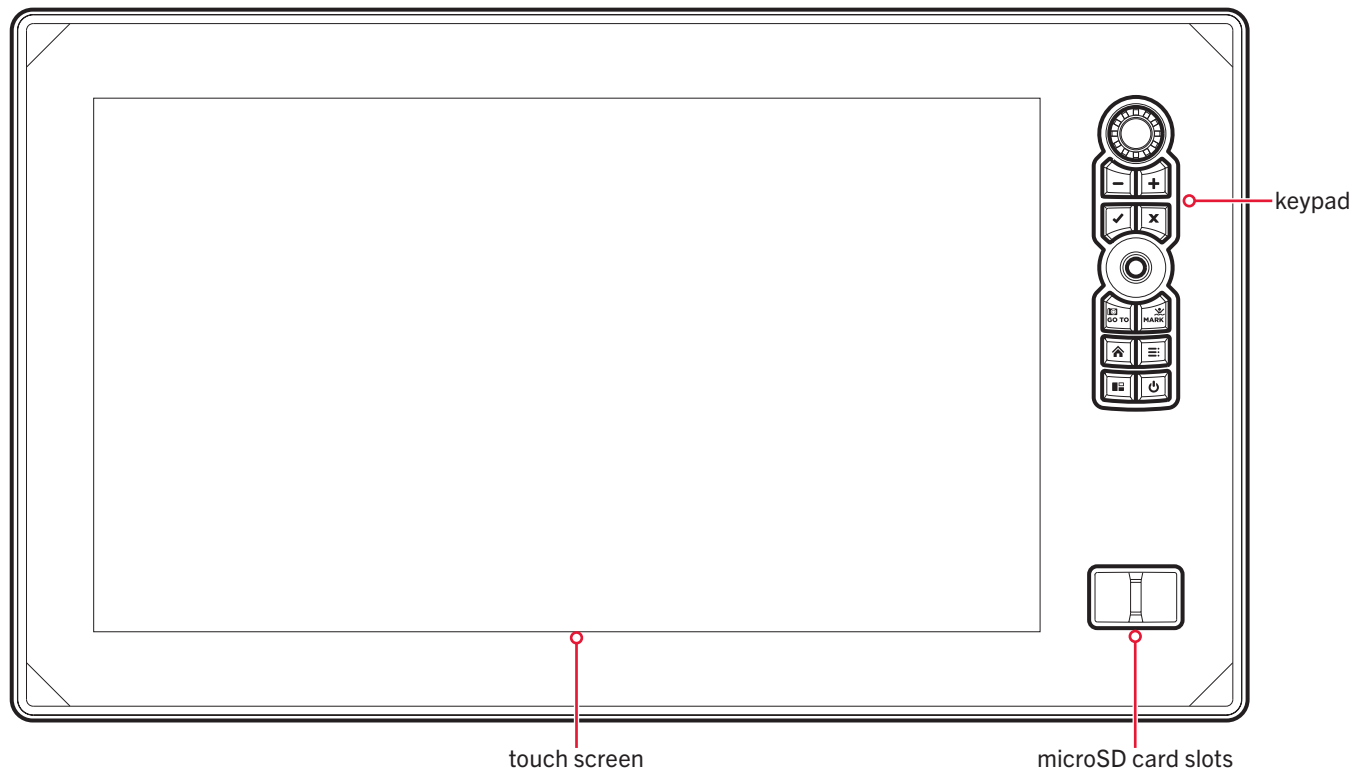


X7 Series

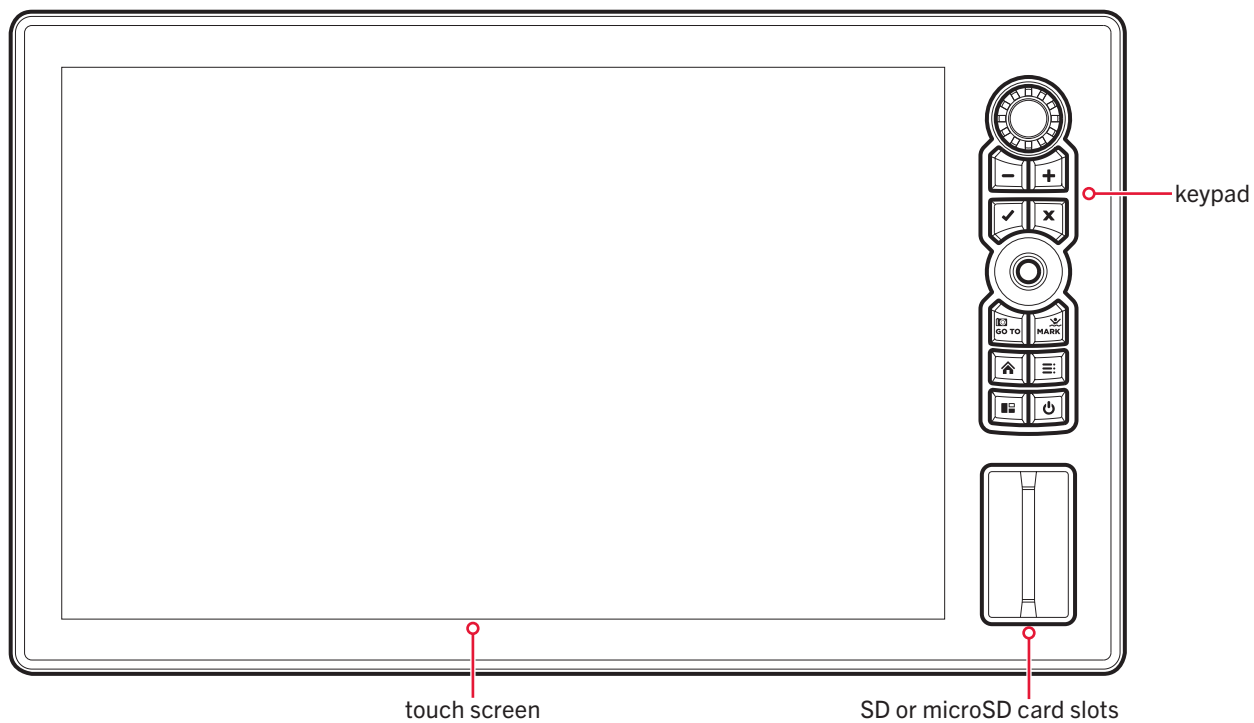


FISH FINDER OVERVIEW

A Series and APEX



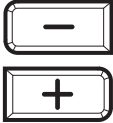
SOLIX



KEY FUNCTIONS

KEYPAD FUNCTIONS FOR X SERIES/XPLORE »

The functions for each key are described here.

Name	Key	Function
Power Key		Press to power on the fish finder. During operation, press the POWER key to open the Power X-Press Menu. Press and hold the POWER key to power off the fish finder.
Enter Key		Press to start a command or turn on a setting. The ENTER key also opens the Info menu and the Cursor menu.
Exit Key		Press once to close a menu, close a dialog box, turn off an alarm, or exit Cursor mode. Press and hold the EXIT key to close all menus at once.
Cursor Pad		Press to select a view, tool, or menu. The Arrow keys can also be used to move the cursor across the view and pan 2D/3D map views.
Navigation Key		Press to open the Navigation menu for navigation functions.
Snapshot Key		Press to save the screen image.
Mark Key		Press to mark waypoints. If the cursor is not active, the waypoint will be marked at the boat position. If the cursor is active, the waypoint will be marked at the cursor position.
Home Key		Press to display the Home screen. The Home screen allows you to access settings, alarms, views, and tools for the fish finder.
Zoom Key		For a closer view, press the ZOOM IN (+) key. For a wider view, press the ZOOM OUT (–) key. Press and hold the ZOOM OUT (–) key to zoom out all the way. Press to adjust menu settings.
Menu Key		Press once to open the X-Press Menu for the on-screen view and operation mode. To open the Settings tool, press and hold the MENU key.
Programmable Keys		Press to enable optional functions. These keys are programmable from the Network + Devices tool.

*The X7 has a smaller keypad and only includes the POWER key, HOME key, ZOOM keys, and two programmable keys.

KEYPAD FUNCTIONS FOR A SERIES/APEX/SOLIX »

The functions for each key are described here. To apply the key functions, see each section of this manual.

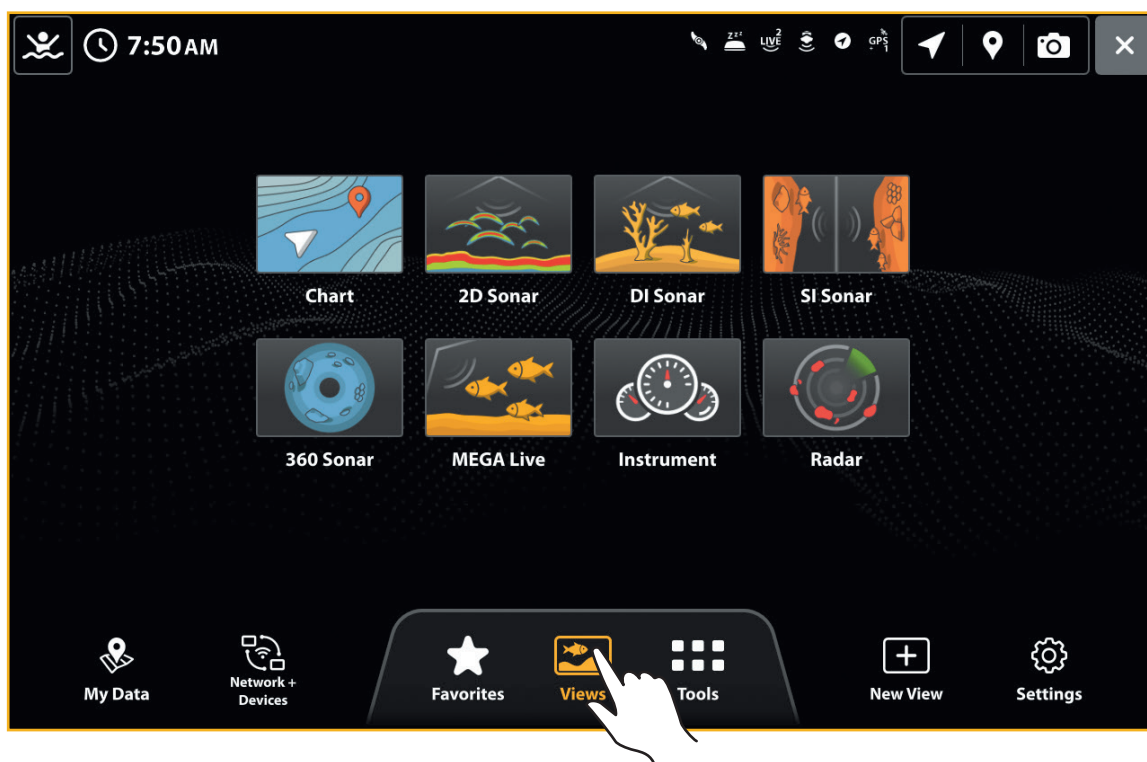
Name	Key	Function
Power Key		Press to power on the fish finder. During operation, press the POWER key to open the Power X-Press Menu. Press and hold to power off the fish finder.
Enter Key		Press to start a command or turn on a setting. The ENTER key also opens the Info menu and the Cursor menu.
Exit Key		Press once to close a menu, close a dialog box, turn off an alarm, or exit Cursor mode. Press and hold the EXIT key to close all menus at once.
Joystick		Move to select a view, tool, or menu. Press the Joystick to open your selection. The Joystick is also used to move the cursor across the view and pan 2D/3D map views.
Rotary Dial		Turn to adjust menu settings or zoom in and out.
Navigation/ Media Key		Press to open the Navigation menu for navigation functions. Press and hold to open the Media menu.
Pane Key		Press to select a pane in multi-pane view.
Mark/Man Overboard Key		Press to mark waypoints. If the cursor is not active, the waypoint will be marked at the boat position. If the cursor is active, the waypoint will be marked at the cursor position. Press and hold to start Man Overboard Navigation.
Home Key		Press to display the Home screen. The Home screen allows you to access settings, alarms, views, and tools for the fish finder.
Zoom Key		For a closer view, press the ZOOM IN (+) key. For a wider view, press the ZOOM OUT (-) key. Press and hold the ZOOM OUT (-) key to zoom out all the way. Press to adjust menu settings.
Menu Key		Press once to open the X-Press Menu for the on-screen view and operation mode. To open the Settings tool, press and hold the MENU key.

USING THE TOUCH SCREEN

TOUCH SCREEN FUNCTIONS >

The touch screen actions are also determined by the view displayed on the screen.

Using the Touch Screen



> Swipe Functions



ONE FINGER SWIPE (VERTICAL)

Browse Menus: Scroll through a menu or list (up or down).



ONE FINGER SWIPE (HORIZONTAL)

Adjust Menu Slider: Drag the slider to adjust the setting.

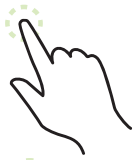
With a Map View displayed on-screen, drag one finger across the screen to see more of the map displayed off-screen.
With a 2D Sonar View displayed on the screen, drag one finger across the screen to see more of the sonar history.



TWO FINGER SWIPE

With a view displayed on-screen, touch the screen with two fingers and swipe down to return to the Home screen.

› Tap Functions



ONE TAP

Select (Open): Tap to select (or open) a view, tool, widget, menu, or icon.

Activate the Cursor: Tap a position on the view once.



TWO TAPS

Tap the screen twice to zoom in on the current display.

› Press and Hold Functions



PINCH

Zoom In: Touch the screen with two fingers and move them apart to zoom in on the display.

Zoom Out: Touch the screen with two fingers and bring them closer together to zoom out.



PRESS AND HOLD

Press and hold a position on the view with one finger to open the Cursor Menu.

BASIC TOUCH SCREEN AND KEYPAD OPERATIONS ›

› Select (Open) a Tool, Widget, or View

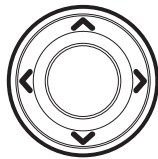
Use the touch screen, CURSOR pad, or the ENTER key to make selections.

X Series/XPLORE

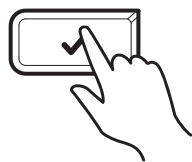


Tap to Select

OR



Select



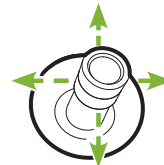
Open

A Series/APEX/SOLIX

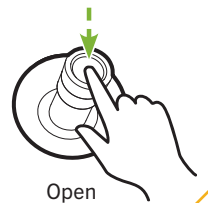


Tap to Select

OR



Select

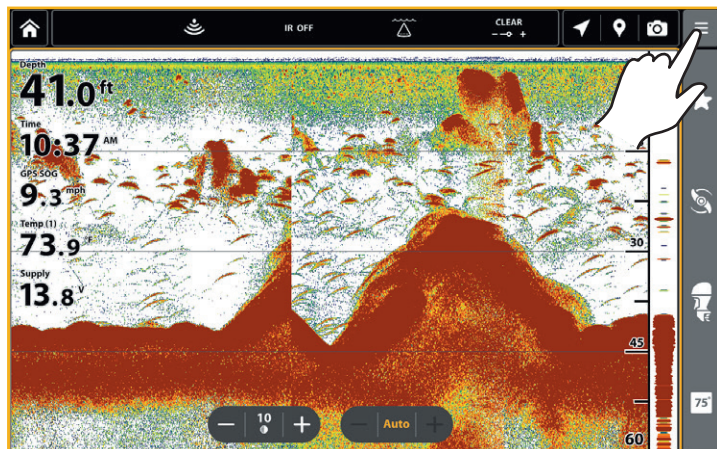


Open

BASIC TOUCH SCREEN AND KEYPAD OPERATIONS

TOUCH SCREEN

› Open a Menu



› Adjust a Menu Setting

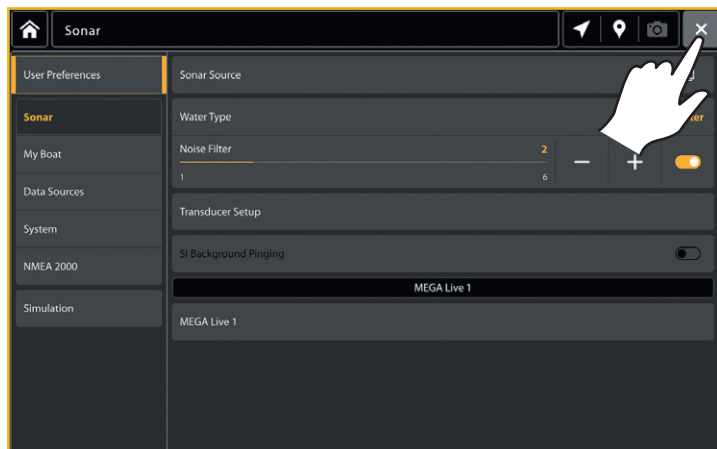
Drag the slider or tap the +/- icons.



› Close a Menu

Tap the Back ↶ icon to go back one level.

Tap the ✕ icon to close a menu.



KEYPAD

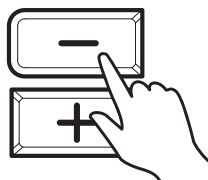
X Series/XPLORE MENU Key



A Series/APEX/SOLIX MENU Key

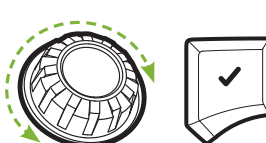


X Series/XPLORE



Press the +/- ZOOM keys.

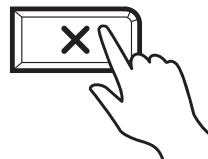
A Series/APEX/SOLIX



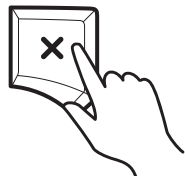
Turn the Rotary dial, or press and hold the ENTER key.

Press the EXIT key to close a menu or go back one level. Press and hold the EXIT key to close all menus and return to the last view.

X Series/XPLORE EXIT Key



A Series/APEX/SOLIX EXIT Key



SD CARD SLOTS »

Your fish finder may be compatible with an SD or microSD card (separate purchase may be required). Use it to view detailed maps on your fish finder, import/export navigation data, save sonar recordings and screen snapshots and update software. Use the instructions in this section to install the card.

 CAUTION

Do not leave the card slot cover open. The slot cover should always be closed to prevent water damage to the unit.

 CAUTION

Before the fish finder software is updated or restored to system defaults, export your navigation data (see **Update Software**).

» **Insert an SD Card**

The left slot is displayed as SD Card (1) in the menu system, and the right slot is displayed as SD Card (2).

1. Remove the SD card slot cover.
2. Position the SD card so that the label faces to the left.
3. Insert the card into the slot until it clicks into place.
4. Replace the slot cover so it is secure.
5. Remove: Press the card into the slot and then release it. The card will eject. Pull the card carefully from the slot.

» **Insert a microSD Card**

The top slot is displayed as SD Card (1) in the menu system, and the bottom slot is displayed as SD Card (2).

1. Remove the microSD card slot cover.
2. Remove the microSD card from the microSD card adapter.
3. Position the microSD card so that the label faces the front of the fish finder and the card notches face down.
4. Insert the card into the slot until it clicks into place.
5. Replace the slot cover so it is secure.
6. Remove: Press the card into the slot and then release it. The card will eject. Pull the card carefully from the slot.

GETTING STARTED

The procedures in this section describe how to get started with your fish finder:

- power on/off
- review GPS reception
- check connected accessories and sensors
- pair the fish finder to the Minn Kota integrated system
- set alarms

See your fish finder installation guide and the quick start guide included with your fish finder to configure the unit for first time setup. Also, see **Installation Information** in this manual for system configuration details.

NOTICE: When the fish finder equipment and accessories are first installed, the Setup Guide provides the prompts to guide you through configuring the unit. The Setup Guide includes important steps to configure the fish finder with the equipment, including language, vessel dimensions, map source selection, and offset menus. See your fish finder installation guide to configure the unit for the first time.

POWER ON/OFF »

» Power On

1. Press the POWER  key.
2. When the first view is displayed on the screen, the fish finder is ready for operation.

NOTICE: The first time the fish finder is powered on, and after each software update, a Welcome dialog box is shown. Select Start Normal Mode to continue to the Setup Screen.

» Use Standby Mode to Conserve Power

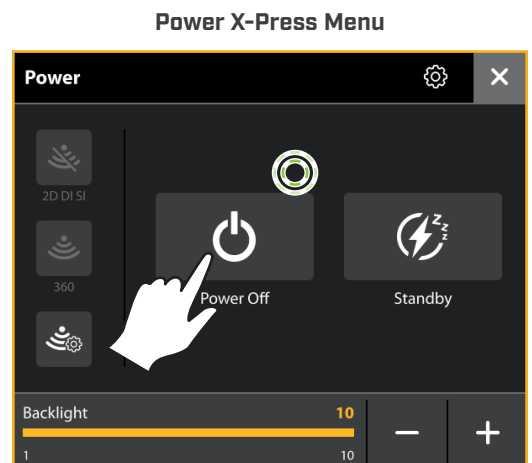
To conserve power while the fish finder is not in-use, start Standby mode from the Power X-Press Menu.

1. **Open the Power X-Press Menu:** Press the POWER  key.
2. Select Standby.
3. **Turn off Standby Mode:** Press the POWER  key.

» Power Off

1. Press the POWER  key.
2. Use your finger to slide across the Power Off button.

Additional Keypad Option: Press and hold the POWER  key.



REVIEW GPS RECEPTION

Use the GPS tool to check the GPS reception. The GPS tool provides two ways to view the satellites communicating with the GPS Receiver. Yellow indicates that the satellite is being used to determine your current position. Teal indicates that the satellite is being monitored but not used. The following data is also displayed:

- Position (latitude and longitude)
- GPS Fix Type: reported as No Fix, 2D Fix, 3D Fix, or Enhanced. An Enhanced fix has been augmented using information from WAAS, EGNOS, or MSAS. A 3D or Enhanced Fix is required for navigation.
- HDOP (the Horizontal Dilution of Precision): a GPS system parameter which depends on the current satellite configuration. HDOP is used to calculate the Estimated Position Error.

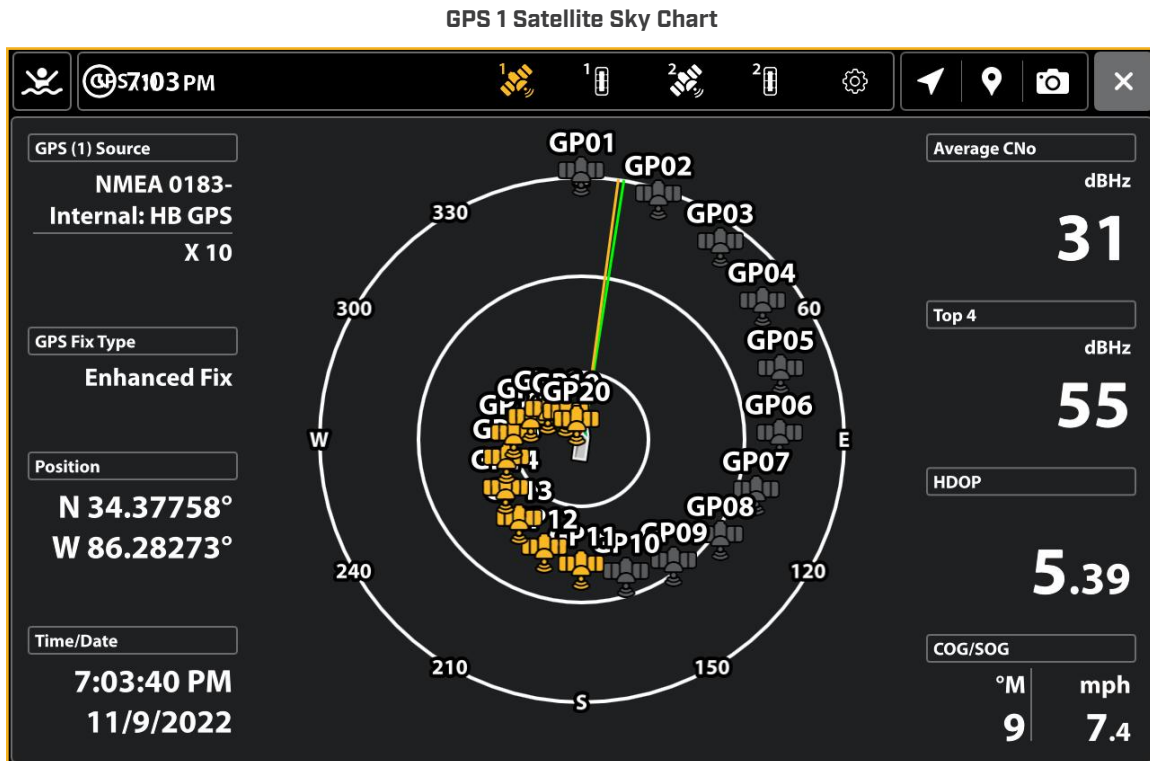
Open the GPS Tool

If there is more than one fish finder installed on the network, select the fish finder that is connected directly to the GPS receiver.

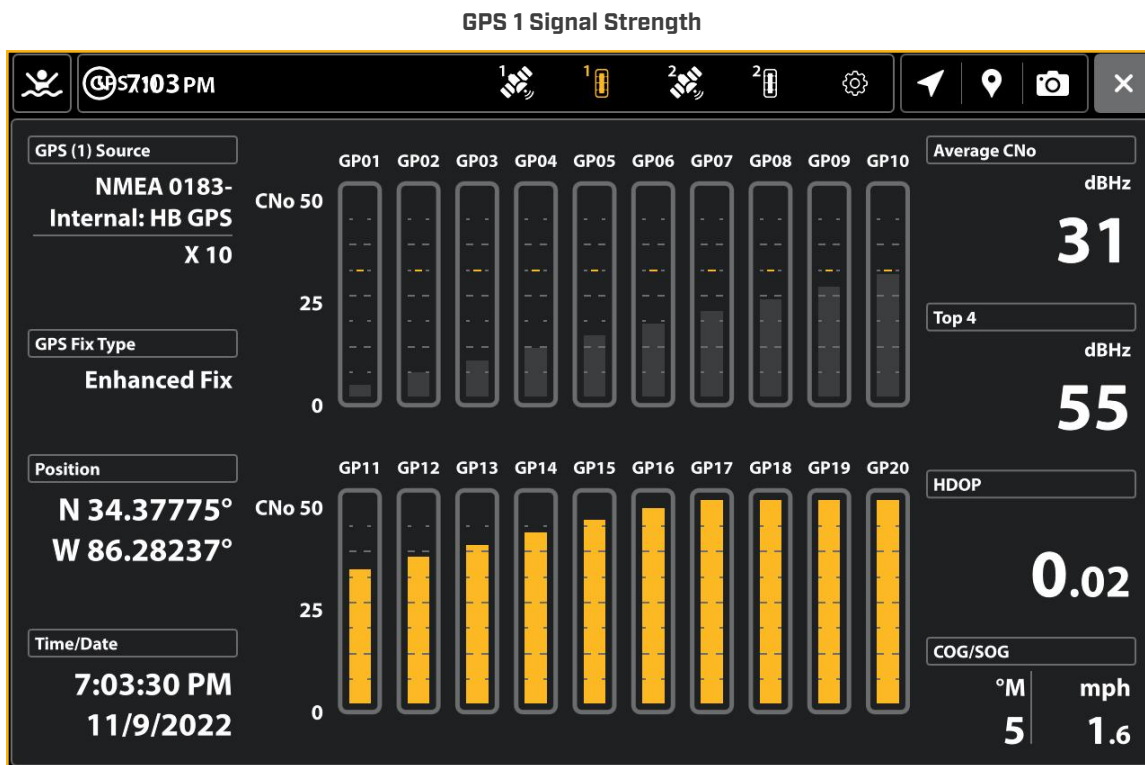
1. Press the HOME  key.
2. Select the Tools tab.
3. Select the GPS tool.

Review Satellites and Signal Strength

1. In the Top Bar, select GPS 1 Satellites or GPS 1 Signal Strength.



REVIEW GPS RECEPTION



GPS (1) and GPS (2) Sources

You can also manually change which GPS receiver is the selected source for GPS (1) or GPS (2). To change the GPS sources, see **Set up your Fish Finder Network**.

- GPS (1) provides position data, Speed over Ground (SOG), Course over Ground (COG), waypoints, routes, tracks, and navigation calculations to the fish finder.
- GPS (2) provides position data that is displayed in the GPS (2) data box.

CHECK SENSOR RECEPTION AND CONNECTIONS

If you've connected other separate-purchase equipment to the network, such as AIS, Compass/Heading Sensor, Radar, Advanced GPS Wireless Remote, Minn Kota Live, 360 Imaging, and more, use these instructions to confirm the equipment is detected and communicating with the fish finder.

1. Press the HOME key.
2. Review the top, right corner of the status bar.



Detected and Active: If a sensor is active and transmitting/receiving, it will be white. See the table below.



Connected but not Detected or Active: If a sensor is not detected on the network, or not transmitting/receiving, it will be completely gray.



Connected but not Transmitting/Receiving: If a sensor is detected, but is not transmitting/receiving, the icon will be partially gray. In this illustration, the GPS receiver is detected, but it doesn't have a GPS fix. This feature will vary with the type of icon represented.

Active Status Icon	Sensor	Description
	AIS	AIS is on and receiving targets.
	Compass	The selected compass/heading sensor is on and heading data is being received.
	GPS	The GPS receiver is detected and a GPS fix has been obtained.
	Trolling Motor	Trolling motor is connected, enabled, and actively navigating.
	Talon or Raptor	The Talon or Raptor shallow water anchor is connected and stowed.
	Radar	The selected radar source is detected and transmitting.
	2D Sonar	The selected 2D sonar source is detected and pinging.
	Minn Kota Live Sonar	The Minn Kota Live Imaging transducer is pinging data.
	MEGA 360 Imaging Sonar	The MEGA 360 Imaging transducer is pinging data.

3. If the sensors are active, your system is ready for use on the water.

For additional system status, select Network + Updates.

If you have connected an accessory to the fish finder, and the icon is not displaying in the system status bar, check the installation of the accessory and the cable connection to the fish finder.

To change the NMEA 2000 network or multi-fish finder network sources, see **Set up a NMEA 2000 Network** and **Set up your Fish Finder Network**.

CONNECT TO Wi-Fi

1. Press the HOME  key.
2. Select Network + Devices.
3. Select Wi-Fi Updates.
4. Toggle on Wi-Fi.
5. Select a network from the Available Networks list and enter the password.

PAIR THE FISH FINDER

PAIR THE FISH FINDER TO THE MINN KOTA FISHING APP

Use the following instructions to pair the fish finder to the Minn Kota Fishing App on your phone using Bluetooth wireless technology. (Available with Bluetooth supported Minn Kota products and mobile devices only. Wifi or data connection required.)

NOTICE: If you have a Bluetooth compatible trolling motor or shallow water anchor (separate purchases required), see the accessory operations manual for each product for pairing instructions. Operations manuals can be downloaded from our Web site at minnkota.johnsonoutdoors.com.

NOTICE: WiFi or cellular data must be enabled on your mobile device.

Enable Bluetooth on the Phone

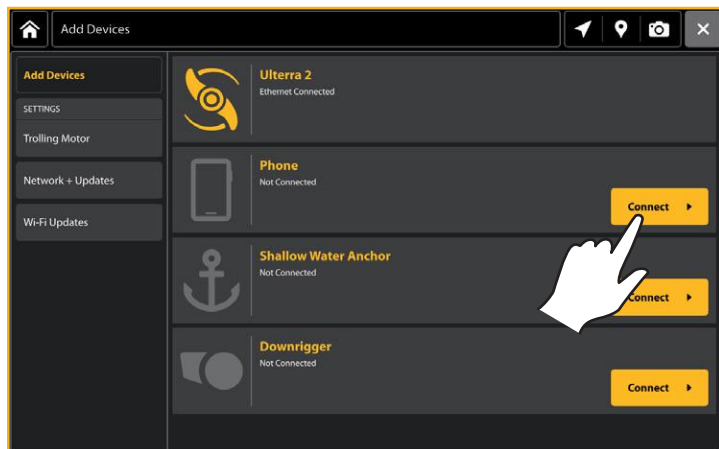
1. Open the Settings menu on your phone.
2. Select Bluetooth.
3. Select On.

Pair the Fish Finder

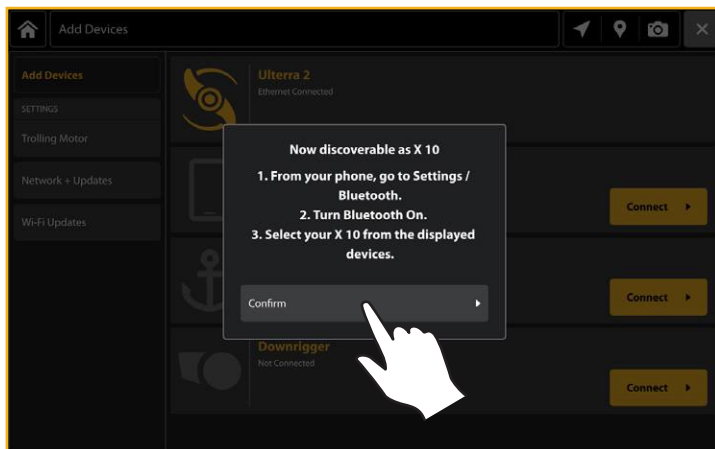
1. Press the HOME  key.
2. Select Network + Devices.
3. Under Add Devices tab, find the Phone icon and select Connect.
4. Follow the on-screen prompts to complete the pairing process.
5. Check the Bluetooth menu on your phone. Tap the name of the fish finder on your phone.
6. Confirm the six digit confirmation code and tap Pair on your phone.

Upon successful pairing, the fish finder will be listed as connected under the phone's Bluetooth menu.

Pairing a Phone



Starting the Pairing Process



» Forget Device

If you are having any issues with your connection, forget the device on both the phone and the fish finder and start the pair process over.

Forget Device on the Phone

1. **Apple iOS:** Open the phone's Bluetooth menu, and next to the fish finder's name under My Devices, tap the information icon.
Google Android: Open the phone's Bluetooth menu, and next to the control head's name under Available Media Devices, tap Settings.
2. **Apple iOS:** Tap Forget This Device.
Google Android: Tap Forget.

Forget Device on the Fish Finder

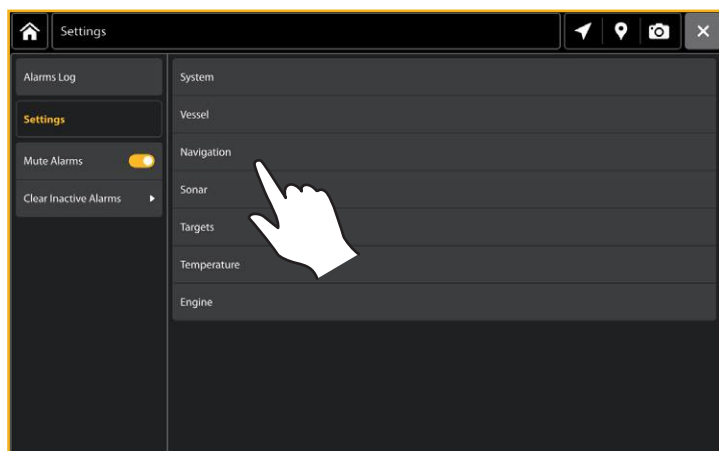
1. Press the HOME  key.
2. Select Network + Devices.
3. Under Add Devices, find the connected phone and select Forget.

SET ALARMS »

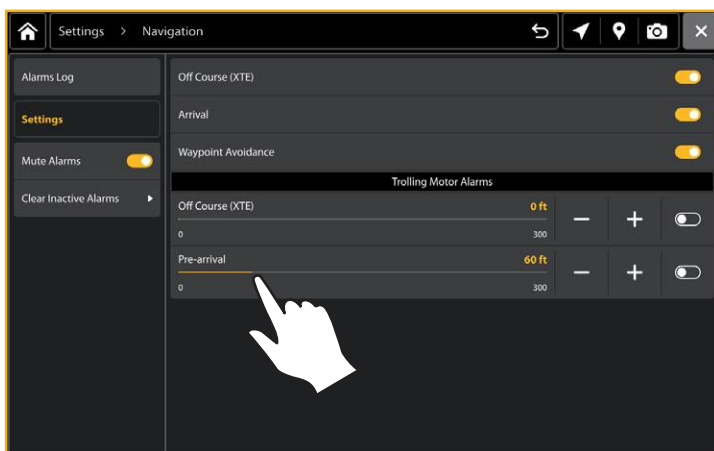
When an alarm is turned on, an alert will sound or display on the fish finder to indicate the threshold has been exceeded.

1. Press the HOME  key.
2. Select Tools.
3. Select Alarms.
4. Select Settings and then select an alarm category.
5. Select an alarm name.
6. **On/Off:** Tap the on/off button to turn on/off the alarm.
7. **Adjust the alarm threshold:** Drag the slider or tap the + and - buttons.
8. Repeat steps 4 through 7 for each alarm you want to set.

Selecting an Alarm



Setting Alarm Thresholds



The available alarms are determined by the connected equipment, so your fish finder may provide more or less options than the information shown here.

SET ALARMS



Alarm	Description
Systems	Voltage, Lost Heading (compass/heading sensor required), etc.
Vessel	Drift Limit, SOG (Speed over Ground), STW (Speed through Water), etc. Also, see Views: <i>Understand the Data Box Digital Readouts</i> for more information.
Navigation	See <i>Map Overview: Navigation Alarms Overview</i> for details.
Sonar	See <i>Sonar Overview: Sonar Alarms</i> for details.
Temperature	Temp (High) or Temp (Low). To change the Temperature sources, see <i>Installation Information: Set up your Fish Finder Network</i> .
Engine	Low Fuel, Engine Temp, Oil Level, Coolant Level, Check Engine, etc. To change Engine and Fuel sources, see <i>Installation Information: Set up a NMEA 2000 Network</i> .

Use the Alarms Log menu to view any alarms that have been triggered.

CHANGE SYSTEM SETTINGS >

Your fish finder was configured during the installation setup. To change the system settings such as the key sounds, units of measurement, and the time and date format (including Daylight Saving Time), select Settings from the Home screen. See *Manage your Fish Finder* for more information.

- 1. Press the HOME  key.
- 2. Select Settings.
- 3. Select User Preferences.

SET UP SONAR >

Proceed to the *Sonar Overview* section.

SELECT THE MAP SOURCE >

Proceed to the *Map Overview* section.



UPDATE SOFTWARE

As you build your Minn Kota integrated system, it is important to keep your fish finder and accessory software up to date. Accessories such as the NMEA 2000 GPS Heading Sensor, Advanced GPS Wireless Remote, MEGA 360 Imaging, Minn Kota Live Imaging, and Ethernet Switches are updated through the fish finder.

You can update software using wi-fi, an SD or microSD card (depending on your fish finder model) or using the built-in Bluetooth and the Minn Kota Fishing App.

Preparation: We recommend that you read this section completely before starting any software updates. Fish finders take approximately 10 minutes to update, and each fish finder on the network must be updated individually. Accessories take approximately 3 minutes to update.

NOTICE: Minn Kota is not responsible for the loss of data files (waypoints, routes, tracks, groups, snapshots, recordings, etc.) that may occur due to direct or indirect damage to the unit's hardware or software. It is important to back up your fish finder's data files periodically. Data files should also be saved to your computer before restoring the unit's defaults or updating the software.

REGISTER PRODUCTS »

Register your Minn Kota equipment so that you will receive the latest Minn Kota Systems news, including accessory compatibility and software update information.

1. Go to our Web site at minnkota.johnsonoutdoors.com. Select Support > Register your Product.
2. Follow the on-screen prompts to register your products.

CHECK THE CURRENT SOFTWARE VERSION »

It is helpful to review the software version number that is currently installed on the fish finder and each accessory.

1. Press the HOME  key.
2. Select Network + Devices.
3. Select the Network + Devices tab.
4. Review the software version number listed under each connected device.

UPDATE FISH FINDER SOFTWARE USING WI-FI »

To update software over Wi-Fi (recommended), ensure your unit is connected to Wi-Fi. Once connected to Wi-Fi, the unit will notify you whenever an update is available. Updates can then be installed to all networked devices. See **Getting Started: Connect to Wi-Fi** for more information about connecting to Wi-Fi.

1. Press the HOME  key.
2. Select Network + Devices.
3. Select the Network + Devices tab.
4. Select Check for Updates.
5. If an update is available, follow the on-screen prompts to complete the software update.

UPDATE SOFTWARE



Checking for Software Updates

Network + Updates

Add Devices

SETTINGS

Trolling Motor

Network + Updates

Wi-Fi Updates

Check for Updates

This Fish Finder

X 10

Name260708030078

CURRENT SOFTWARE VERSIONv7.112

Device Information

Trolling Motor

ULTERRA 2

CURRENT SOFTWARE VERSIONv9.999

Device Information

Ethernet Accessories

RADAR

MODEL:SIM_HB2124 CHIRP Radar

UPDATE SOFTWARE USING THE MINN KOTA FISHING APP

UPDATE SOFTWARE USING THE MINN KOTA FISHING APP »

If Wi-Fi is unavailable, you can update software using the Minn Kota Fishing App.

1. Open the Minn Kota Fishing App on your mobile device.
2. Tap Network + Updates.
3. Tap Download Update next to the device you want to update. The download progress is displayed on the screen.

You can also tap More Options icon (...) next to the device you want to update, and then tap Download Update. Use this menu to cancel the download (Apple iOS only).

NOTICE: The update may take several minutes to download. You may close the app while you wait for the download to complete.

4. Tap Transfer Software next to the selected device once the download is complete.
You can also tap the More Options icon (...) again, and then tap Transfer Software or Delete Software.
5. Confirm the estimated transfer time.
6. Tap the radio button to select the transfer location (internal storage, SD card 1, or SD slot 2).

NOTICE: You cannot download software updates to an SD or microSD card with Minn Kota Maps card saved to it.

7. Tap Start Transfer (Apple iOS) or Transfer (Google Android).
The upload progress is displayed under the selected unit in the Minn Kota Fishing App and in the Network + Updates view on the fish finder.
8. Follow the on-screen prompts on the fish finder to complete the software installation.

UPDATE SOFTWARE USING AN SD CARD



UPDATE SOFTWARE USING AN SD CARD >

Supplies: In addition to your fish finder, you will need a PC with Internet access and a blank 32 GB SD or microSD card (depending on your fish finder model).

When you install the SD card with the software file, the fish finder will detect the update and provide an automatic prompt to install the software. You can follow the prompts or choose to install the software at a later time through the Network + Devices tool. It is important to review the following tips:

- **Automatic Restart:** The fish finder will restart during the software update process.
- **Multiple Fish Finders:** If you have more than one fish finder on the network, go to each fish finder to install the latest software update. Fish finder software updates cannot be updated through another networked unit.

> Download Software Updates

1. Install the SD card into the PC card slot.
2. Go to minnkota.johnsonoutdoors.com, and click Support > Software Updates.
3. The available software updates are listed as Downloads under each product.
 - Under Downloads, click the file name. Confirm the file name is for your fish finder model.
 - Read the instructions in the dialog box and select Download.
 - Follow the on-screen prompts to save the software file to the SD card.
4. Repeat step 3 to download the software updates posted to each product.

> Update Software Automatically

1. Press the POWER  key.
2. Install the SD card with the software file(s) into the fish finder card slot.
3. A dialog box will display to start the software update.

To start the fish finder software update, select Install. Once the software update is installed, the unit will power down and automatically restart.

OR

To update the software at a later time, select Cancel. If you select Cancel, go to Network + Devices to download the software at a later time.
4. Select Start Normal Mode from the Welcome Screen.
5. Use the touchscreen to complete the Setup and tap Continue.



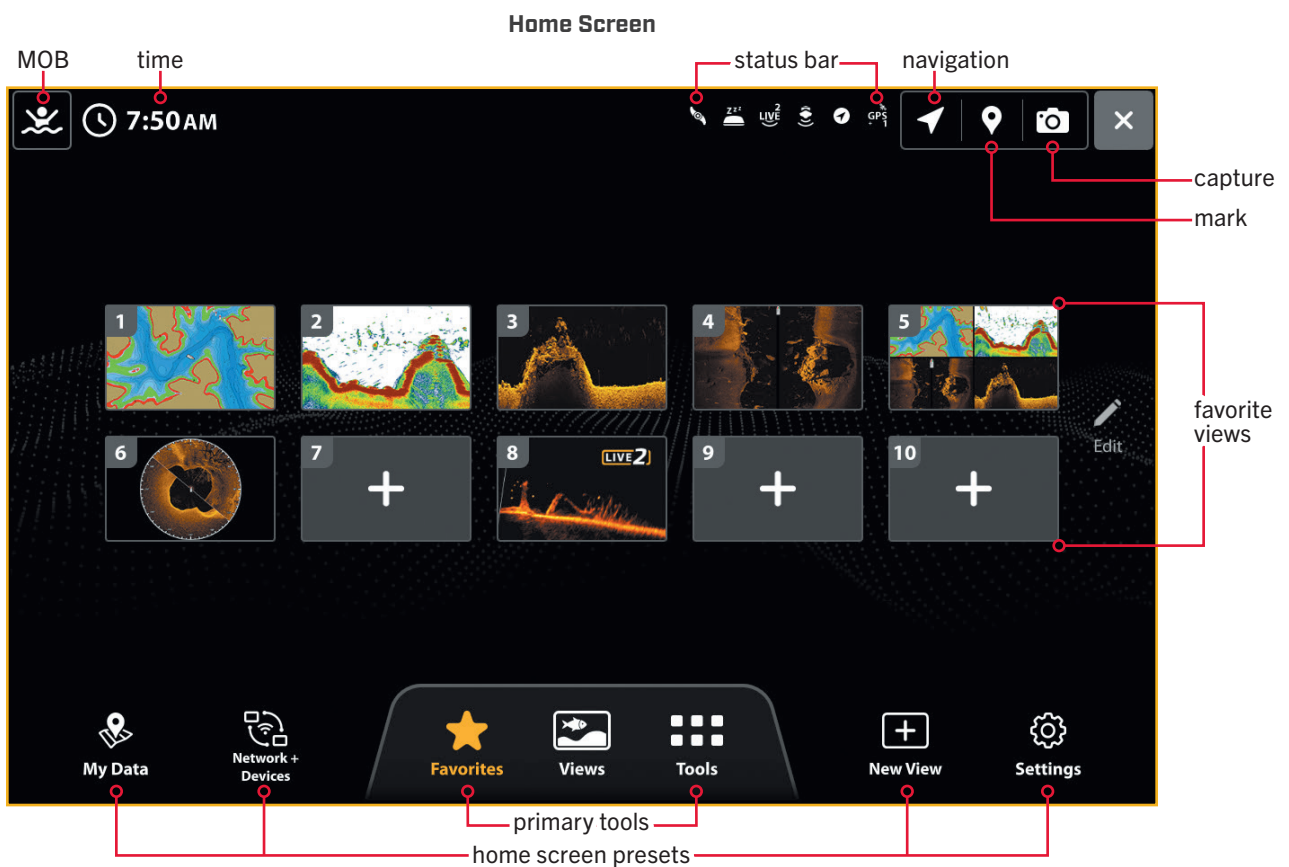
THE HOME SCREEN

The Home screen is the main control center for your fish finder. Use the Home screen to access the settings, navigation data, views, favorites, and other tools.

- Tools and views available on the Home screen are determined by the equipment attached to the fish finder network.
- Favorite views can be saved for quick access and customized views can be created.
- Pair your fish finder to other Minn Kota System devices, like a trolling motor or the Minn Kota Fishing App.

Open the Home Screen

1. Tap the Home  in the top left corner of the screen or press the HOME  key.



THE HOME SCREEN

› Navigate the Home Screen

Use the touchscreen to select an option from the Home screen.

Icon	Sensor	Description
	Favorites	Select to quickly access your favorite saved views.
	Views	Select to access the complete set of views available on your fish finder. You can edit views, create your own views, and save your favorite views.
	Tools	Allows you to manage the fish finder network operations and saved data. When you connect an accessory to the fish finder, a related tool may also be displayed.
	My Data	Select to manage your saved waypoints, spot-locks, routes, tracks, and itracks. You can create new navigation data from this screen or edit your saved navigation data.
	Network + Devices	Select to view all devices on the network, install software updates and pair your fish finder to the Minn Kota Fishing App on your phone. You can also pair your wireless remote, trolling motor, shallow water anchor and downrigger (separate purchase required) to the fish finder. See your installation guide for details. <i>Required Equipment: mobile phone (with Bluetooth)</i>
	New View	Select to create a new view from a blank template. You can change the type of data displayed in a view and how many panes are displayed.
	Settings	Select to change general system settings such as the units of measurement and the time and date format. You can also use this menu to view system, network, and NMEA 2000 information.
	Mark	Select to add a waypoint.
	MOB	Select to start Man Overboard functions.
	Capture	Select to open the Media tool. You can use this tool to screen capture or screen record.

Tools

Tools allow you to manage the network operations and saved data. When you connect an accessory to the fish finder, a related tool may also be displayed.

Icon	Sensor	Description
	Alarms	Select Alarms to view the alarm log, mute alarm sounds, and set the alarms for the individual applications. To set up individual alarms for navigation, sonar, radar, AIS, etc., see each related section of this manual for details.
	Navionics	Select Navionics to access advanced mapping features. <i>Required Map Source: Navionics</i>
	Sun + Moon	Select Sun + Moon to review the sunrise and sunset for today or the date you select. The Moon data provides the rise and set of the moon and moon phases. <i>Required Map Source: Navionics or coastal Minn Kota Maps card.</i>
	Media	Select Media to manage your screen snapshots. When a screen snapshot is taken, a waypoint can also be saved at the current position. You can also choose to save the image on the fish finder or to an SD or microSD card. See Media Tool for more information.
	Fuel	Select Fuel to review the fuel log for NMEA 2000 fuel sensors connected to the network. This tool provides refuel alerts and displays the fuel level in graphical form. See Set up a NMEA 2000 Network for details. <i>Required Equipment: NMEA 2000 tank sensor and/or fuel flow rate sensor</i>
	Trip + Timer	Select Trip + Timer to display Speed over Ground (SOG), timer for elapsed time, distance traveled since last reset, average speed, and trip fuel. You can also reset the trip log to zero, set an alarm clock for a selected time of day, use the countdown timer, or use the stopwatch from this tool. <i>Required Equipment: GPS receiver (internal or external)</i>
	GPS	Select GPS to review the signal strength of the GPS receivers (“sensors”) connected to the system. The tool shows the satellites in the area, the positions, and the signal strength for each one. You can also designate a primary and secondary GPS source from this tool. See Getting Started, Installation Information , and Set up your Fish Finder Network . <i>Required Equipment: GPS receiver (internal or external)</i>
	Record	Select Record to start a sonar recording or select a save location. You can also watch a sonar recording from the perspective of a 2D, SI, or DI View, depending on the capabilities of your model. See Sonar Recording for more information. <i>Required Equipment: transducer</i>
	Targets	Select Targets to manage AIS and MARPA targets. <i>Required Equipment: AIS or Radar, GPS receiver (internal or external), and compass/heading sensor</i>

THE HOME SCREEN



Icon	Sensor	Description
	Tides	Select Tides to review information for the nearest tide station to your present position. The tool includes the position of the station and the times of the high and low tides for today's date. A tide graph is also displayed showing the rise and fall of the tides for the 24 hour time period encompassing the date. You can also search data for a selected date. <i>Required Map Source: Navionics or CoastMaster VX.</i>
	Currents	Select Currents to review information for the nearest current station to your present position. Two graphs are also presented that show the time, direction, and flow speed of the current changes for the 24 hour time period of today's date. You can also search data for a selected date. <i>Required Map Source: Navionics or CoastMaster VX.</i>
	Battery Monitoring	Select Battery Monitoring to see real-time readings of battery power, remaining runtime and low-battery alerts. <i>Required Equipment: Minn Kota QUEST Series trolling motor.</i>
	Audio	Select Audio to control audio from the fish finder.



VIEWS AND THE MENU SYSTEM

There are many options to display data on-screen, and the data can be displayed in a variety of ways. You can open a view from the Views tool or from the Favorites tool. You can also create a new view, edit views, and customize your favorite views list.

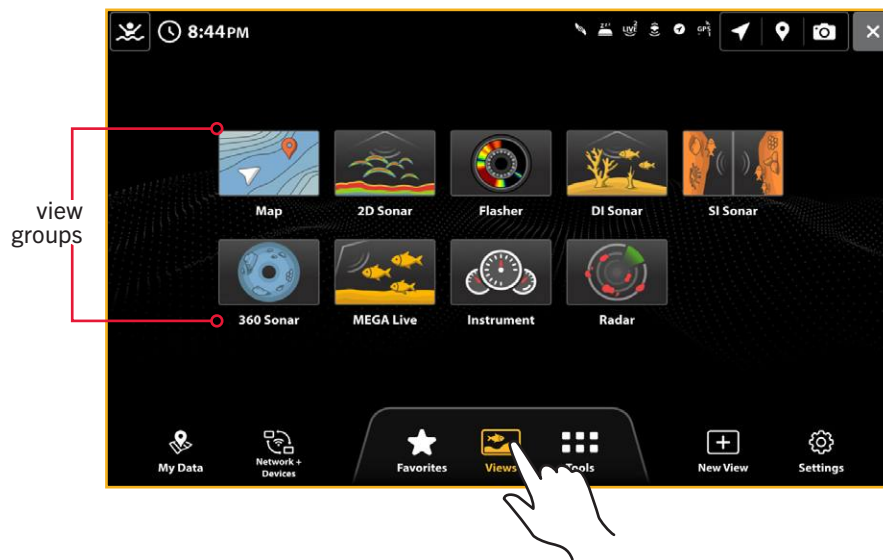
Once you have opened a view, you can access a view-specific menu to initiate actions or change the view settings.

DISPLAY A VIEW FROM THE VIEWS TOOL

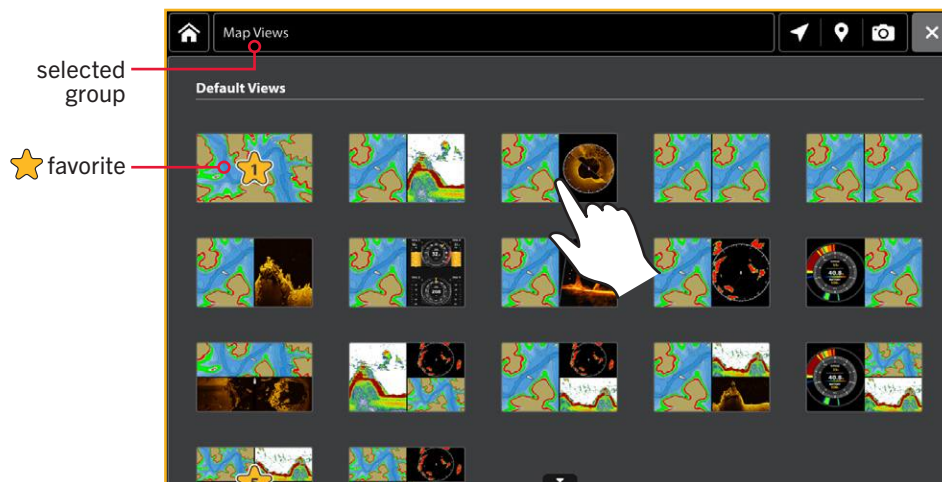
The Views tool includes the complete database of available views for your fish finder.

1. From the Home screen, tap the Views tool.
2. Tap a View group.
3. Tap a View to display.

Opening a View from the Views Tool



Selecting a View



VIEWS AND THE MENU SYSTEM

DISPLAY A VIEW FROM THE FAVORITES TOOL >

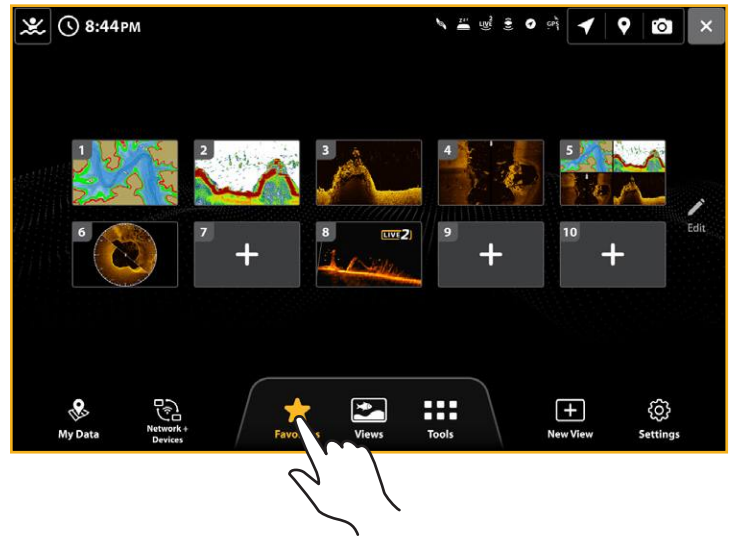
The Favorites tool displays all of your saved favorite views for your fish finder. Use the Favorites tool to edit your favorite views at any time.

1. From the Home screen, tap the Favorites tool.
2. Tap a Favorite View to display

OR

Tap an open box to select a new favorite from the groups of views or create a new view. See ***Save a View to the Favorites Tool*** for more information.

Opening a View from the Favorites Tool

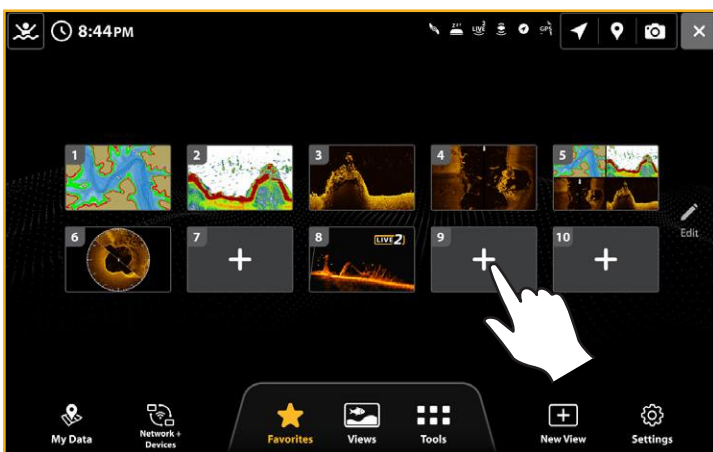


SAVE A VIEW TO THE FAVORITES TOOL >

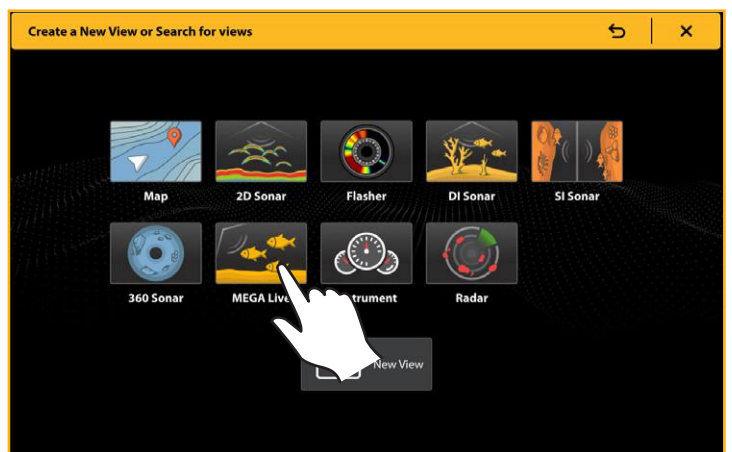
1. Open the Favorites tool.
2. Tap an open box or select Edit.
3. Tap a View Group.
4. Tap a View to display.

Favorites seen on the Home Screen and within the Side Bar are the same.

Saving a New Favorite View



Selecting a New Favorite View



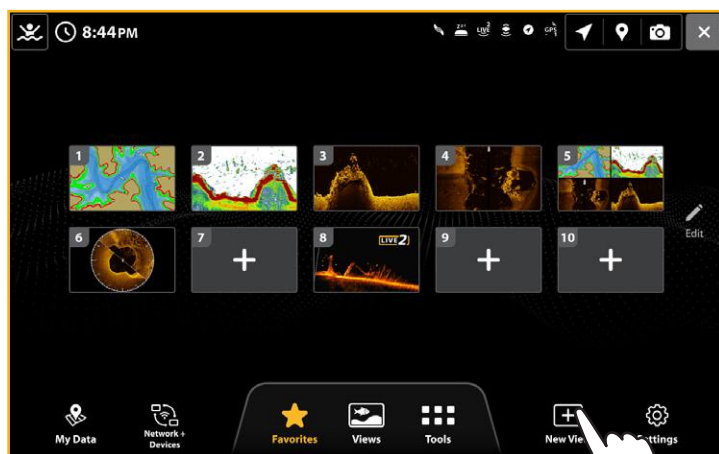
VIEWS AND THE MENU SYSTEM

CREATE A NEW VIEW »

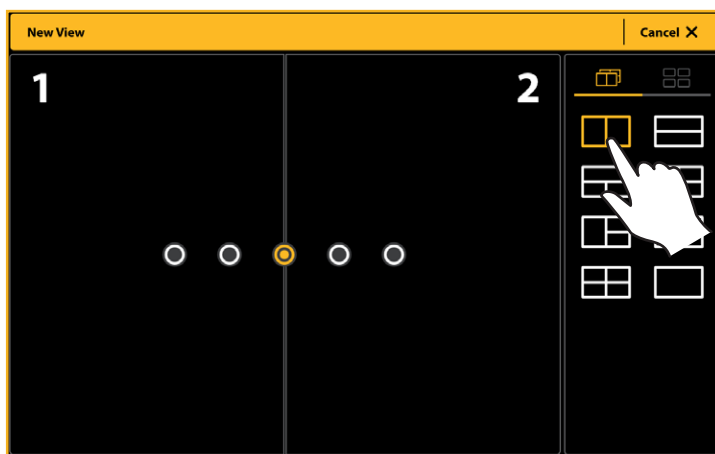
Customize your own view using the New View tool. Use the New View tool to change the type of data that is displayed in the view and how many panes are displayed.

1. From the HOME screen, select New View.
2. Select a Pane Layout from the Layout tab.
3. Tap a circle to adjust the pane size.
4. Tap a pane to highlight it, and select an application from the Application tab.
5. Repeat Step 4 for each pane.
6. Tap Save.

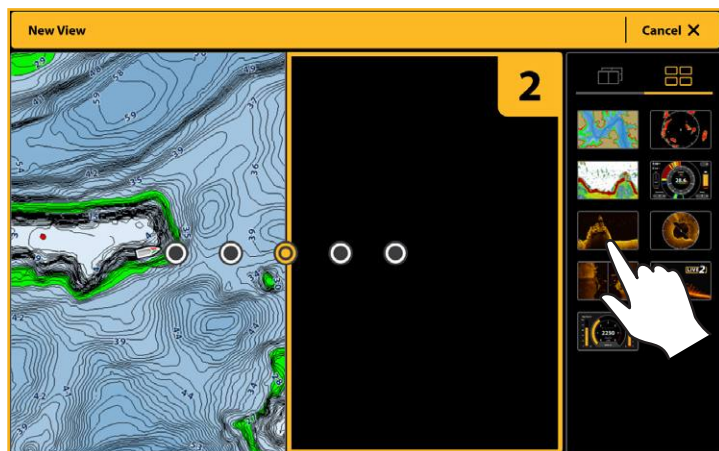
Selecting a New View



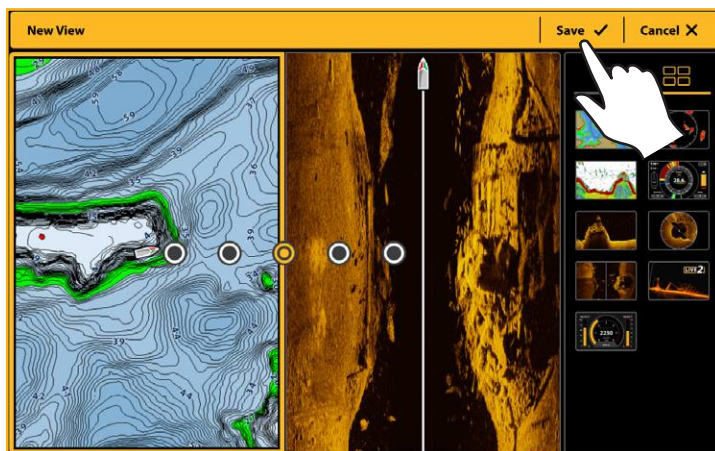
Selecting a Pane Layout



Selecting the Application Type



Saving a New View

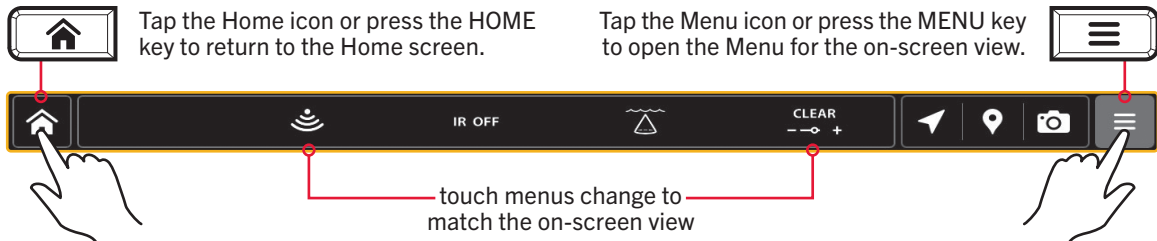


VIEWS AND THE MENU SYSTEM

TOP BAR

The Top Bar is located at the top of each View screen. It changes to match the on-screen view and operation mode.

In the following illustration, the information in the Top Bar corresponds with the Sonar View displayed on-screen. You can tap an icon in the Top Bar to open a menu, return to the Home screen, close a menu, or make a selection. You can also use the corresponding keys.



MENU SYSTEM

The X-Press Menu displays menu options for the on-screen view and operation mode (such as navigation). In a multi-pane view, the X-Press Menu options are determined by which pane is selected.

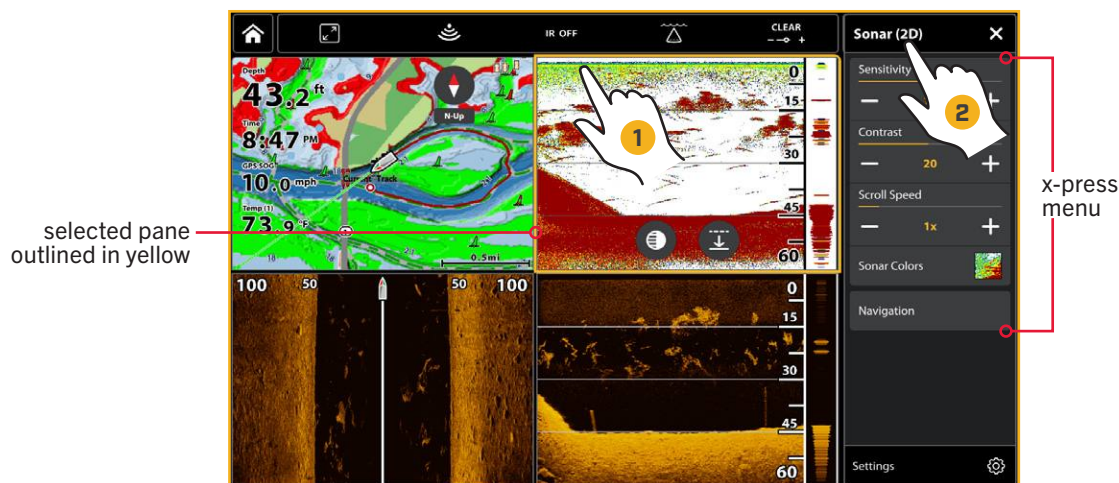
Open an X-Press Menu

1. With a view displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU  key.

Open an X-Press Menu in a Multi-Pane View

1. With a Multi-Pane View displayed on-screen, tap a pane. The selected pane is outlined with a yellow box.
2. Tap the Menu icon in the Top Bar, or press the MENU  key.

Opening an X-Press Menu for a Selected Pane



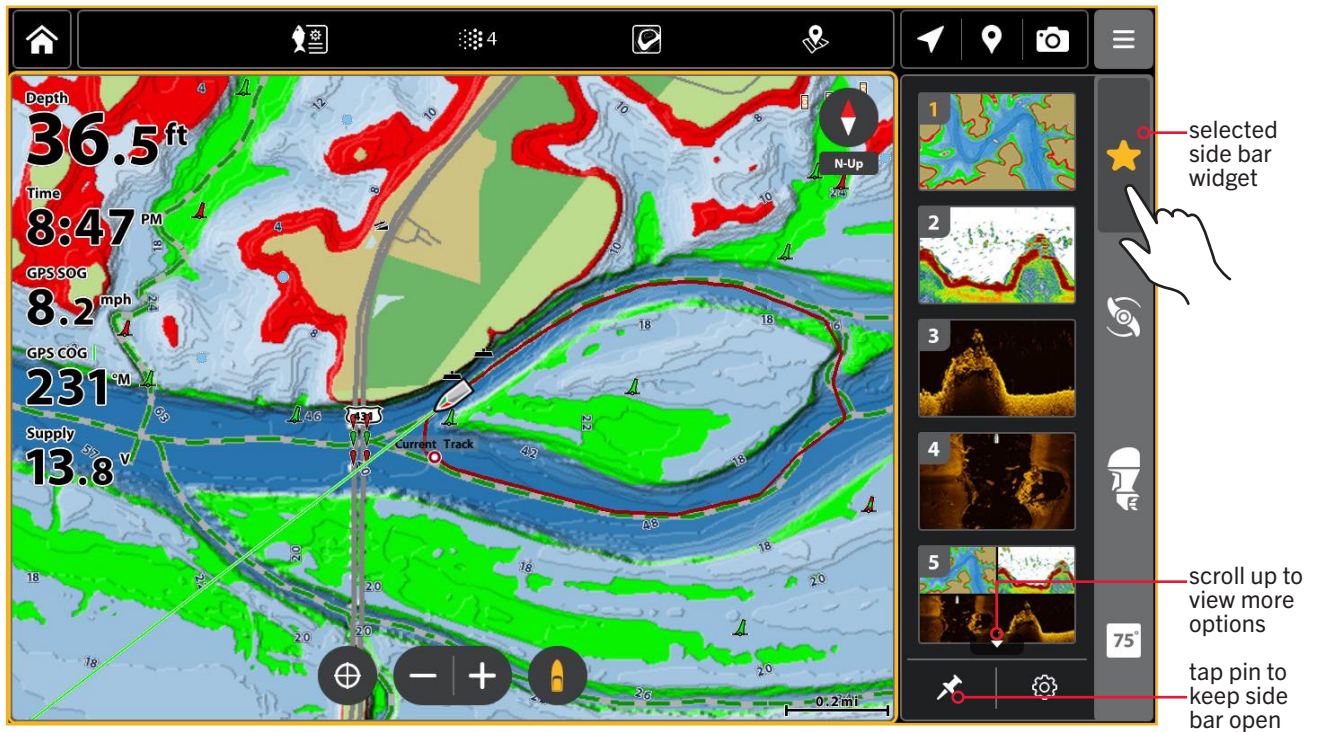
VIEWS AND THE MENU SYSTEM

SIDE BAR WIDGETS

The Side Bar includes widgets that allow you to quickly access your favorite views, data bars, and digital remotes for networked accessories, like the Advanced GPS Wireless Remote.

The Side Bar is set to be minimized. Tap the Side Bar to view the widgets and tap the Pin icon to keep the Side Bar open. See **View Settings Menu: Turn the Side Bar On/Off**.

Opening a Side Bar Widget



VIEWS AND THE MENU SYSTEM



Available Side Bar Widgets

When you connect an accessory to the fish finder, a related widget may also be displayed in the Side Bar.

Icon	Name	Function
	Favorite Views	Allows you to create a list of your favorite views. There are two tabs of favorite views. Use the widget to quickly display your favorite views (see Views). These favorites are linked to the favorites selected from the Home screen.
	Data Bar	Displays the standard Data Bar with data box readouts. There are two tabs and each data box can be customized (see Views: Understand the Data Box Digital Readouts).
	Trolling Motor*	Displays the trolling motor digital remote.
	Talon*	Displays the Talon digital remote, which includes quick access menus to deploy and retract the Talon, change the anchor mode, turn the work light on/off, etc.
	Raptor*	Displays the Raptor digital remote, which includes quick access menus to deploy and retract the Raptor, change the anchor mode, and adjust deployment speed.
	Engine	Displays engine data via a NMEA 2000 connection.
	Audio*	Displays the audio settings for a connected audio accessory.
	Audio Fusion*	Displays the audio settings for a connected Fusion radio accessory.

**separate purchase accessory*



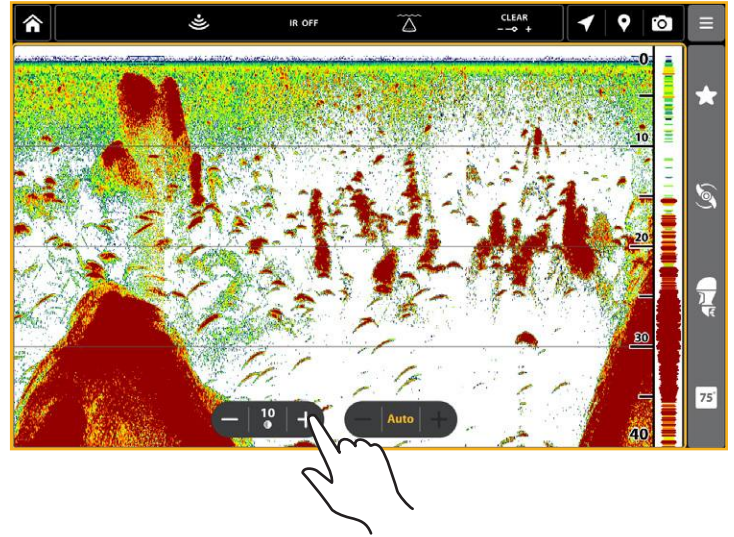
VIEWS AND THE MENU SYSTEM

IN-PANE BUTTONS »

The In-Pane buttons are on-screen touch controls that allow you to make quick adjustments for settings like sensitivity and range directly on the active sonar or map view.

The In-Pane buttons are set to be displayed. To hide the In-Pane buttons, see **View Settings Menu: Turn the In-Pane Buttons On/Off**.

Using an In-Pane Button



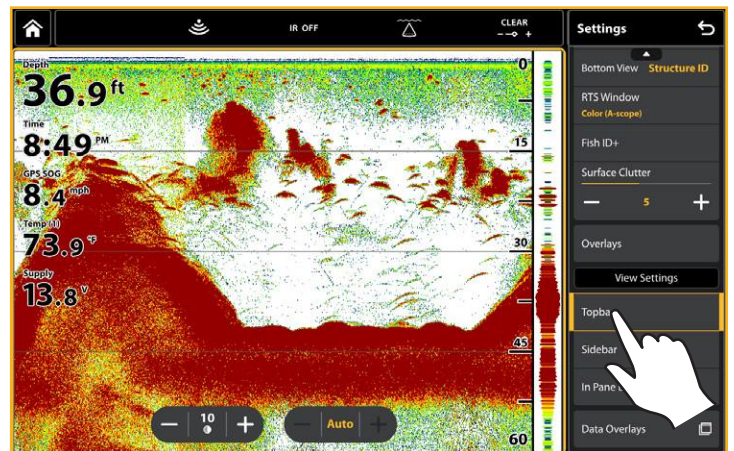
THE VIEW SETTINGS MENU »

The View Settings menu provides options to show or hide features on the selected view, including the Top Bar, the Side Bar and the In-Pane Buttons.

» Open the View Settings Menu

1. With a view displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key.
2. Tap Settings, and scroll down to View Settings.

Changing the View Settings



VIEWS AND THE MENU SYSTEM

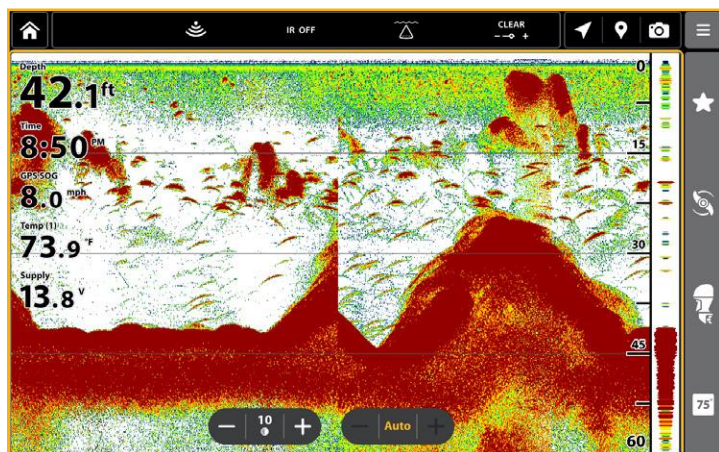
› Turn the Top Bar On/Off

To maximize the size of your application, use the following directions to hide the Top Bar.

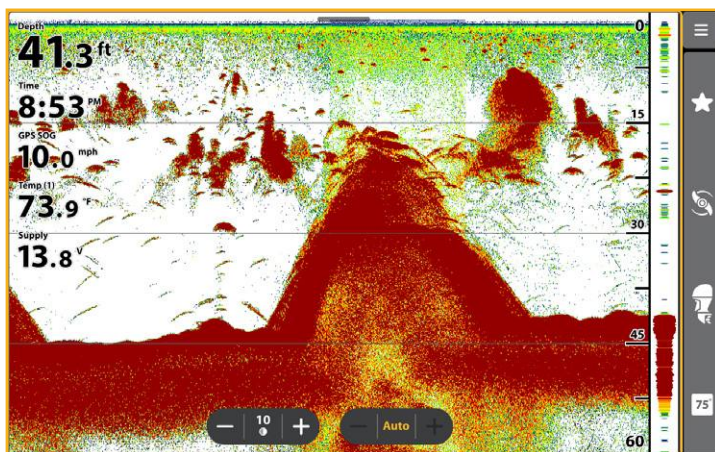
1. With a view displayed on-screen, tap the Menu  in the Top Bar, or press the MENU  key.
2. Tap Settings, and scroll down to View Settings.
3. Select Top Bar.
4. Tap the On/Off toggle to turn off the Top Bar.

View the Top Bar when hidden: To view the Top Bar in the hidden state, swipe down on the gray bar at the top of the screen. The Top Bar will then stay open, unless you swipe up on the gray bar or select Auto Close On from the View Settings menu.

Sonar View with Top Bar Set to On



Sonar View with Top Bar Set to Off

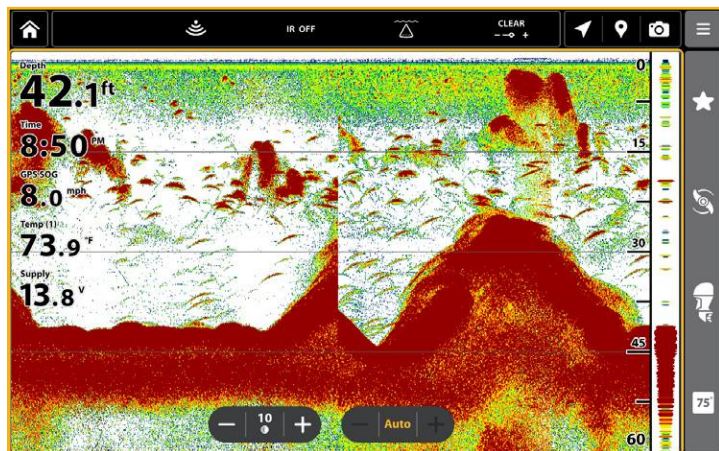


› Turn the Side Bar On/Off

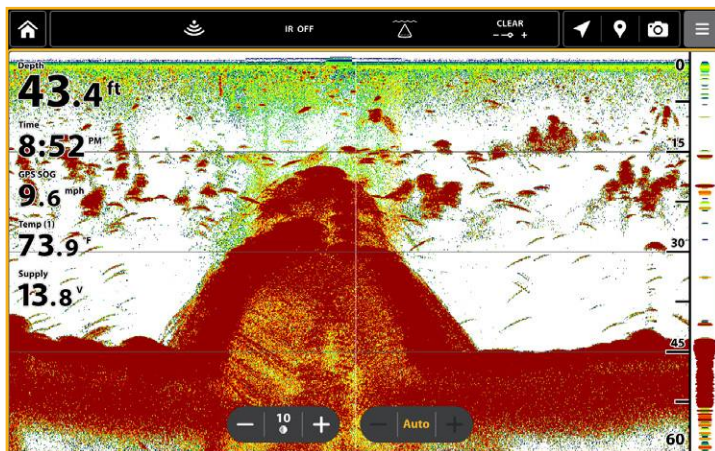
To maximize the size of your application, use the following directions to hide the Side Bar.

1. With a view displayed on-screen, tap the Menu  in the Top Bar, or press the MENU  key.
2. Tap Settings, and scroll down to View Settings.
3. Select Side Bar.
4. Tap the Sidebar On/Off toggle to turn off the Side Bar.

Sonar View with Side Bar Set to On



Sonar View with Side Bar Set to Off



VIEWS AND THE MENU SYSTEM

Pin the Side Bar Open

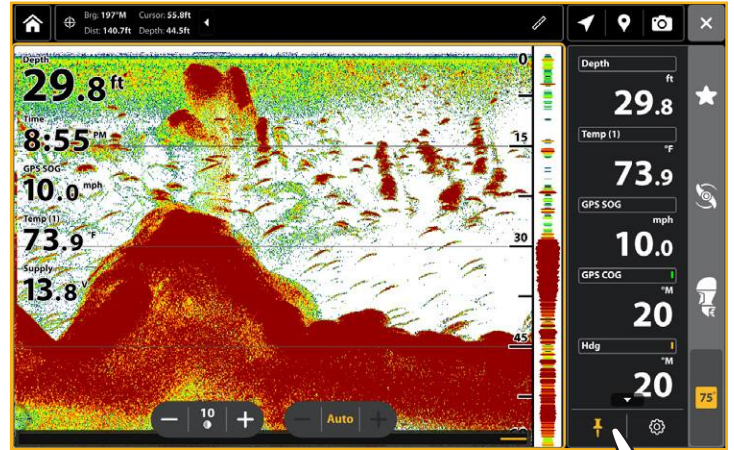
The Side Bar is set to minimize unless it is pinned open. There are two options to pin the Side Bar.

1. With a view displayed on-screen, tap the Menu  in the Top Bar, or press the MENU  key.
2. Tap Settings, and scroll down to View Settings.
3. Select Side Bar.
4. Tap the on/off button, or press the ENTER key, to change the setting.

OR

1. With a View displayed on-screen, tap the Side Bar to open it.
2. Tap the Pin button at the bottom of the screen.

Pinned Side Bar

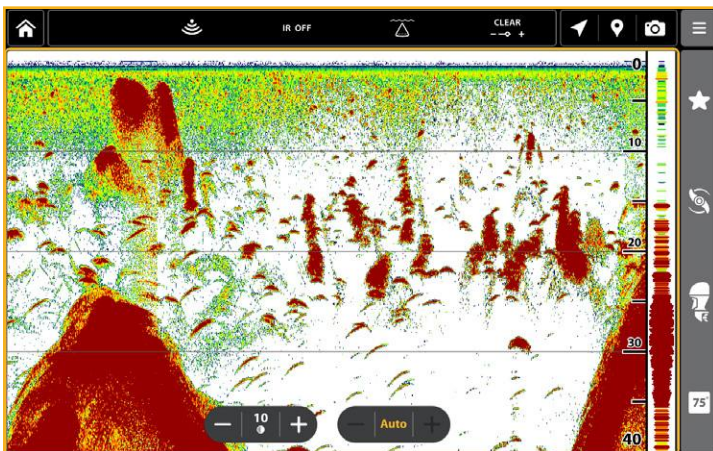


Turn the In Pane Buttons On/Off

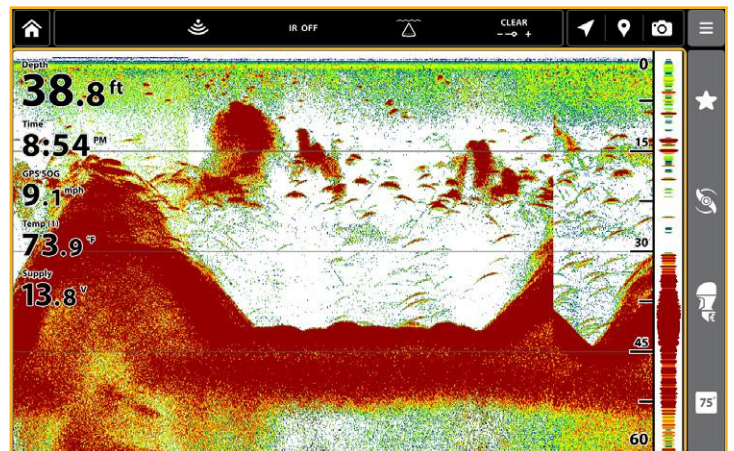
Each View has In Pane Buttons for quick setting adjustments. Use the View Options menu to turn the In Pane Buttons on or off.

1. With a view displayed on-screen, tap the Menu  in the Top Bar, or press the MENU  key.
2. Tap Settings, and scroll down to View Settings.
3. Select In Pane Buttons.
4. Tap, or press the ENTER key, to change the setting. (check mark = visible, blank = hidden).

Sonar View with In-Pane Buttons Set to On



Sonar View with In-Pane Buttons Set to Off



VIEWS AND THE MENU SYSTEM

DISPLAY DATA OVERLAYS

Digital readout data can be displayed as an overlay, and it can be displayed in the data bar. To turn on the data bar, see the next section Display a Data Bar.

Display an Overlay on the View

1. Press and hold an overlay.

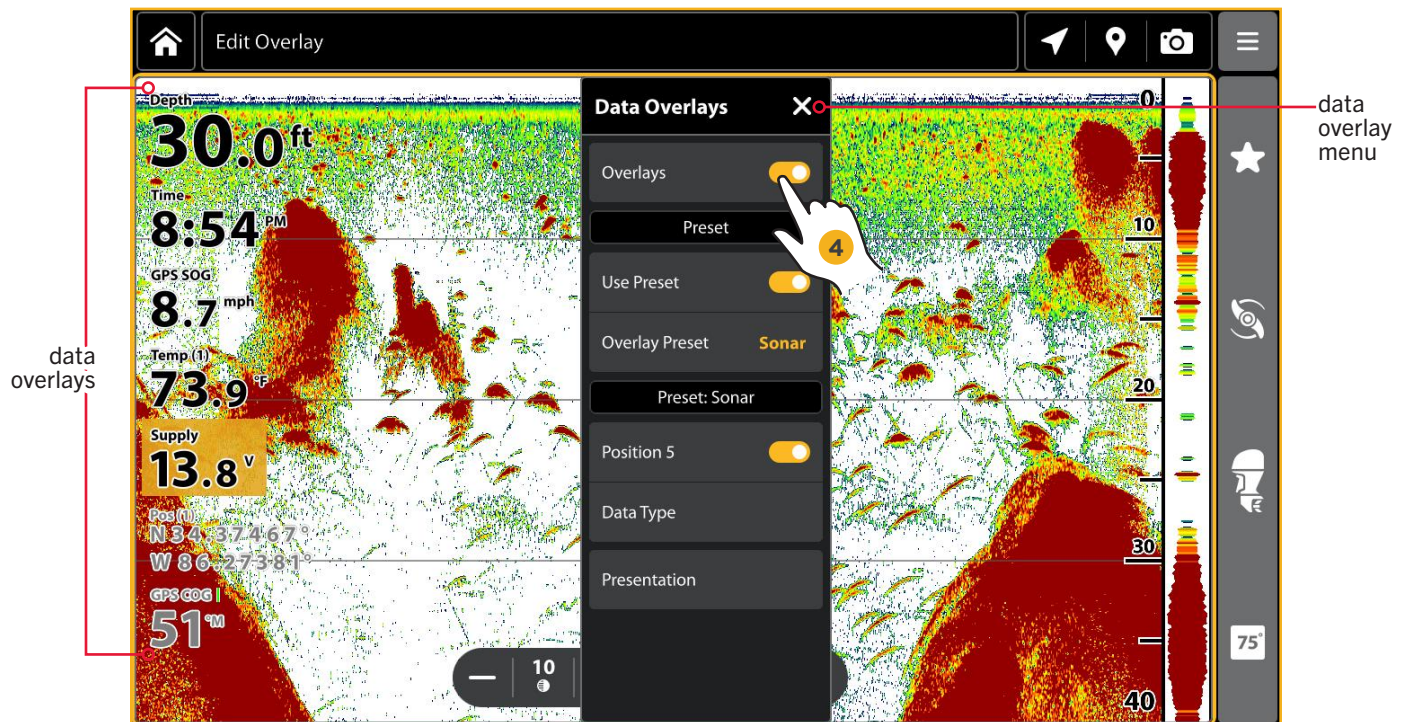
OR

1. With a view displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key.
2. Select Settings.
3. Select Data Overlays. The Data Overlays menu will appear.
4. **Turn On Data Overlays:** Under Overlays, tap the on/off button, or press the ENTER key, to turn it on.
5. **Select a Data Overlay Preset:** Under Preset, select the type of data overlay.

There are presets grouped for certain functions (Sonar, Map, Navigation), and presets grouped by position, size and color (Overlay 1 through Overlay 7).

For example, to display navigation data like Heading, Course Over Ground (COG), Speed, etc., select Navigation.

Display Data Overlays



» Change the Overlay Data

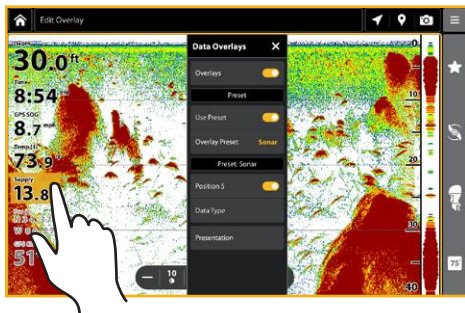
Use the following instructions to customize the data displayed in the data overlay. You can also change the overlay color, size, and position on the view.

1. Press and hold an overlay, or open the Data Overlays menu from the Menu tab (see *Display an Overlay on the View*) and select the overlay to edit.
2. Select to edit a Preset or a Custom overlay. Any changes to the selected overlay will be applied to other views.
3. Tap an overlay position to change. The data box will be highlighted in yellow, and the position will be updated on the Data Overlays menu.
4. Tap Data Type.
5. Select the new data category.
To turn the readout off, tap the on/off button by the Position.
6. Select the data type.
7. Tap the Back button.
8. **Repeat:** Repeat steps 3 through 8 to change more data overlays.

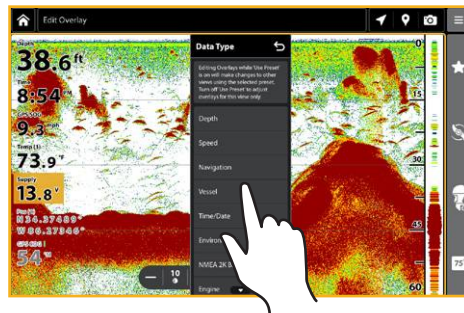
OR

Close: Press the EXIT key until the menu is closed.

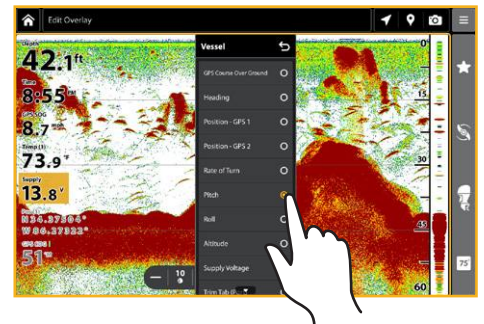
Selecting an Overlay Position



Selecting the Data Type



Selecting the Data Label



» Change the Overlay Appearance

You can also change the overlay color, size, and position on the view.

1. Press and hold an overlay, or open the Data Overlays menu from the Menu tab (see *Display an Overlay on the View*) and select the overlay to edit.
2. Select Presentation.
3. Set the following menus to your preference:

Position	Change the position of the overlay on the screen (top or bottom).
Size	Change the font size (large or small).
Color	Change the font color (white or black).

4. **Back:** Tap the Back icon to return to the previous menu.
- OR

Close: Press the EXIT key until the menu is closed.

VIEWS AND THE MENU SYSTEM

DISPLAY A DATA BAR

Your fish finder allows you to display a data bar with preset data boxes. The data boxes in the data bar can also be changed. To turn on the data overlay, see the previous section *Display Data Overlays*.

Display a Data Bar

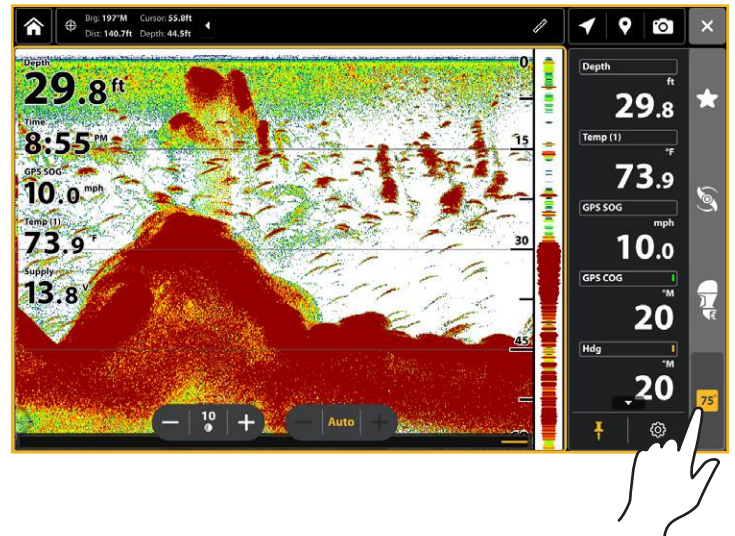
1. With a view displayed on-screen, tap the Side Bar to expand it.
2. Select the Data Bar icon  from the Side Bar. Swipe up to see more data boxes.

To keep the data bar displayed on the view, tap the pin icon at the bottom of the data bar.

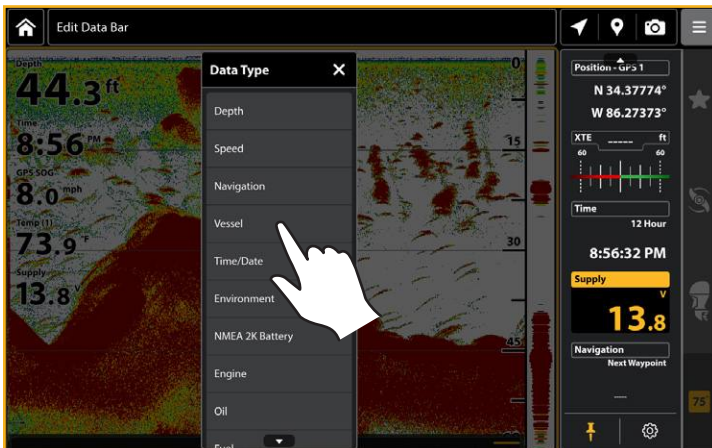
Change the Data Bar

1. With a view displayed on-screen, tap the Side Bar to expand it.
2. Select the Data Bar icon  from the Side Bar.
3. Press and hold the data box to select it.
4. Select a data type from the menu.
5. Select a data label.
6. **Close:** Press the EXIT key.

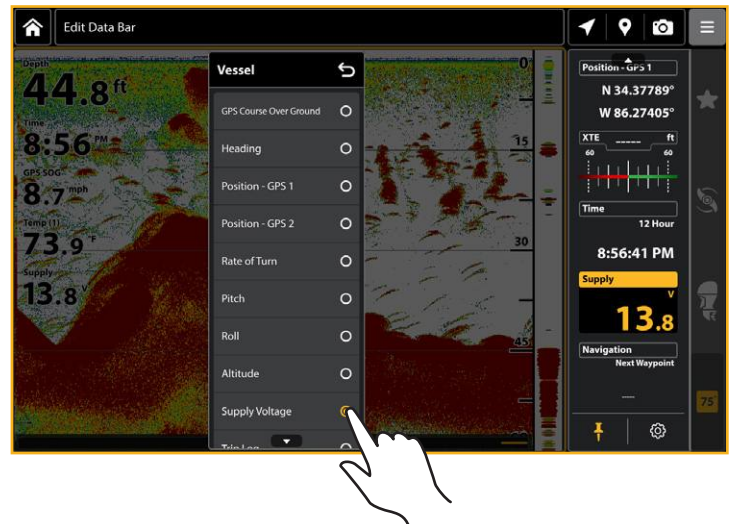
Displaying a Data Bar



Data Bar - Selecting the Data Type



Data Bar - Selecting the Data Label



» Understand Data Bar Digital Readouts

The table below displays the basic data box options that are shown in the Standard data bar and the Navigation data bar, as well as the additional data box options for vessel, wind, and engine. The data box options are determined by the installed equipment and the selected sources on the network. Your fish finder provides a wide variety of data box options, more than the information shown here.

The number on the data label (Temp 1, Temp 2, Temp 3, etc.) corresponds with the source number. For more information about sources and networking, see Installation Information, Set up your *NMEA 2000 Network*, and *Set up your Fish Finder Network: Select Data Sources*.

Label	Name	Description	Data Type
ALT	Altitude	The height measurement above sea level.	Vessel
AWA	Apparent Wind Angle	The direction of wind relative to the bow of the vessel.	Wind
AWS	Apparent Wind Speed	The speed of wind with respect to the speed of the vessel.	Wind
Brg	Bearing	The compass direction from the vessel position to the next waypoint or route point.	Navigation
Brg (End)	Bearing (To End)	The compass direction from the vessel position to the final point in a route.	Navigation
Course	Course	The intended direction of travel measured between the start point and end point.	Navigation
CMG	Course Made Good	The bearing from your starting position to the present vessel position. The goal is to have CMG and Track equal to the same number.	Navigation
COG	Course Over Ground	The current direction the boat is traveling measured in degrees from North. When the COG is equal to Bearing, the boat is said to be on course and will arrive at the destination in the most efficient manner.	Vessel
CTS	Course to Steer	The heading that must be maintained in order to reach the planned destination.	Navigation
Depth (#)	Depth	The depth of the water from the transducer or digital depth sensor to the bottom. This measurement includes the depth offset setting.	Depth
Dest Wpt ID	Next Waypoint	The next point (waypoint, route point, Man Overboard point, etc.) that the vessel is navigating towards in a route or other navigation mode.	Navigation
DBT	Depth Below Transducer	The depth of the water below the transducer. This measurement does not include the depth offset setting.	Depth
DMG	Distance Made Good	The straight line distance actually traveled between the start position to the current vessel position.	Navigation
DTG	Distance to Go	The distance between the vessel position and the next waypoint or route point.	Navigation
Eng Temp (#)	Engine Temperature	The engine temperature from the engine source.	Engine
Eng Volt (1)	Engine Voltage	The power supplied to the engine source.	Engine
ETA	Estimated Time of Arrival	The estimated time of arrival to the next waypoint on the route.	Navigation

VIEWS AND THE MENU SYSTEM

Label	Name	Description	Data Type
Fuel (#)	Fuel Level	The fuel level of the fuel source.	Fuel
Hdg	Heading	The direction the boat is pointing, measured in degrees. Due to wind and waves, the boat is often traveling in a slightly different direction than its heading. See Course Over Ground (see COG).	Vessel
Heat Index	Heat Index	The perceived temperature derived from air temperature and relative humidity.	Environment
Next Turn	Next Turn	The course of the next route leg with respect to the current heading.	Navigation
Odo	Odometer	The distance traveled.	Vessel
Pitch	Pitch	The rotation angle of the boat from front to back (bow to stern).	Vessel
Position (#)	GPS	The latitude and longitude coordinates of the vessel position based on the GPS receiver installation location.	Vessel
Roll	Roll	The rotation angle of the boat from side to side (port to starboard).	Vessel
ROT	Rate of Turn	The rate at which the boat is turning, measured in degrees per second.	Vessel
RPM	Revolutions Per Minute	The number of engine revolutions per minute.	Engine
SMG	Speed Made Good	The distance from the starting waypoint on the route divided by the time elapsed since starting navigation on the route.	Speed
SOG	Speed Over Ground	The measurement of the boat's progress across a given distance and the speed measurement provided by GPS. SOG is optimal for navigation because accurate destination times can be derived from this measurement.	Speed
STW	Speed Through Water	The measurement of the flow past the boat, which may vary depending on current speed and direction.	Speed
Temp (#)	Water Temperature	The detected water temperature.	Environment
Temp (Air)	Air Temperature	The detected air temperature.	Environment
TTG	Time to Go	The estimated time required to reach the next waypoint on the route. TTG is calculated using the SOG (Speed Over Ground) and DTG (Distance to Go).	Navigation
TWA	True Wind Angle	The wind angle detected when the vessel is stationary.	Wind
TWS	True Wind Speed	The wind speed detected when the vessel is stationary.	Wind
VMG	Velocity Made Good	The speed of travel relative to the next waypoint on the route.	Speed
XTE	Cross Track Error	The straight-line distance of the boat from the intended Track. XTE measures how far the boat is off course.	Navigation

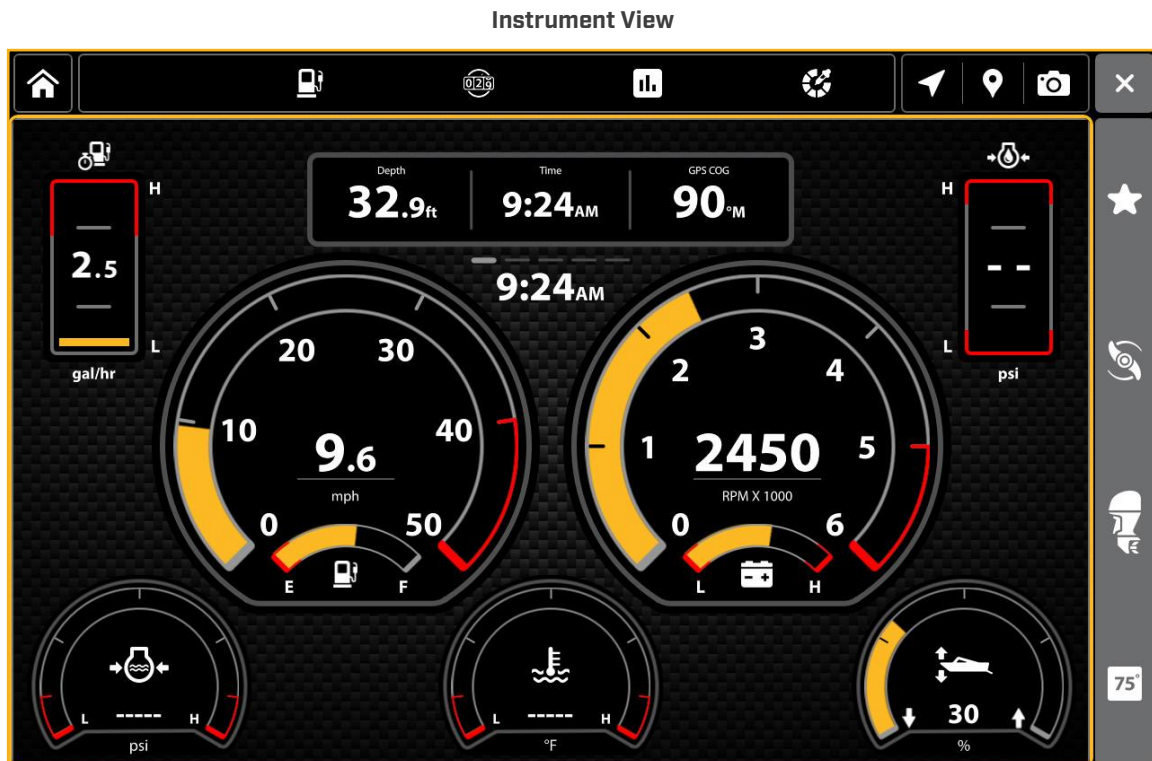
INSTRUMENT VIEW

The Minn Kota fish finder provides Instrument Views in a variety of combinations to display on-screen. You can also customize the gauges, data boxes, and ranges.

NOTICE: The data boxes and gauges must have input from connected and powered equipment. The Engine data boxes must have input from a NMEA 2000 network to provide source data. For more information about sources and networking, see *Installation Information*, *Set up your NMEA 2000 Network*, and *Set up your Fish Finder Network*.

Display an Instrument View

1. Press the HOME  key.
2. Select the Views tool.
3. Under Groups, select Instrument.
4. Tap an Instrument View.



INSTRUMENT VIEW

Customize an Instrument View

In an Instrument View, you can customize the gauges, data boxes, and ranges. You can change each item in the same way you change data boxes in a view. You can also set up warning limits for the selected data range.

NOTICE: The available changes and sources are determined by the selected gauge or data box. As you change data, the available sources are displayed in white, and the unavailable sources are displayed in black.

1. With an Instrument view displayed on-screen, tap the Menu  icon, or press the MENU  key once.
2. Select Edit Instrument.
3. Tap a gauge or data box.
4. Change the Type of Data: Select Data Type. Select a category and a data type from the menus.
5. Change the Displayed Range and Warning Threshold: Select Data Limits. Select a range from the list.

Select a warning (if available), and tap the on/off button to turn it on. Tap the +/- buttons or press the +/- ZOOM keys to set the warning threshold.

6. **Close:** Press and hold the EXIT key.

Selecting a Data Box or Gauge



Selecting a Data Type



Selecting a Data Limit



MAP VIEW

To enable the navigation features, the fish finder must have a GPS fix from an internal or external GPS receiver (see **Getting Started** to check the sensor reception). Some of these features also require a compass/heading sensor to be connected to the fish finder.

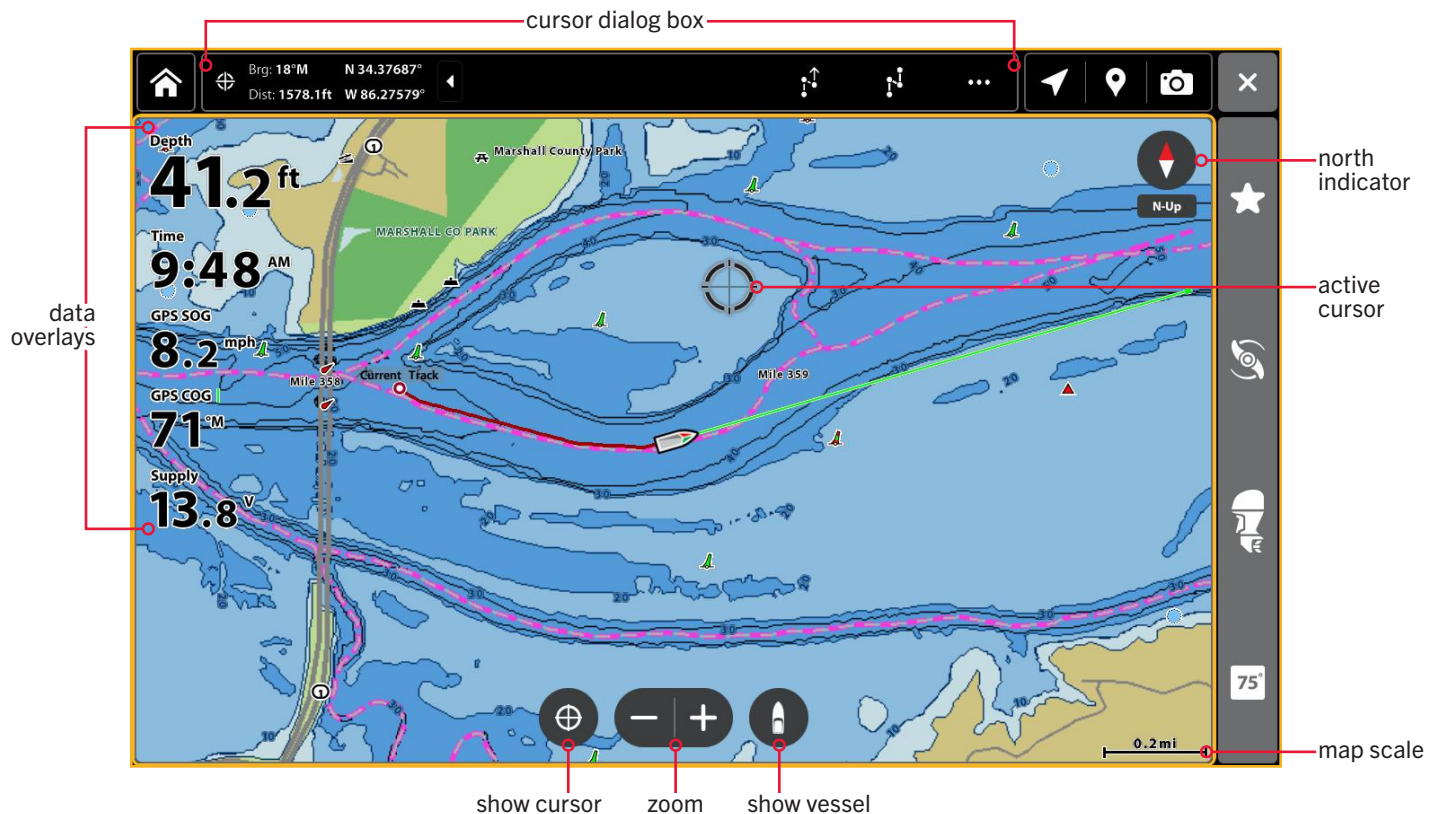
DISPLAY A MAP VIEW

1. Press the HOME  key.
2. Tap the Views tool.
3. Tap Map to view the Map group.
4. Tap a Map view to display.

OR

1. Press the HOME  key.
2. Tap the Favorites tool.
3. Tap a Map view to display.

Map View (Basemap)



MAP VIEW

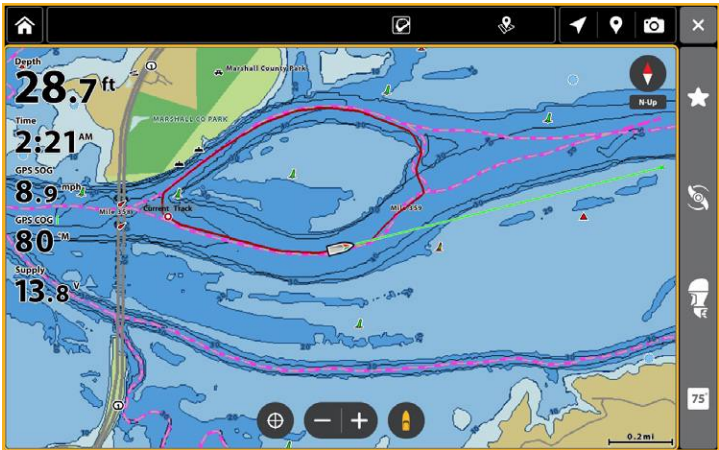
MAP SOURCE OVERVIEW

The Minn Kota fish finder includes a built-in base map. You can also install a microSD or SD map card with additional map information for a particular location (separate purchase required). Minn Kota is the default map source, but you can change the map source at any time (see Using the Built-in Maps).

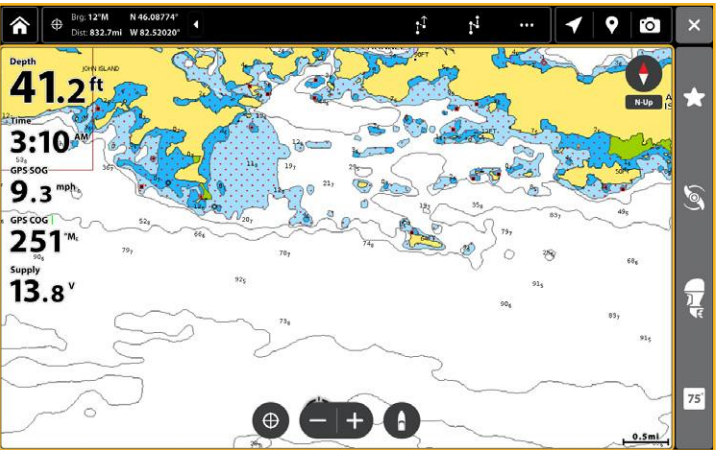
Your fish finder supports the following maps (some require a separate purchase):

Minn Kota	Basemap (built in)
	Minn Kota Maps, CoastMaster, LakeMaster, LakeMaster PLUS, SmartStrike, Aerial View, ChartSelect-downloaded maps and layers AutoChart, AutoChart PRO, AutoChart Live (built in), SI Mosaic
Navionics	Navionics (built in), Navionics Gold, HotMaps, Navionics Platinum+

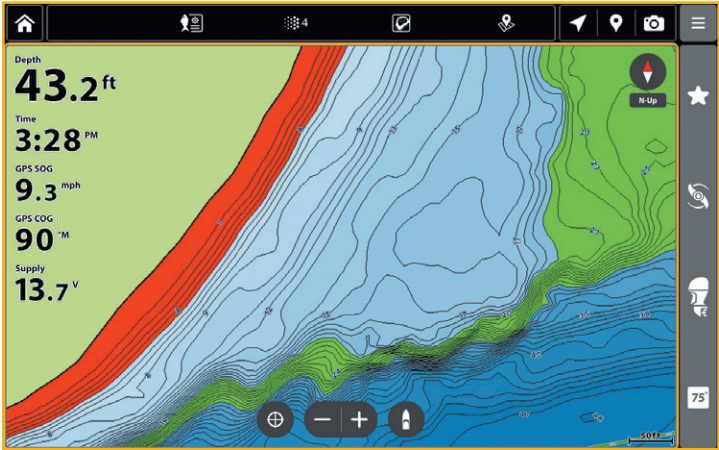
Map Source: Minn Kota Basemap



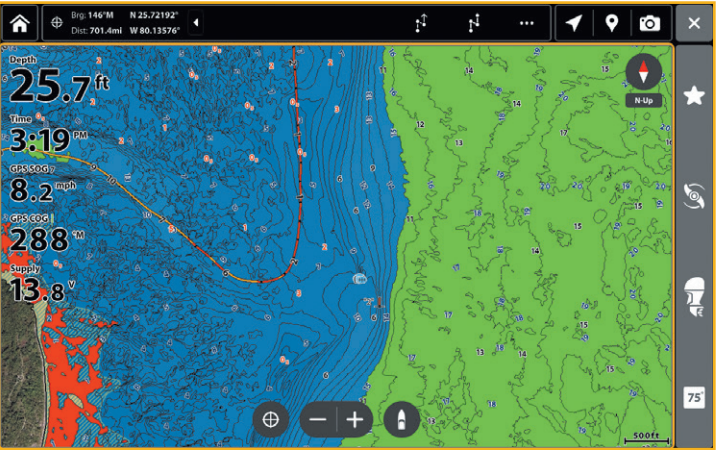
Map Source: Navionics



Map Source: Minn Kota Inland Map Card



Map Source: Minn Kota Coastal Map Card



How the Map Source Affects your Map View Operations

The selected map source influences the menu system. When you change the map source, the menu options for the Map Views change, allowing you to add navigation data, shading, or overlays. Install an SD or microSD map card (separate purchase required) with specific maps or layers to add more detail to your Map views (see *Using Map Cards*).

USING BUILT-IN MAPS

Your Minn Kota fish finder includes built-in maps. Display the built-in maps and add data overlays and map layers to customize your Map view.

Change the Built-in Map Source

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Under System Settings, select Map Source.
4. Select between Minn Kota and Navionics.

Minn Kota Maps

When Minn Kota is selected as the map source, you can use the system defaults, or you can set the menu settings to your preference. You can use the built-in Minn Kota Basemap or a Minn Kota VX Map Card (see *Using Map Cards*).

1. Select Minn Kota as the map source.
2. Under Minn Kota Maps, select Basemap or Legacy Map Cards.

Minn Kota Basemap	Select the Minn Kota Basemap to display contour data and navigation aids, including hazards, buoys, daymarkers, marinas, and other points of interest. The Basemap also shows depth markings and spot soundings (for coastal areas).
Legacy Map Cards*	Select the Legacy Map Card to display the map data from the installed legacy map card. <i>*Required Equipment: Legacy map card. See Using Map Cards for more information.</i>

Change Basemap System Settings

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Under System Settings, select Basemap Settings.
4. Set the following menus to your preference:

Text Size	Adjust the setting to change the size of font used in the Basemap.
Symbol Size	Adjust the setting to change the size of the symbols used in the Basemap.

MAP VIEW

Navionics

When Navionics is selected as the map source, you can use the system defaults, or you can set the menu settings to your preference. You can use the built-in map, or you can install an SD map card with additional features. To change Navionics Basemap settings:

- 1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
- 2. Select Settings.
- 3. Under System Settings, select Basemap Settings.
- 4. Set the following menus to your preference:

Easy View	Turn on Easy View to simplify the Map View. The icon size and text size increase for easier viewing.
Dynamic Tides/Currents	Turn on Dynamic Tides/Currents to display an icon on the Map View that indicates the status of the tides and currents. The provided data is affected by the station’s time zone.
Symbols	Select USA or International symbols to display on the Map View.
Map Datum	Use Map Datum to change the map coordinate system used by the fish finder to match those of a paper map. Almost all electronic charts use the WGS84 Map Datum and most likely do not require a setting change. (Default = WGS84)
Chart Offset	Use Chart Offset to move the chart position on-screen and correct a position error in the cartography. Turn on Chart Offset, and use the sliders to adjust the latitude/longitude coordinates. The Chart Offset setting applies to all charts, not just the chart that requires correction.
Chart Boundaries	Turn on Chart Boundaries to display chart boundaries on the Map View. The dotted lines of a chart boundary indicate an area that contains a different map. Use the Joystick to move the cursor within a chart boundary, and press the +ZOOM key to see a closer view of the map.

NOTICE: There are also alarm and display options that are exclusively available for Navionics charts. See *Navigation Alarms Overview* and *Customize the Map View* for more information.

USING MAP CARDS

When you install an SD or microSD map card (separate purchase required), the fish finder automatically chooses the best map to display. If you install more than one SD or microSD card, you can choose which map source you want to use.

Your fish finder may be compatible with an SD or microSD card (depending on your fish finder model). Locate the instructions to install your SD card below and proceed to *Change the Map Source*.

Insert an SD Card

If your fish finder is compatible with SD cards, use the following instructions to install and eject it from the fish finder. If your fish finder is compatible with microSD cards, proceed to the next section below.

- 1. Insert the card into the slot with the label facing left.
- 2. The fish finder automatically chooses the best map to display. If more than one type of SD card is installed, follow the on-screen prompts to select the map source.
- 3. **Remove:** Press the SD card into the slot and then release it. Pull the card from the slot.

› Insert a microSD Card

1. Remove the microSD card slot cover.
2. Position the microSD card so that the label faces up.
3. Insert the card into the slot until it clicks into place.
4. Replace the slot cover so it is secure.
5. **Remove:** Press the card into the slot and then release it. Pull the card from the slot.



CAUTION

Do not leave the card slot cover open. The slot cover should always be closed to prevent water damage to the unit.

CHANGE THE MAP SOURCE ›

When you install an SD card, the map source is changed automatically to match the SD card map source. You can also change the map source using the Settings menu.

When you change the map source, the menu options for the Map Views also change, allowing you to add navigation data, shading, alarms, and more. See each section for details.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Under System Settings, select Map Source.
4. Select the Map Source to display.

› View Map Card Info

Use the following steps to review the information about the installed map card.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Under System Settings, select Map Source.
4. Select Map Card Info.
5. Select between SD Card (1) and SD Card (2).

› Select between Multiple Map Cards

If you have more than one map card in your fish finder or shared across the network, select which card you want to use.

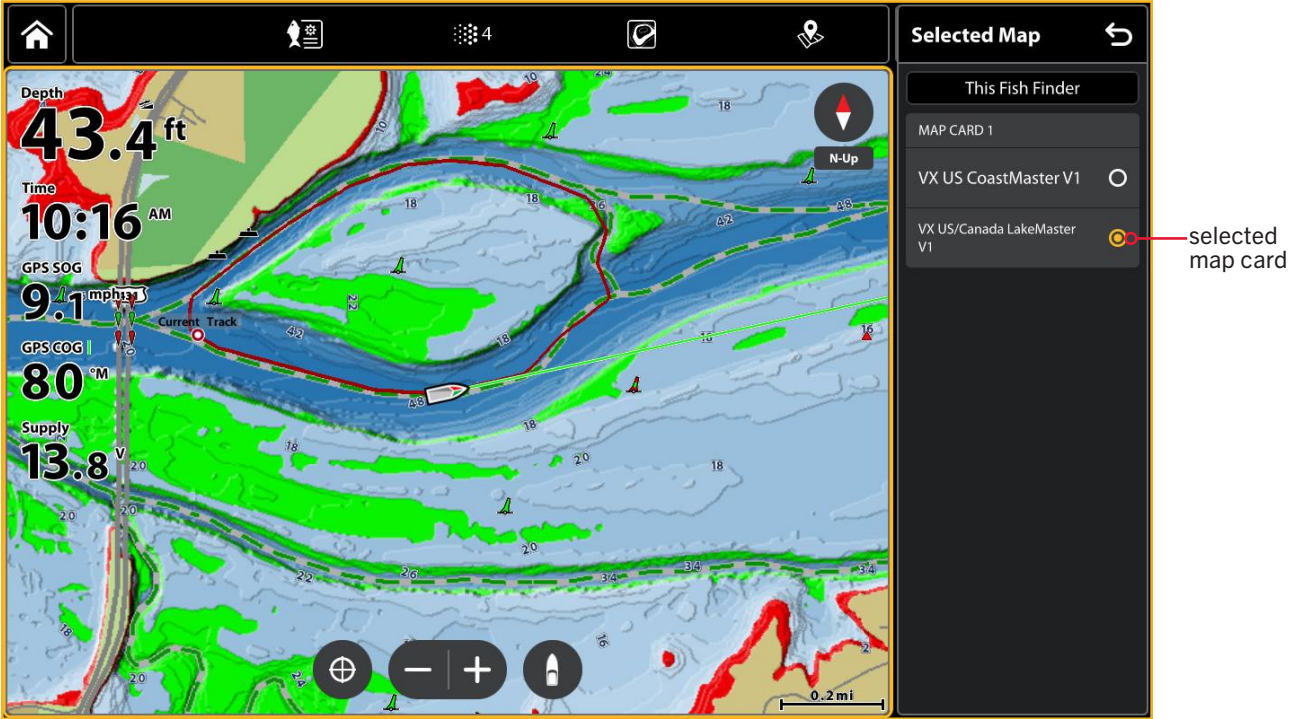
NOTICE: XPLORE fish finders come with LakeMaster VX and CoastMaster VX maps on one card. Use these instructions to switch between LakeMaster and CoastMaster.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Selected Map.
3. Select the map card you want to display.
4. Select Map Card Info.
5. Select between SD Card (1) and SD Card (2).

MAP VIEW



Selecting a Map



Map Settings

Minn Kota Map cards have additional Map Settings available.

- 1. With a Map View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Settings.
- 3. Under System Settings, select VX Settings.
- 4. Set the following menus to your preference:

Dynamic Tides/ Currents	Turn on Tides and Currents to review information for the nearest tide and current stations to your present position. <i>*CoastMaster or Coastal map card required</i>
Text Size	Adjust the setting to change the size of font used in the map.
Symbols	Adjust for International or U.S. symbols.
Symbol Size	Adjust the setting to change the size of the symbols used in the map.
Safe Depth	Select this menu to set the minimum depth level for your vessel and to turn on highlights for hazards shallower than that level.



ADJUST THE WATER LEVEL OFFSET »

It is important to note if the water level is higher or lower than normal for the selected lake. For example, if the water level is down 3 feet, set the Water Level Offset to -3. Depth labels on the Contour Lines will adjust based on the Water Level Offset setting.

- 1. From the Map Menu, select Water Level Offset.
Tap the on/off button, or press the ENTER key, to turn it on.
- 2. Tap the +/- buttons or press and hold the slider to adjust the setting.
 - If the water level is higher than normal, set a positive amount.
 - If the water level is lower than normal, set a negative amount.
 - If the water level has not changed (normal), turn Water Level Offset off.

CHANGE THE MAP ORIENTATION »

Select your display preference: North-Up, Head-Up, Course-Up, etc.

- 1. Map Menu > Settings > General > Orientation.
OR
Tap the Orientation icon  in the Map View.

Head Up	The vessel’s current heading points up, and the map rotates around the vessel icon so it always points up on the view. The heading is provided by the connected compass/heading sensor. If a compass is not connected, the vessel will be oriented according to the COG (Course Over Ground).
North Up	The map is oriented with North up on the display, and the vessel rotates according to its heading or COG (Course Over Ground).
COG Up	The map is displayed with the vessel oriented in a fixed position pointing up, and the map rotates according to the vessel COG (Course over Ground).
Course Up	During navigation, the intended course or route leg is shown at the top of the view. Objects ahead of the vessel are drawn above the vessel. When the vessel is not navigating, the current heading is displayed.

CUSTOMIZE THE MAP VIEW

The settings in this section are optional. You can use the default settings for the map appearance and map source, or you can customize the Map View for your navigation preferences. See **Views** for more information.

CUSTOMIZE THE MINN KOTA MAP DISPLAY >

When Minn Kota is selected as the map source, additional menus to customize the map display are added to the menu system.

SELECT A MAP PRESET >

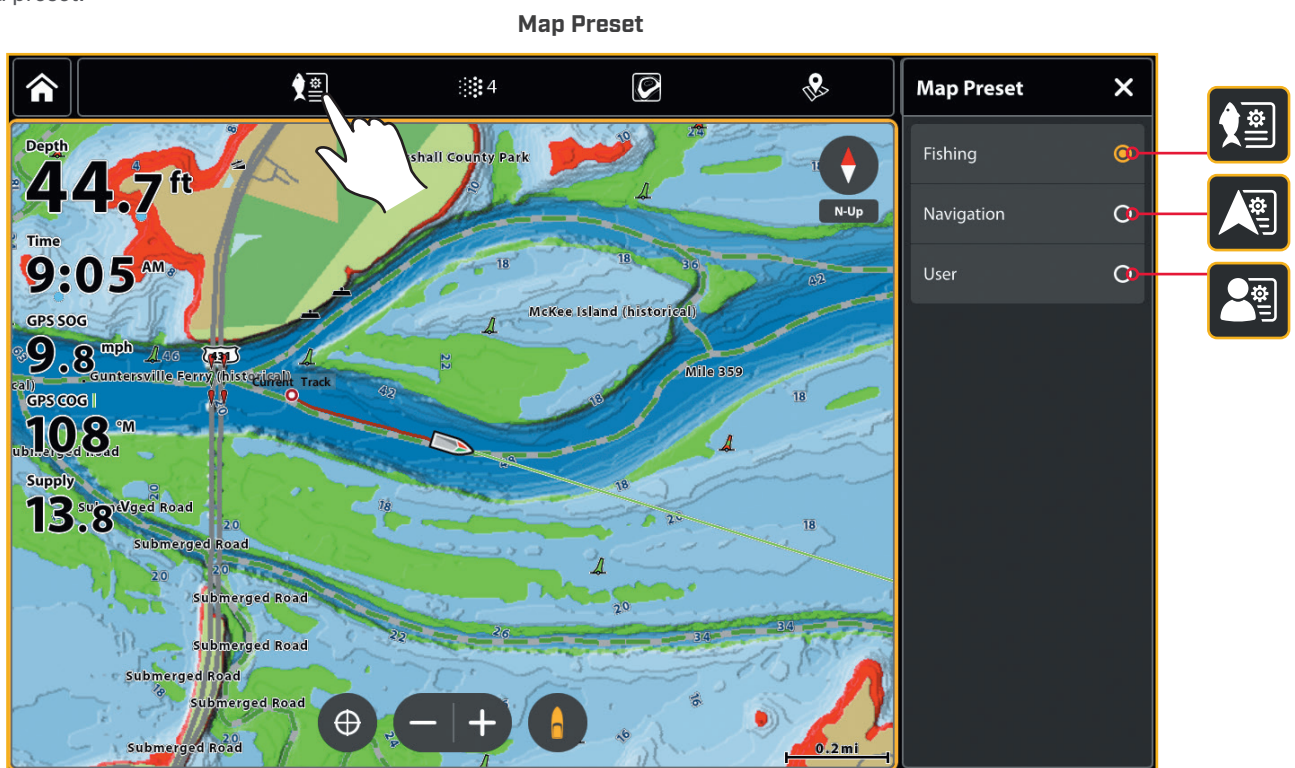
Use Map Presets to quickly alternate between settings. You can use the default Fishing or Navigation settings provided, or you can create a custom User preset with your preferences. The Fishing and Navigation presets are also fully customizable. You can restore each preset back to its default settings at any time.

1. With a Map View displayed on-screen, tap the Map Preset icon in the Top Bar.

OR

From the Map Menu, select Settings > Map Preset.

2. Select a preset.

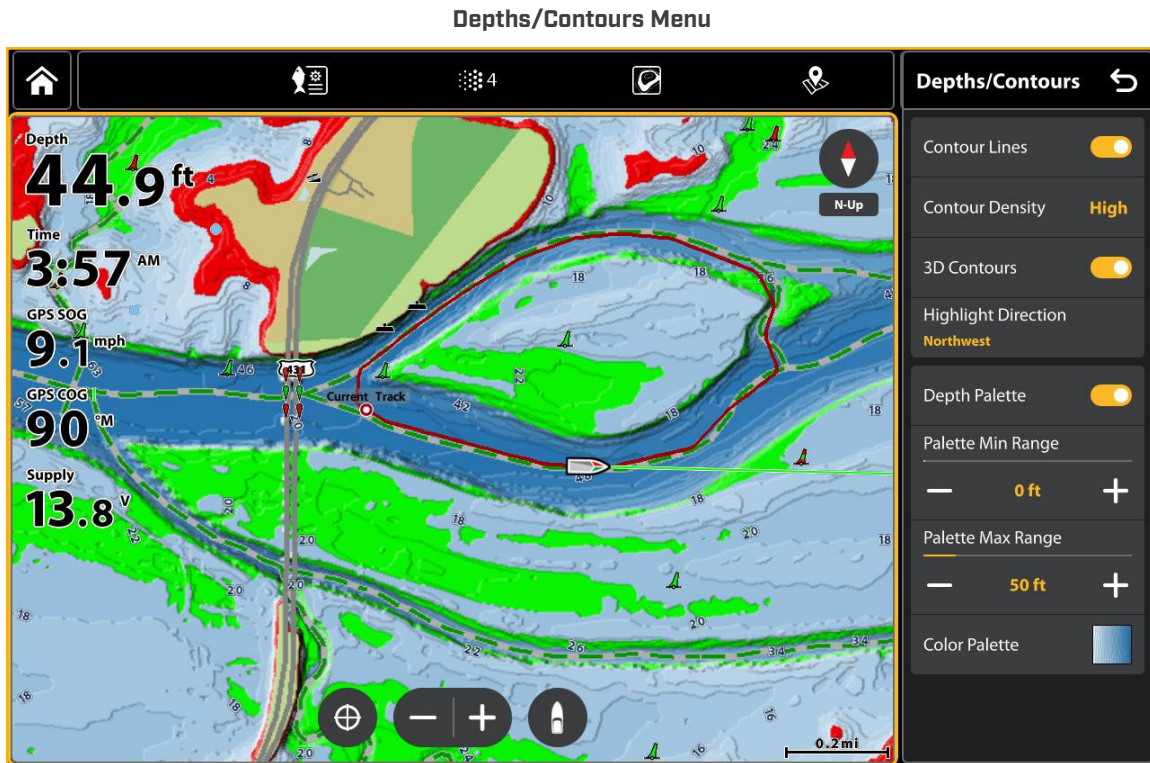


DEPTHS/CONTOURS MENU

Open the Depths/Contours Menu

You can display or hide the contour lines on the map, and you can adjust the distance between each contour line.

1. From the Maps Menu, select Settings.
2. Select Depths/Contours.



Show/Hide Contour Lines

Show or hide water contour lines in Map Views.

1. From the Depths/Contours Menu, select Contour Lines.
2. Tap the on/off button, or press the ENTER key, to show or hide contour lines.

Adjust the Contour Density

Use Contour Density to adjust the density of the contour lines displayed on the map. You can set the density to High, Medium, or Low. Contour lines must be turned on to adjust this feature.

NOTICE: Contour density can only be customized in the Fishing and User presets. Navigation contour density cannot be changed.

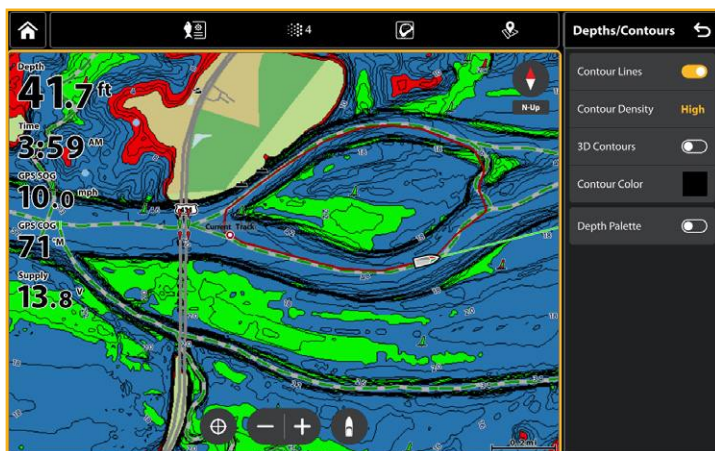
1. From the Depths/Contours Menu, select Contour Density to open the submenu.
2. Select a Contour Density setting.

CUSTOMIZE THE MAP VIEW

Adjusting the Contour Density (High)



Adjusting the Contour Density (Low)



Change the Contour Lines Color

Contour lines must be turned on to adjust this setting.

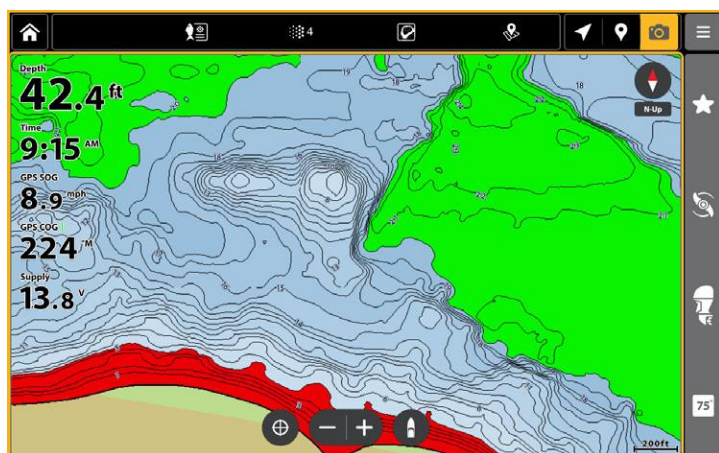
1. From the Depths/Contours Menu, select Contour Color to open the submenu.
2. Select a color. Tap, or press the ENTER key, to turn it on.

3D Contours

Switch between 2D contour lines and 3D contour imaging for your preferred view.

1. From the Map Menu, select Settings > Depth/Contours and then toggle 3D Contours on or off.

2D Contour



3D Contour



Show/Hide Depth Palette Colors

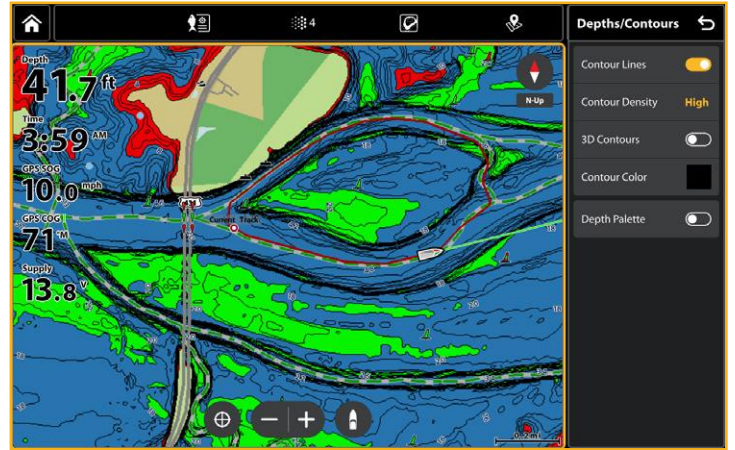
Turn depth area colors in the Map Views Off or On.

1. From the Depths/Contours Menu, select Depth Palette.
2. Tap the on/off button, or press the ENTER key, to show or hide depth colors.

Depth Palette [ON]



Depth Palette [OFF]



Adjust the Palette Range

You can adjust the range of data shown on the map by changing the minimum range and maximum range on the display. The range you select affects how the depth colors are displayed. For best results, set a narrow depth range threshold.

1. From the Depths/Contours Menu, select Palette Min Range.
2. Press and hold the slider, or press and hold the ENTER key, to adjust the setting.
3. Select Palette Max Range.
4. Press and hold the slider, or press and hold the ENTER key, to adjust the setting.

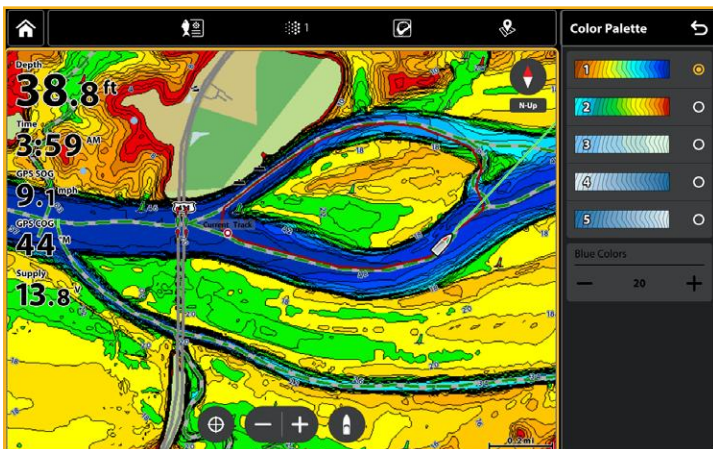
Change the Color Palette

The Color Palette menu changes the colors used to display the map.

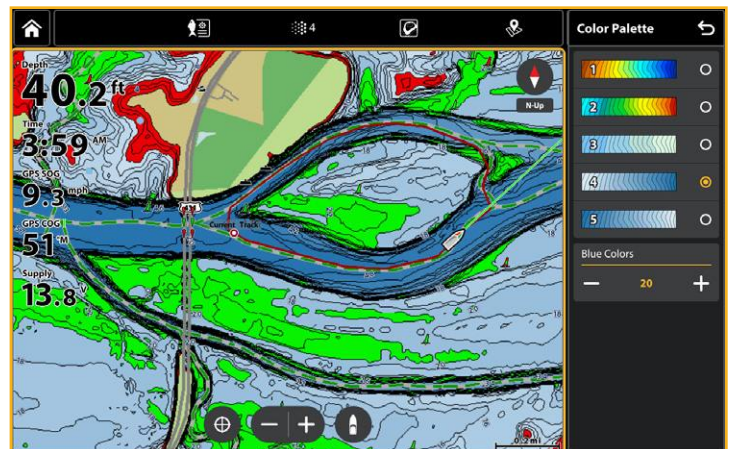
1. From the Depths/Contours Menu, select Color Palette.
2. Select a color palette.
3. If you have selected a blue color palette, you can adjust the number of shades displayed. Select Blue Colors, and press and hold the slider, or press and hold the ENTER key, to adjust the setting.

QUICK TIP! You can also change this setting by tapping the color palette  1 icon in the Top Bar. See *Using the Top Bar* for more information.

Color Palette 1



Color Palette 4



CUSTOMIZE THE MAP VIEW

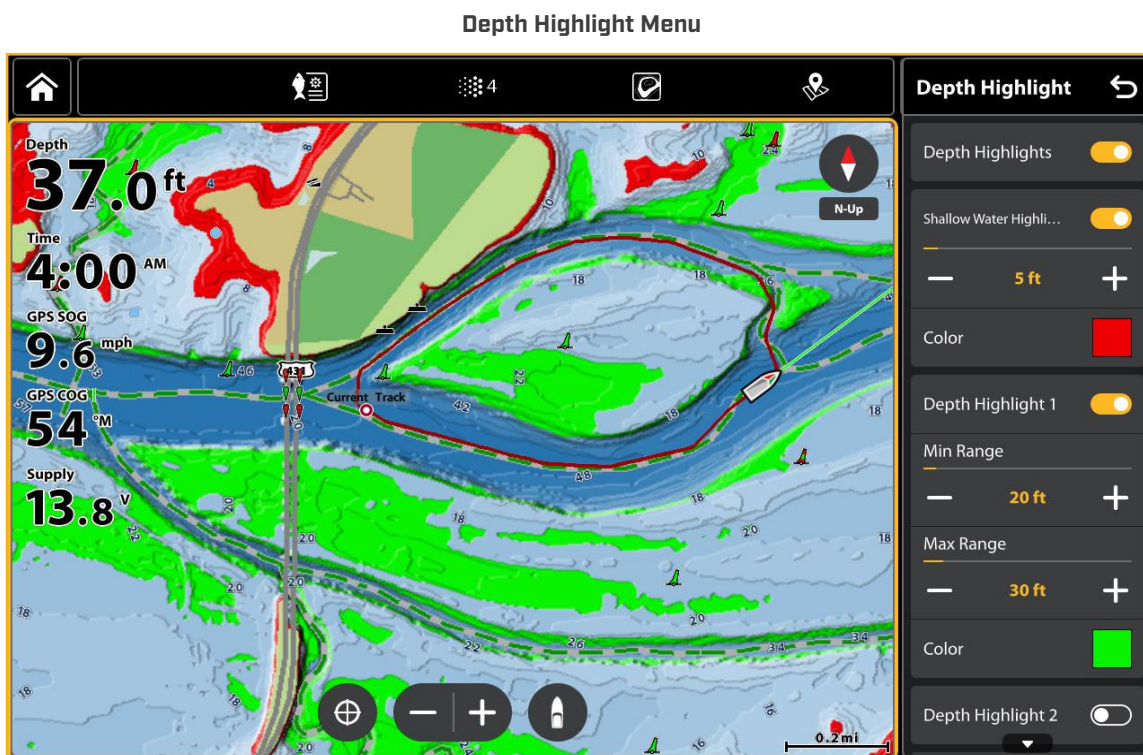
SET DEPTH HIGHLIGHTS >

Highlight deep and shallow waters in Map View and Map Combo Views using the following features.

NOTICE: Changing these settings will affect all presets, not just the active preset.

> Open the Depth Highlights Menu

1. With a Map view displayed on-screen, tap the Depth Highlight  icon in the Top Bar.
- OR
1. From the Map Menu, select Settings.
2. Select Depth Highlight.

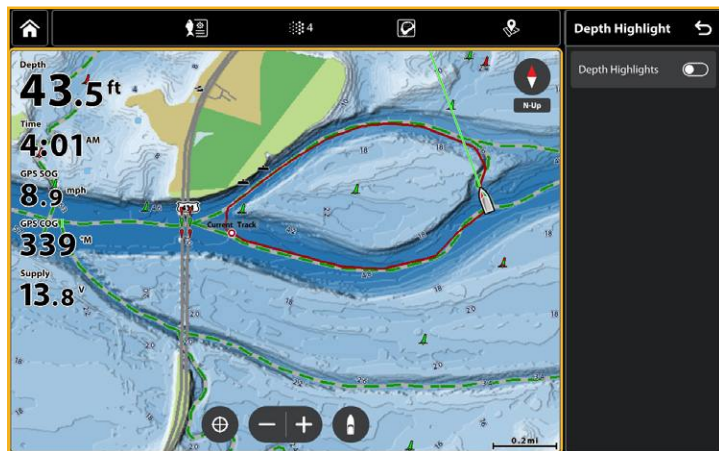


> Highlight a Depth Range

The Depth Highlight Menu allows you to select up to four depth ranges to be highlighted on the map.

1. From the Depth Highlight Menu, select Depth Highlights.
Tap the on/off button, or press the ENTER key, to show or hide depth highlights.
2. With depth highlights turned on, set the depth range for Depth Highlight 1 by selecting Min Range or Max Range.
Press and hold the slider, or tap the +/- buttons, to adjust the setting.
3. To turn on an additional highlight, select Depth Highlight 2 and tap the on/off button, or press the ENTER key.
4. Repeat Step 2 with Depth Highlight 2 to adjust the depth range.
5. Repeat Steps 2-3 for each additional depth highlight (up to four).

Depth Highlight (OFF)



Depth Highlight (ON)



Change the Highlight Color

If you've set Depth Highlights and they're not easy to see with the color palette you've selected, you can change the Highlight Color.

1. From the Depth Highlight Menu, select the Depth Highlight Color you wish to change.
2. Tap, or use the Cursor Pad/Joystick and Enter key, to select a new color.
3. Repeat these steps for each additional highlight you wish to change.

Orange Depth Highlights



Magenta Depth Highlights



Highlight Shallow Water

The Shallow Water Highlight identifies shallow waters when the depth is equal to or less than the level you set. Depth Highlights must be turned on to enable this feature.

1. From the Depth Highlights Menu, select Shallow Water Highlight.
2. Tap the on/off button, or press the ENTER key, to show or hide shallow water highlights.
3. Press and hold the slider, or tap the +/- buttons, to adjust the highlighted depth level.

CUSTOMIZE THE MAP VIEW



» Change the Shallow Color

If you’ve set Shallow Water Highlights and they’re not easy to see with the color palette you’ve selected, you can change the Shallow Water Highlight Color.

- 1. From the Depth Highlights Menu, select the Shallow Water Highlight Color.
- 2. Tap, or use the Cursor pad/Joystick and Enter key, to select a new color.

SET SAFE DEPTH LEVELS »

Use the Safe Depth feature to set the minimum depth level for your vessel and to turn on highlights for hazards shallower than that level.

NOTICE: Changing these settings will affect all presets, not just the active preset.

- 1. From the Map Menu, select Settings.
- 2. Select VX Settings.
- 3. Select Safe Depth and press and hold the slider, or press and hold the ENTER key, to set the minimum depth level for your vessel.

Sounding Highlight	Displays soundings shallower than the safe depth in red
Symbol Highlight	Displays hazardous objects shallower than the safe depth with a red outline
Always Show Hazards COG Up	Forces hazardous objects and spot soundings shallower than the safe depth to display even if the map object data is hidden

FILTER MAP OBJECTS »

Use Map Objects to add or hide map details and nav aids on the Map View.

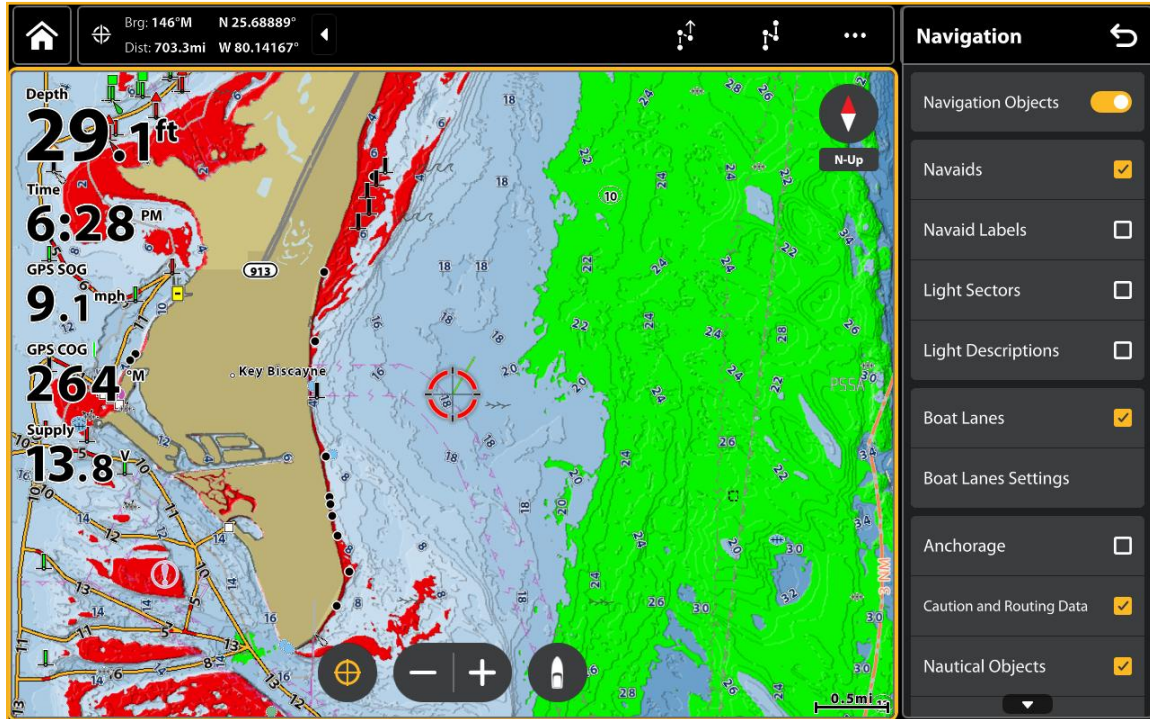
» Open the Map Objects Menu

- 1. From the Map Menu, select Settings.
- 2. Select Map Objects.
- 3. Select one of the following:

Navigation	Shows nav aids and labels, light sectors and descriptions, anchorage, caution and routing data, nautical objects, tides and currents, spot soundings, and oil and gas production areas
Water	Shows wrecks, rocks, obstructions, natural water features, fishing objects, and the nature of the seabed
Land	Shows ports, shoreline objects, roads, points of interest (POIs) and POI labels, and natural land features



Map Objects (Navigation Menu)



Show/Hide Spot Soundings

Spot Soundings are depth measurements shown on the map.

1. From the Map Objects Menu, select Navigation > Spot Soundings.
2. Tap, or press the ENTER key, to show or hide spot soundings. (check mark = visible, blank = hidden)
3. To hide only the spot soundings deeper than a depth you set, select Soundings Filter.
4. Tap the on/off button, or press the ENTER key to enable or disable the filter.
5. Tap the +/- buttons, or press and hold the slider, to adjust the depth level.

Show/Hide Rocks

Spot Soundings are depth measurements shown on the map.

1. From the Map Objects Menu, select Water > Rocks.
2. Tap, or press the ENTER key, to show or hide rocks. (check mark = visible, blank = hidden)
3. To hide only the rocks below a depth you set, select Rock Filter.
4. Tap the on/off button, or press the ENTER key to enable or disable the filter.
5. Tap the +/- buttons, or press and hold the slider, to adjust the depth level.

Show/Hide Tides and Currents

Turn on Tides and Currents to review information for the nearest tide and current stations to your present position.

1. From the Map Objects Menu, select Navigation.
2. Select Tides and Currents.
3. Tap, or press the ENTER key, to show or hide tide and current icons. (check mark = visible, blank = hidden)

CUSTOMIZE THE MAP VIEW

› Show/Hide Dynamic Tides and Currents

Turn on Dynamic Tides and Currents to display an icon on the Map View that indicates the status of the tides and currents. The provided data is affected by the station's time zone.

NOTICE: Tides and Currents must be turned on to enable Dynamic Tides and Currents.

NOTICE: Changing these settings will affect all presets, not just the active preset.

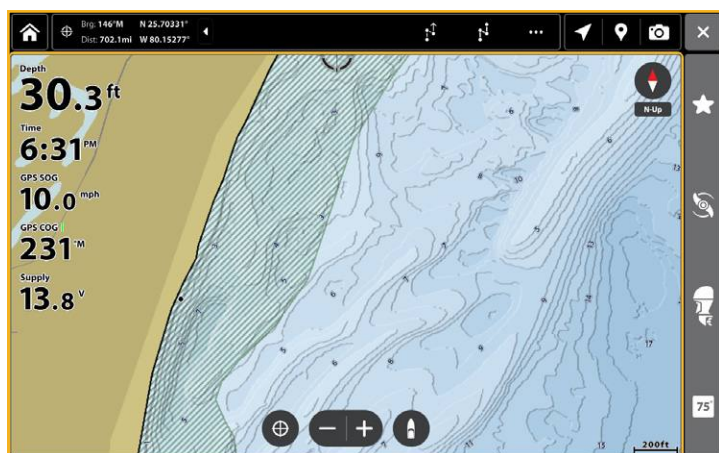
1. From the Map Menu, select Settings.
2. Select VX Settings.
3. Select Dynamic Tides/Currents.
4. Tap the on/off button, or press the ENTER key, to show/hide dynamic tides and currents.

› Show/Hide Drying Areas

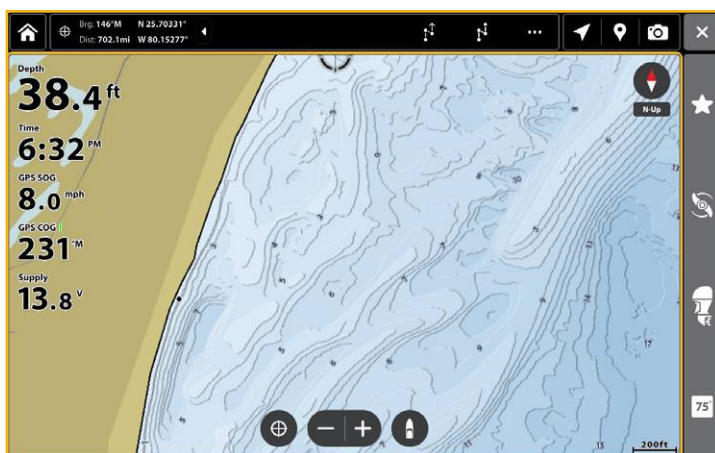
Tidal drying areas are highlighted on your map by a green and tan hatched pattern (Navigation Preset) or in seafoam green (Fishing and User Presets). Drying areas can be turned on and off through the Natural Land Features option.

1. From the Map Objects Menu, select Land > Natural Features.
2. Tap, or press the ENTER key, to show or hide drying areas. (check mark = visible, blank = hidden)

Drying Areas [ON]



Drying Areas [OFF]



MAP LAYERS

Premium map cards unlock additional map layers in Map View and Map Combo Views, including aerial imagery and shaded relief. Layer transparency can be customized to adjust how much detail appears on the map.

- Aerial Imagery can be applied to land only or to both land and water.
- Shaded Relief uses shadows to highlight lakebed features.
- Bottom Hardness, available on Premium coastal maps, uses color shading to show seabed composition, with lighter colors indicating harder bottom and darker colors indicating softer bottom.

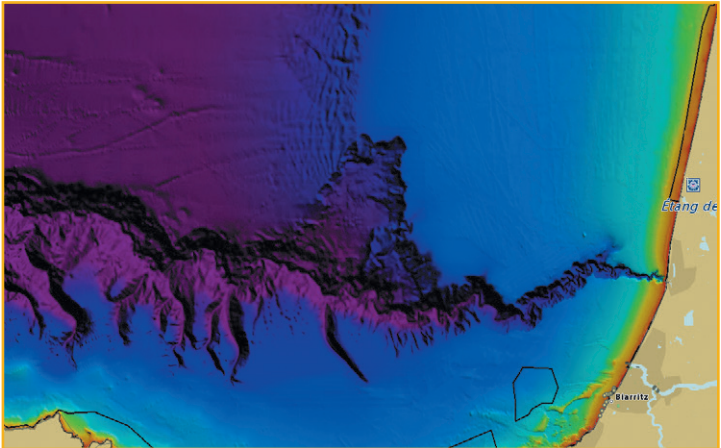
Change Layers

1. With a Map view displayed on-screen, tap the Layers icon  in the Top Bar.
- OR
2. From the Map Menu, select Settings > Layers.

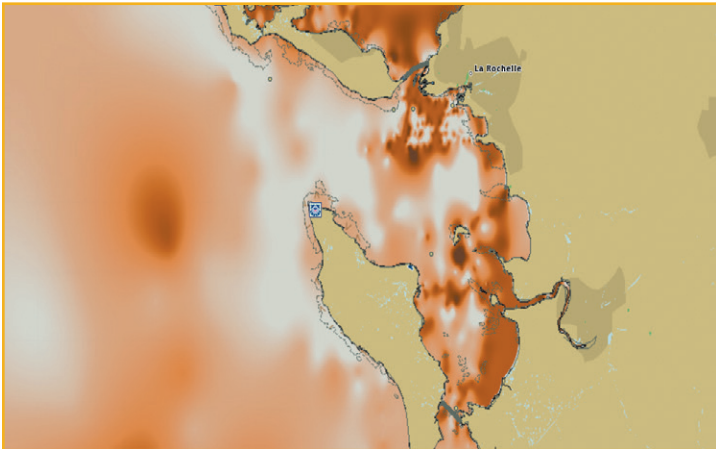
Aerial imagery



Shaded Relief



Bottom Hardness



Layer Transparency



CUSTOMIZE THE MAP VIEW

TURN ON AUTO ZOOM >

Auto Zoom focuses the view on the current route leg as it is being navigated. As the vessel's speed increases, the map range will increase. If you press the ZOOM keys to see more or less of the view, Auto Zoom will pause.

NOTICE: The Auto Zoom setting does not apply to the 3D Views.

1. Press the HOME  key.
2. Select Settings.
3. Select My Boat.
4. Under Navigation Options, select Auto-Zoom. Tap the on/off button, or press the ENTER key, to turn it on.

CHANGE THE MAP VIEW DATA OVERLAYS >

Use the Vessel Overlays menu to display or hide information on the view. In a Map View, you can display or hide the vessel icon, data overlays, and range rings. The available menu options are determined by the accessories attached to the fish finder network. Also, see Views for more information about Overlays.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Vessel Overlays.
4. Tap, or press the ENTER key, to select an overlay. (check mark = visible, blank = hidden).

CUSTOMIZE THE NAVIONICS MAP DISPLAY >

Navionics must be selected as the map source to enable the following features.

> Select Map Data

When a Navionics map is selected as the map source, you can set nav aids, marine, and land icons to hidden or visible. The Depth menu option allows you to see shading on the map based on the set depth.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Under Navionics Settings, use the touch screen or the Cursor pad/Joystick to select a menu and change the settings.

> Change the Map Mode

Use the instructions in this section to switch the Map View from 2D to 3D.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select a map mode.

» Display Layers

Display Layers on the Map View to add more details and data. With those locations, you just have Satellite Maps (ON), 100%, and Land highlighted. The zoom level has to be less than 2 miles.

Layers	Select to turn Layers on.
Satellite Maps	Press and hold the slider, or press the +/- Zoom keys, to adjust the setting.
Display Area	Land: Select to display the satellite layer over land only. Land + Shoals: Select to display the satellite layer over land and shallow water. Land + Sea: Select to display the full satellite layer.

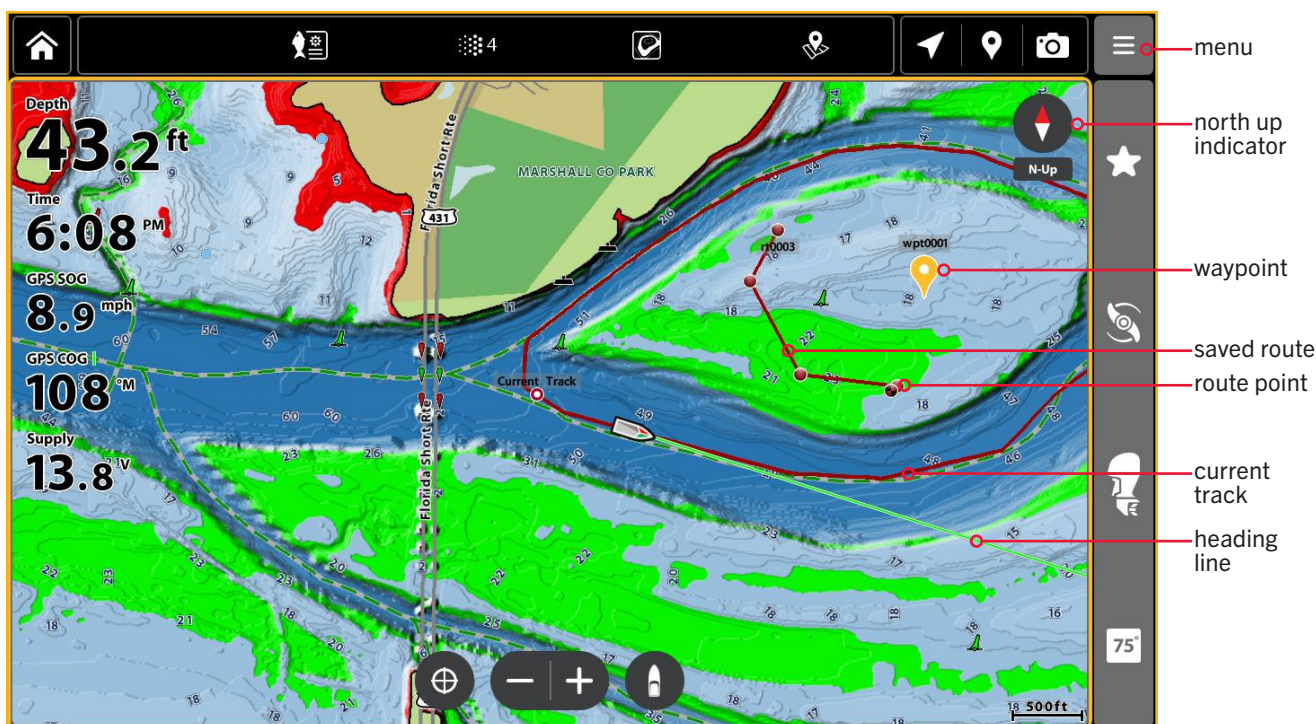
2D Map View [Navionics]



INTRODUCTION TO NAVIGATION

Your fish finder allows you to mark waypoints, create a route, and start navigating. Waypoints, routes, and tracks can be managed on-screen so you can save your favorites, edit names, and easily return to your favorite destinations. There are many ways to start navigation or edit navigation data with your fish finder. The instructions in this section review navigation features on the Map View. To use navigation features from the My Data tool, see *Manage your Navigation Data*.

Map View with Waypoints, Routes, Tracks



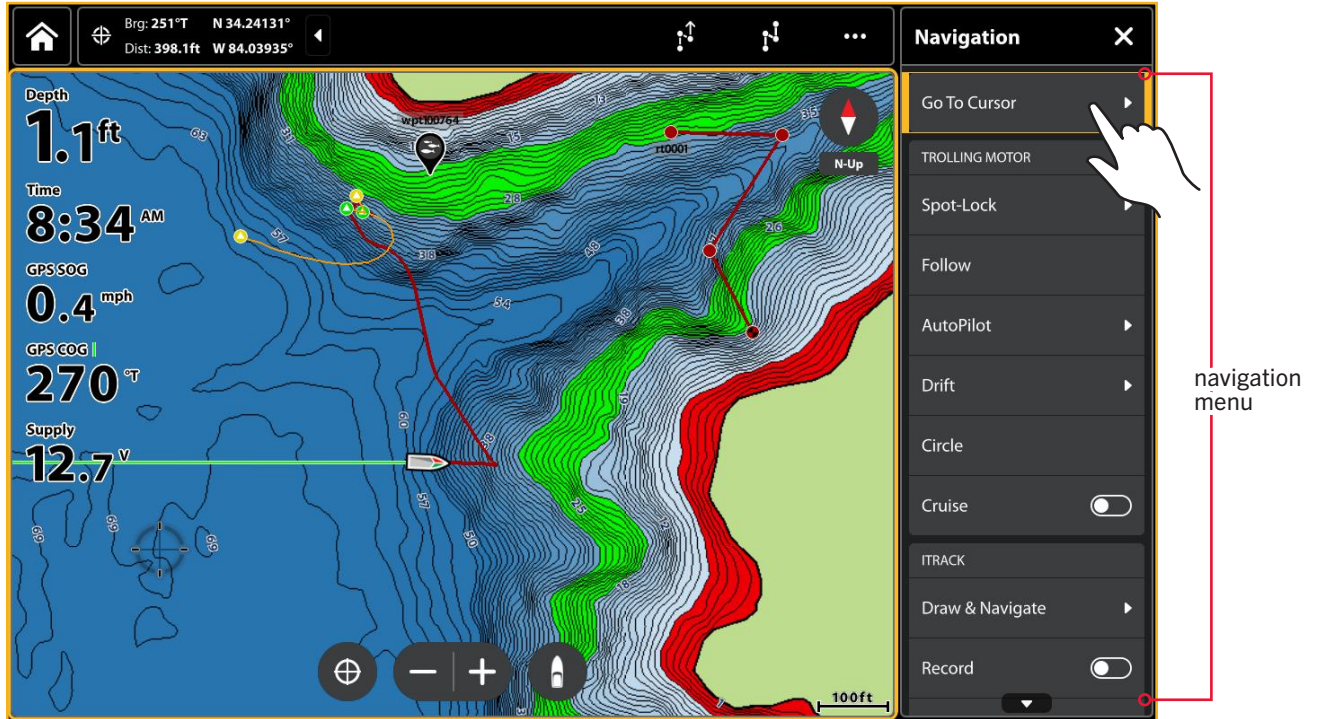
NAVIGATION X-PRESS MENU »

The Navigation X-Press Menu allows you to start a Quick Route, navigate to a cursor, route or point, draw and navigate and initiate Minn Kota Motor features (if equipment is connected). The Navigation X-Press Menu is only available in the Map View, Sonar Views, or Radar View displayed on-screen with Navigation enabled.

» Open the Navigation X-Press Menu

1. With a Map View displayed on-screen, tap the Navigation icon in the Top Bar.
2. Select an action from the sub-menu.
OR
1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Navigation.
3. Select an action from the sub-menu.
OR
1. With a Map View displayed on-screen, press the NAVIGATION key.
2. Select an action from the sub-menu.

Using the Navigation Menu



The following options are available from the Navigation X-Press menu when navigation is not in progress. See [Routes](#) for more information about using this menu.

Go To Cursor	If the cursor is active, navigation will start to the cursor position.
iTrack	Select to navigate a saved iTrack.
Quick Route	Select Quick Route to mark quick route points and start navigation. See <i>Routes</i> for more information.
Nav Data	Open the My Data tool to select saved navigation data and start navigation.

INTRODUCTION TO NAVIGATION

When the Navigation X-Press menu is opened during navigation, additional menu options are available, including the following:

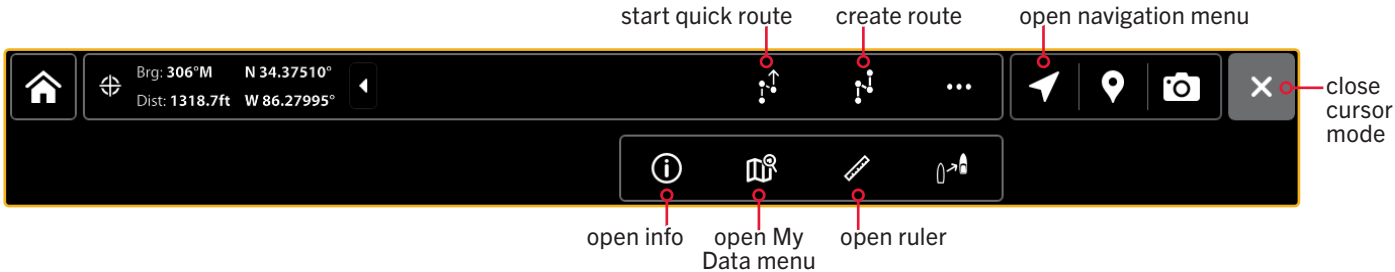
Cancel Navigation	Select Cancel Navigation to cancel navigation with the fish finder.
Restart Course	Select Restart Course to start navigation from the current vessel position instead of from the first route point. The fish finder will recalculate navigation to the next closest point in the route. This is helpful if the boat has navigated off course from the current route.
Next Point	Select Next Point to skip the current point and navigate to the next route point in the route.
Reverse Route	Select Reverse Route to reverse the currently navigated route. Navigation will start from the vessel position and continue in the opposite order.

CURSOR MENU

The Cursor menu is another way to use the touch screen to open the Navigation X-Press menu, create a route, or start a search. The Cursor menu is only available with the 2D Map View, Sonar Views, or Radar View displayed on-screen.

Open the Cursor Menu

1. Tap a position on the Map View to activate the cursor, or use the Cursor pad/Joystick, to move the cursor to a position on the map.



Cursor Menu Options		
	Navigation	Opens the Navigation X-Press menu to start or change navigation.
	Quick Route	Starts Quick Route navigation by letting you to connect route points and waypoints and start navigation immediately.
	Mark Route	Create a route in the Map View and save it for navigation later.
	Ruler	Open ruler to measure distance between two points.
	Find Nearest	Search for nearest waypoints, routes, and tracks.
	Info	Open Map Info menu.

INFO MENU »

Use the Info menu to start a proximity search. If you are using a map card as the map source, you can search lake information.

» Open the Info Menu

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Info.
3. Select an action from the sub-menu.

NOTICE: If you select a waypoint, route, or track with the cursor, and then press the ENTER key, the Info menu for the selected item will display.

Map Info	Select Map Info to search the area within a preset range for a variety of data, including cautions, tide stations, current stations, and ports. The available information is determined by the selected map source and the information available in the search area. See Search for more information. (Navionics only)
Ruler	Select Ruler to measure the distance between two positions on the view. Press the ENTER key to select the measurement start point. Move the Cursor pad/Joystick to the second selected position, and press the ENTER key to mark the measurement end point.
Lake List	Select Lake List to search for lakes within a preset range. Minn Kota must be selected as the map source. See Search for more information.
Find Nearest	Select Find Nearest to search the closest waypoints, routes, and tracks within a preset range. See Search for more information.

INTRODUCTION TO NAVIGATION



SEARCH >

There are many ways to search the area for ports, services, tide stations, current stations, and other points of interest. You can also search the nearest waypoints, routes, and tracks. In many cases, you can also use the Navigation menu to start navigation to your selection. The search options and the search area distance are determined by the selected map source.

> Search for a Lake

If Minn Kota is selected as the map source, you can search for lakes in the area.

- 1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
- 2. Select Info.
- 3. Select Lake List.
- 4. Select an item from the displayed list.

OR

To search by name, select Lake Name. Use the on-screen keyboard to enter a name.

> Find the Nearest Navigation Data

Use the Find Nearest menu to search for the ports, services, tide stations, current stations, and other points of interest.

- 1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
- 2. Select Info.
- 3. Select Find Nearest.
- 4. Select an item from the displayed list. Tap the item, or press the ENTER key, to see more information if it is available.
- 5. To start navigation to your selection, press the NAVIGATION/GO TO key.

OR

- 1. Tap a position on the Map View.

OR

Use the Cursor pad/Joystick to move the cursor to a position on the Map View.

- 2. Select Find Nearest  in the Cursor Menu.
- 3. Choose an item from the displayed list. Tap the item, or press the ENTER key, to see more information if it is available.
- 4. To start navigation to your selection, press the NAVIGATION key.



MAN OVERBOARD (MOB)

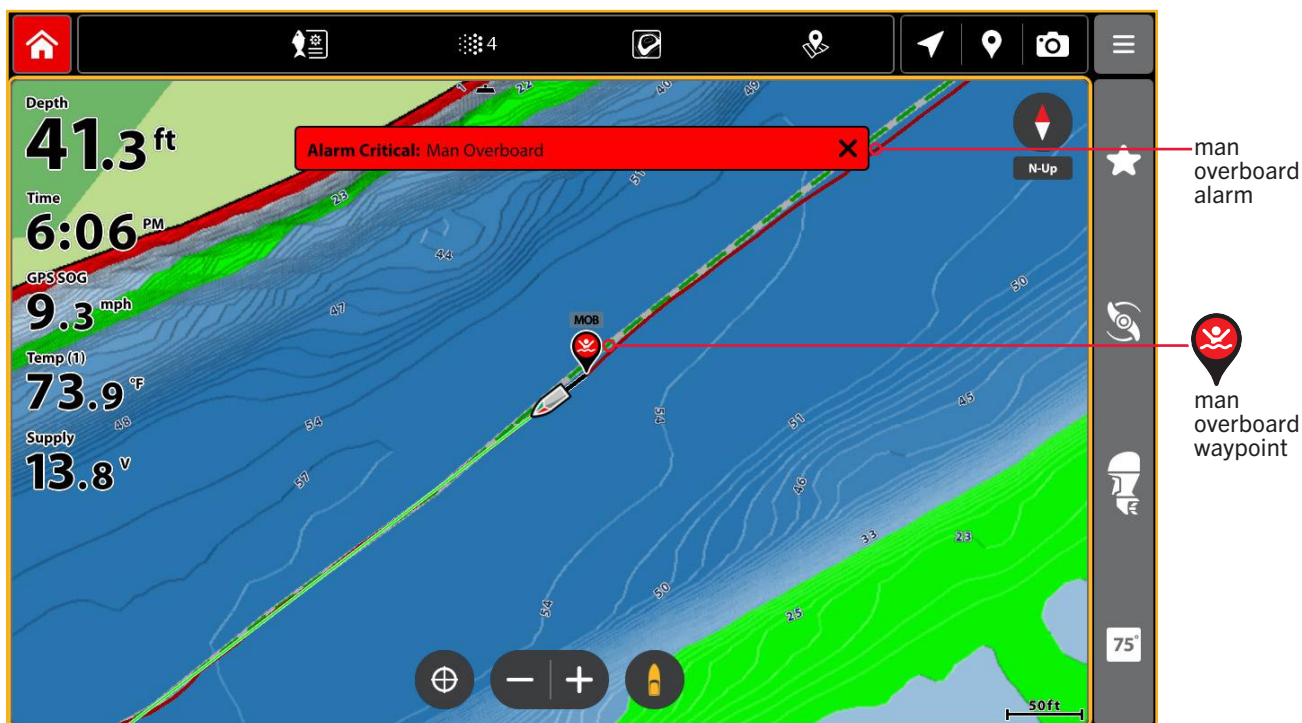


As soon as you know that you have a man overboard (MOB), you should activate Man Overboard navigation to maximize the chances for a successful rescue. Man Overboard navigation marks the approximate point where the person went overboard and starts continuous navigation toward the Man Overboard waypoint.

ACTIVATE MAN OVERBOARD NAVIGATION >

1. Press and hold the Man Overboard icon on the Home screen.

Man Overboard Navigation (in progress)



When Man Overboard is activated, any current navigation will be canceled and the current route will be discarded without notification. Man Overboard navigation will begin immediately, and you will see the following on the screen:

Map View: The view will switch to Map View automatically.

Man Overboard Waypoint: A waypoint is created at the vessel's current position, regardless of whether the map cursor is active or not.

Continuous Navigation: The fish finder will begin continuous navigation toward the Man Overboard waypoint.

Auto Zoom: The screen magnifies to show the Man Overboard waypoint and the vessel on the screen.

Data Bar: The data bar will display digital readouts for Man Overboard, including the Distance to Go and Time to Go to the MOB waypoint (DTG + TTG).

MAN OVERBOARD (MOB)



CANCEL MAN OVERBOARD NAVIGATION >

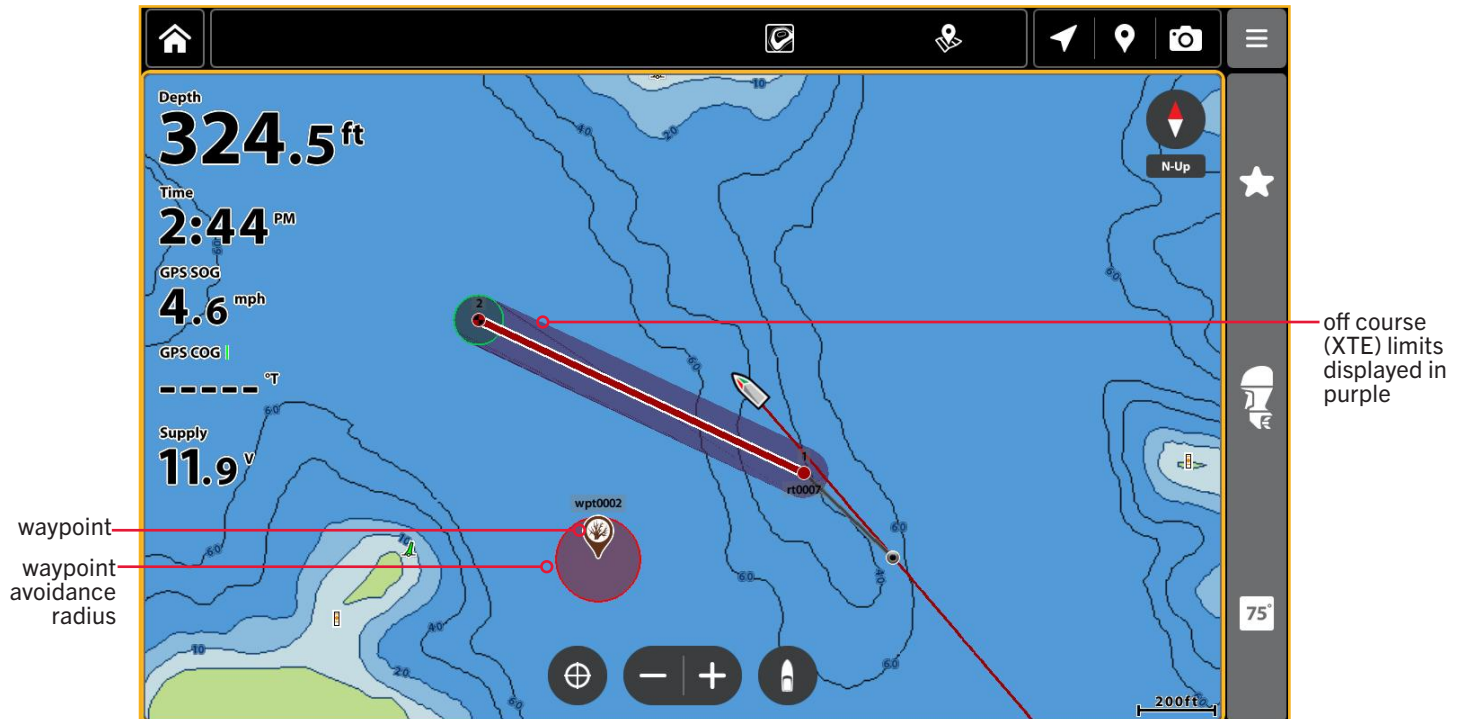
- 1. Press and hold the Cancel Man Overboard icon from the Home screen.
OR
- 1. With a Map View displayed on-screen, tap the Menu ≡ icon in the Top Bar, or press the MENU ≡ key once.
- 2. Select Cancel Navigation.



NAVIGATION ALARMS

When an alarm is turned on, an alert will sound or display on the fish finder to indicate the threshold has been exceeded. The settings in this section describe how to turn on a Navigation alarm, adjust the threshold, and display the limits on the view if they are available. The alarm options are determined by the map source.

Map View with Alarm Overlays Displayed



OFF COURSE (XTE) ALARM

Turn on Off Course (XTE) to receive an alert if the vessel has traveled outside the selected route. You can also set how far the vessel is allowed to move off course before the alarm is triggered. If the alarm is turned off, the Off Course limit can be displayed on the Map View, but you won't receive an alert if the vessel crosses it.

Turn on the Alarm

1. From the Home screen, tap the Tools icon.
2. Select Tools.
3. Select Alarms.
4. Select Settings > Navigation.
5. Select Off Course (XTE). Tap the on/off button, or press the ENTER key, to turn it on.

Adjust the Parameters (optional)

1. From the Home screen, tap the Tools icon.
2. Select Tools.
3. Select Alarms.
4. Select Settings > Navigation.
5. Under Trolling Motor Alarms, select Off Course (XTE) and tap the + / - buttons, drag the slider, or press the + / - keys to set the amount the vessel can move off course.

NAVIGATION ALARMS



› Display the Off Course (XTE) Limit (optional)

- 1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
- 2. Select Settings > General.
- 3. Select XTE Limits.
- 4. Tap the check box, or press the ENTER key, to add a check mark and make it visible on the view.

ARRIVAL ALARM ›

Turn on Arrival to receive an alert when the vessel has reached the destination waypoint, route point, or track point. You can also set the Arrival Radius to indicate how close to the destination point the alarm is triggered. If this alarm is turned off, the Arrival Radius will be displayed on the Map View, but you won't receive an alert if the vessel crosses it.

The Arrival Radius also influences navigation. If the Arrival Radius is set to 60 feet from the destination point, the arrival is accomplished at 60 feet from the destination point. If there is another point in the route, navigation will then start to the next point.

› Turn on the Alarm

- 1. From the Home screen, tap the Tools icon.
- 2. Select Tools.
- 3. Select Alarms.
- 4. Select Settings > Navigation.
- 5. Select Arrival. Tap the on/off button, or press the ENTER key, to turn it on.

› Adjust the Parameters (optional)

- 1. From the Home screen, tap the Tools icon.
- 2. Select Tools.
- 3. Select Alarms.
- 4. Select Settings > Navigation.
- 5. Under Trolling Motor Alarms, select Pre-arrival, tap the on/off button, and tap the + / - buttons, drag the slider, or press the + / -keys to adjust the radius.

WAYPOINT AVOIDANCE ALARM ›

Turn on Waypoint Avoidance to receive an alert if the vessel has crossed the Waypoint Avoidance Radius. If the alarm is turned off, the Waypoint Avoidance Radius can be set for a waypoint, and it will be displayed on the Map View, but you won't receive an alert if the radius is crossed.

› Turn on the Alarm

- 1. From the Home screen, tap the Tools icon.
- 2. Select Tools.
- 3. Select Alarms.
- 4. Select Settings > Navigation.
- 5. Select Waypoint Avoidance. Tap the on/off button, or press the ENTER key, to turn it on.



› Create an Avoidance Waypoint

1. See *Waypoints: Set the Waypoint Radius and Avoidance* to identify a waypoint for avoidance.

ANTI-COLLISION ALARM ›

If Navionics is selected, and the Anti-Collision alarm is turned on, an alert will be provided based on potential dangers detected in the map data ahead of the vessel, such as land, rocks, and restricted areas. You can also select Anti-Collision Objects and how far in front of the vessel the area will be scanned based on distance or time.

NOTICE: Navionics must be selected as the map source to enable this feature.

› Turn on Anti-Collision

1. From the Home screen, tap the Tools icon.
2. Select Settings.
3. Select My Boat > Navigation Settings.
4. Select Settings > Navigation.
5. Select Anti-Collision. Tap the on/off button, or press the ENTER key, to turn it on.

Use the Anti-Collision default settings, or use the menus in this section to set how the area is searched (Search Parameters, Search (Time) or Search (Distance), and Anti-Collision Objects).

› Turn on Anti-Collision Alarm

1. From the Home screen, tap the Tools icon.
2. Select Tools.
3. Select Alarms.
4. Select Settings > Navigation.
5. Select Anti-Collision Alarm. Tap the on/off button, or press the ENTER key, to turn it on.

› Display the Anti-Collision Overlay

When the overlay is turned off, the scan area is shown only when a danger is detected.

When the overlay is turned on, the scan area is displayed at all times. When a potential danger is detected, the scan area will turn red.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings > Overlays > Vessel.
3. Select Anti-Collision.
4. Tap the check box, or press the ENTER key, to add a check mark and make it visible on the view.

INTELLIGENT DEPTH CONTROL

Intelligent Depth Control is a feature that detects depth changes, alerts you immediately, and if configured, automatically engages Spot-Lock® and deploys your shallow water anchors.

IDC requires a Minn Kota fish finder, an Advanced GPS trolling motor and sonar/depth transducer on the Minn Kota integrated system. Shallow water anchors can optionally be connected to physically anchor the boat when the IDC threshold is met. In addition, the Intelligent Depth Control status is displayed on the fish finder, trolling motor remote control and Minn Kota Fishing App.



WARNING

All electronic chart data and features, from memory or external digital media, should not be used as a navigational aid to prevent collision, grounding, boat damage, or personal injury. They are aids to navigation designed to facilitate the use of government charts, not to replace them.

This product provides general route guidance only. Always rely on official charts and current water conditions.

Any automated navigation modes require the captain of the vessel to continue to maintain watch and ensure proper and safe navigation at all times.

The vessel's captain is responsible for safe, lawful operation, maintaining a vigilant watch, and preventing damage or injury.

1 | SET UP INTELLIGENT DEPTH CONTROL ON THE FISH FINDER »

When an Advanced GPS trolling motor is connected to your compatible Minn Kota fish finder, a Trolling Motor Setup Guide is launched. Complete the Trolling Motor Setup Guide on the fish finder connected to the preferred depth source to set up the Intelligent Depth Control threshold. This setup can be completed configured later in Network + Devices.

The Trolling Motor Setup Guide is divided into two sections: 1) General Setup and 2) Intelligent Depth Control.

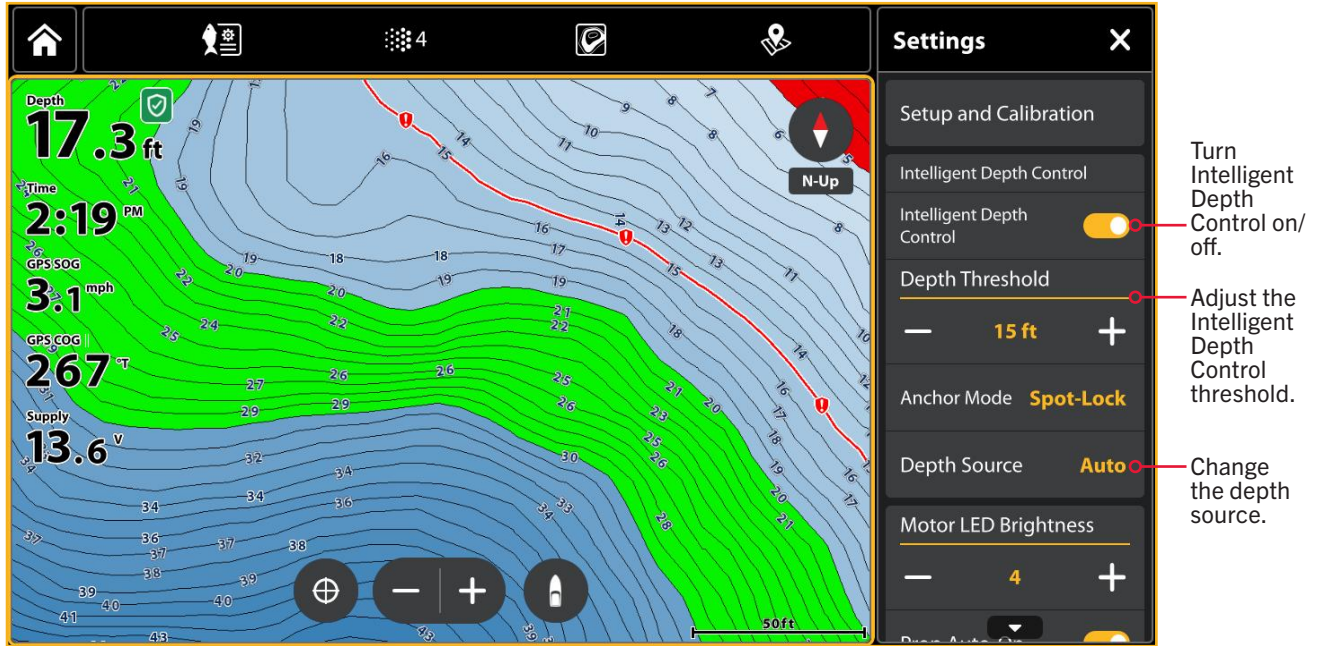
1. When the Trolling Motor Setup Guide is launched, complete or skip the General Setup section.
2. Tap the next arrow on Intelligent Depth Control Trolling Motor Setup.
3. Under Set Depth Threshold, tap the + / - buttons to set the depth threshold, and tap the next arrow.
4. Under Depth Source, select Auto or specify which depth source you would like to use, and tap the next arrow.
5. Under Water Level Offset, use the + / - buttons to set the water level offset. Tap the next arrow.
6. Under Anchor Mode, select if you want to activate Spot-Lock or Spot-Lock and Shallow Water Anchor. If you select Spot-Lock and Shallow Water Anchor, the system will walk you through connecting your shallow water anchors.
7. Review the Intelligent Depth Control Status Icons and tap the check mark to confirm setup.

2 | TURN ON INTELLIGENT DEPTH CONTROL »

Once Intelligent Depth Control has been set up, the user can enable or disable Intelligent Depth Control when the Minn Kota system detects all of the following: a deployed trolling motor, a valid GPS fix, a connected fish finder, and an available sonar depth source.

1. Open the Trolling Motor Virtual Remote.
2. Select Settings.
3. Under Setup and Calibration, select Intelligent Depth Control.
On/Off: Tap the on/off button, or press the ENTER key, to turn it on
Adjust: Tap the + / - buttons to change the shallow water depth threshold.
4. Tap Anchor Mode and select one of the following options: Spot-Lock or Spot-Lock and Shallow Water Anchor.
5. Tap Depth Source to turn Depth Source Auto-Configure on/off.
6. Exit the Settings menu. The Intelligent Depth Control Armed icon will display on all screens.

Setting the Intelligent Depth Control Threshold



3 | REVIEW INTELLIGENT DEPTH CONTROL STATUS AND ACTIONS

When Intelligent Depth Control is turned on and ready, notification appears on all networked fish finder displays. Review the different Intelligent Depth Control states and what actions are initiated.

Intelligent Depth Control (IDC) Status	
Intelligent Depth Control Off	Intelligent Depth Control is turned off by default. Intelligent Depth Control is not monitoring or active.
Intelligent Depth Control On (Disarmed)	Intelligent Depth Control is on but not actively armed due to conditions (e.g., the motor is turned off, the current depth is already shallow). Intelligent Depth Control will disarm whenever manual motor control from the fish finder, foot pedal, remote or mobile app is initiated.
Intelligent Depth Control On (Armed)	Intelligent Depth Control is turned on and all conditions are nominal. Intelligent Depth Control is continually monitoring depth in the background and is poised to engage as configured. A green activation icon is displayed on all networked fish finders.
Pre-Alarm	When the water depth is about to hit the shallow water threshold, Intelligent Depth Control enters a pre-alarm phase. A red pre-alarm visual alert displays on all fish finder screens and an audible beep sounds indicating that the boat is about to hit shallow water and allowing the user to ignore or continue with automatic intervention.
Active Alarm	When the water depth becomes shallower than the threshold, Intelligent Depth Control triggers the alarm and takes control of the boat by engaging Spot-Lock or Spot-Lock and Shallow Water Anchors (if configured). In order for a shallow water anchor to be deployed, the SOG must be less than 3 mph and the DTG must be less than 3 feet. The red Active Alarm notification is displayed on all fish finders, mobile app and the remote. The trolling motor's control head LED glows red and the foot pedal autopilot LED is illuminated.

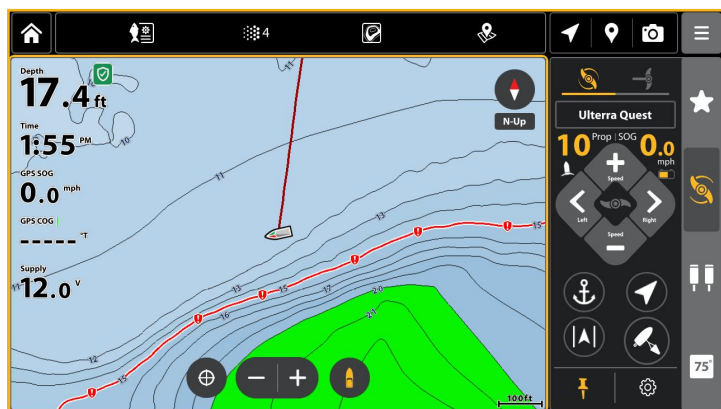
INTELLIGENT DEPTH CONTROL

Pre-Alarm

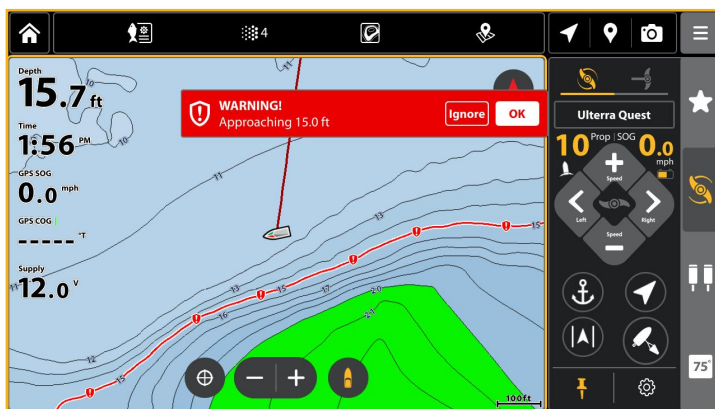
When the system is within 1 foot of the Intelligent Depth Control threshold, the Pre-Alarm notifies the user with a pop-up message and audio beep. The user can select to ignore or confirm the Pre-Alarm.

- **Ignore:** Select Ignore. Navigation continues in its current state and the system will remain unarmed until the user returns to deeper water to reset Intelligent Depth Control.
- **OK:** Select OK or provide no action. The Pre-Alarm stays triggered until the system enters the Intelligent Depth Control threshold and the Intelligent Depth Control Alarm is activated.

Intelligent Depth Control Armed



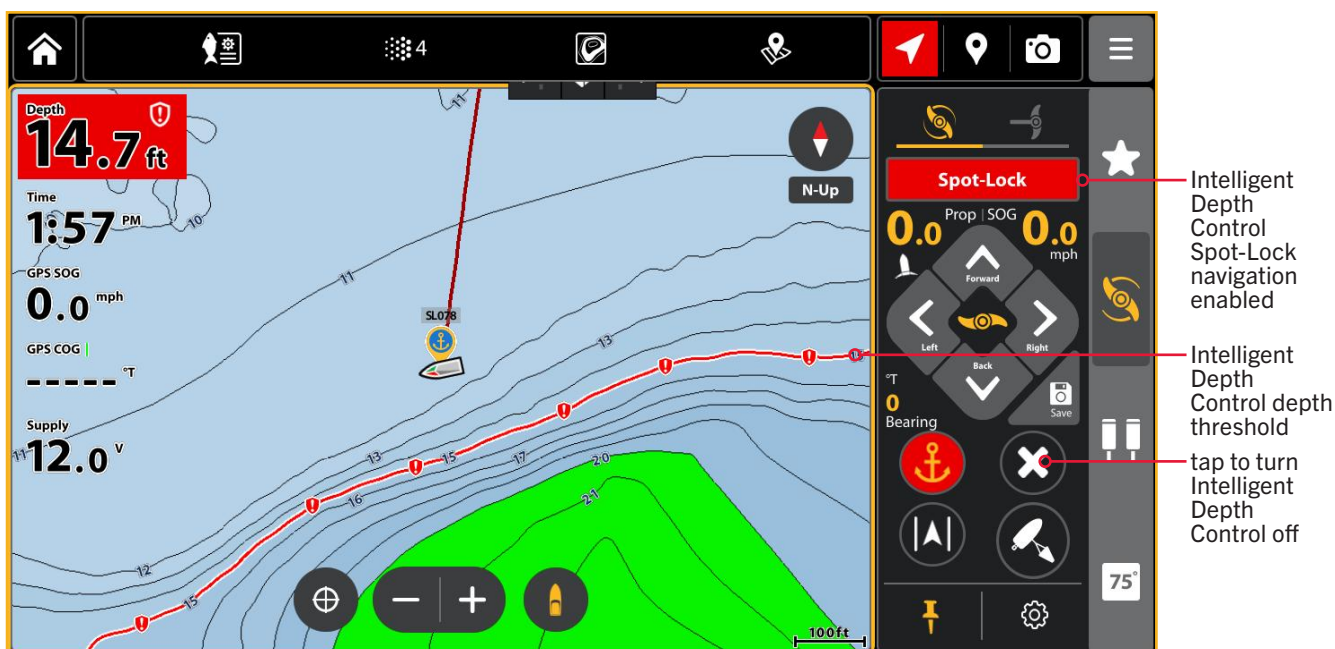
Intelligent Depth Control Pre-Alarm Message



Intelligent Depth Control Alarm

When the Intelligent Depth Control Alarm is activated, the system will immediately engage Spot-Lock on the trolling motor to hold the boat's current GPS position, and if configured, the shallow water anchors will deploy. The Intelligent Depth Control Activated Alarm notification will remain on all devices.

Active Intelligent Depth Control





4 | CANCEL INTELLIGENT DEPTH CONTROL >

The user can override Intelligent Depth Control at any time. When Intelligent Depth Control is cancelled, the Spot-Lock is turned off and the trolling motor returns to manual control. If shallow water anchors are configured, the anchors will stow automatically. All alarm indicators are cleared and Intelligent Depth Control remains on but disarmed until the boat moves back into deeper water.

Use one of the following methods to override or cancel Intelligent Depth Control:

1. Manually steer with the fish finder, foot pedal, remote, or app.

OR

1. Select Cancel on the Alarm pop-up.

OR

1. Cancel Navigation.

5 | RE-ARM INTELLIGENT DEPTH CONTROL >

Intelligent Depth Control will automatically re-arm when one of the following conditions take place:

- The water depth becomes 2 feet deeper than the Intelligent Depth Control threshold.
- There are no manual inputs to the trolling motor for a minimum of 5 seconds. Any manual input will reset the timer.



WAYPOINTS



Waypoints are saved latitude/longitude positions. They mark a position of interest such as your favorite fishing area, structure, or marker buoy. The fish finder saves the position and allows you to edit the waypoint name, icon, and more (see **Manage your Navigation Data**). You can save 10,000 waypoints to the fish finder.

MARK WAYPOINTS >

Waypoints can be marked at the vessel position or cursor position. To edit the waypoint, see **Edit a Waypoint in the Map View** or **Manage your Navigation Data**.

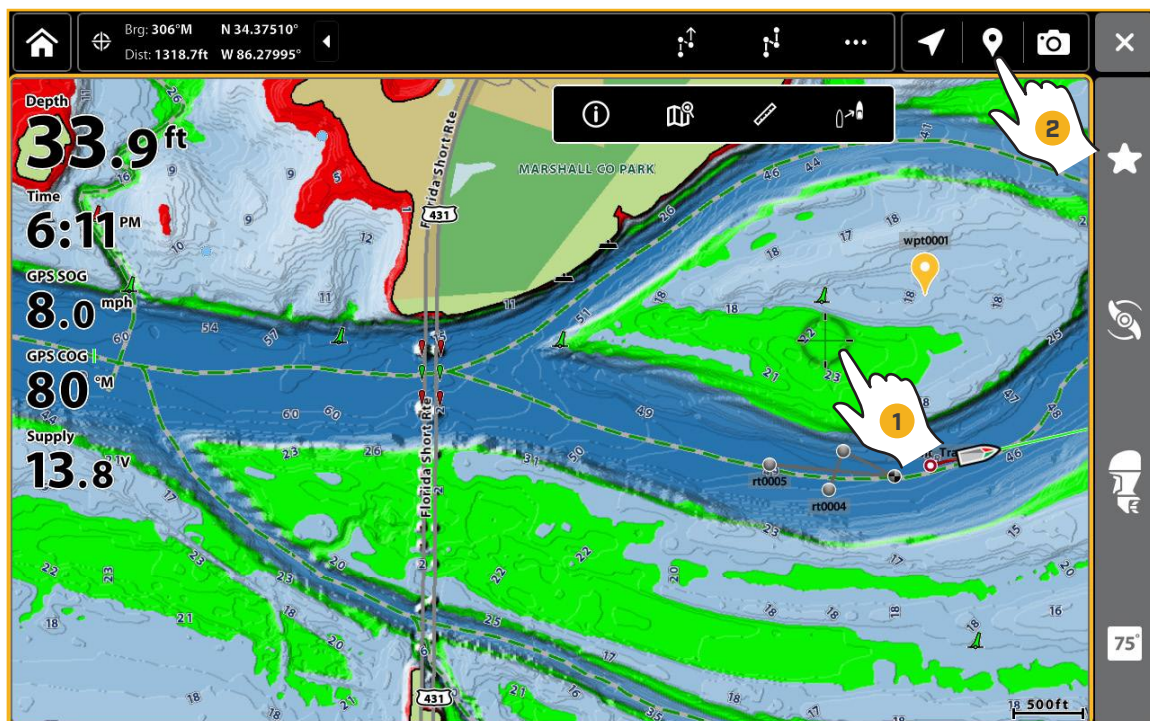
> Mark a Waypoint at the Vessel Position

1. With a Map View displayed on screen, tap the Mark icon  in the Top Bar or press the MARK key.
2. Select a waypoint color icon and color from the Favorites menu.

> Mark a Waypoint at the Cursor Position

1. Tap a position on the Map View to activate the cursor, or use the Cursor pad/Joystick to move the cursor to a position on the map.
2. Tap the Mark icon  in the Top Bar or press the MARK key.
3. Select a waypoint color icon and color from the Favorites menu.

Marking a Waypoint at the Cursor Position



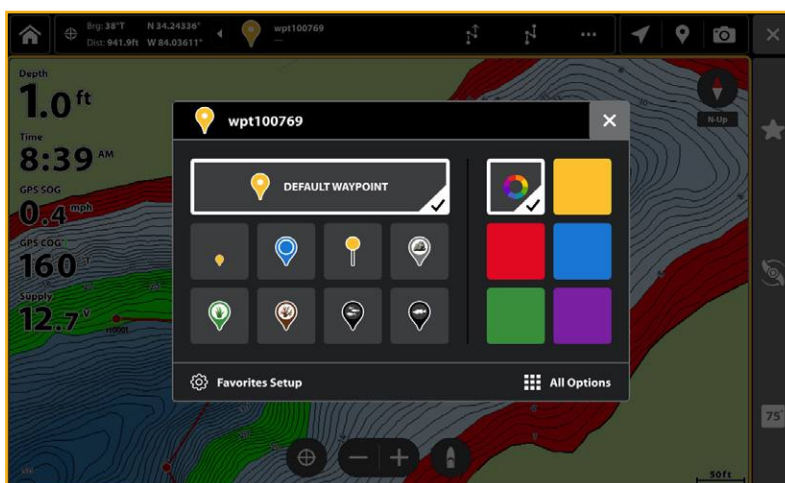
› Mark a Waypoint at the Vessel Position

Use the instructions in this section to preset your favorite icon and color. When you mark a waypoint, you will be given the menu options from your favorite settings to edit the waypoint.

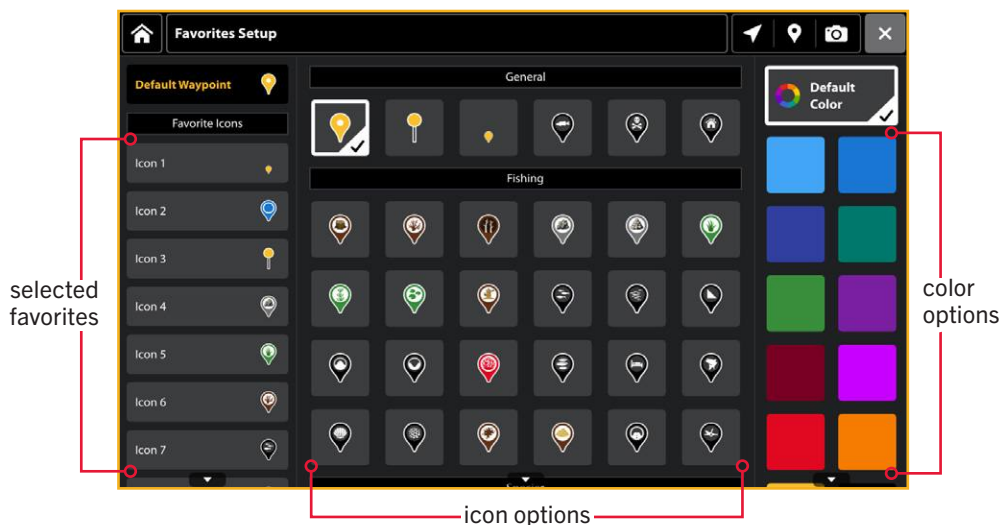
1. Tap the Mark icon  in the Top Bar or press the MARK key.
2. Select Favorite Setup.
3. Tap an icon and color or use the Cursor pad/Joystick to make your selections.

Editing Options for Favorite Waypoint Settings	
Icon	Select 5 icons to be your favorite icons. The icons are grouped by category.
Color	Select 5 colors to be your favorite colors.

Favorites Setup



Setting Favorites

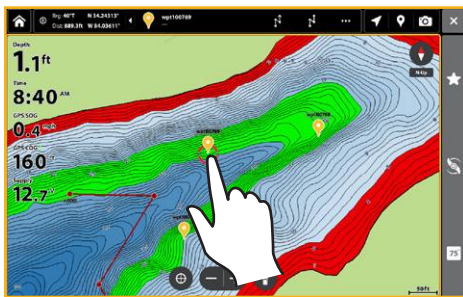


WAYPOINTS

MOVE A WAYPOINT IN THE MAP VIEW

1. Tap a waypoint on the map, or use the Cursor pad/Joystick to move the cursor to a waypoint on the map.
2. Tap the More icon ●●● in the Cursor menu.
3. Tap Move .
4. Tap a new position on the map, or use the Cursor pad/Joystick to move the waypoint to a new position.
5. Tap the Check icon ✓ or press the ENTER key to confirm the new position.

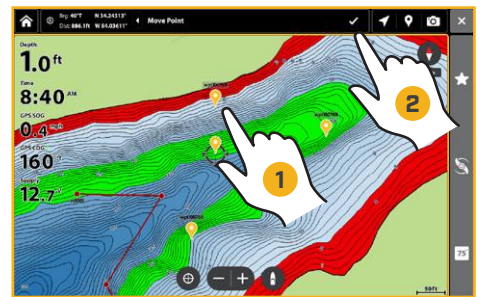
Selecting a Waypoint



Selecting Move from the Cursor Menu

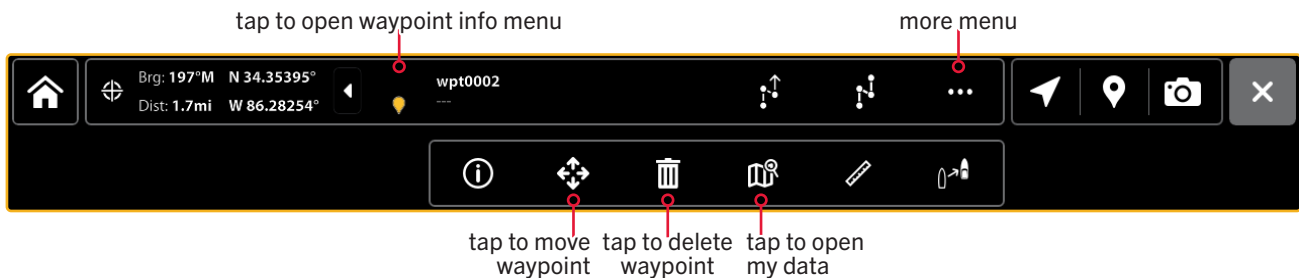


Moving the Waypoint



EDIT A WAYPOINT IN THE MAP VIEW

1. Tap a waypoint on the map, or use the Cursor pad/Joystick to move the cursor to a waypoint on the map. The waypoint icon, name and depth will display in the Top Bar.
2. Tap the waypoint in the Top Bar to open the Waypoint Info menu.
3. Edit the waypoint name, icon, color, and more (see *Manage your Navigation Data* for more information).
4. **Close:** Press the EXIT key.



SET THE WAYPOINT AVOIDANCE RADIUS >

An avoidance radius can be set around a selected waypoint. A radius will be highlighted around the waypoint. To receive an alarm when the waypoint avoidance radius has been crossed, turn on the Waypoint Avoidance Alarm (see **Navigation Alarms**).

1. Tap a waypoint on the map, or use the Cursor pad/Joystick to move the cursor to a waypoint on the map. The waypoint icon, name and depth will display in the Top Bar.
2. Tap the waypoint in the Top Bar to open the Waypoint Info menu.
3. Under Avoidance, tap the check box, or press the ENTER key, to add a check mark to it.
4. Drag the slider, tap the +/- buttons or press the +/- ZOOM key, to adjust the radius setting.
5. **Optional:** To receive an alarm when the radius has been crossed, turn on Waypoint Avoidance in the Navigation Alarms menu (Home > Tools > Alarms > Settings > Navigation > Waypoint Avoidance > On).

DELETE A WAYPOINT IN THE MAP VIEW >

1. Tap a waypoint on the map, or use the Cursor pad/Joystick to move the cursor to a waypoint on the map.
2. Tap the More icon ●●● in the Cursor menu.
3. Select Delete .

DRAW TO SELECT >

Use the Draw to Select feature in Map View to freehand draw around waypoints to select multiple waypoints at one time.

1. With a Map View displayed on-screen, tap the My Data icon  in the Top Bar.
2. Tap Draw to Select.
3. Use the touchscreen to draw around the waypoints you want to select. The drawn area will be outlined in red.
4. Select an action from the Top Bar.

Editing Options for Selected Waypoints		
	Export	Transfer data to a selected SD card or to the Minn Kota Fishing App.
	Edit Group	Select an existing group or create a new group.
	Edit Icon	Select a new icon for all of the selected waypoints.
	Edit Color	Select a new color for all of the selected waypoints.
	Delete	Delete all of the selected waypoints.

WAYPOINTS



Map Objects (Navigation Menu)

Home

3 Waypoints Selected

Export

Folder

Pin

Color

Delete

Navigation

Location

Camera

Close

delete

edit color

edit icon

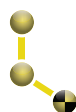
export

edit group

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ROUTES



Routes link two or more points together to create a path for navigation. A route represents your intended navigation and shows the shortest path from each data point to the next. The distance between each route point is a route leg. You can save 200 routes to the fish finder.



Route Points are stored latitude/longitude positions that connect to form route navigation.



Route Start Point



Route End Point



CAUTION

You should always be aware of your surroundings and watch for any potential obstacles.

QUICK ROUTE NAVIGATION >

A Quick Route allows you to connect route points and waypoints and start navigation immediately. A Quick Route can be started with the NAVIGATION key or with the touch screen. Quick Routes can be saved or discarded. To create a saved route, see **Create a Saved Route** or **Manage your Navigation Data**.

> Start Quick Route Navigation from Navigation X-Press Menu

1. Open the Navigation X-Press Menu: With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once. Select Navigation.

OR

With a Map View displayed on-screen, press the NAVIGATION key.

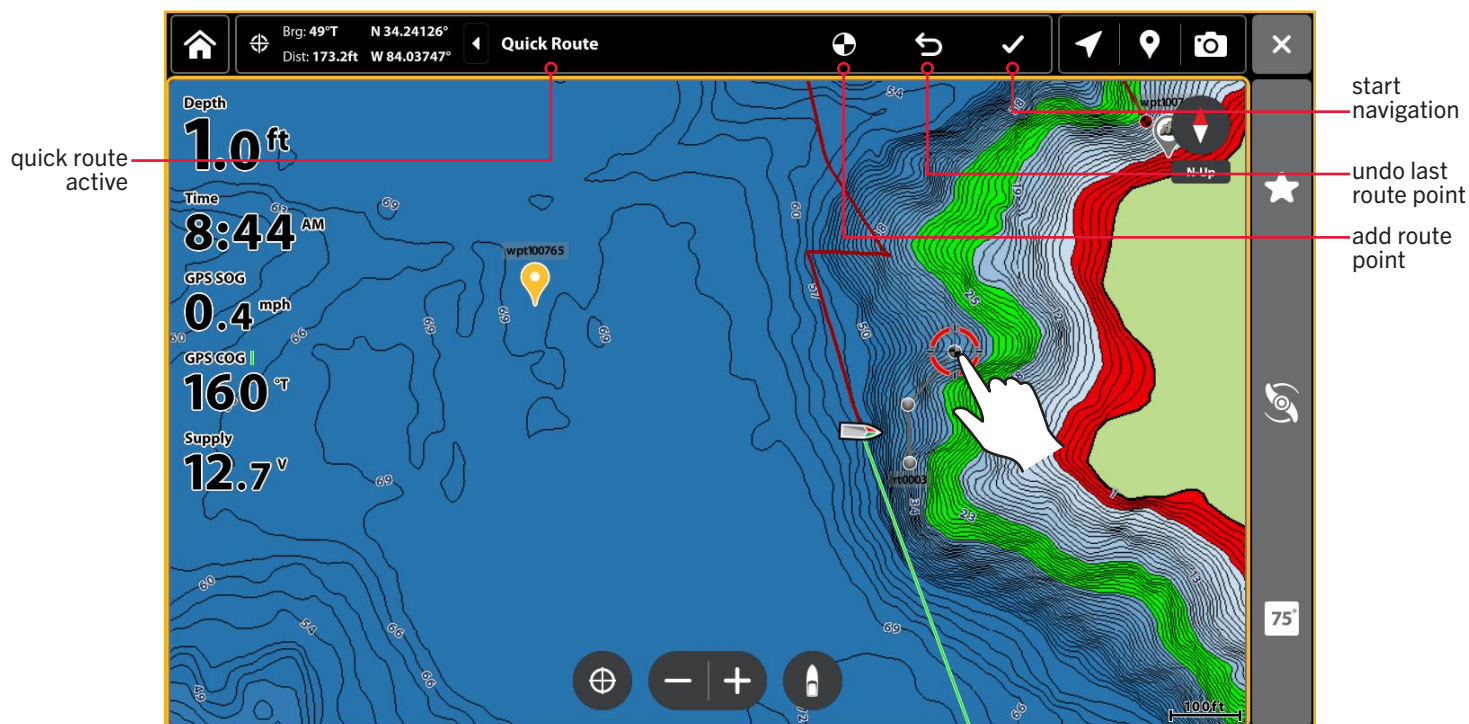
2. Select Quick Route.
3. Tap points on the screen to add route points. Use the Route Point icon  or Back icon  to make changes. Select the Check icon  when complete. Navigation will begin.

> Start Quick Route Navigation from Cursor Menu

1. Tap a waypoint on the map, or use the Cursor pad/Joystick to move the cursor to a waypoint on the map. The waypoint icon, name and depth will display in the Top Bar.
2. Tap the Quick Route icon  in the Cursor Menu.
3. Tap points on the screen to add route points. Use the Route Point icon  or Back icon  to make changes. Select the Check icon  when complete. Navigation will begin.

ROUTES

Marking a Quick Route



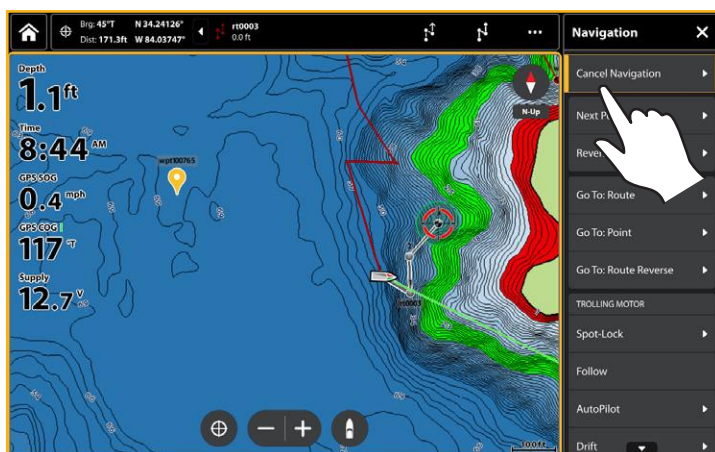
Change Route Order During Navigation

- During navigation, tap the Menu icon in the Top Bar, or press the MENU key once. Select Navigation.
OR
Press the NAVIGATION key.
- Select one of the following menu options:
 - Restart Course:** Resets navigation to start from the current vessel position to the next point in the route.
 - Next Point:** Skips to the next point in the route.
 - Reverse Route:** Reverses the currently navigated route. Navigation will start from the vessel position and continue in the opposite order.

Cancel Quick Route Navigation

- During navigation, tap the Menu icon in the Top Bar, or press the MENU key once. Select Navigation.
OR
Press the NAVIGATION key.
- Select Cancel Navigation.
- Select Save Route or Discard Route.

Canceling Quick Route Navigation



START NAVIGATION TO A SAVED WAYPOINT OR ROUTE

Use the cursor to select a saved waypoint or route point on the Map View, and you can start navigation to it. If you select a route point, you can also choose a navigation order for the selected route.

Start Quick Route Navigation from Navigation X-Press Menu

1. Tap a waypoint or route point on the map, or use the Cursor pad/Joystick to move the cursor to a waypoint or route point on the map.
2. Tap the Navigation icon  in the Top Bar or press the NAVIGATION key.
3. Select Go To: Route or Go To: Point.

Cancel Navigation: Tap the Navigation icon  or press the NAVIGATION key. Select Cancel Navigation.

CREATE A SAVED ROUTE

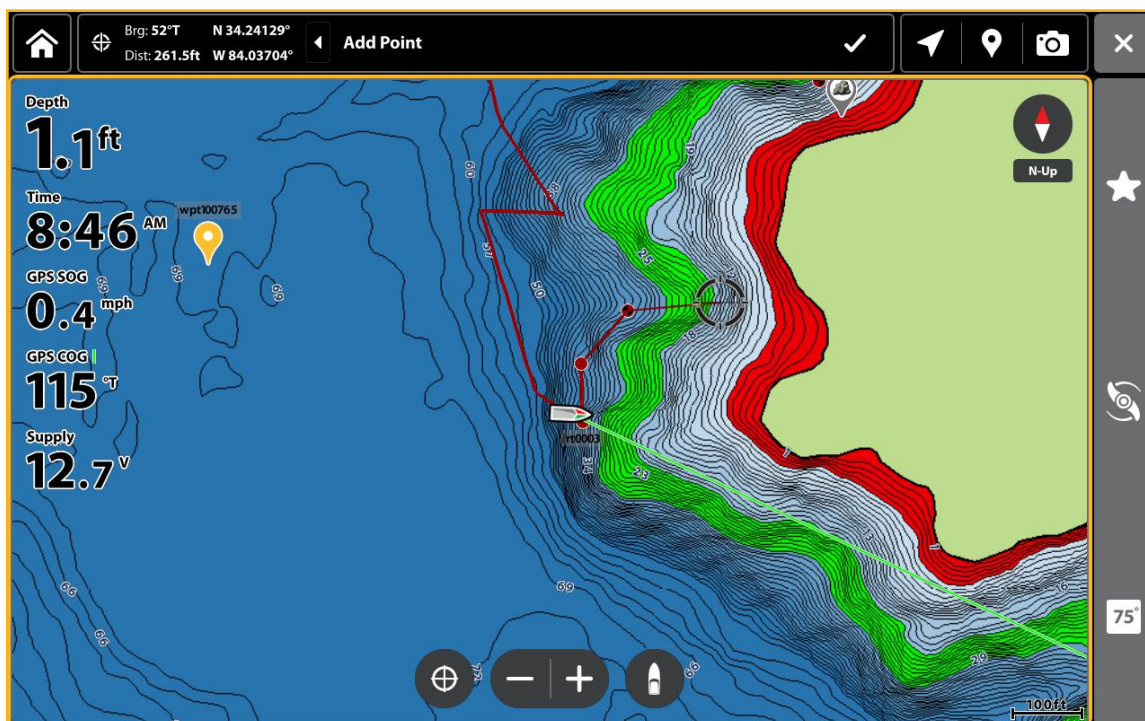
The instructions in this section allow you to create a route in the Map View and save it for navigation later. The steps are similar to creating a Quick Route, but you will use the Mark Route icon  in the Cursor menu.

Save Location: The route is saved to the My Data tool.

Navigation: To start navigation on the route, see *Start Navigation to a Saved Waypoint or Route*.

Overlay: To display saved routes on the Map View, press the MENU  key once. Select Map Options > Overlays > Nav Data > Routes (Saved).

Creating a Saved Route



ROUTES

>Create a Saved Route

1. Activate the cursor on the map using the touchscreen or cursor pad.
2. Tap the Mark Route icon  in the Cursor Menu.
3. Tap points on the screen to add route points. Use the Route Point icon  or Back icon  to make changes. Select the Check icon  to save the route.

DRAW & NAVIGATE >

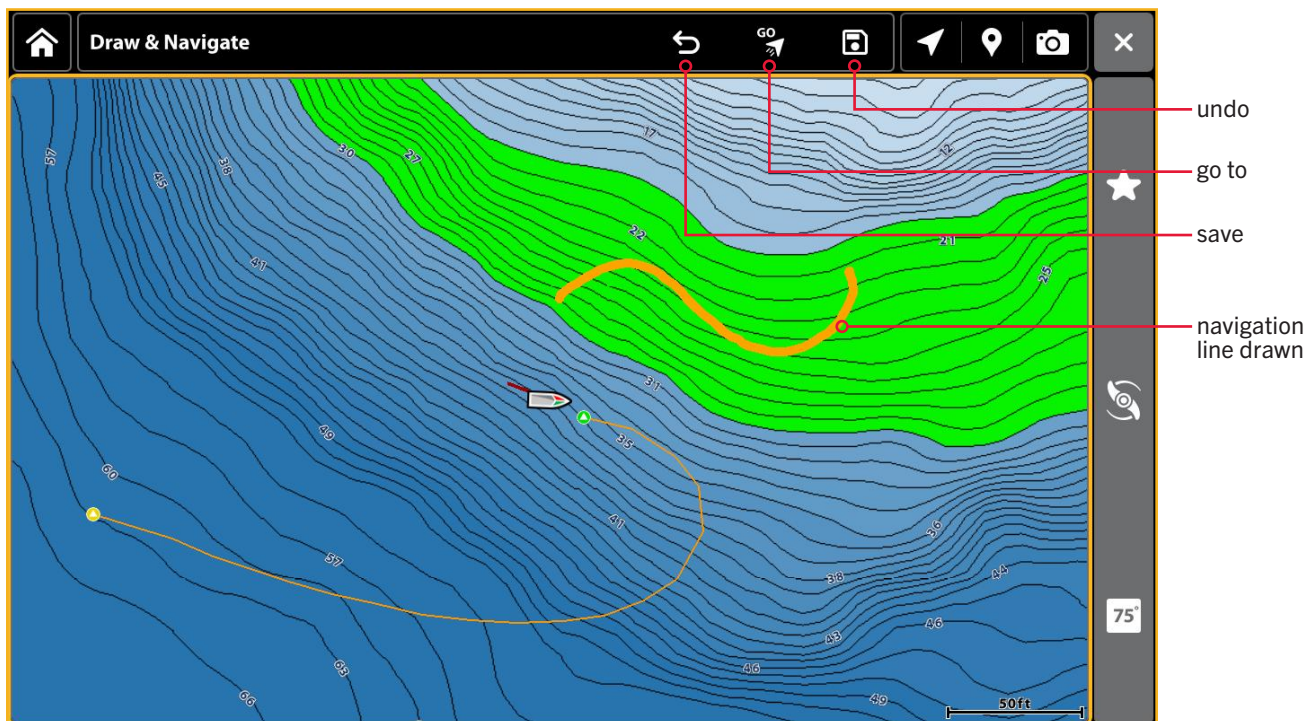
The Draw & Navigate features allows you to draw custom routes on the Map View and start navigation to that route.

1. Tap the Navigation icon  in the Top Bar or press the NAVIGATION key.
2. Select Draw & Navigate.
3. Use the touchscreen to draw your route.
4. **Start Navigation:** Tap the Go To icon in the Top Bar to start navigation.

Save: Tap the Save icon in the Top Bar to save the route drawn.

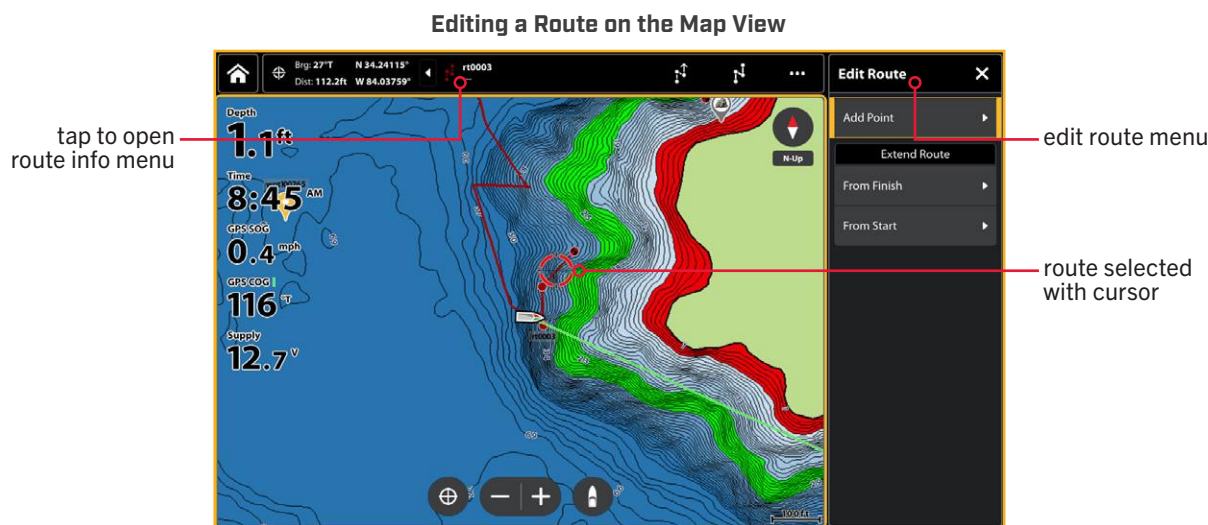
Undo: Tap the Undo icon in the Top Bar to undo the drawing.

Using Draw & Navigate



EDIT A ROUTE IN THE MAP VIEW

1. Tap the route to select it.
OR
Use the Cursor pad/Joystick to move the cursor to a route on the map. Press the ENTER key.
2. Use the Route Info menu to edit the route name, color, and more (see *Manage your Navigation Data* for more information).
3. **Close:** Press the EXIT key.



ADD OR DELETE POINTS IN A ROUTE

1. Tap the route to select it. Tap the Route Name.
OR
Use the Cursor pad/Joystick to move the cursor to a route on the map.
2. Tap the More icon in the Cursor menu.
3. Tap the Edit icon .
4. Select Add Point or Extend Route From Finish or Extend Route From Start.

DELETE A ROUTE IN THE MAP VIEW

1. Tap the route to select it.
OR
Use the Cursor pad/Joystick to move the cursor to a route on the map. Press the ENTER key.
2. Tap the More icon in the Cursor menu.
3. Tap the Delete icon .

TRACKS



A track is a collection of track points that contains the vessel's detailed position history at set intervals. The Current Track shows the position history since the fish finder was powered on. Record Track must be turned on to enable this feature (see **Record a Track**). You can clear the Current Track or save it at any time. To change the track point interval, edit saved tracks, and create track settings, see **Manage your Navigation Data**. You can save 50 tracks (each with 20,000 track points) to the fish finder.



Start Point



End Point

SET UP TRACKS >

Your fish finder is set to record tracks and display them on the view. Use the instructions in this section if you've changed the fish finder default settings.

> Record a Track

When Record Track is turned on, the fish finder will save the current track. If Record Track is turned off, the track will not be recorded or saved.

1. Press the HOME  key.
2. Select the My Data tool.
3. Select My Data Settings.
4. Select Tracks.
5. Select Record Track. Tap the on/off button, or press the ENTER key, to turn it on.

> Display Tracks on the Map View

You can display saved tracks or active tracks on the Map View.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Overlays > Nav Data.
4. Add a check mark to Tracks (Active) or Tracks (Saved) to make them visible on the Map View.

NOTICE: To set an individual track to visible or hidden, see **Manage your Navigation Data: Edit a Saved Track**.

SAVE THE CURRENT TRACK >

Use the following instructions to save the current track and start a new track.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Current Track.
3. Select Save Current Track.

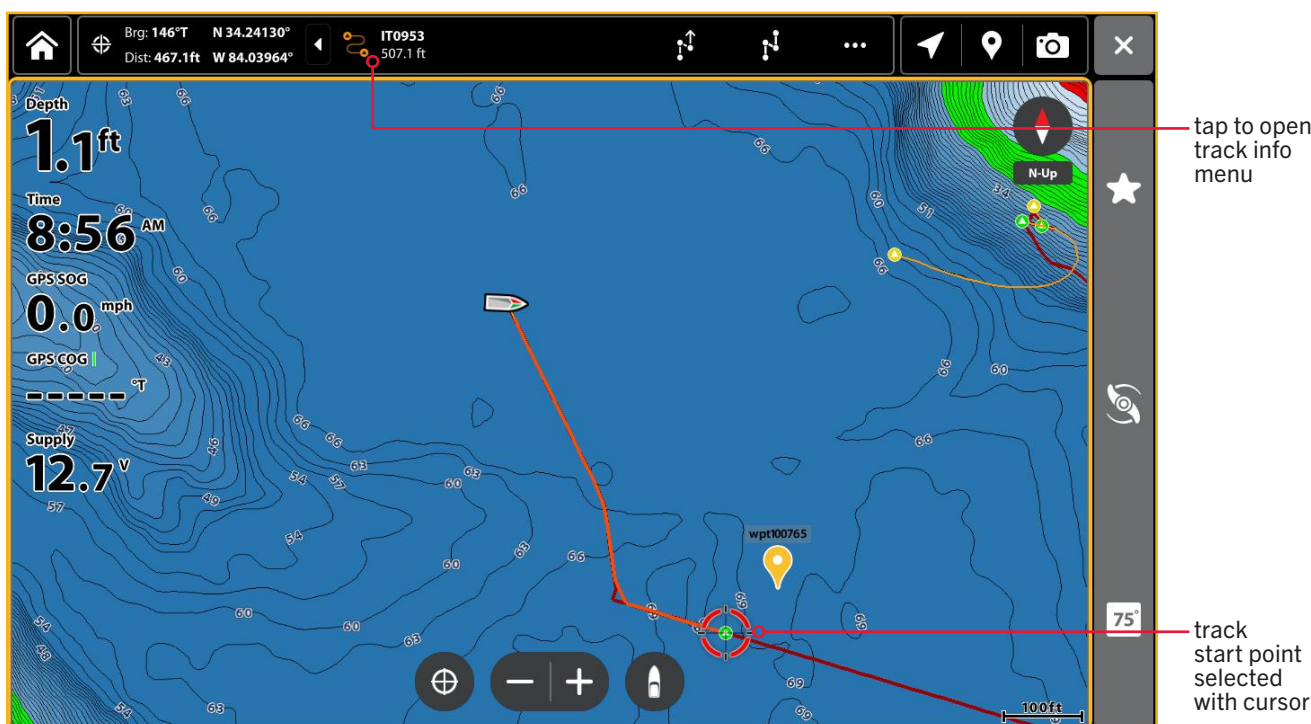
NOTICE: You can also start a new track from the My Data tool. See **Manage your Navigation Data: Manage Tracks**.

CLEAR THE CURRENT TRACK >

Use the following instructions to clear the current track and start a new track at the current vessel position.

1. With a Map View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Current Track.
3. Select Clear Current Track.

Map View with a Track Displayed



EDIT A TRACK IN THE MAP VIEW >

1. Tap a track start point or end point, or use the Cursor pad/Joystick to move the cursor to a track start point or end point.
2. Tap the Track name in the Top Bar. The Track Info menu will open.
3. Edit the track name, style, color, and more from the Track Info menu.
4. **Close:** Press the EXIT key.

NOTICE: To change the default appearance for new tracks, or to change the Track Point Interval, see *Manage your Navigation Data: Manage Tracks*.

DELETE A SAVED TRACK >

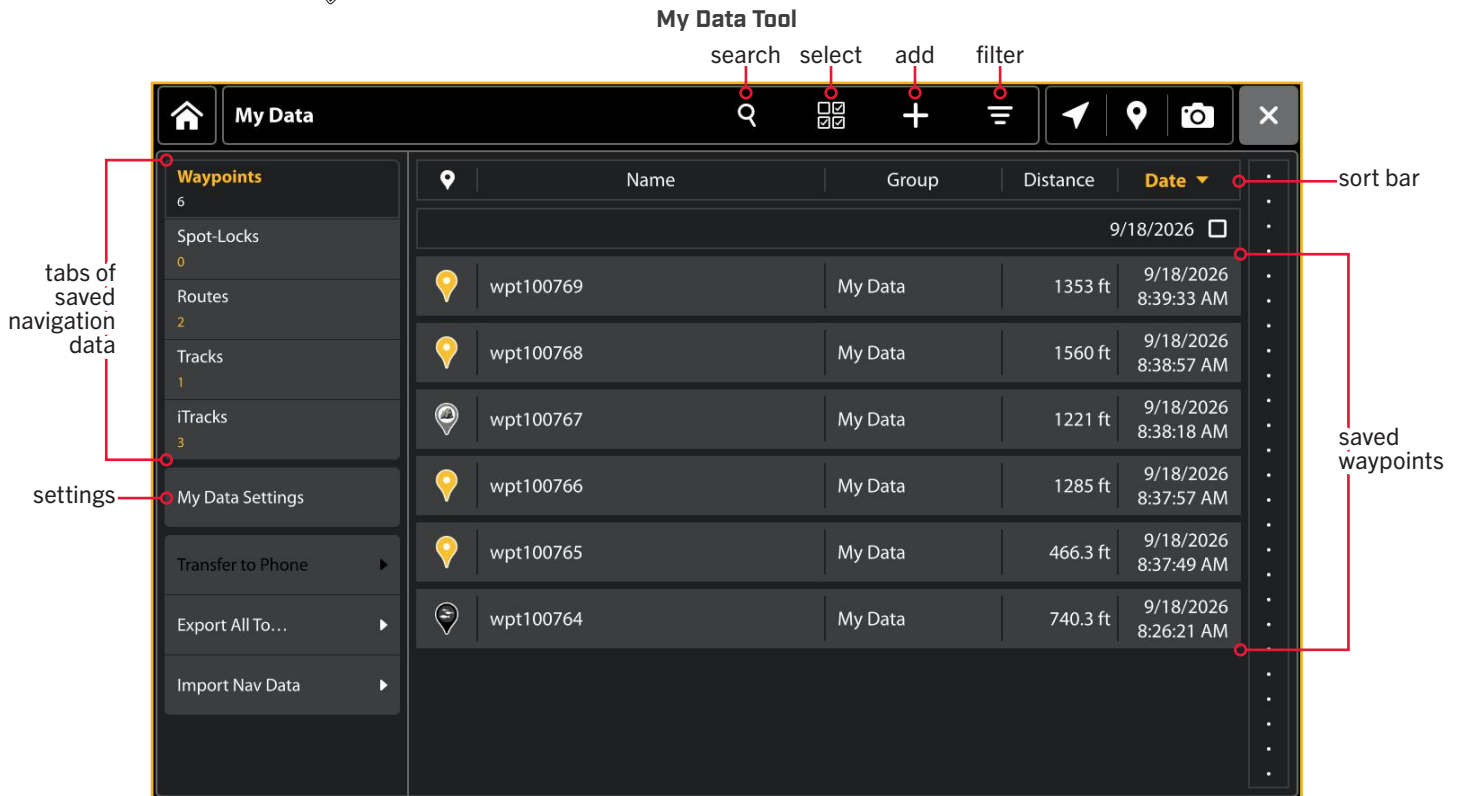
1. Tap a track start point or end point, or use the Cursor pad/Joystick to move the cursor to a track start point or end point.
2. Tap the More icon  in the Cursor menu.
3. Tap the Delete icon .

MANAGE NAVIGATION DATA

Use the My Data tool to manage your saved waypoints, spot-locks, routes, and tracks. You can edit your saved navigation data and start navigation from this tool.

› Open the My Data Tool

1. Press the HOME  key.
2. Select the My Data tool .



› Sort Lists

1. Select a navigation data tab: Waypoints, Spot-Locks, Routes, Tracks or iTracks.
2. Tap a column name, or move the Cursor pad/Joystick and press it on a column name. The first tap will sort the column low to high or A to Z. The second tap will sort it high to low or Z to A.

› Filter Lists

1. Select a navigation data tab: Waypoints, Spot-Locks, Routes, Tracks or iTracks.
2. Tap the Filter icon  in the Top Bar.
3. Select a category.

› Select Data

1. Select a navigation data tab: Waypoints, Spot-Locks, Routes, Tracks or iTracks.
2. Tap the Select icon  in the Top Bar.
3. Tap Select All to select each data point in the list.
4. Select an option from the Top Bar to apply to all selected data.

» Add

- 1. Select a navigation data tab: Waypoints, Spot-Locks, Routes, Tracks or iTracks.
- 2. Tap the Add icon **+** in the Top Bar.
- 3. Select one of the following menu options:

Add Menu Actions	
Waypoint at Position	Adds a Waypoint at the keyed in latitude and longitude.
Group	Adds the selected data to a new or existing group.
Import Nav Data	Transfer data to the selected media.

» Open the Data Info Menu

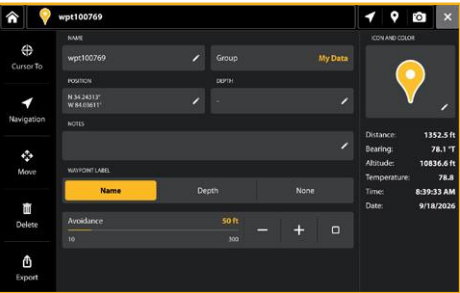
- 1. Select a navigation data tab: Waypoints, Spot-Locks, Routes, Tracks or iTracks.
- 2. Tap one of the data points.

» Info Menu Actions

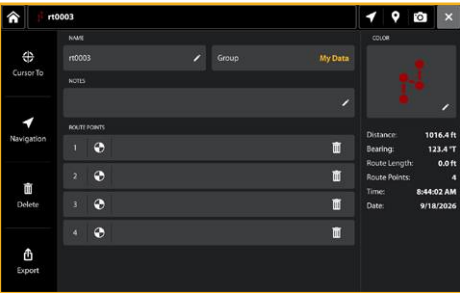
Tapping on a navigation data point will open the Info Menu. Use this menu to edit information about the navigation point and to start one of the following actions:

Info Menu Actions	
Cursor To	Select to display cursor at the data point in map view.
Navigation	Select to start navigation to the selected waypoint, spot-lock, route or track.
Delete	Select to delete the selected navigation data.
Export	Select to export navigation data to an SD card or to the Minn Kota Fishing App.

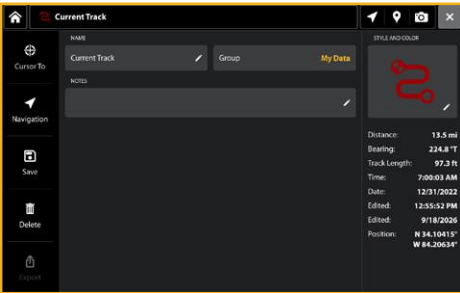
Waypoint Info Menu



Route Info Menu



Track Info Menu



MANAGE NAVIGATION DATA

MANAGE WAYPOINTS

Edit a Waypoint

1.

Select the Waypoints tab.
2.

Tap a waypoint, or use the Cursor pad/Joystick to select a waypoint and press the ENTER key. The Waypoint Info Menu will open.
3.

Select the Edit icon  in the field you want to edit.

Editing Options for Saved Waypoints	
Waypoint Name	Select the waypoint name and use the on-screen keyboard to change it.
Icon and Color	Select an icon category (water, fishing, navigation, POI [point of interest], etc.) and select an icon to represent the selected waypoint. Then, select a color to represent the waypoint.
Group Name	The menu name will vary with the default group name. Select the group name to change where the selected waypoint is saved. See Groups for more information.
Position	Use the on-screen keyboard to edit the latitude/longitude position of the waypoint.
Depth	Use the on-screen keyboard to enter a depth for the waypoint if it was not marked at the vessel position.
Notes	Use the on-screen keyboard to add notes about the waypoint.
Waypoint Label	Select if the waypoint should be labeled by name or depth or have no label.
Avoidance	Add a check mark to the Avoidance box to display the Waypoint Avoidance Radius. Adjust the radius by tapping the +/- buttons or using the slider.

Delete a Waypoint

1.

Select the Waypoints tab.
2.

Tap a waypoint. The Waypoint Info Menu will open.
3.

Tap Delete.
- OR
1.

Select the Waypoints tab.
2.

Tap and hold on a waypoint (or multiple waypoints) to select it. There will be a check mark next to the waypoint.
3.

Tap Delete in the Top Bar.

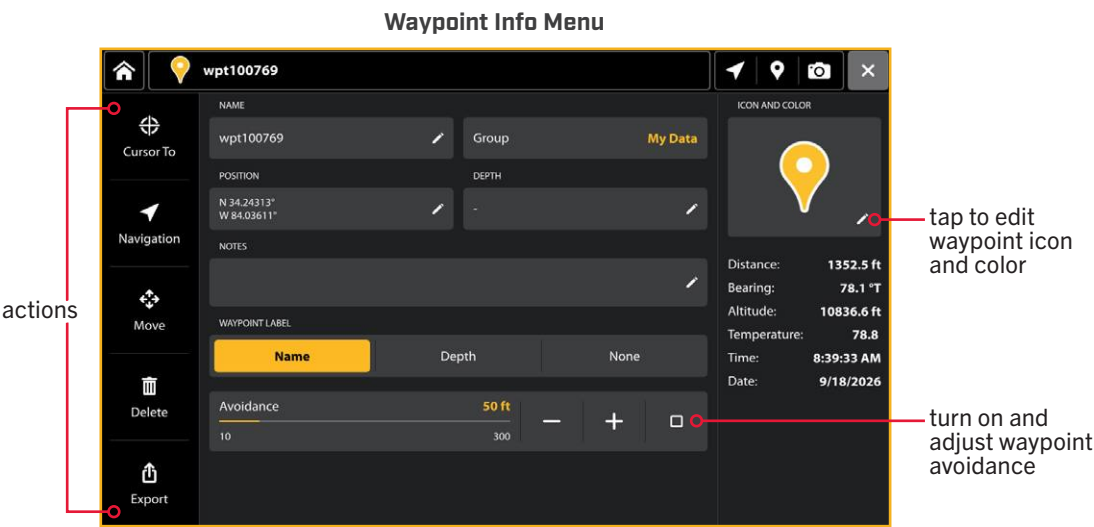
Navigate to a Selected Waypoint

1.

Select the Waypoints tab.
2.

Tap a waypoint. The Waypoint Info Menu will open.
3.

Tap Navigation.



MANAGE ROUTES »

» Edit a Route

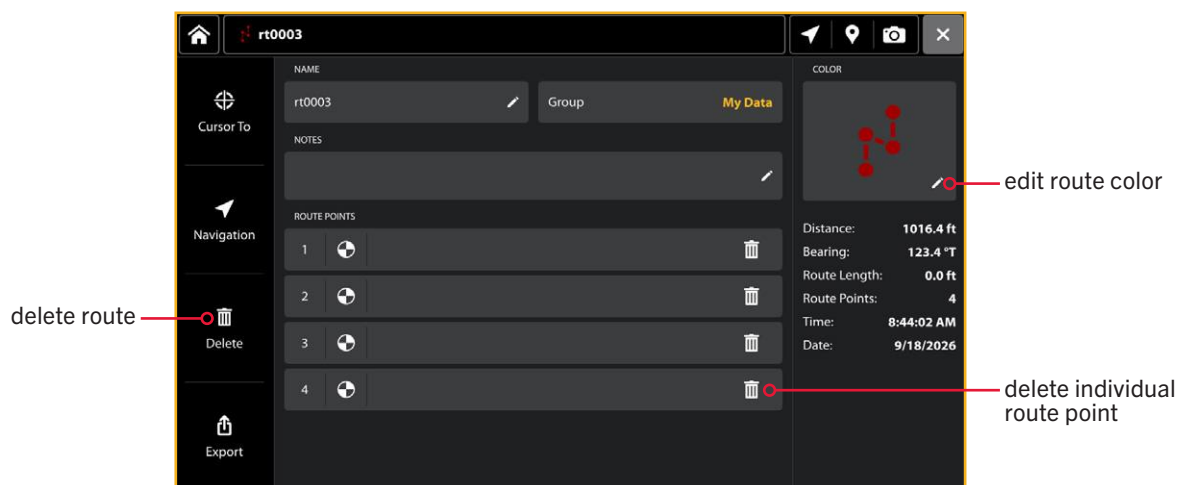
- 1. Select the Routes tab.
- 2. Tap a route, or use the Cursor pad/Joystick to select a route and press the ENTER key. The Route Info Menu will open.
- 3. Select the Edit icon  in the field you want to edit.

Editing Options for Saved Waypoints	
Route Name	Select the route name and use the on-screen keyboard to change it.
Color	Select a color to represent the route.
Group Name	The menu name will vary with the default group name. Select the group name to change where the selected waypoint is saved. See Groups for more information.
Position	Use the on-screen keyboard to edit the latitude/longitude position of the waypoint.
Notes	Use the on-screen keyboard to add notes about the route.
Visibility	To display the route on the view, select On. To hide the route on the view, select Off.
Route Points	Tap the Delete icon to delete a specific point in the route.



MANAGE NAVIGATION DATA

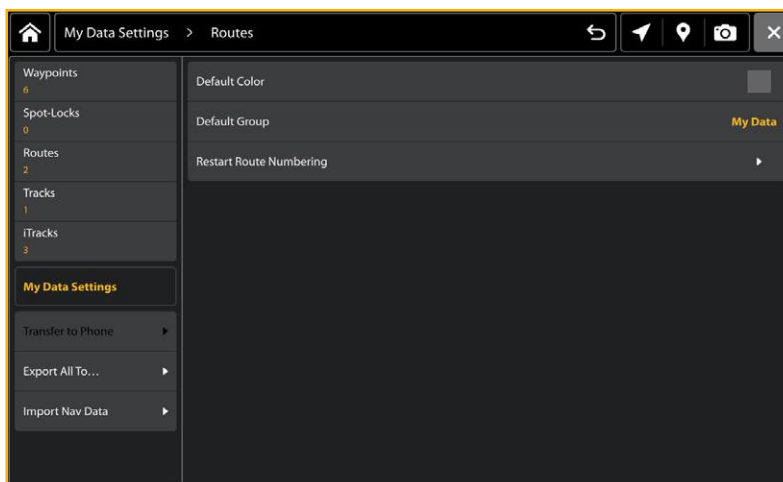
Changing the View Settings



Change Default Settings for New Routes

1. In the My Data tool, select My Data Settings.
2. Select Routes.
3. Select the default color and group.
4. **Optional:** Select Restart Route Numbering to restart the numbering sequence at rt0001.

Route or Edit Default Settings



Delete a Route Point

1. Select the Routes tab.
2. Tap a route, or use the Cursor pad/Joystick to select a route and press the ENTER key. The Route Info Menu will open.
3. Select a point in the route to delete and tap the Delete icon.

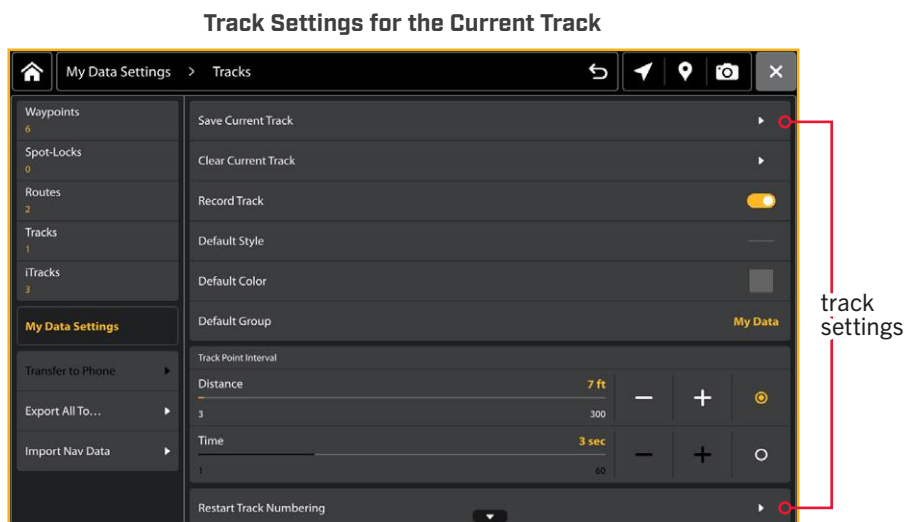
› Delete a Route

1. Select the Routes tab.
 2. Tap a route. The Route Info Menu will open.
 3. Tap Delete.
- OR
1. Select the Routes tab.
 2. Tap and hold on a route (or multiple routes) to select it. There will be a check mark next to the route.
 3. Tap Delete in the Top Bar.

› Navigate a Selected Route

1. Select the Routes tab.
2. Tap a route. The Route Info Menu will open.
3. Tap Navigation.

MANAGE TRACKS ›



› Start a New Track

The Record Track menu must be turned on to enable this feature.

1. Under Options, select Tracks.
2. Select New Track.

› Record a Track

When Record Track is turned on, the fish finder will save the current track. If you power off the fish finder and then power on the fish finder at a different position, there might be gaps in the track.

If Record Track is turned off, the track will not be displayed on the Map View, and the track will not be recorded or saved.

1. Under Options, select Tracks.
2. Select Record Track. Tap the on/off button, or press the ENTER key, to turn it on.

MANAGE NAVIGATION DATA



› Auto-Save

When Auto-Save is turned on, the fish finder will save the current track each time the fish finder is powered off, and a new track will be started when the fish finder is powered on again.

When Auto-Save is turned off, the current track will continue until you save it (see **Tracks: Save the Current Track**).

- 1. Under Options, select Tracks.
- 2. Select Record Track. Tap the on/off button, or press the ENTER key, to turn it on. The fish finder will start recording the current track at the moment the menu is turned on.

› Change Default Settings for New Tracks

- 1. Under Options, select Tracks.
- 2. Select Default Settings.

Changing the Default Settings for New Tracks	
Style	Select a line style.
Color	Select a color.
Group	Select the group name to change where tracks will be saved. You can also open a new group from this menu. See Groups for more information.

› Change the Track Point Interval

- 1. Under Options, select Tracks.
- 2. Select Track Point Interval.
- 3. Select Distance or Time.
- 4. Select the Back icon on the status bar, or select the Tracks tab under Options to return to the Track Options menu.
- 5. If you selected Distance in step 3, adjust the Distance slider to adjust the distance between track points.
If you selected Time in step 3, select Time and open the menu. Select the amount of time between track points.

› Edit a Saved Track

- 1. Under Lists, select Tracks.
- 2. Press and hold a track. Select Info.
OR
Use the Joystick to select a track. Press the ENTER key.
- 3. Edit the saved track using the options in the Track Info menu.
To see the complete list of options to edit the track, select Full Info.





Editing Options for a Saved Track	
Track Name	Select the track name and use the on-screen keyboard to change it.
Style	Select a line style.
Color	Select a color.
Visibility	To display the track on the Map View, select On. To hide the track on the Map View, select Off.
My Data (Group Name)	The menu name will vary with the default group name. Select the group name to change where the selected track is saved. See Groups for more information.
Edit Notes (Select Full Info)	Use the on-screen keyboard to add notes about the selected track.

› Delete a Track

- 1. Under Lists, select Tracks.
- 2. Press and hold a track. Select Delete.
- OR
- 1. Use the Joystick to select a track. Press the ENTER key.
- 2. Select Full Info.
- 3. Select Delete Track.

MANAGE GROUPS ›

Use Groups to organize your navigation data (waypoints, routes, and tracks) in one set. Some anglers prefer to group their navigation data by trip, fish-type, body of water, or time of day. Your fish finder can hold up to 50 groups.

Default Group: Your navigation data is saved to My Data, the default group for your fish finder. You can create new groups and save new navigation data to them. You can also move saved navigation data to a different group.

› Create a New Group

- 1. Press the HOME  key.
- 2. Select the My Data tool.
- 3. Select My Data Settings.
- 4. Select Groups.
- 5. Select New Group.
- 6. Use the on-screen keyboard to name the new group.
- 7. Select Save.



MANAGE NAVIGATION DATA



› Set the Default Group

Your navigation data is saved to My Data as the default group. The instructions in this section allow you to save your new navigation data to a different group, so as a waypoint, route, or track is saved, it will be saved to the group you’ve set up. You can assign waypoints, routes, and tracks to different groups, or you can assign them to the same group.

- 1. Press the HOME key.
- 2. Select the My Data tool.
- 3. Select My Data Settings.
- 4. Select Waypoints, Spot-Locks, Routes, Tracks or iTracks.
- 5. Select Group.
- 6. Select a group from the list.
To create a new group, select New Group.
- 7. Repeat these instructions for each type of navigation data.

› Move Navigation Data to a Group

- 1. Press the HOME key.
- 2. Select the My Data tool.
- 3. Tap a saved item or use the Selection tool to select multiple items.
- 4. Select the Group icon from the Top Bar.
- 5. Select a group from the list.
- 6. To create a new group, select New Group.

QUICK TIP! The Group can also be changed from the Navigation Data Info Menu.

DELETE ALL NAVIGATION DATA ›

The Delete All menu allows you to select a navigation data category and delete all items in that category. For example, if you select Delete All > Waypoints, all saved waypoints will be deleted.

To delete individual waypoints, or other individual navigation items, see the previous sections of *Manage your Navigation Data*.

CAUTION

Use this menu with caution!

- 1. Press the HOME key.
- 2. Select the My Data tool.
- 3. Select Delete.
- 4. Select a category. **Follow the on-screen prompts to confirm the deletion.**



IMPORT/EXPORT NAVIGATION DATA »

Your fish finder allows you to export your waypoints, spot-locks, routes, and tracks, so you can view the data on your personal computer. You can also import your navigation data.

» Import Navigation Data

Requirements: Navigation data must be saved as a GPX file.

1. Install the microSD card (with navigation data) into the front fish finder port.
2. Press the HOME  key.
3. Select the My Data tool.
4. Select Import.
5. Select a .GPX file. The navigation data will be imported to the fish finder.

» Export Navigation Data

1. Install a formatted microSD card into the front fish finder port or have the Minn Kota Fishing App synced to your fish finder.
2. Press the HOME  key.
3. Select the My Data tool.
4. Select Export All To...
5. **Select a Save Location:** Select which microSD Card to save the data to, or select to transfer the data to the Minn Kota Fishing App.
All saved navigation data will be exported to the selected location.

SONAR OVERVIEW

A functioning transducer must be attached to the fish finder or selected as the transducer source on the Ethernet network to enable sonar functions. To purchase transducers, visit our Web site at minnkota.johnsonoutdoors.com.

The X Series, A Series, XPLORE, APEX and SOLIX fish finders support the following sonar:

- MEGA Imaging+ with Dual Spectrum CHIRP Sonar
- MEGA Imaging with Dual Spectrum CHIRP Sonar
- Dual Spectrum CHIRP Sonar (2D)
- Digital CHIRP Sonar: 2D CHIRP, Side Imaging CHIRP and Down Imaging CHIRP use multiple frequency ranges, either individually or blended together.

NOTICE: Depth capability is affected by such factors as boat speed, wave action, bottom hardness, water conditions, and transducer installation. See the **Specifications** section for details.

MEGA IMAGING+ »

MEGA Side Imaging+ and MEGA Down Imaging+ sonar provides two high frequency options, and includes (2D) Dual Spectrum CHIRP sonar.

MEGA Imaging+ transducers

MEGA SI+

XM 14 HW MSI T
XPTH 14 HW MSI T
XM 14 HW CMSI T
XPTH 14 74 MSI T
SSTH 14 HW MSI T
Built-in MSI+

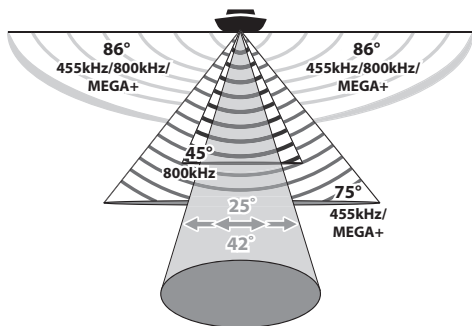
MEGA DI+

XM 14 HW MDI T
XTM 14 HW MDI T
Built-in MDI+

MEGA SI+ sonar uses two very precise sonar beams that are aimed at right angles to the path of the boat. The side beam coverage is very thin from front to back, yet very wide from top to bottom. The beams provide thin slices of the bottom for high resolution imaging. The beams can be operated at one of two display frequencies: MEGA+ or 455 kHz.

MSI+ sonar also provides MEGA Down Imaging+ and (2D) Dual Spectrum CHIRP sonar.

MEGA SI+



MEGA SI+ Cone Angles

MEGA+

Select MEGA for the highest resolution, sharpness, and range (up to 500 ft side to side).

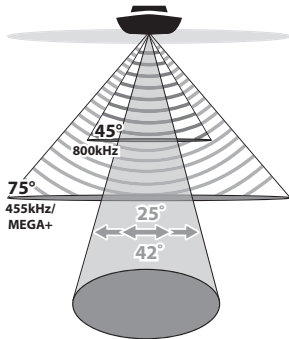
455 kHz

Select 455 kHz for deep water and overall coverage (up to 800 ft side to side).

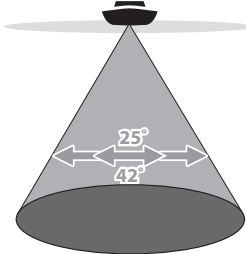
SONAR OVERVIEW

MEGA DI+ sonar beams point down and scan the water with razor-thin, high definition beams that are wide side to side, but very thin from front to back. The beams can be operated at one of two display frequencies: MEGA+ or 455 kHz.

MDI+ also includes (2D) Dual Spectrum CHIRP sonar.

MEGA DI+		
 MEGA DI+ Cone Angles	MEGA+	Select MEGA for the highest resolution, sharpness, and depth (up to 250 ft).
	455 kHz	Select 455 kHz for deep water and overall coverage (up to 400 ft).

Dual Spectrum CHIRP sonar provides conical coverage directly below the boat. The beam can be adjusted to show the full, narrow, or wide frequency range. The sonar returns are displayed on the Sonar (2D) Views.

(2D) Dual Spectrum CHIRP		
 Dual Spectrum Cone Angles	Full	Select Full Beam (default) to use the complete frequency range.
	Narrow	Select Narrow Beam for increased bottom detail and better target separation.
	Wide	Select Wide Beam to maximize coverage and show big, clearly defined fish arches.

MEGA IMAGING >

MEGA Side Imaging and MEGA Down Imaging transducers provide high frequency options, and includes either (2D) Dual Spectrum CHIRP sonar or (2D) DualBeam PLUS sonar (see each table below for respective transducer models).

MEGA Down Imaging Transducers with (2D) Dual Spectrum CHIRP	
XM 14 20 MDI T XTM 14 20 MDI T	

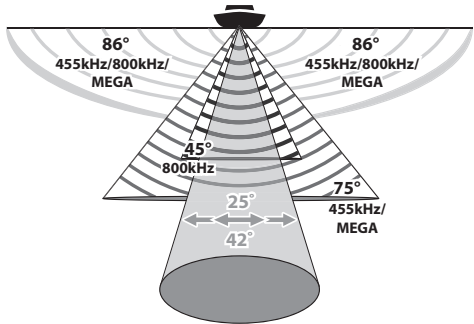
SONAR OVERVIEW



MEGA Imaging Transducers with (2D) DualBeam PLUS	
MEGA SI XM 14 20 MSI T XPTH 14 20 MSI T XM 14 74 MSI T	MEGA DI XM 14 MDI T XTM 14 20 MDI T

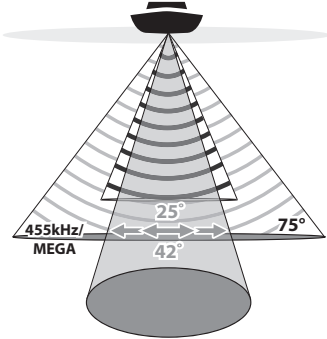
MEGA SI sonar uses two very precise sonar beams that are aimed at right angles to the path of the boat. The side beam coverage is very thin from front to back, yet very wide from top to bottom. The beams provide thin slices of the bottom for high resolution imaging. The beams can be operated at one of three display frequencies: MEGA, 800 kHz, or 455 kHz.

MSI sonar also provides MEGA Down Imaging and (2D) DualBeam PLUS sonar.

MEGA SI		
 MEGA SI Cone Angles	MEGA	Select MEGA for the highest resolution, sharpness, and range (up to 250 ft side to side).
	800 kHz	Select 800 kHz as an alternative frequency with sharp returns (up to 250 ft side to side).
	455 kHz	Select 455 kHz for deep water and overall coverage (up to 800 ft side to side).

MEGA DI sonar beams point down and scan the water with razor-thin, high definition beams that are wide side to side, but very thin from front to back. The beams can be operated at MEGA, 800 kHz, or 455 kHz.

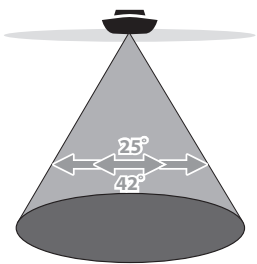
MDI sonar also provides (2D) Dual Spectrum CHIRP sonar.

MEGA DI		
 MEGA DI Cone Angles	MEGA	Select MEGA for the highest resolution, sharpness, and depth (up to 125 ft). <i>*For MEGA SI models, the depth is up to 75 ft.</i>
	800 kHz	Select 800 kHz as an alternative frequency with sharp returns (up to 125 ft).
	455 kHz	Select 455 kHz for deep water and overall coverage (up to 350 ft).



SONAR OVERVIEW

Dual Spectrum CHIRP sonar provides conical coverage directly below the boat. The beam can be adjusted to show the full, narrow, or wide frequency range. The sonar returns are displayed on the Sonar (2D) Views.

(2D) Dual Spectrum CHIRP		
 Dual Spectrum Cone Angles	Full	Select Full Beam (default) to use the complete frequency range.
	Narrow	Select Narrow Beam for increased bottom detail and better target separation.
	Wide	Select Wide Beam to maximize coverage and show big, clearly defined fish arches.

DUAL SPECTRUM CHIRP >

Transducers with HW Dual Spectrum CHIRP			
MEGA SI+ XM 14 HW MSI T XPTH 14 HW MSI T XM 14 HW CMSI T XPTH 14 74 MSI T SSTH 14 HW MSI T Built-in MSI+	MEGA DI+ XM 14 HW MDI T XTM 14 HW MDI T Built-in MDI+	MEGA DI XM 14 20 MDI T XTM 14 20 MDI T	(2D) Dual Spectrum CHIRP XNT 14 HW T XP 14 HW XP 14 HW T XTM 14 HW T Built-in DSC

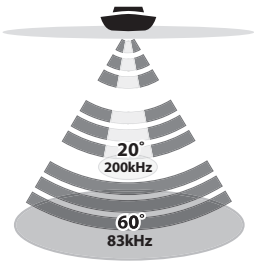
TRADITIONAL [2D] 83/200 KHZ SONAR >

DualBeam PLUS sonar provides conical coverage directly below the boat. DualBeam PLUS sonar returns are displayed in Sonar (2D) Views. The beams can be blended together, viewed separately, or compared side-to-side.

83/200 kHz Transducers	
2D Sonar XNT 14 20 T XP 14 20 T XP 14 20 XTM 14 20 T XTH 14 20 XPTH 14 20 T	SI XM 14 20 MSI T XPTH 14 20 MSI T XT 14 20 HDSI T XPTH 14 20 HDSI T

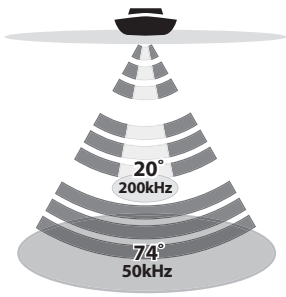
SONAR OVERVIEW

DualBeam PLUS sonar provides conical coverage directly below the boat. The beam can be adjusted to show the medium, high, or medium-high frequency range. DualBeam PLUS sonar returns are displayed on the Sonar (2D) Views.

DualBeam PLUS Sonar		
 DualBeam Cone Angles	Medium (83 kHz) Frequency	Select Medium Frequency for deep water (more than 800 feet). Medium Frequency can be used for deep returns at high speed. If Medium Frequency is selected, the high frequency beam pings in the background but is not displayed.
	High (200 kHz) Frequency	Select High Frequency for more detail at shallower depths (less than 800 feet). If High Frequency is selected, the medium frequency beam is not available.
	Medium/High (83/200 kHz) Frequency	Select Medium/High Frequency to ensure both beams ping continuously, so the sonar history is not interrupted if the Sonar View is closed. The returns from both beams are blended by starting with the wide beam return, dimming it, and then overlaying it with the narrow beam return. The narrow beam sonar returns will stand out from the wide beam sonar returns.

DIGITAL 50/200 KHZ CHIRP SONAR

50/200 kHz Transducers		
2D Models XNT 14 74 T XP 14 74 T XP 14 74 XTM 14 74 T XTH 14 74 XPTH 14 74 T	DI Models XPTH 14 74 DI T	SI Models XPTH 14 74 MSI T XM 14 74 MSI T XT 14 74 HDSI T XPTH 14 74 HDSI T

2D Display		
 50/200 kHz Cone Angle	50 kHz (Low)	Select 50 kHz for deep water (more than 1500 feet). 50 kHz can be used for deep returns at high speed. If 50 kHz is selected, the 200 kHz beam pings in the background but is not displayed.
	200 kHz (High)	Select 200 kHz for faster pinging and shallower water (less than 800 feet).

SONAR SETUP

The available sonar views and menus on the fish finder are determined by the connected transducer and the selected transducer source. The selected transducer must be pinging to enable the views.

When you connect a transducer to an X Series, A Series, XPLORE, APEX or SOLIX fish finder, the transducer will be detected in the network automatically. The best sonar source will be chosen and start pinging automatically.

To manually select a sonar source, see **Installation Information: Set up your Fish Finder Network**.

Transducer Settings: To review transducer settings, including sonar frequencies, depth offset, and maximum depth, see **Installation Information: Set up or Change Transducer Settings**. Also, visit our Web site at minnkota.johnsonoutdoors.com to download the Transducer Setup Guide and review troubleshooting options.

Sonar Settings: You can also change the water type, adjust the noise filter, and select transducer beams. The main sonar settings are displayed in the Sonar tab in the Settings tool (Home > Settings > Sonar). If an accessory transducer is added to the configuration (such as a 360 Imaging transducer or an Airmar CHIRP transducer), the related menu options will be added to the menu system. See **Installation Information: Set up or Change Transducer Settings**.

NOTICE: Visit our Web site at minnkota.johnsonoutdoors.com for the latest compatible transducers and accessories for your fish finder.

START PINGING FROM A SONAR VIEW »

When a transducer is connected to the fish finder, the Sonar View will be automatically added to the view database.

1. From the Home screen, tap the Views icon or Favorites icon in the menu tray.
2. Tap the sonar category and select your preferred view.
3. The sonar returns will begin to display on the view automatically.

STOP PINGING FROM A SONAR VIEW »

1. With a Sonar View displayed on the screen, tap PING ON/Off button on the Top Bar.

Ping on: 

Ping off: 

SONAR ALARMS »

Before you start navigating and fishing with your fish finder, set up sonar alarms. A functioning transducer must be attached to the fish finder or selected as the transducer source on the network to enable all sonar functions.

» Turn on Sonar Alarms

1. Press the HOME  key.
2. Select the Tools menu.
3. Select Alarms.
4. Select Settings > Sonar.
5. Select an alarm and tap the on/off button, or press the ENTER key, to turn it on.
6. Drag the slider, or tap or press the + / - buttons, to adjust the range setting.

SONAR SETUP



Fish (Shallow)	Turn on Fish (Shallow) to receive an alarm if fish are detected in shallow water. You can also adjust the shallow water range with the slider.
Fish (Deep)	Turn on Fish (Deep) to receive an alarm if fish are detected in deep water. You can also adjust the deep water range with the slider.
Shallow Water	If the bottom depth is less than the amount you set, the control head will provide an alarm.
Deep Water	If the bottom depth is more than the amount you set, the control head will provide an alarm.

USE CURSOR AND ZOOM IN SONAR VIEWS >

You can use the cursor in the 2D Sonar, Side Imaging, and Down Imaging Views. With the cursor activated, you can magnify sonar returns on the view to get a closer look.

NOTICE: To display the 2D Sonar View in Split Zoom mode, see *Customize the 2D Sonar View: Change the Sonar Mode*.

> Change the Zoom Mode

In 2D Sonar View and Down Imaging View, the sonar returns will be magnified based on the Zoom Mode setting. You can magnify the full view (Pane Zoom) or a selected area of the view (Cursor Zoom). See *Customize the 2D Sonar View* or *Customize the Down Imaging View* for more information.

1. With a 2D Sonar View or Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar.
2. Select Settings.
3. Select Zoom Mode.
4. Select Pane Zoom or Cursor Zoom.

> Activate the Cursor

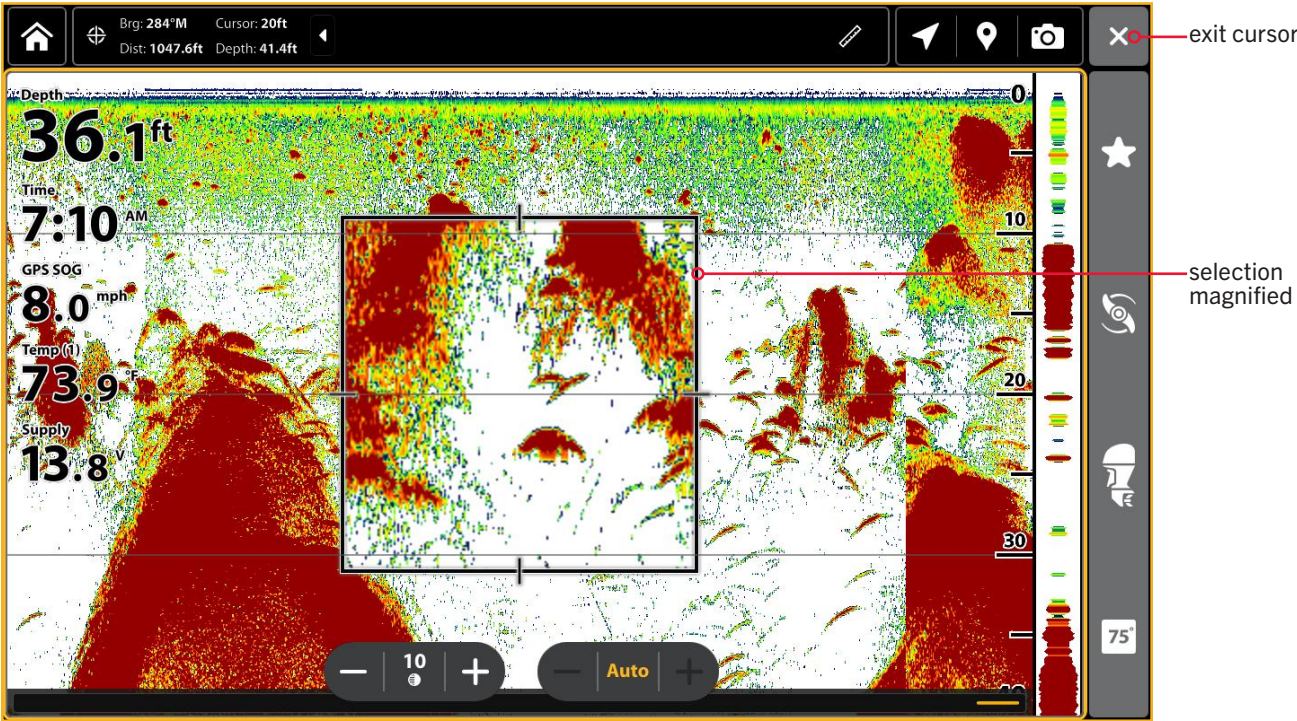
1. Tap a position, or move the Cursor/Joystick, on the 2D Sonar, Down Imaging, or Side Imaging View.

> Zoom In/Out

1. Zoom In: Touch the screen with two fingers and move them apart (pinch out).
OR
Press the +ZOOM key.
2. Zoom Out: Touch the screen with two fingers and move them together (pinch in).
OR
Press the -ZOOM key.



Using Cursor Zoom Mode (2D Sonar View)



2D SONAR

2D SONAR OVERVIEW >

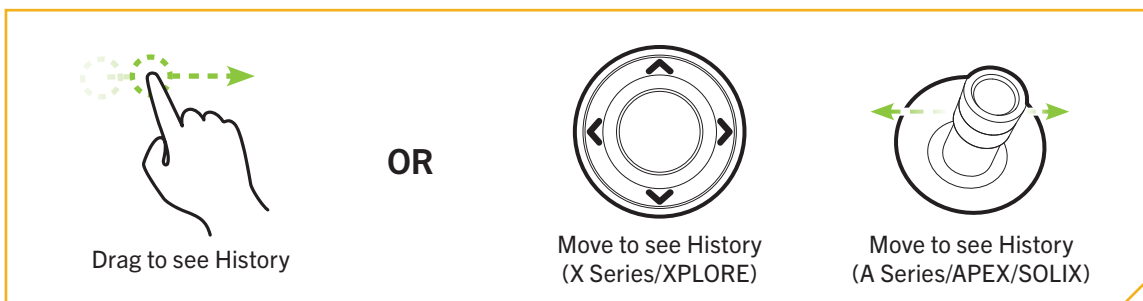
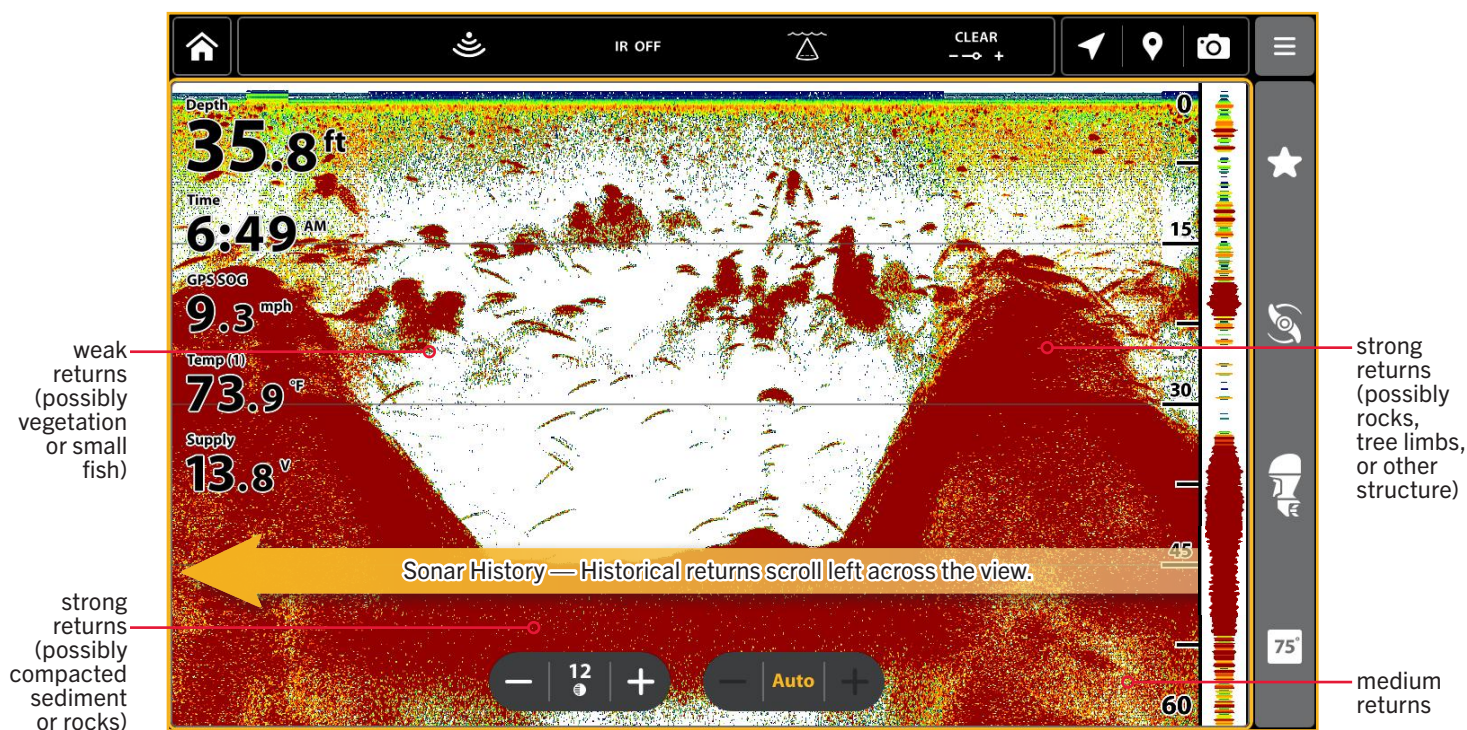
As the boat moves, the unit charts the changes in depth on the display to create a profile of the bottom contour. The 2D Sonar View displays the sonar return intensity with different colors.

Strong returns often result from rocky or hard bottoms (compacted sediment, rocks, fallen trees), while weaker returns often result from soft bottoms (sand, mud), vegetation, and small fish.

The colors used to represent high, medium, to low intensity returns are determined by the palette you choose in the 2D Sonar Menu (see *Open the 2D Sonar Menu: Change the Sonar Color Palette*).

The fish finder displays the return intensity based on the Sonar Color and Bottom View menu settings. You can display the RTS Window (Real Time Sonar), turn on/off fish symbols (Fish ID+), change the SwitchFire mode, adjust sensitivity, and more.

2D Sonar View: Original Palette



CUSTOMIZE THE 2D SONAR VIEW

The settings in this section are optional. You can use the default settings for the 2D Sonar View, or you can customize it with your preferences. See **Views** for more information.

Open the 2D Sonar Menu

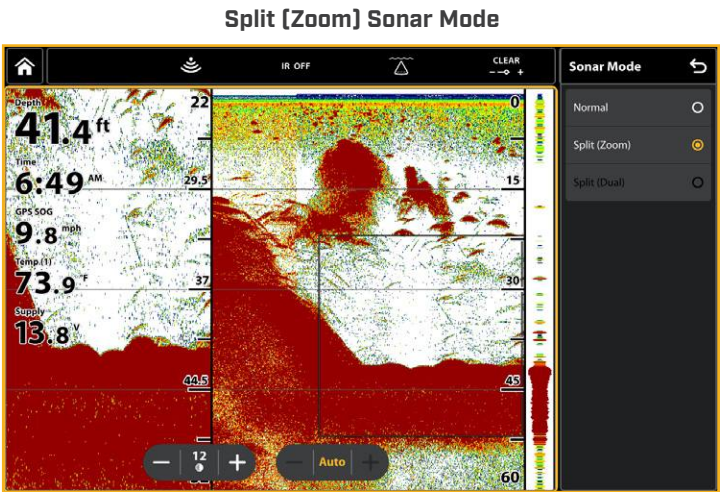
The 2D Sonar menu allows you to set the sonar mode, zoom mode, return palette, background color, bottom view, and RTS Window. For more information about view preferences, see **Views**.

- 1. With a 2D Sonar View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select a display option or select Settings.

Change the Sonar Mode

The 2D Sonar data can be displayed on the full screen. You can also choose a split screen to display the beams separately, or you can display a split zoom view.

- 1. With a 2D Sonar View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Settings.
- 3. Select Sonar Mode.
- 4. Select a mode to apply to the view.



Normal	The 2D Sonar is displayed on the full screen.
Split (Zoom)	The view is split into two sides. 2D Sonar View is displayed on the right side with a zoom preview box. The zoomed view is shown on the left side. Select Split (Zoom) from the Settings menu, and you can turn on Flat Bottom and change the Zoom Window size.
Split (Dual)	The view displays sonar returns from each down beam frequency on separate sides of the screen. You can use the split mode to make side by side comparisons between the sonar returns from both beams.

2D SONAR

Set the Zoom Mode

The Zoom Mode sets the zoom commands to magnify the full pane or the cursor selection. See Use Cursor and Zoom in Sonar Views to apply the zoom features.

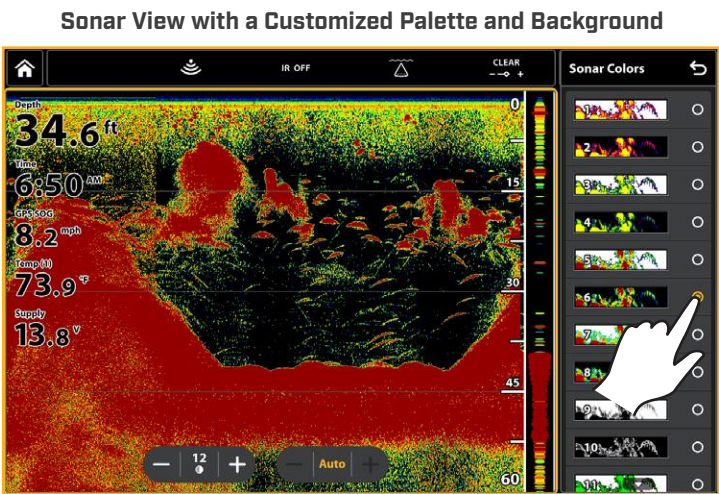
1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Zoom Mode.
4. Select Pane Zoom or Cursor Zoom.

Pane Zoom	When you use pinch out/in (touch screen) to zoom, or press the +/- ZOOM keys, the view will be magnified.
Cursor Zoom	When you use pinch out/in (touch screen) to zoom, or press the +/- ZOOM keys, the cursor selection will be magnified.

Change the Sonar Color Palette

The Sonar Colors menu changes the colors used to display sonar returns on the view.

1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Sonar Colors.
3. Select a color palette.

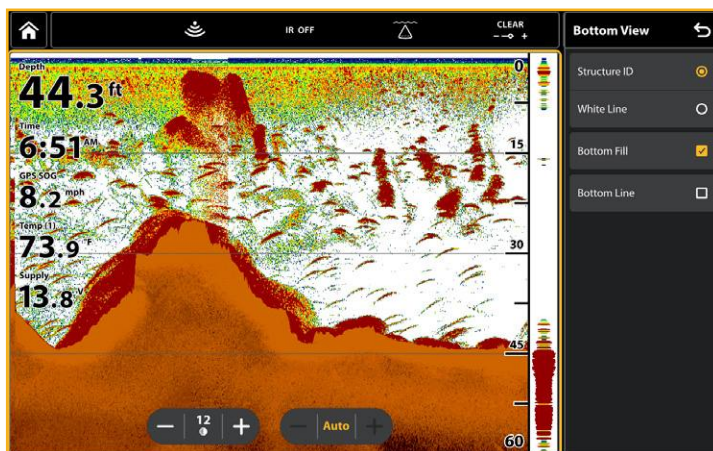


› Set the Bottom View Preferences

Bottom View selects the method used to represent bottom and structure on the display. There are many ways to display the bottom on the display.

1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Bottom View.
4. Select Structure ID or White Line. Then, select Bottom Fill and/or Bottom Line to add them to the view.

2D View with Bottom View Options Displayed



Structure ID	Structure ID represents weak returns in blue and strong returns in red (original palette). If the color palette is changed, the Structure ID will display the strongest return as specified by the palette.
White Line	White Line highlights the strongest sonar returns in white. This has the benefit of clearly defining the bottom on the display.
Bottom Fill	Select Bottom Fill to see the shaded bottom filled in with a solid color on the view. This has the benefit of clearly defining the bottom location on the display.
Bottom Line	Select Bottom Line to display the depth reading from the Depth Source as a line, either from the selected transducer or another digital depth source. See Set up your Fish Finder Network for details about selecting sources.

› Display the RTS Window

The RTS Window plots the depth and intensity of a sonar return. It updates at the fastest rate possible for depth conditions and shows only the returns from the bottom, structure, and fish that are within the transducer beam. When you use the cursor to review sonar history, the sonar history will pause, but the RTS Window will continue to display sonar returns in real time.

1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select RTS Window.
4. Tap the on/off button, or press the ENTER key, to turn it on. Then, choose the type of RTS Window to display.

Color (A-Scope)	Sonar returns are displayed in color. The size of the displayed lines correspond with the intensity of the sonar returns from the transducer beam(s).
Color (Full)	Sonar returns are displayed in color, and they fill the width of the RTS Window.
Mono	Sonar returns are displayed in black.

2D SONAR

Turn on/off Fish ID+

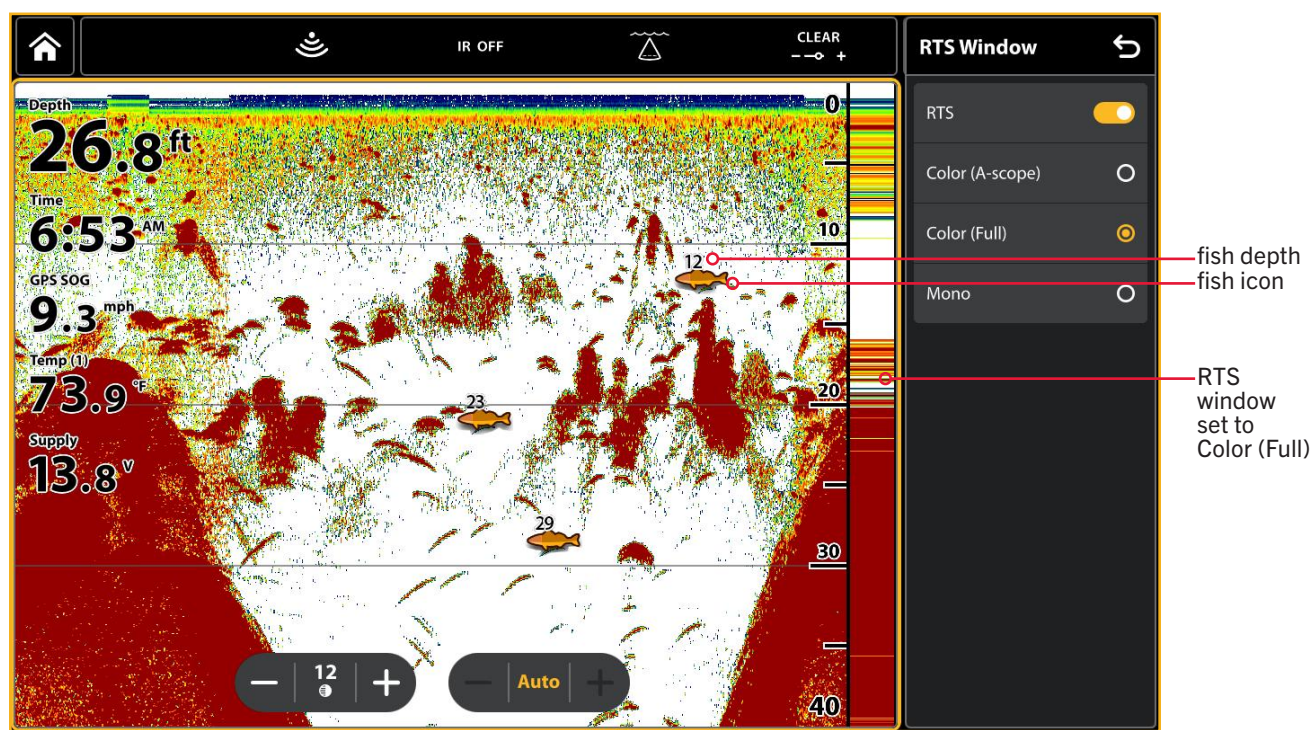
Fish ID+ uses advanced signal processing to interpret sonar returns. When Fish ID+ is selected, fish symbols will be displayed on the Sonar View when very selective requirements are met.

When Fish ID+ is not selected, the fish finder shows only the raw sonar returns on the display. The returns appear as arches on the display to indicate potential targets.

- 1. With a 2D Sonar View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Settings.
- 3. Select Fish ID+.
- 4. Use the following menu options to display fish icons, adjust the sensitivity, and more.

Fish Icons	Select Fish Icons to display fish symbols on the 2D Sonar View when a fish is detected. Blue Fish Icons = targets detected in the 200 kHz narrow beam. Orange Fish Icons = targets detected in the 83 kHz or 50 kHz wide beam.
White Line	The depth of the fish is displayed above the fish icon.
Bottom Fill	Use ID Sensitivity to adjust the threshold used for detecting a fish with Fish ID+. (1 = low sensitivity, where only a large fish will be displayed, and 10 = high sensitivity, where small fish up to large fish will be displayed)
Bottom Line	To receive an on-screen alert when a fish is detected, turn on this menu option.

2D Sonar View with RTS Window and Fish ID+ Turned On



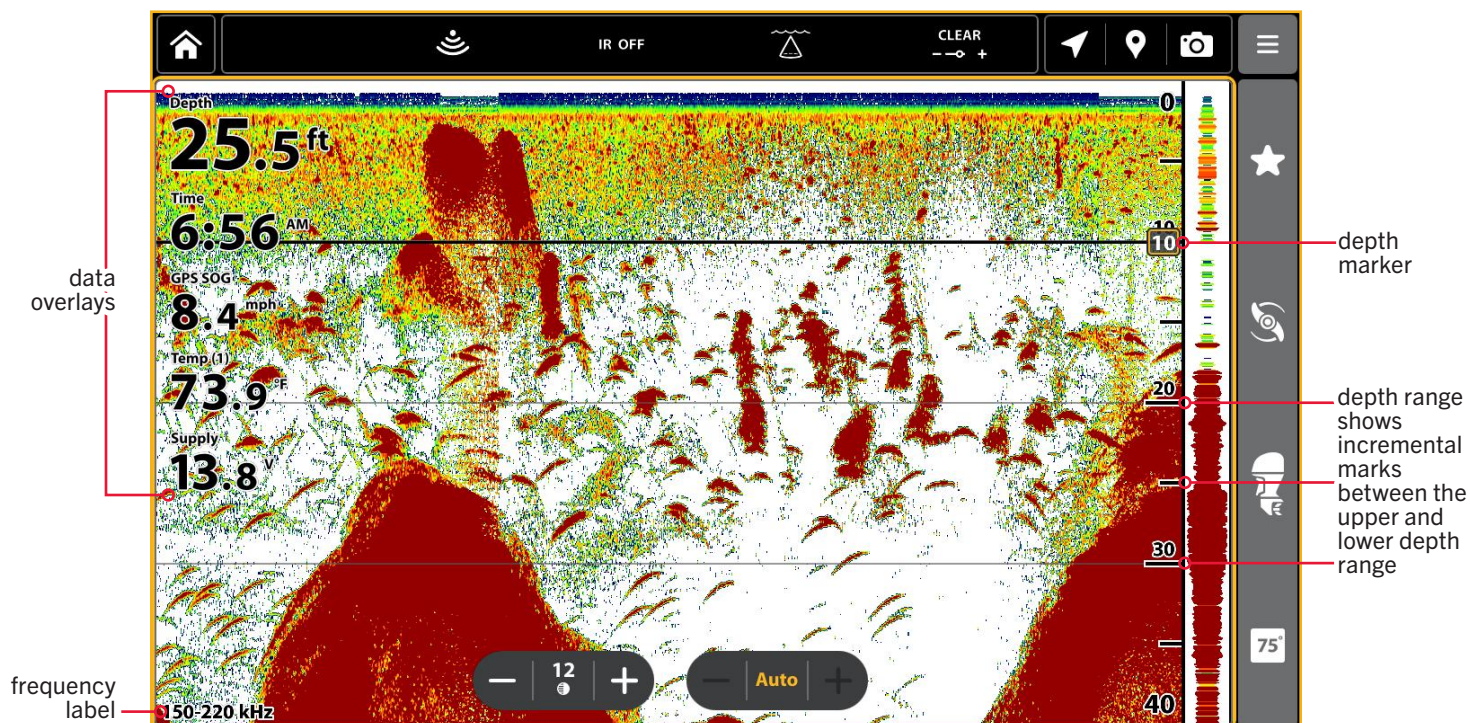
CHANGE THE 2D SONAR VIEW OVERLAYS >

Use the Overlays menu to display or hide information on the view. In the 2D Sonar View, you can display the following: depth lines, depth range, depth marker, temperature graph, beam frequency label, and zoom label.

Digital readout data can be displayed as an overlay, and it can be displayed in the data bar. To turn on the data overlay or data bar, see **Views: Edit the On-Screen View**. For more information about data overlays, see **Views**.

1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select a display option or select Settings.
3. Select Overlays.
4. Tap the menu, or use the Cursor pad to select an item, and add a check mark. (check mark = visible, blank = hidden).

Selecting Overlays for the 2D Sonar View



ADJUST 2D SONAR DISPLAY SETTINGS >

The 2D Sonar Menu provides menu options to adjust the sensitivity and range as you fish. You can also mark a particular depth and control how fast the sonar history scrolls across the screen. The menu options allow you to see more or less of the sonar returns from the transducer beams as you adjust each setting.

2D SONAR



Adjusting Sonar Display Settings

Depth 43.8 ft

Time 6:57 AM

GPS SOG 10.0 mph

Temp (1) 73.9 °F

Supply 13.8 V

scroll speed

sensitivity

range

Sonar (2D)

Sensitivity 10

Contrast 20

Scroll Speed 1x

Sonar Colors

Navigation

Settings

sensitivity

upper range

contrast

scroll speed

lower range

Adjust Display Settings

- 1. With a 2D Sonar View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Sensitivity, Contrast, or Scroll Speed.
- 3. Tap the + or -, or press the +/- ZOOM keys, to adjust the setting.

Sensitivity	Sensitivity controls how much detail is shown on the display and will adjust the sensitivity of all sonar frequencies. Decrease sensitivity to eliminate display clutter sometimes present in murky or muddy water. When operating in very clear water or greater depths, increase the sensitivity to see weaker returns that may be of interest. QUICK TIP! This setting can also be changed by tapping the sensitivity in-pane button on the Sonar View.
Contrast	Contrast allows you to choose a range of the Sonar Colors palette to display sonar returns. When Contrast is set to 20 (default), the entire Sonar Colors palette (represented by the Color Bar) is used to display weak and strong sonar returns. As you increase the Contrast, the top range of the Color Bar is used to display all sonar returns (whether weak or strong). As you decrease the Contrast, the bottom range of the Color Bar is used to display all sonar returns (whether weak or strong).
Scroll Speed	Scroll Speed determines how fast the sonar history moves across the display and how much detail is shown. Select a faster speed to see more detail. Select a slower speed to keep the sonar history on the display longer.

Filter Surface Clutter

Use Surface Clutter to reduce the noise that may appear at the top of the view caused by algae and aeration. The lower the setting, the less surface clutter will be displayed. A higher setting allows more surface clutter to be displayed.

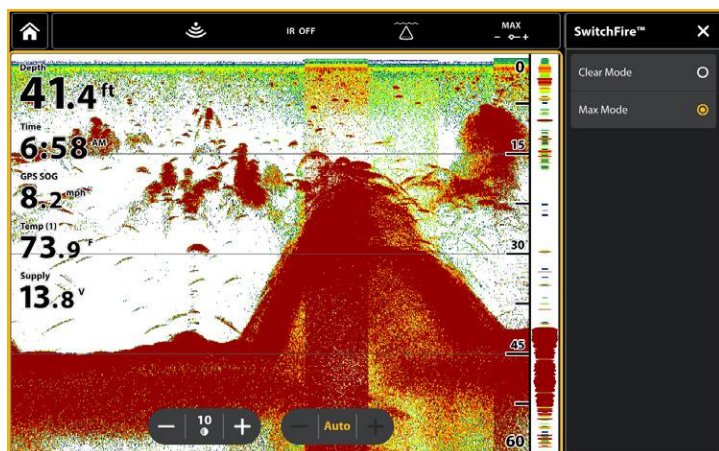
1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Surface Clutter.
4. Tap the + or -, or press the +/- ZOOM keys, to adjust the setting.

Change the SwitchFire Mode

SwitchFire controls how the sonar returns are displayed in the view.

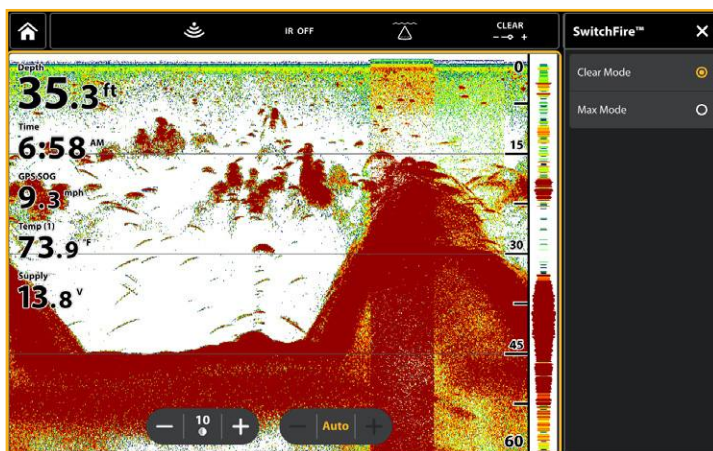
1. With a 2D Sonar View displayed on-screen, tap the SwitchFire icon  in the Top Bar.
2. Select Clear Mode  or Max Mode .

SwitchFire: Max Mode



Choose Max Mode to see only raw sonar returns on the display. When Max Mode is selected, you will see the maximum sonar information available within the transducer beam, so more fish arches and better jig tracking are shown.

SwitchFire: Clear Mode



Choose Clear Mode to see less clutter and more fish size accuracy on the display. When Clear Mode is selected, clutter is filtered, and sonar returns are interpreted to provide more details about objects within the transducer beam, regardless of their location. In other words, a large arch on the display means a large fish has been detected.

Set the Range

Range controls how much of the water column is displayed on the view. For example, if you are only interested in the area between 20 and 50 feet deep, set the Upper Range to 20 and the Lower Range to 50. The view will not display sonar returns outside of the set ranges, and greater detail for the selected range will be displayed.

1. With a 2D Sonar View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Range.
4. Select Upper Range. Tap the + or -, or press the +/- ZOOM keys, to adjust the setting.

OR

Drag the slider at the bottom of the screen to adjust the setting.

2D SONAR

5. Select Lower Range.
- Auto: Move the slider to Auto. The Lower Range will be adjusted by the fish finder to follow the bottom automatically.
- Man (Manual): Move the slider to Manual and adjust the setting.
- QUICK TIP!** This setting can also be changed by tapping the Range in-pane button on the Sonar View.

Display the Depth Marker

- To mark a specific depth on the view, turn on Depth Marker.
- With a 2D Sonar View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
 - Select Settings.
 - Select Overlays.
 - Select Depth Marker.
 - Tap the on/off button, or press the ENTER key, to turn it on.
 - Drag the slider, or press the +/- ZOOM keys, to adjust the setting.

Select Frequencies

If there are multiple beams available in a transducer, you can display individual frequencies on the 2D Sonar View. The menu options are determined by the installed transducer and control head model. See *Installation Information: Set up your Fish Finder Network, Select Sonar Sources* and *Set up or Change Transducer Settings* for details.

- Dual Beam CHIRP Models
- With a 2D Sonar View displayed on-screen, tap the Display Frequency icon **800 kHz** in the Top Bar.
 - Select a frequency from the list.

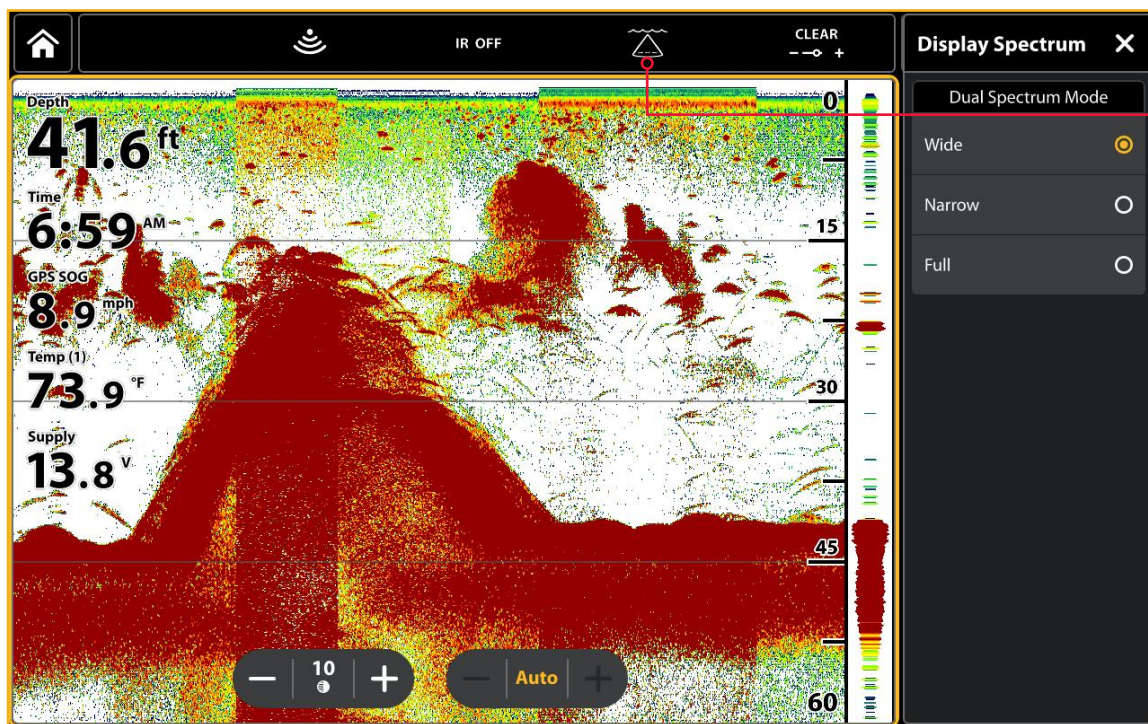
QUICK TIP! This setting can also be changed by pressing and holding the ENTER key.

NOTICE: If the fish finder is using a sonar source with only one beam frequency, the frequency list will not offer additional options.

- Dual Spectrum High Wide Models
- With a 2D Sonar View displayed on-screen, tap the Display Spectrum icon in the Top Bar.
 - Select a spectrum from the list.

	Full	Select Full Beam (default) to use the complete frequency range.
	Narrow	Select Narrow Beam for increased bottom detail and better target separation.
	Wide	Select Wide Beam to maximize coverage and show big, clearly defined fish arches.

2D Sonar View



Tap to open the Display Spectrum menu in the Top Bar.

Adjust Beam Sensitivity

Your fish finder model may allow you to adjust the sensitivity of individual frequencies. The available frequencies are determined by your fish finder model and the installed transducer. Use the following instructions to adjust a single beam.

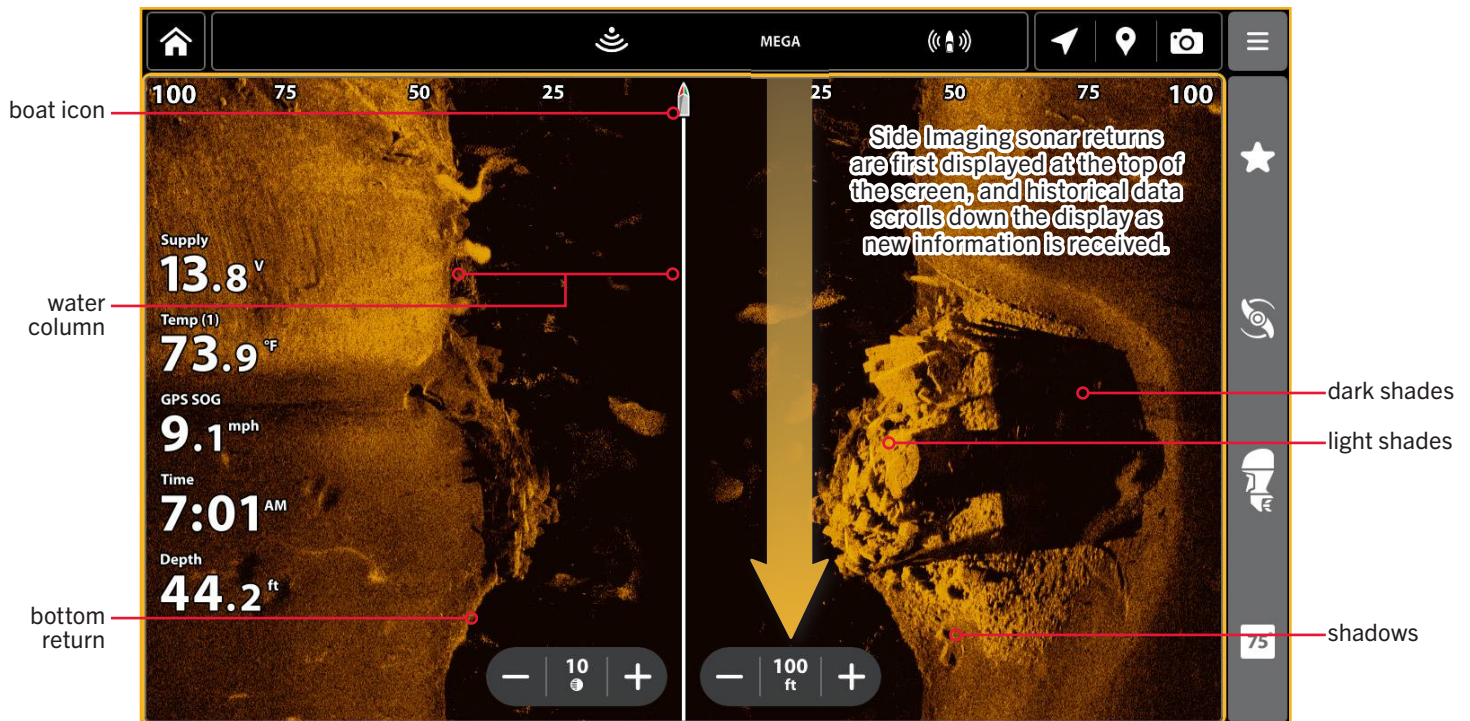
1. Tap the Sensitivity tool on the Sonar View.
- OR
1. With a 2D Sonar View displayed on-screen, tap the Menu in the Top Bar, or press the MENU key once.
2. Select Sensitivity.
3. Tap the + or -, or press the +/- ZOOM keys, to adjust the setting.

SIDE IMAGING

SIDE IMAGING OVERVIEW >

Side Imaging beams “illuminate” the bottom contour, structure, and fish. The side beam coverage is very thin from front to back, yet very wide from top to bottom. The bottom composition determines the intensity of the sonar return, and upward slopes that face the transducer reflect sonar better than downward slopes that face away from the transducer.

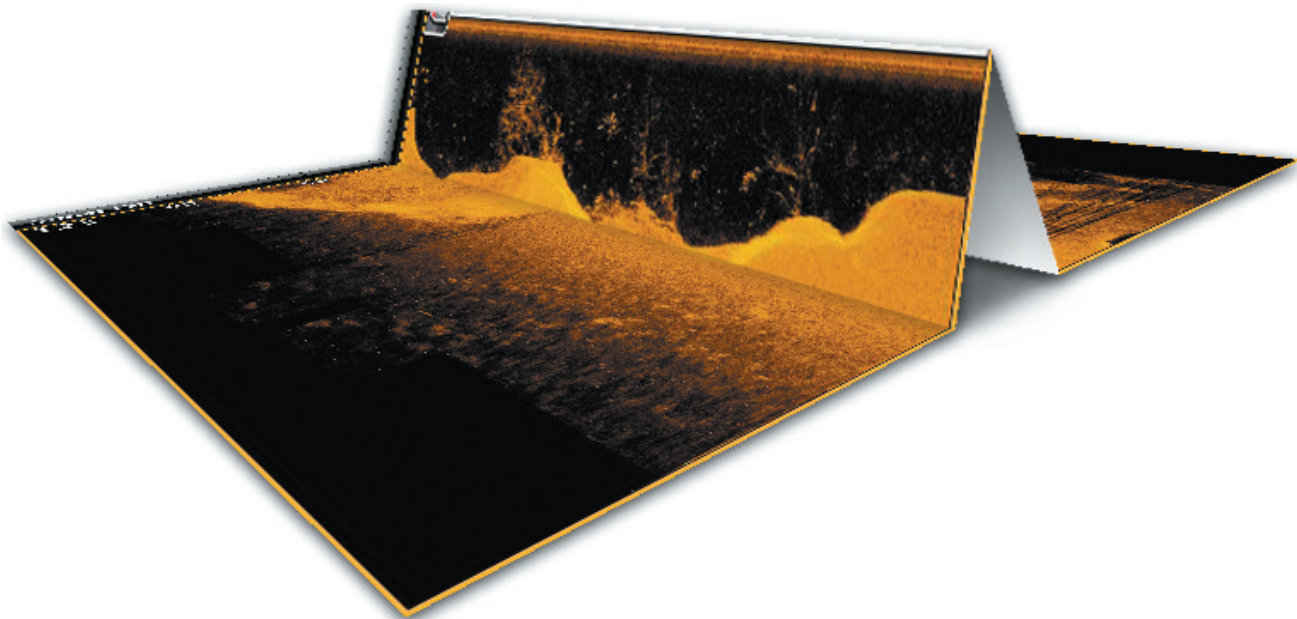
Side Imaging View



Use the light and dark parts of the display to interpret the objects on the view as follows:

- **Shadows:** The longer the shadow, the taller the object. Fish also cast shadows, and their distance from the bottom can be interpreted by their shadow.
- **Light Shades** represent denser terrain (possibly compacted sediment, timber, rocks) or rising terrain.
- **Water Column:** shows the relative depth of the water under the vessel at any given time. Variations in the width of the water column show variations in the distance to the bottom as the vessel passes over. See the illustration *Interpreting the Side Imaging View*.
- **White Streaks** or **Clouds** may represent fish on the display.
- **Dark Shades** represent soft returns (possibly sand or mud) or descending terrain.

Interpreting the Side Imaging View



To visualize how Side Imaging works, the Side Imaging View illustration can be folded down the middle and then folded again at the lowest point of the water column. The raised area reveals the water column with its relative depth of the water under the vessel. In the Side Imaging View, variations in the width of the water column show variations in the distance to the bottom as the vessel passes over.

For best side imaging performance:

- Vessel Speed: 2 to 6 mph
- Straight line navigation
- Minimum turning time and wave turbulence

Also, see minnkota.johnsonoutdoors.com for tutorials and Side Imaging videos.

CUSTOMIZE THE SIDE IMAGING VIEW >

The settings in this section are optional. You can use the default settings for the view, or you can customize it with your preferences. See **Views** for more information.

> Open the Side Imaging Menu

The Side Imaging menu allows you to select a beam to display, set the zoom mode, color palette, and turn on Contour Mode and SI Navigation. For more information about view preferences, see **Views**.

1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select a display option or select Settings.

SIDE IMAGING

› Select Beams to Display

The Side Imaging View displays both beams on the view. You can also choose to display the left side or the right side of the Side Imaging transducer beams.

1. With a Side Imaging View displayed on-screen, tap the SI Side icon (📶) in the Top Bar.

2. Select a side to display.

OR

1. With a Side Imaging View displayed on-screen, tap the Menu ☰ icon in the Top Bar, or press the MENU ☰ key once.

2. Select Settings.

3. Select SI Side.

4. Select a side to display.

› Change the Color Palette

The Sonar Colors menu changes the colors used to display sonar returns on the view.

1. With a Side Imaging View displayed on-screen, tap the Menu ☰ icon in the Top Bar, or press the MENU ☰ key once.

2. Select Sonar Colors.

3. Select a color palette.

› Turn on/off Dynamic Contrast

Dynamic Contrast automatically enhances the contrast of the selected color palette.

1. With a Side Imaging View displayed on-screen, tap the Menu ☰ icon in the Top Bar, or press the MENU ☰ key once.

2. Select Dynamic Contrast, and tap the on/off button, or press the ENTER key, to turn it on/off.

› Turn on/off Contour Mode

Contour Mode controls how the water column is displayed in the Side Imaging Views. When Contour Mode turned off, the water column is displayed on the view. The location of a target on the display is based on the slant range to the target.

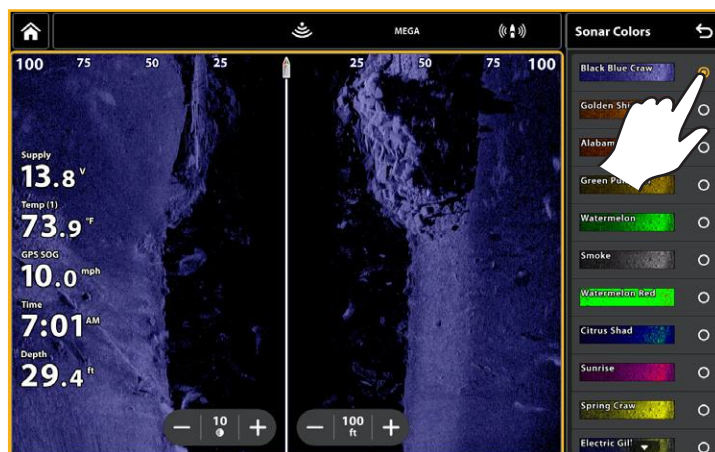
When Contour Mode is turned on, the bottom is graphed at a constant point on the display, regardless of changes in depth. The Side Imaging beams are divided by a vertical line. The water column is removed from the view, which allows the display to show targets at their linear horizontal distance. The location of a target may be easier to interpret when the water column is removed.

1. With a Side Imaging View displayed on-screen, tap the Menu ☰ icon in the Top Bar, or press the MENU ☰ key once.

2. Select Settings.

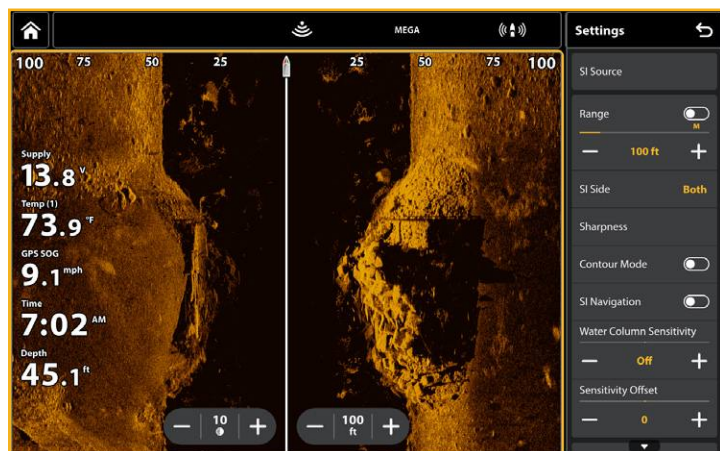
3. Select Contour mode, and tap the on/off button, or press the ENTER key, to turn it on/off.

Side Imaging View with a Customized Palette



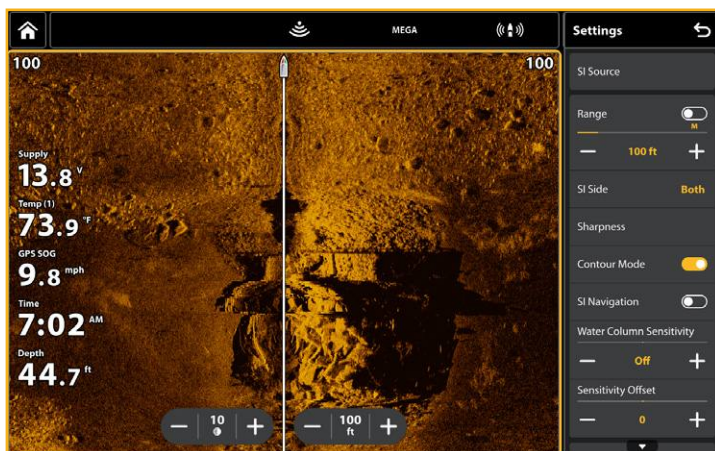


Contour Mode Off



The water column is displayed on the Side Imaging View.

Contour Mode On



The water column is removed from the Side Imaging View.

Turn on/off SI Navigation

SI Navigation controls how the boat icon is displayed in Side Imaging Views. See *Navigation in Sonar Views* for more information. If SI Navigation is turned on, the boat icon indicates the direction the boat needs to turn to reach the next waypoint during navigation.

If SI Navigation is turned Off, the boat icon will not change during navigation although you can still mark waypoints and start navigation from a Side Imaging View.

1. With a Side Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
2. Select Settings.
3. Select SI Navigation, and tap the on/off button, or press the ENTER key, to turn it on/off.

CHANGE THE SIDE IMAGING VIEW OVERLAYS

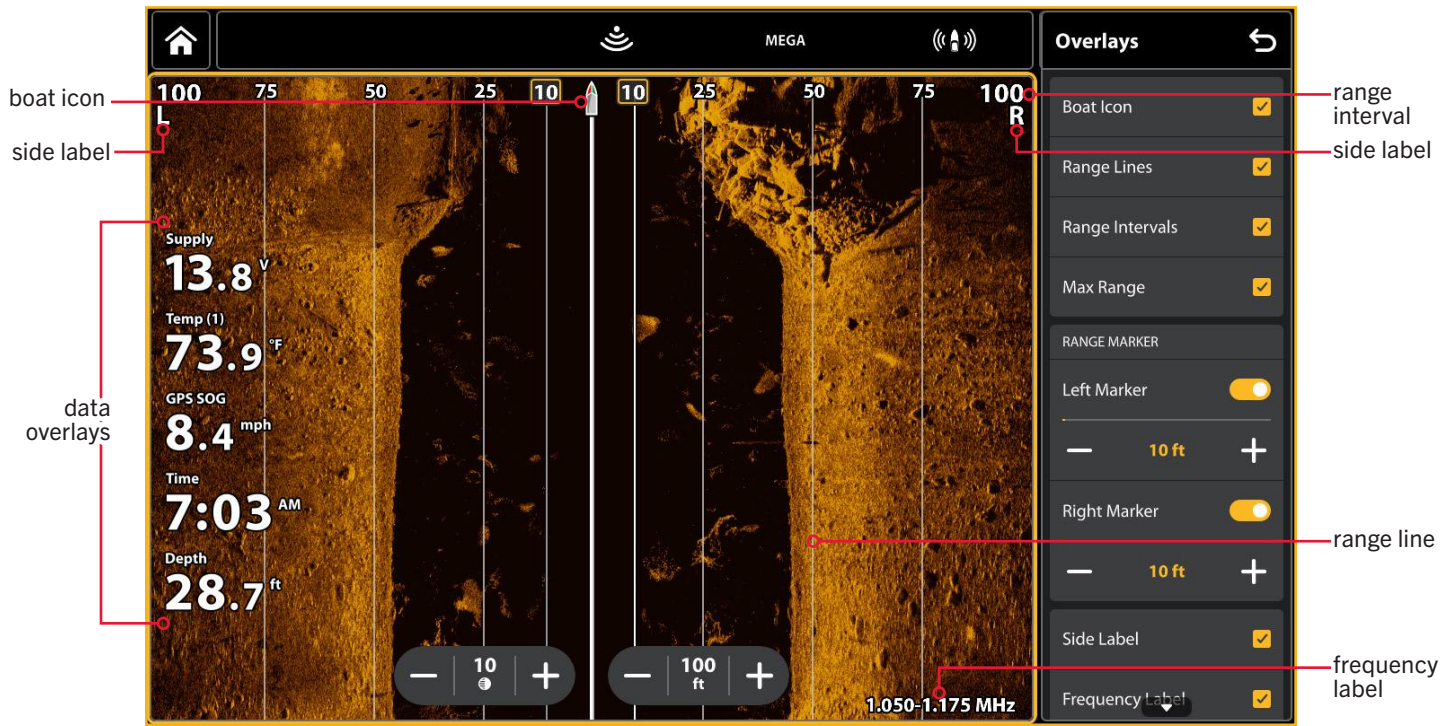
Use the Overlays menu to display or hide information on the view. In the Side Imaging View, you can display the following: boat icon, range lines, range intervals, side label, frequency label, and data overlays. To turn on the data overlay or data bar, see *Views: Edit the On-Screen View*. For more information about data overlays, see Views.

1. With a Side Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
2. Select Settings.
3. Select Overlays.
4. Tap the menu, or use the Cursor pad/Joystick to select an item, and add a check mark. (check mark = visible, blank = hidden).

SIDE IMAGING



Selecting Overlays for the Side Imaging View



ADJUST SIDE IMAGING DISPLAY SETTINGS >

The Side Imaging Menu provides menu options to adjust the sensitivity, contrast, sharpness, water column sensitivity, and range as you fish. You can also mark a particular range, and you can control how fast the sonar history scrolls across the screen. The menu options allow you to see more or less of the sonar returns from the transducer beams as you adjust each setting.

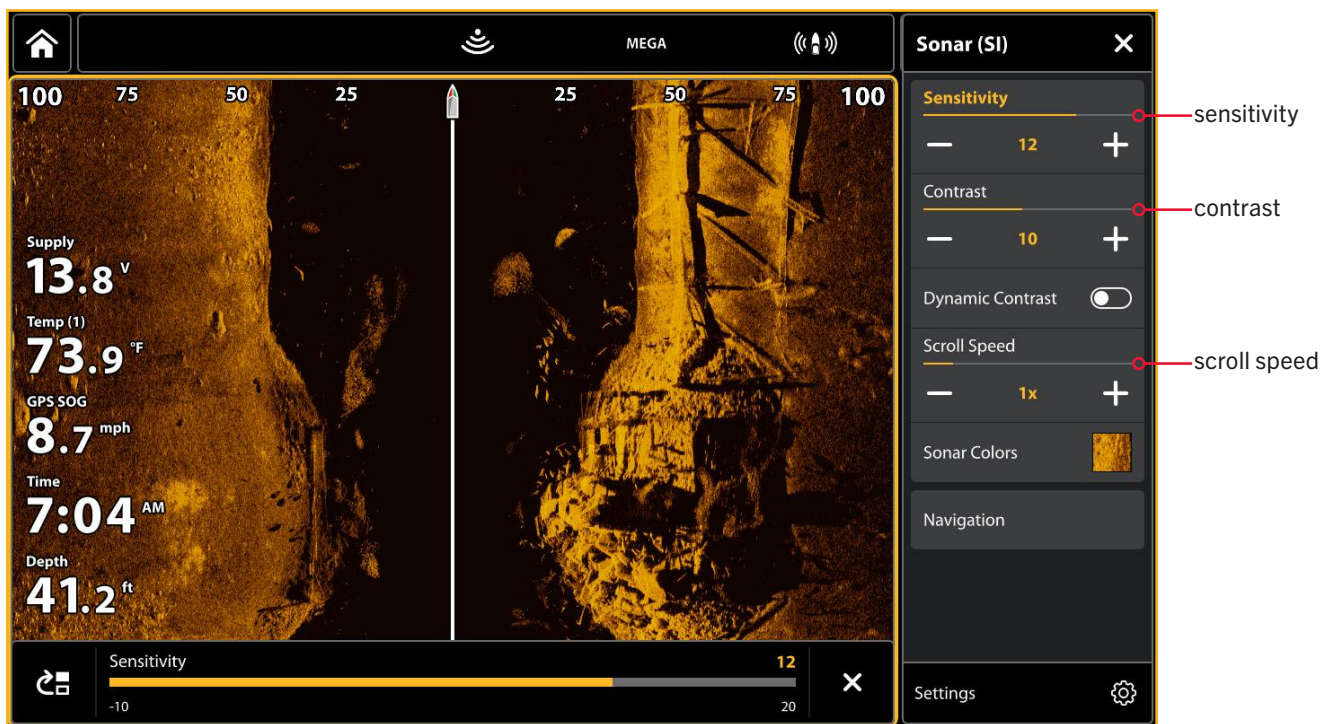
> Adjust Display Settings

- 1. With a Side Imaging View displayed on-screen, tap the Menu ≡ icon in the Top Bar, or press the MENU ≡ key once.
- 2. Select Sensitivity, Contrast, or Scroll Speed.
- 3. Drag the slider, or press the +/- ZOOM keys, to adjust the setting.

Sensitivity	Sensitivity controls how much detail is shown on the display and will adjust the sensitivity of all sonar frequencies. Decrease sensitivity to eliminate display clutter sometimes present in murky or muddy water. When operating in very clear water or greater depths, increase sensitivity to see weaker returns that may be of interest. QUICK TIP! This setting can also be changed by tapping the sensitivity in-pane button on the SI View.
Contrast	Adjust the Contrast setting to accent the light and dark parts of the Side Imaging data to provide greater definition.
Scroll Speed	Scroll Speed determines how fast the sonar history moves across the display and how much detail is shown. Select a faster speed to see more detail. Select a slower speed to keep the sonar history on the display longer.



Adjusting Side Imaging Display Settings



QUICK TIP! The Sensitivity setting can also be changed by tapping the Sensitivity in-pane button on the SI View.

Adjust Water Column Sensitivity

The Water Column Sensitivity settings is used to increase or decrease the sensitivity of the sonar return that is in the water column.

1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Water Column Sensitivity.
4. Drag the slider, or press the +/- ZOOM keys, to adjust the setting.

Adjust the Sharpness

Turn on Sharpness and select a filter level to sharpen the edges of the Side Imaging data.

1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Sharpness.
4. Tap the on/off button, or press the ENTER key, to turn it on/off.
5. Select filter level of Low, Medium, or High.

SIDE IMAGING



› Set the Range

Range controls how much of the water column is displayed on the view.

- 1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
- 2. Select Settings.
- 3. Select Range.
- 4. Tap the toggle to select Auto or M (Manual), or press the ENTER key.
- 5. If M (Manual) is selected, tap the + or -, or press the +/- ZOOM keys, to adjust the setting.

Auto: Toggle to Auto. The Range will be adjusted by the fish finder to follow the bottom automatically.

M (Manual): Toggle to M (Manual) and adjust the setting.

QUICK TIP! The Range can also be changed by tapping the Range in-pane buttons on the SI View.

Auto	The Range will be adjusted by the fish finder to follow the bottom automatically.
M (Manual)	To adjust the display range, drag the slider, or press the +/- ZOOM keys. Select a low range number to focus on a shorter distance of the water column and see greater detail on the screen. Select a higher range number to view farther into the water and see an overview of details on the screen.

› Select Frequencies

If there are multiple beams available in a transducer, you can display individual frequencies on the view. See *Installation Information: Set up your Fish Finder Network*, *Select Sonar Sources* and *Set up or Change Transducer Settings* for details.

- 1. With a Side Imaging View displayed on-screen, tap the frequency icon in the Top Bar.
- 2. Select a frequency from the list.

455 kHz
800 kHz
MEGA

QUICK TIP! This setting can also be changed by pressing and holding the ENTER key.

NOTICE: If the fish finder is using a sonar source with only one beam frequency, the frequency list will not offer additional options.



Adjust the SI Sensitivity Offset

In the unlikely event that your Side Imaging transducers are not tuned to the same level, you can offset the left Side Imaging beam from the right Side Imaging beam.

1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Sensitivity Offset.
4. Drag the slider, or press the +/- ZOOM keys, to adjust the setting.

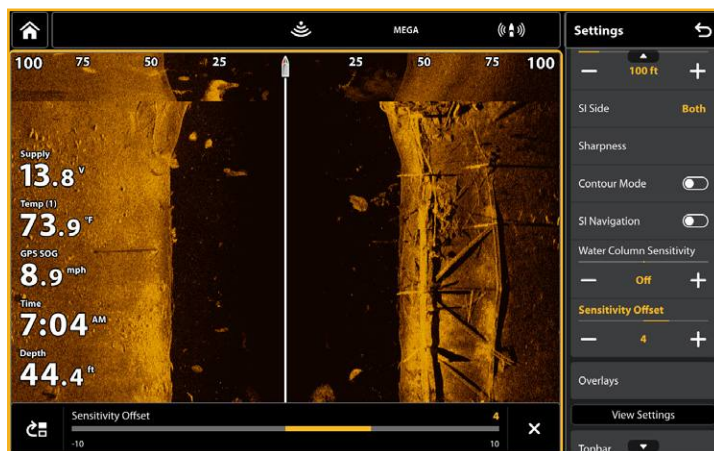
Turn on Contour Mode

1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Contour Mode.
4. Tap the on/off button, or press the ENTER key, to turn it on/off.

Turn on SI Navigation

1. With a Side Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select SI Navigation.
4. Tap the on/off button, or press the ENTER key, to turn it on/off.

Adjusting the SI Sensitivity Offset



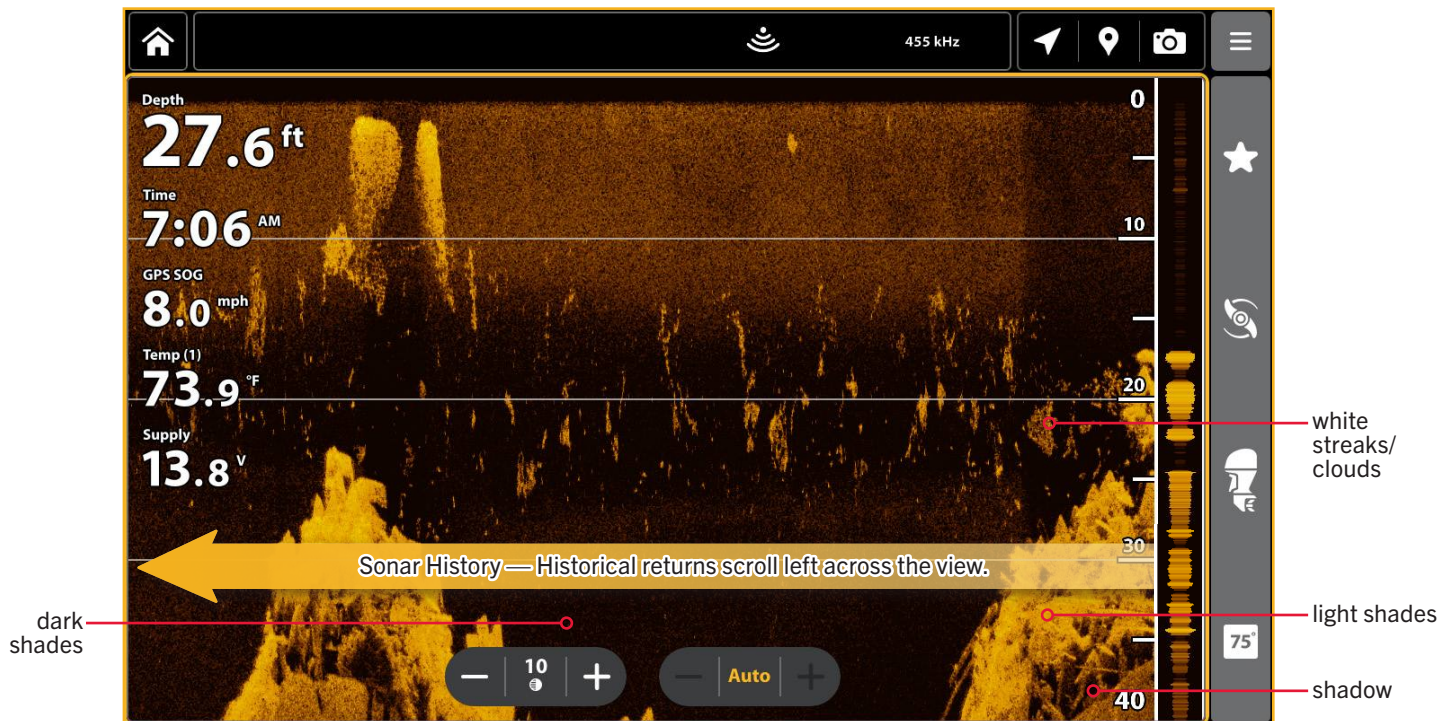
DOWN IMAGING

DOWN IMAGING OVERVIEW >

The images you see on the Down Imaging display are produced using sonar technology. Each time the unit pings, a strip of data representing all the echoes received by the transducer are put together on the display to form the image that you see. Like traditional 2D Sonar, the sonar history scrolls left across the screen.

Down Imaging beams “illuminate” the bottom contour, structure, and fish. The beams are wide (side to side) but very thin from front to back.

Down Imaging View: Original Palette



Use the light and dark parts of the display to interpret the objects under your boat as follows:

- **Dark shades** represent soft returns (mud, sand) or descending terrain.
- **Light shades** represent denser terrain (timber, rocks) or rising terrain. A very hard bottom may appear as white on the display.
- **White Streaks or Clouds** may represent fish on the display.
- **Shadows** are not caused by light but by the lack of a sonar return. Objects standing on the bottom cause a sonar shadow to appear on the display. The longer the shadow, the taller the object. Fish may also cast shadows. You can use the shadow to interpret where the fish or object is located in relation to the bottom.

CUSTOMIZE THE DOWN IMAGING VIEW >

The settings in this section are optional. You can use the default settings for the view, or you can customize it with your preferences. See **Views** for more information.

Open the Down Imaging Menu

The Down Imaging menu allows you to set the color palette, zoom mode, and bottom line. For more information about view preferences, see *Views*.

- 1. With a Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select a display option or select Settings.

Change the Color Palette

The Sonar Colors menu changes the colors used to display sonar returns on the view.

- 1. With a Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Sonar Colors.
- 3. Select a color palette.

Turn on/off Dynamic Contrast

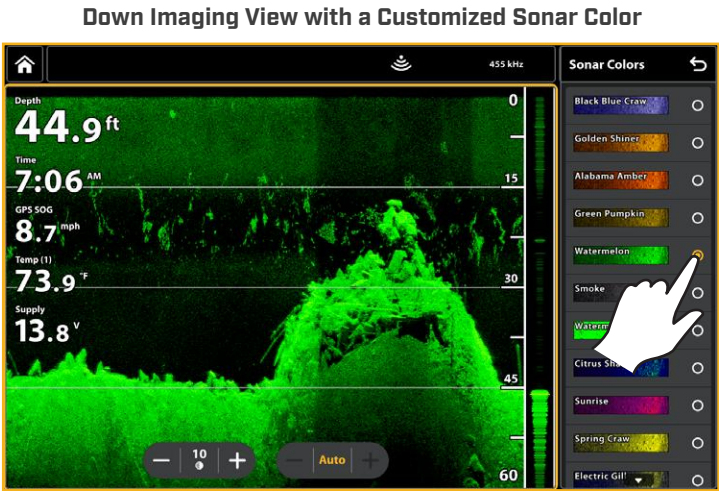
Dynamic Contrast automatically enhances the contrast of the selected color palette.

- 1. With a Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Dynamic Contrast.
- 3. Tap the on/off button, or press the ENTER key, to turn it on/off.

Set the Zoom Mode

The Zoom Mode sets the zoom commands to magnify the full pane or the cursor selection. See *Use Cursor and Zoom in Sonar Views* to apply the zoom features.

- 1. With a Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Settings.
- 3. Select Zoom Mode.
- 4. Select Pane Zoom or Cursor Zoom.



Pane Zoom	When you use pinch out/in (touch screen) to zoom, or press the +/- ZOOM keys, the view will be magnified.
Cursor Zoom	When you use pinch out/in (touch screen) to zoom, or press the +/- ZOOM keys, the cursor selection will be magnified.

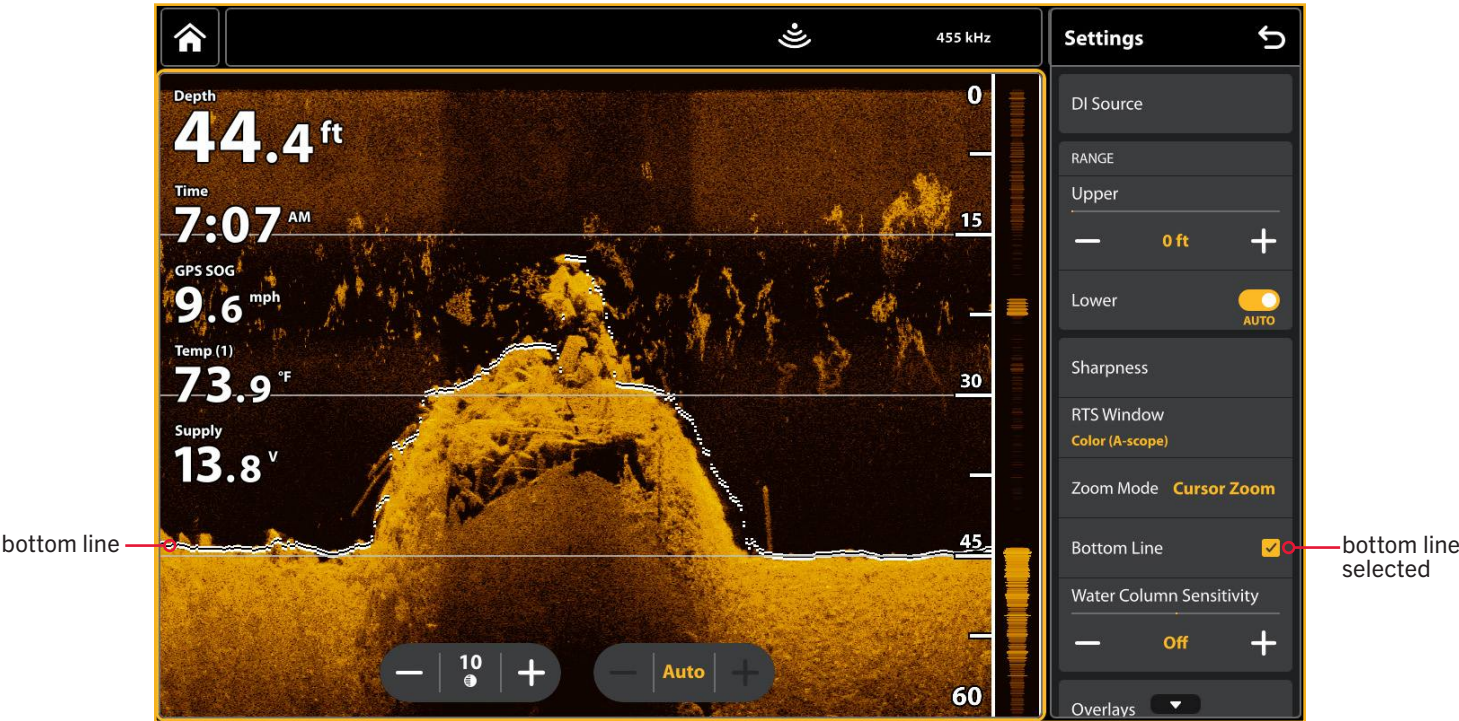
DOWN IMAGING

Display the Bottom Line

Add a check mark to Bottom Line to display the depth reading from the Depth Source as a line, either from the selected transducer or another digital depth source. See *Set up your Fish Finder Network* for details about selecting sources.

- 1. With a Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Settings.
- 3. Select Bottom Line, and tap the on/off button, or press the ENTER key, to turn it on/off.

Down Imaging View with Bottom Line Displayed



Display the RTS Window

The RTS Window plots the depth and intensity of a sonar return. It updates at the fastest rate possible for depth conditions and shows only the returns from the bottom, structure, and fish that are within the transducer beam. When you use the cursor to review sonar history, the sonar history will pause, but the RTS Window will continue to display sonar returns in real time.

- 1. With a Down Imaging View displayed on-screen, tap the Menu icon in the Top Bar, or press the MENU key once.
- 2. Select Settings.
- 3. Select RTS Window.
- 4. Tap the on/off button, or press the ENTER key, to turn it on. Then, choose the type of RTS Window to display.

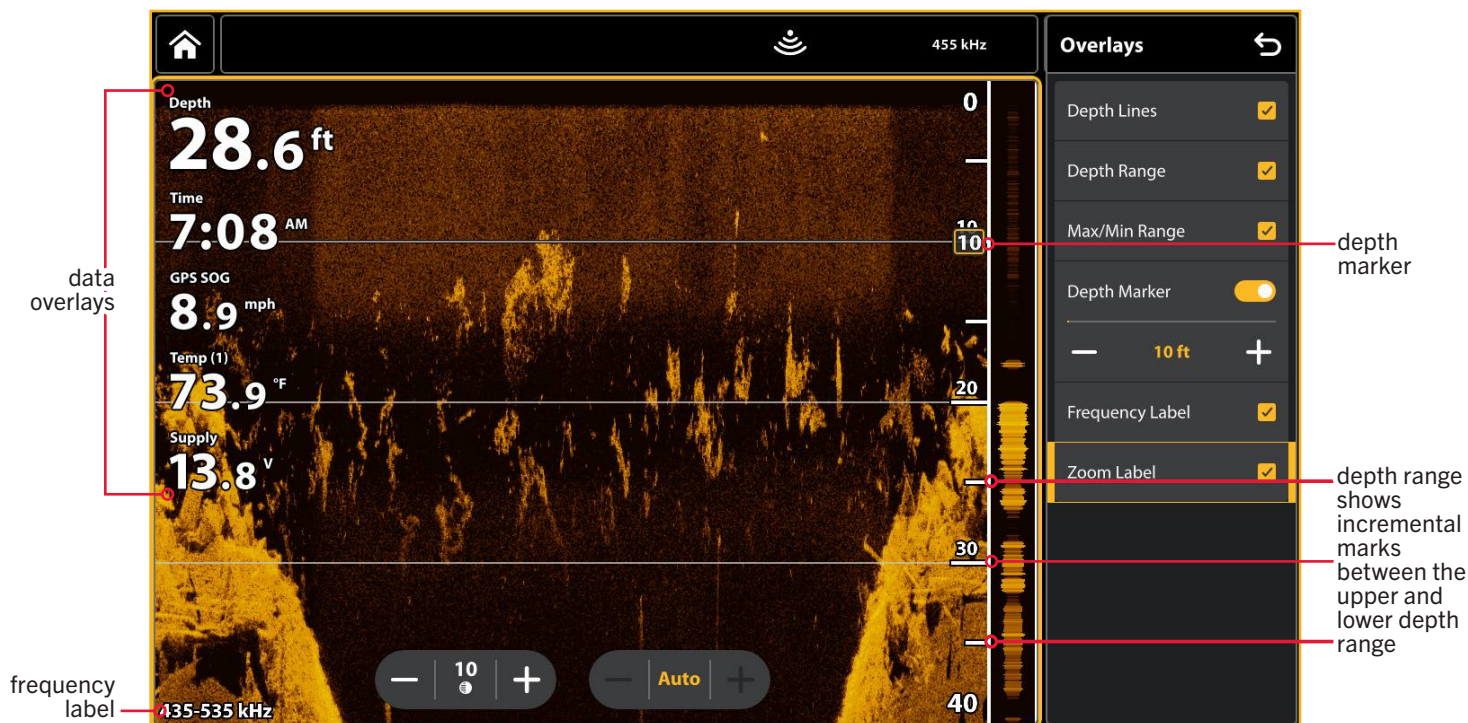
Color (A-Scope)	Sonar returns are displayed in color. The size of the displayed lines correspond with the intensity of the sonar returns from the transducer beam(s).
Color (Full)	Sonar returns are displayed in color, and they fill the width of the RTS Window.
Mono	Sonar returns are displayed in black.

CHANGE THE DOWN IMAGING VIEW OVERLAYS

Use the Overlays menu to display or hide information on the view. In the Down Imaging View, you can display the following: depth lines, depth range, depth marker, beam frequency label, and zoom label. Digital readout data can be displayed as an overlay, and it can be displayed in the data bar. To turn on the data bar, see **Views: Display a Data Bar**. For more information about data overlays, see **Views**.

1. With a Down Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Overlays.
4. Tap the menu, or use the Cursor pad/Joystick to select an item, and add a check mark. (check mark = visible, blank = hidden).

Selecting Overlays for the Down Imaging View



ADJUST DOWN IMAGING DISPLAY SETTINGS

The Down Imaging Menu provides options to adjust the sensitivity, contrast, and range as you fish. You can also control how fast the sonar history scrolls across the screen. The menu options allow you to see more or less of the sonar returns from the transducer beams as you adjust each setting.

Adjust Display Settings

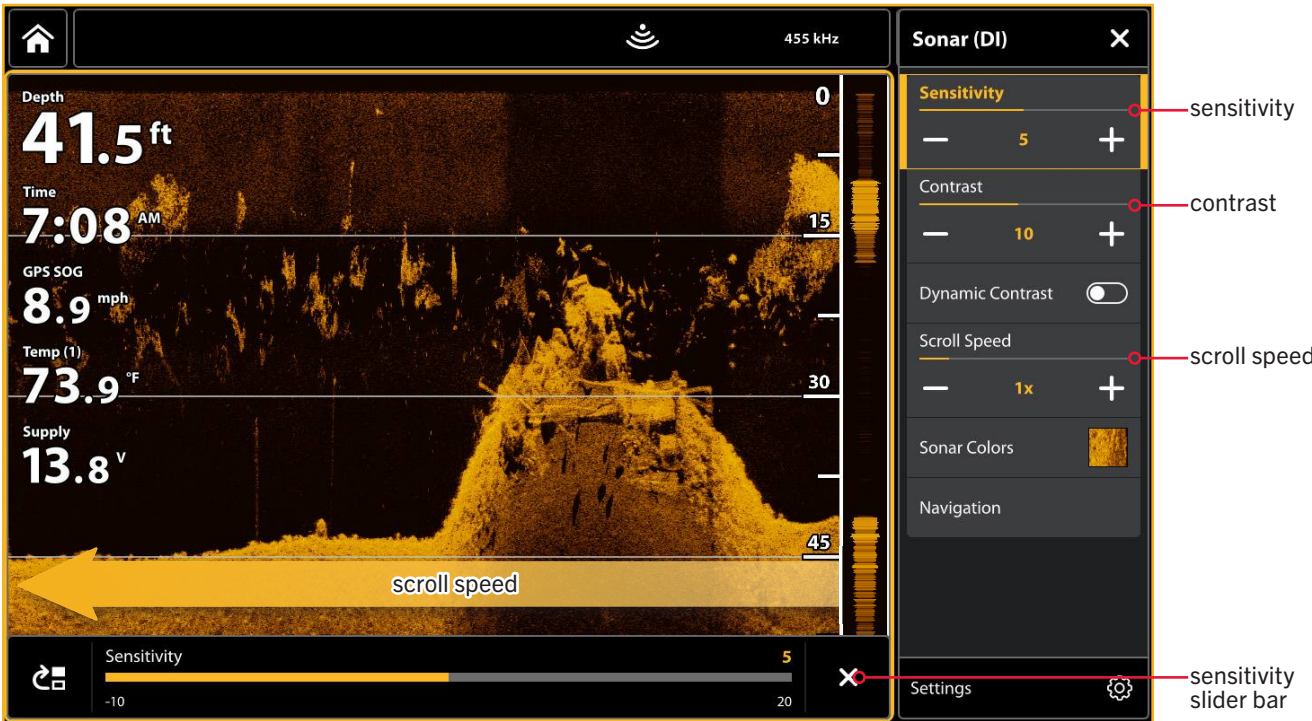
1. With a Down Imaging View displayed on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
2. Select Sensitivity, Contrast, or Scroll Speed.
3. Drag the slider, or press the +/- ZOOM keys, to adjust the setting.

DOWN IMAGING



Sensitivity	Sensitivity controls how much detail is shown on the display and will adjust the sensitivity of all sonar frequencies. Decrease sensitivity to eliminate display clutter sometimes present in murky or muddy water. When operating in very clear water or greater depths, increase the sensitivity to see weaker returns that may be of interest. QUICK TIP! This setting can also be changed by tapping the sensitivity in-pane button on the DI View.
Contrast	Adjust the Contrast setting to accent the light and dark parts of the Side Imaging data to provide greater definition.
Scroll Speed	Scroll Speed determines how fast the sonar history moves across the display and how much detail is shown. Select a faster speed to see more detail. Select a slower speed to keep the sonar history on the display longer.

Adjusting Down Imaging Display Settings



QUICK TIP! The Sensitivity setting can also be changed by tapping the Sensitivity in-pane button on the DI View.

Adjust Water Column Sensitivity

The Water Column Sensitivity settings is used to increase or decrease the sensitivity of the sonar return that is in the water column.

- 1. With a Down Imaging View displayed on-screen, tap the Menu ≡ icon in the Top Bar, or press the MENU ≡ key once.
- 2. Select Settings.
- 3. Select Water Column Sensitivity.
- 4. Drag the slider, or press the +/- keys, to adjust the setting.



» Adjust the Sharpness

Turn on Sharpness and select a filter level to sharpen the edges of the Down Imaging data.

1. With a Down Imaging View displayed on-screen, tap the Menu  in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Sharpness.
4. Tap the on/off button, or press the ENTER key, to turn it on/off.
5. Select filter level of Low, Medium, or High.

» Set the Range

Range controls how much of the water column is displayed on the view. For example, if you are only interested in the area between 20 and 50 feet deep, set the Upper Range to 20 and the Lower Range to 50. The view will not display sonar returns outside of the set ranges, and greater detail for the selected range will be displayed.

1. With a Down Imaging View displayed on-screen, tap the Menu  in the Top Bar, or press the MENU  key once.
2. Select Settings.
3. Select Range.
4. Select Upper Range. Drag the slider, or press the +/- keys, to adjust the setting.
5. Select Lower Range.

Auto: Toggle to Auto. The Lower Range will be adjusted by the fish finder to follow the bottom automatically.

M (Manual): Toggle to M (Manual) and adjust the setting.

QUICK TIP! The Range can also be changed by tapping the Range tool on the DI View.

» Select Frequencies

If there are multiple beams available in a transducer, you can display individual frequencies on the view. See *Installation Information: Set up your Fish Finder Network*, *Select Sonar Sources* and *Set up or Change Transducer Settings* for details.

1. With a Down Imaging View displayed on-screen, tap the DI Frequency icon in the Top Bar.
2. Select a frequency from the list.

455 kHz

800 kHz

MEGA

QUICK TIP! This setting can also be changed by pressing and holding the ENTER key.

NOTICE: If the fish finder is using a sonar source with only one beam frequency, the frequency list will not offer additional options.

NAVIGATION IN SONAR VIEW

To mark waypoints and start navigation, the fish finder must have a GPS fix from a connected or internal GPS receiver. The navigation menus can be accessed from the X-Press Menu, touch screen, and the keypad.

MARK A WAYPOINT »

You can mark a waypoint on the Sonar Views using the keypad or touch screen. You can also mark a waypoint at the vessel position or the cursor position.

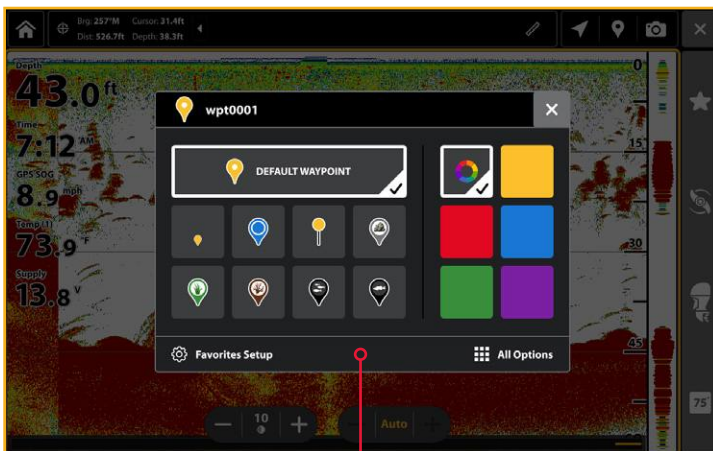
» Mark a Waypoint at the Vessel Position

1. Select the Mark icon  in the Top Bar or press the MARK key.
2. Select a Waypoint icon from the Favorites menu.

» Mark a Waypoint at the Cursor Position

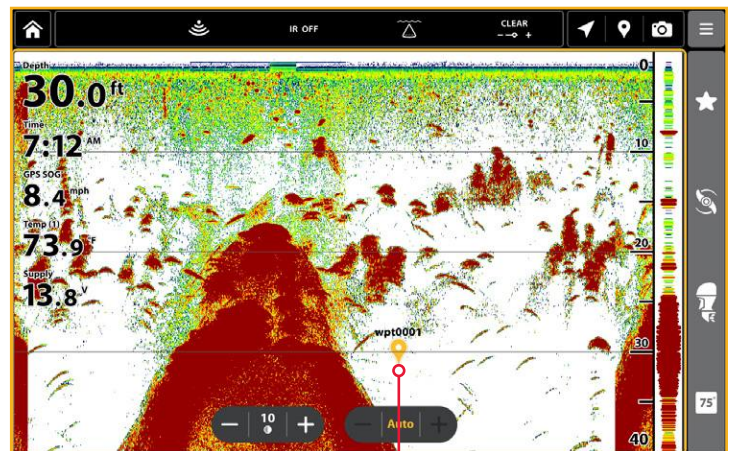
1. Press and hold a position on the Sonar View.
OR
Use the Cursor pad/Joystick to move the cursor to a position on the Sonar View, and press the MARK key.
2. Select a Waypoint icon from the Favorites menu.

Marking a Waypoint in 2D Sonar View



favorites menu

Waypoint in 2D Sonar View



marked waypoint



NAVIGATE TO A POSITION »

Use the instructions in this section to start navigation to a position in the Sonar Views. See *Introduction to Navigation* for more information about these features.

» Start Navigation

- 1. Tap a position on the Sonar View to activate the cursor, or use the Cursor pad/Joystick to move the cursor to a position on the view.
- 2. Press the NAV key.
OR
Press the MENU ≡ key, and select Navigation.
- 3. Select Go To Cursor. Navigation will begin.

NOTICE: In Side Imaging Views, if SI Navigation is turned on, the boat icon will turn to indicate the direction the boat needs to turn to reach the next waypoint during navigation (see *Customize the Side Imaging View: Turn on/off SI Navigation*).

» Cancel Navigation

- 1. During navigation, tap the Menu ≡ icon in the Top Bar or press the MENU ≡ key.
- 2. Select Cancel Navigation.



SONAR RECORDING

Use the Sonar Recording tool to record active sonar information. Sonar recordings are saved to an installed SD card, and you can play your saved sonar recordings from the Record tool. When the recording is played back, the views that were active during the recording are available. You can also adjust the view settings and mark waypoints during playback.

NOTICE: A microSD or SD card must be installed in the fish finder to use the Recording features.

› Start Recording

When you start a sonar recording, you can select which beams will be recorded and where the sonar recording will be saved.

1. Press the HOME  key.
2. Select Tools.
3. Select the Record tool.
4. Select Record Sonar, and set up the sonar recording:
Select Recording Sources, and select the beams to be recorded.
Select Save Location, and select an installed SD card.
5. Select Start Recording.
The Sonar Recording icon  will display in the Sonar Top Bar.

› Stop Recording

1. Press the HOME  key.
2. Select Tools.
3. Select the Record tool.
4. Under Record, select Stop Recording.
OR
 1. With a Sonar View on-screen, tap the Menu  icon in the Top Bar, or press the MENU  key once.
 2. Select Stop Recording.

› Play a Sonar Recording

1. Press the HOME  key.
2. Select Tools.
3. Select the Record tool.
4. Tap the recording name, or use the Cursor pad/Joystick to select it.
5. Select Start.

› Open the Playback Control Menu

The Playback Control menu includes stop, pause, forward or reverse for the recording played on the screen.

1. Play a sonar recording.
2. Tap the Play icon ► from the Top Bar.

› Stop Playback

1. Press the HOME 🏠 key.
2. Select Tools.
3. Select the Record tool.
4. Tap the recording name, or use the Cursor pad/Joystick to select it.

5. Select Stop.

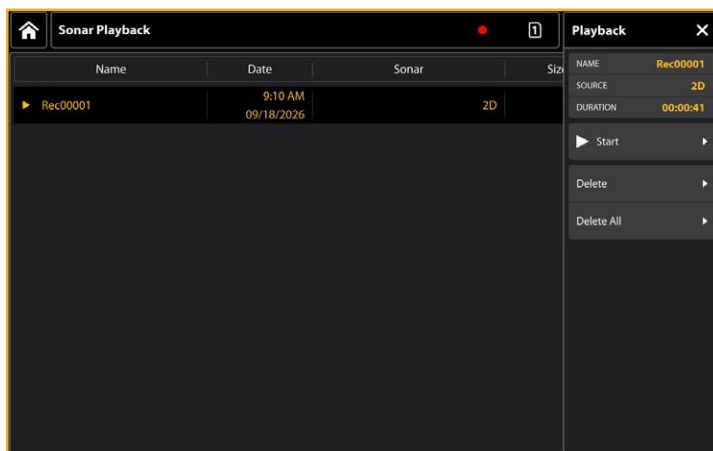
OR

1. With a Sonar View on-screen, tap the Menu ≡ icon in the Top Bar, or press the MENU ≡ key once.
2. Tap the Play icon ► from the Top Bar to open the Playback menu.
3. Select Stop.

› Delete a Recording

1. Press the HOME 🏠 key.
2. Select Tools.
3. Select the Record tool.
4. Press and hold the recording name.
5. Select Delete.

Sonar Recording Playback Menu



MEDIA TOOL

The Media tool displays the screen snapshots and sonar recordings saved to the fish finder or to the installed SD cards. You can edit, rename, copy, and delete a screen snapshot.

TAKE A SCREEN SNAPSHOT »

Use the screen snapshot feature to take a picture of the on-screen view. The screen snapshot includes the warnings, menus, and messages that were active when the screen snapshot was taken. If Save Position is turned on, a waypoint will be marked when you take the screen snapshot. See *Screen Snapshot Settings* for details.

1. Tap the Capture icon  in the Top Bar or press the MEDIA key.

2. Select one of the following options:

Save Screen Capture: Select to save the current screen snapshot.

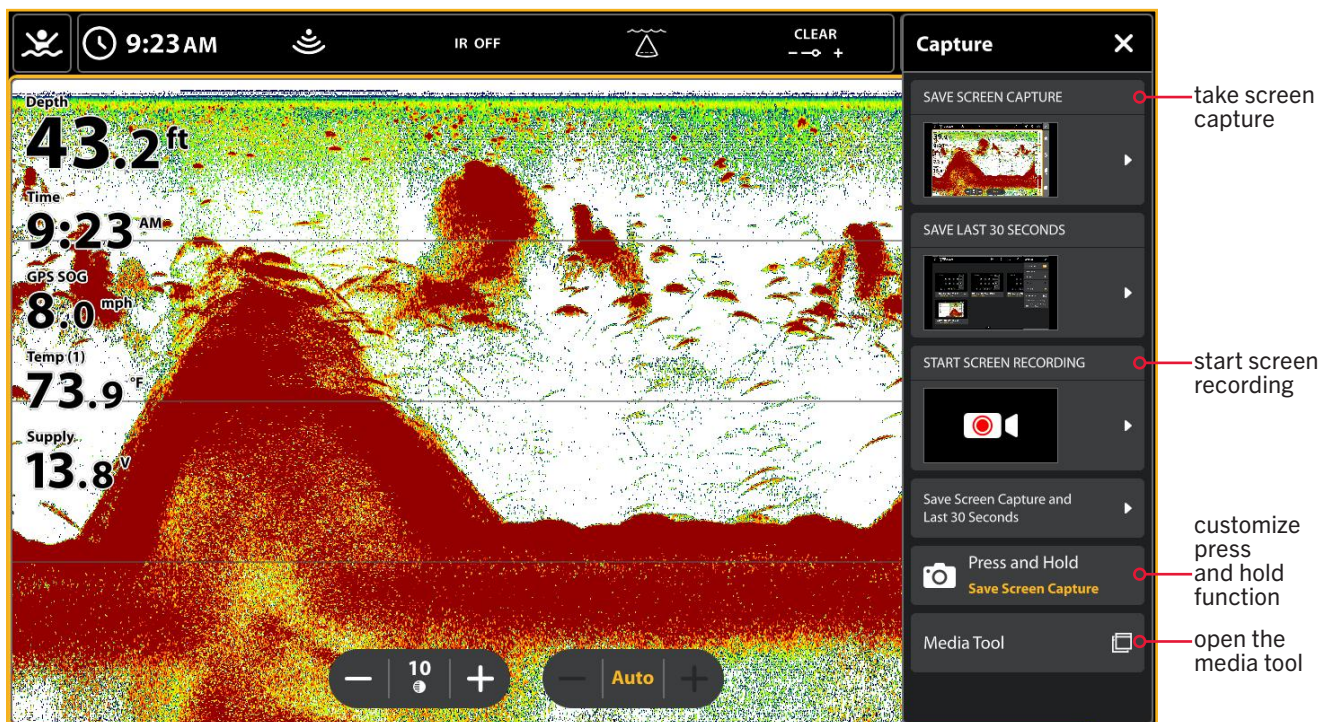
Save Last 30 Seconds: Select to save the last 30 seconds of activity as a screen recording.

Start Screen Recording: Select to start a screen recording.

Edit the Press and Hold function: Select to edit the function of the Press and Hold Capture icon. The default is set to Save Screen Capture.

Open the Media Tool: Select to open the Media Tool.

Taking a Screen Capture



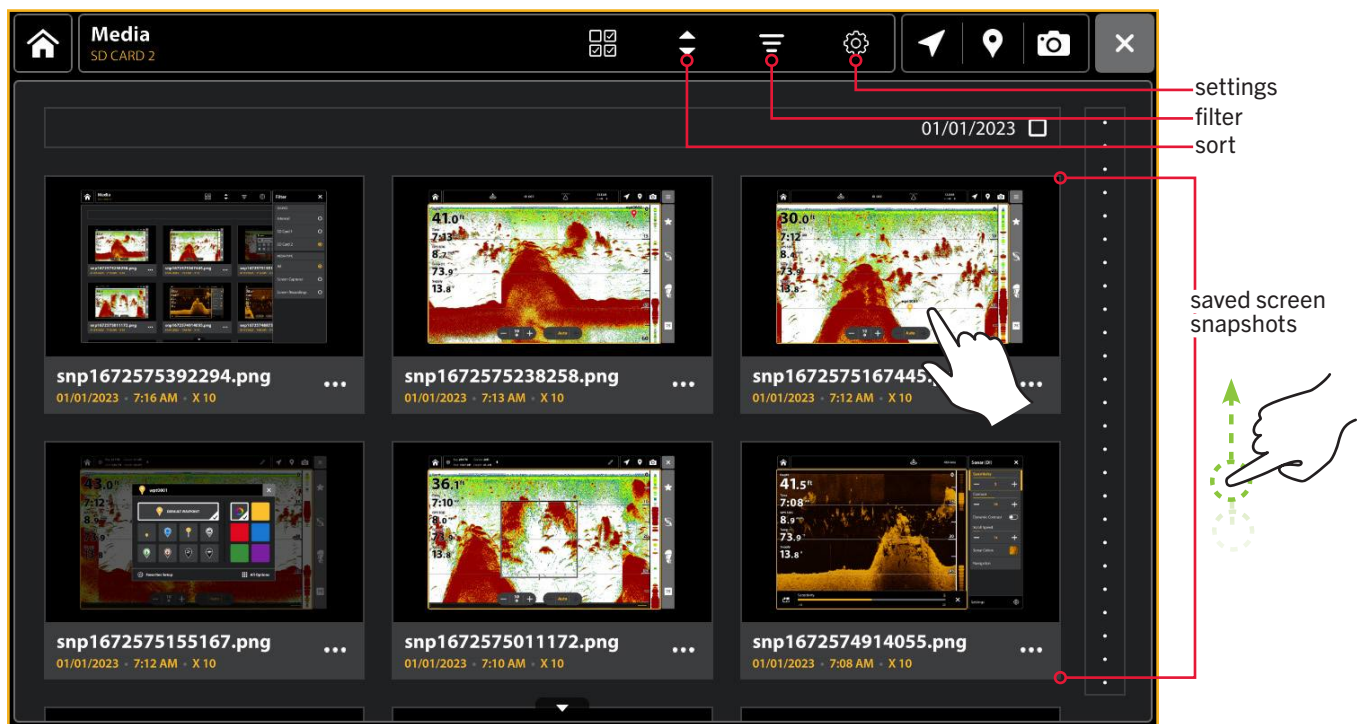
OPEN THE MEDIA TOOL >

Open the Media tool to see all the screen snapshots saved to the fish finder or installed SD cards. You can also view each save location individually, and the images can be sorted by name or date, or filtered by source and media type.

> Open the Media Tool

1. Press the HOME  key.
 2. Select Tools.
 3. Select the Media tool.
- OR
1. Tap the Capture icon  in the Top Bar or press the MEDIA key.
 2. Select Media tool.

Browsing Screen Snapshots in the Media Tool



MEDIA TOOL

› Sort Screen Snapshots

1. From the Media tool Top Bar, select Sort
2. Select a sort option to sort by Date or Name.

› Filter Media

1. From the Media tool Top Bar, select Filter.
2. Select a filter option to filter by source or media type.

SCREEN SNAPSHOT SETTINGS ›

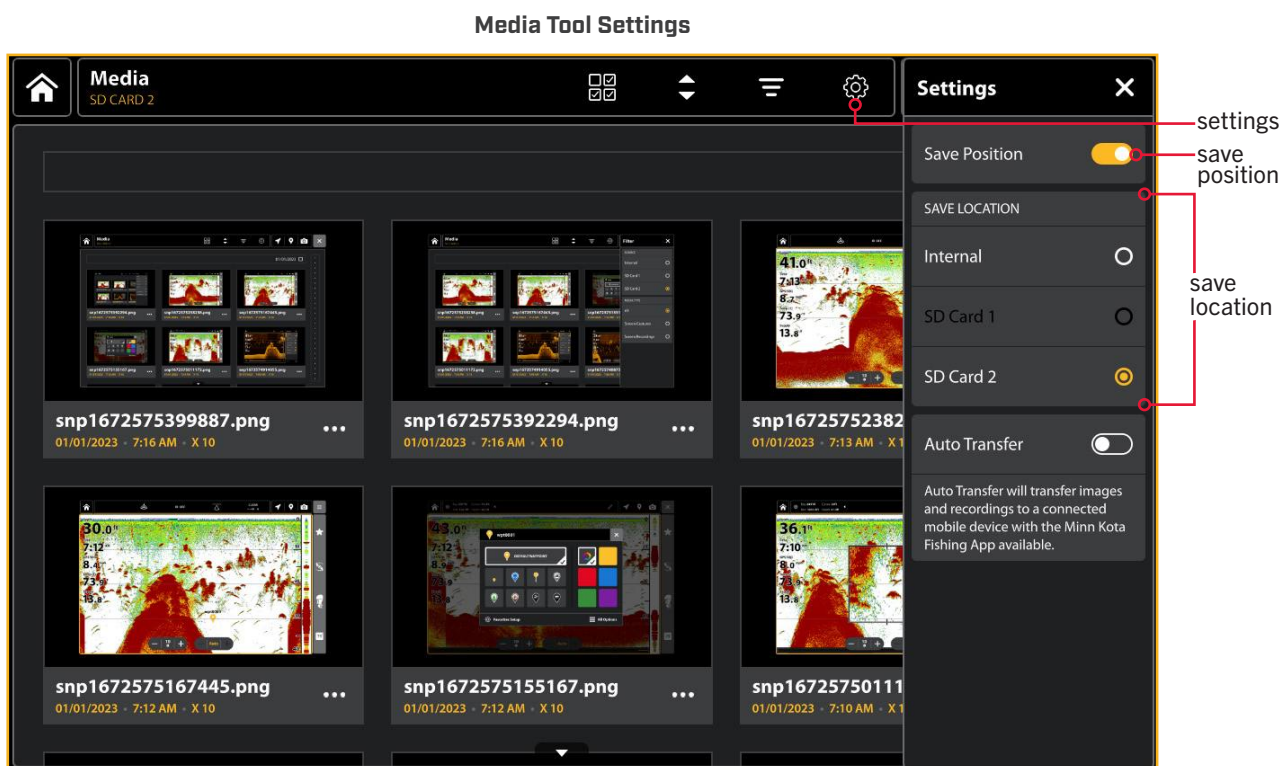
Screen snapshots are automatically saved to the fish finder as JPG files. To save screen snapshots to an SD card, set up the save location in advance.

› Save Screen Snapshots to an SD Card

1. Install an SD card into a fish finder port.
2. Press the HOME  key.
3. Select Tools.
4. Select the Media tool.
5. From the Media tool Top Bar, select Settings.
6. Under Save Location, select an installed source:

Fish Finders with Vertical SD Card Slots: left port = SD Card 1 or right port = SD Card 2; default = Internal

Fish Finders with Horizontal SD Card Slots: top port = SD Card 1 or bottom port = SD Card 2; default = Internal



› Save the Position with a Screen Snapshot

1. From the Media tool Top Bar, select Settings.
2. Under Save Position, tap the on/off button, or press the ENTER key, to turn it on/off.

When a screen snapshot is taken with Save Position turned on, the screen snapshot will display a waypoint icon in the Media tool preview.

› Select One or More Screen Snapshots

1. From the Media tool Top Bar, select Select.
2. Choose either Select or Select All.

Select: Tap to place a checkmark next to every snapshot you want to select

Select All: Tap to select all media.

DISPLAY SCREEN SNAPSHOTS AND SLIDESHOW ›

When you select a saved screen snapshot (JPG file) from the Media tool, you can display it in full-screen using the touch screen or keypad.

› Display a Screen Snapshot

1. From the Media tool, tap a screen snapshot.

Scroll to the Next Image/Previous Image: Tap the on-screen arrows.

Return to the Media Tool: Tap the on-screen X icon.

EDIT SCREEN SNAPSHOTS ›

The Media Options menu allows you to edit the name and review the file information for the selected screen snapshot. You can also copy screen snapshots to another save location or delete them.

› Change a Screen Snapshot Name

1. From the Media tool, tap the More icon in the bottom right corner of the media file to open the Media Options menu.
2. Select Name. Use the on-screen keyboard to enter a name.
3. Select Save.

› Review Screen Snapshot Information

When you save a screen snapshot, the date and time the screen snapshot was taken is saved. If Save Position is turned on, the position and waypoint name are also saved with the screen snapshot. Use these instructions to review the saved information.

1. From the Media tool, tap the More icon in the bottom right corner of the media file to open the Media Options menu.
2. Select Full Info.

MEDIA TOOL



» Export/Copy a Screen Snapshot

1. From the Media tool, tap the More icon in the bottom right corner of the media file to open the Media Options menu.
2. Select Export/Copy.
3. Select a location to save the copy.

» Delete a Screen Snapshot

1. From the Media tool, tap the More icon in the bottom right corner of the media file to open the Media Options menu.
2. Select Delete.



INSTALLATION INFORMATION

This section includes information that may be required to connect new equipment or a new accessory to the fish finder. There are several configurations available for your fish finder. You can network fish finders, connect accessories to an Ethernet network, and connect to a NMEA 2000 network. For configuration options and the latest Minn Kota accessories, visit our Web site at minnkota.johnsonoutdoors.com.

Installation guides are included with each hardware component to install equipment purchased separately (transducer, heading sensor, radar, AIS, autopilot, and accessories). See your installation guides for details.

Unused Ports: Any unused ports should be covered with the port covers to prevent potential damage to the fish finder.

Cables: We also recommend that you label the cables with waterproof tags for future reference.



CAUTION

Before you connect cables to the fish finder, or disconnect cables, the fish finder power and equipment power sources must be turned off.

NOTICE: If you have questions about the installation or troubleshooting, see your fish finder installation guide. Also, contact Minn Kota Technical Support at minnkota.johnsonoutdoors.com.

SET UP OR CHANGE TRANSDUCER SETTINGS >

When you connect a transducer to a Minn Kota fish finder, the transducer will be detected in the network automatically. The best transducer source will be chosen and start pinging automatically. If you connect an accessory transducer to the network, the unit will recognize the new transducer.



CAUTION

The instructions in this section are advanced and not recommended for the typical user. Changing these settings incorrectly could damage the transducer.

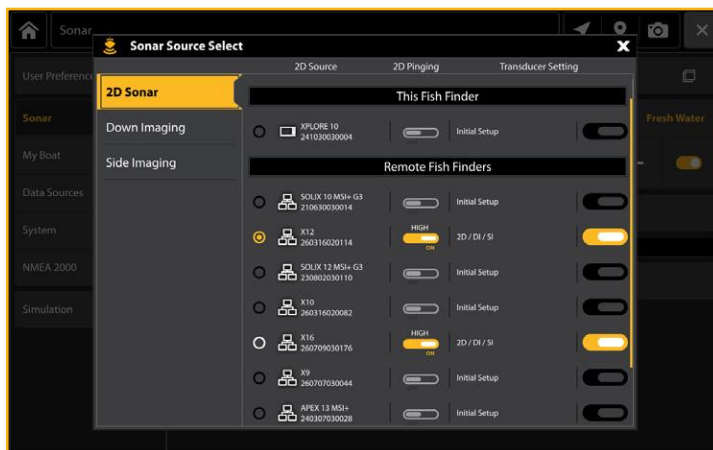
NOTICE: Minn Kota has provided the best settings for your unit. You can use the settings included with your fish finder, or you can adjust these advanced options.

> Change Transducer Sources

Use the instructions in this section to turn on and off transducers.

1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select Sonar Source.
5. Tap the on/off button, or press the ENTER key, to turn it on/off.

Changing the Sonar Source



INSTALLATION INFORMATION

› Set up or Change Transducer Settings (not recommended)

Use the instructions in this section to disable auto-configure for a transducer.

1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select Transducer Setup.
5. Select Auto-Configure.
6. Tap the on/off button, or press the ENTER key, to turn it on/off.
7. Sonar Capabilities: With Auto-Configure turned off, add a check mark next to each sonar capability.

For example, for a 2D transducer, the 2D Sonar menu needs to be checked. For a Side Imaging transducer, 2D Sonar, SI Sonar, and DI Sonar need to be checked because the transducer includes all three capabilities.

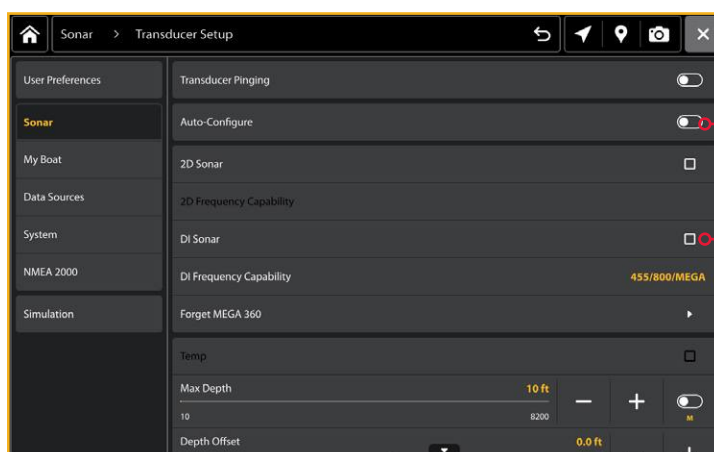
NOTICE: The capabilities of your sonar model are shown on the packaging, or you can find your transducer on our Web site at minnkota.johnsonoutdoors.com.

8. Frequencies: Select the Frequency Capability Menu under each checked sonar capability. Select an individual frequency.
9. Temp: If the transducer includes a temperature probe, add a check mark to Temp.
10. Max Depth (optional): When Max Depth is set to Auto, the maximum depth is determined by the transducer frequency, and the fish finder will acquire bottom readings as needed (within the capacity of the unit). Auto is the recommended setting for this menu.
To manually set the Max Depth, select MAN (Manual), and adjust the slider to the maximum depth setting. The transducer will not attempt to acquire sonar data below that depth, so more detail will be shown on the sonar view.
11. Depth Offset (optional): Depth Offset adjusts the digital depth readout to indicate the distance from the transducer to the waterline.

NOTICE: Make sure all capabilities have a check mark so the full functionality of the transducer is enabled. To select sonar sources from the network, see *Set up your Fish Finder Network*.

NOTICE: The menu options are determined by the connected transducer.

Transducer Setup



turn Auto-Configure off

To enable the full functionality of the transducer, add a check mark to each category the transducer is capable of pinging.

» Change the Water Type

Use the instructions in this section to change the Water Type setting.

1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select Water Type.
5. Select Fresh Water, Salt Water (200 ft [61 m] or deeper), or Salt Water Shallow (20 ft [6.1 m] or less). Tap the item or use the Cursor pad/Joystick to make your selection.

» Adjust the Noise Filter (not recommended)

Use Noise Filter to limit the interference that may appear on the sonar views from sources such as your boat engine, turbulence, or other sonar devices.

1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select Noise Filter.
5. Tap the on/off button, or press the ENTER key, to turn it on.
6. Tap the +/- icons, or press the +/- ZOOM keys, to adjust the setting.

» Change the Side Imaging Orientation (MEGA SI models only)

Use SI Orientation to switch how the Side Imaging beams are displayed on the Side Imaging View. This menu option can be used if the port and starboard beams are reversed during installation, which might be the case if a transducer is installed incorrectly. For further assistance, contact Minn Kota Technical Support.

1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select Transducer Setup.
5. Turn Auto-Configure off.
6. Select SI Orientation.
7. To display the beams as the transducer(s) is installed, select Normal.

To change how the beams are displayed so that port and starboard are switched, select Reverse.

» Turn on SI Background Pinging

Use the instructions in this section to turn on SI Background Pinging. This will enable SI to ping even when the view is not displayed.

1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select SI Background Pinging.
5. Tap the on/off button, or press the ENTER key, to turn it on.

INSTALLATION INFORMATION

CONFIGURE THE FISH FINDER

Use the instructions in this section to review fish finder and network connections and name the fish finders and networks.

Review System Connections

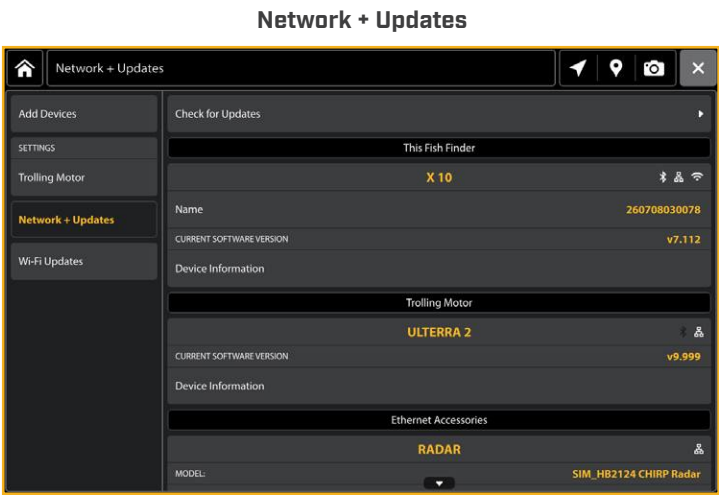
Use the Network + Updates tool to review fish finder information such as the software version and serial number. You can also review connection information for the equipment connected to the fish finder ports, and you can change the fish finder name.

- 1. Press the HOME key.
- 2. Select Network + Devices.
- 3. Select Network + Updates.
- 4. Scroll to view system information.

Change the Fish Finder Name

When a fish finder is part of a network, you can change its name so it is easy to identify as a source on the network.

- 1. From the Network + Updates tab (above), tap the name of the unit. Use the on-screen keyboard to change the fish finder name.
- 2. Select Save.



REAR PORT CONNECTIONS [GPS AND NMEA 0183] - APEX ONLY

When equipment is connected to the fish finder, the equipment and its data will be detected automatically. You can also manually select data, set the data offset, baud rate, and NMEA output sentences from the Sensor Port sub-menus. The available menus are determined by the attached equipment.

- 1. Press the HOME key.
- 2. Select Settings.
- 3. Select System.
- 4. Select Rear Connectors.
- 5. Select GPS / NMEA 0183.

If you've connected an external GPS or an external GPS/Heading Sensor or a NMEA 0183 device to the fish finder, use the following menu options to select the Sensor Type, Data Offset, Baud Rate, and NMEA 0183 Output.

INSTALLATION INFORMATION

Sensor Type	Auto-Select is turned on as the default setting, and the available data from the attached sensor will be auto-selected with a check mark. To change the selected data, turn off Auto-Select, and manually change the data by adding or removing a check mark. (check mark = selected)
Data Offset	To adjust the zero point of the attached sensor, select Data Offsets. Depending on the attached sensor, you can adjust the Depth Offset, Temperature Offset, Heading Adjustment, and STW (Speed Through Water) Calibration from this menu. For example, select Depth Offset to adjust the digital depth readout to indicate the depth from the waterline or the boat's keel for the selected sensor.
Baud Rate	Select a baud rate for the selected port. (Auto, 4800, 9600, 38400; Default = Auto)
NMEA 0183 Output	Select NMEA Output sentences for the selected port. See the NMEA 0183 table on the following pages.

NOTICE: To set up a NMEA 2000 network, see Set up a NMEA 2000 Network.

NMEA 0183 »

Message	Description	Input	Output
AAM	Waypoint Arrival Alarm		•
APB	Heading/Track Controller (Autopilot) Sentence "B"		•
BOD	Bearing-Origin to Destination		•
BWC	Bearing & Distance to Waypoint - Great Circle		•
BWR	Bearing & Distance to Waypoint - Rhumb Line		•
DBT	Depth Below Transducer	•	•
DPT	Depth	•	•
GGA	Global Positioning System Fix Data	•	•
GLL	Geographical Position - Latitude/Longitude	•	•
GNS	GNSS Fix Data	•	•
GSA	GNSS DOP and Active Satellites	•	•
GSV	GNSS Satellites In View	•	•
HDG	Heading, Deviation & Variation	•	•

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1. Press the HOME key.
2. Select Settings.
3. Select System > Rear Connectors > GPS / NMEA 0183.
4. Select NMEA 0183 Output.
5. Under Configure NMEA Talker ID, select IN-Integrated Navigation (Default) or GP-Global Positioning System.

5. Under Configure NMEA Talker ID, select IN-Integrated Navigation (Default) or GP-Global Positioning System.

SET UP A NMEA 2000 NETWORK

Use the instructions in this section if a NMEA 2000 network is connected to the fish finder.

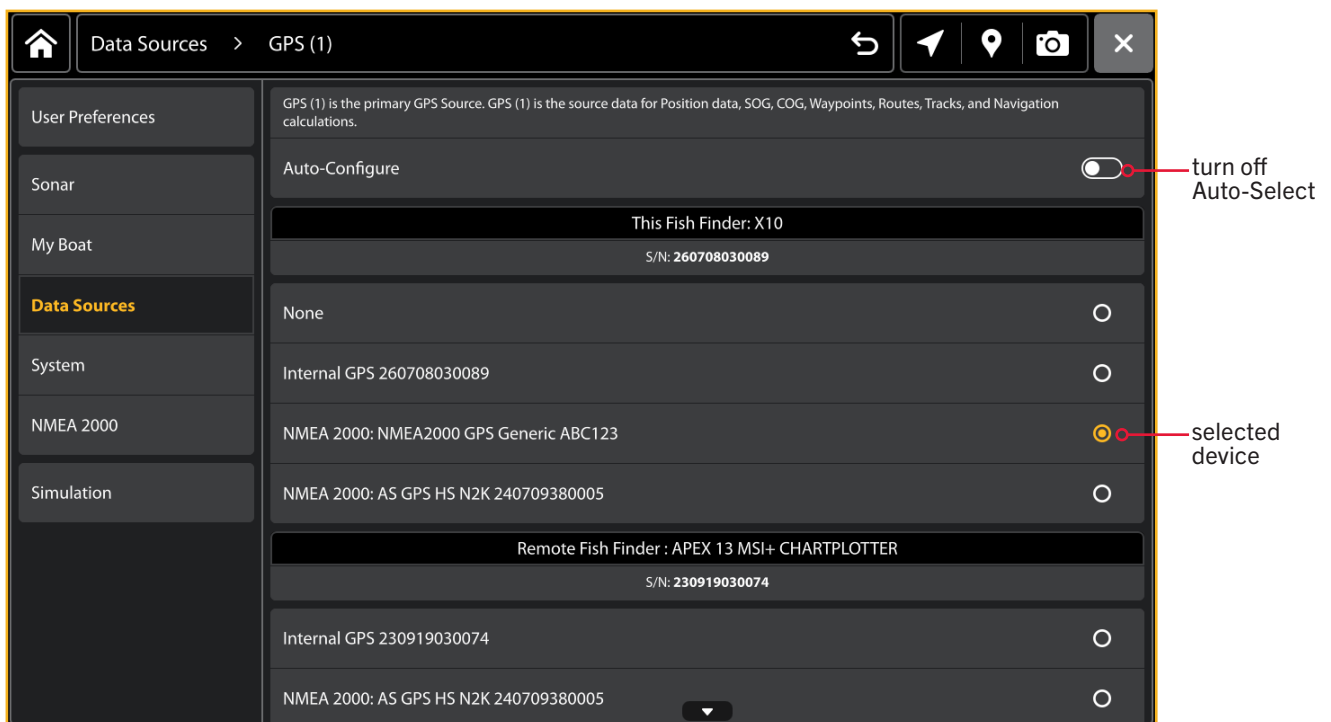
When equipment is connected to the fish finder, the equipment and its data will be detected automatically. You can also manually select equipment. The available menus are determined by the attached equipment.

NOTICE: Minn Kota recommends that the NMEA 2000 network be installed by a certified NMEA 2000 technician. See [NMEA.org](https://www.nmea.org) for details.

Turn on the NMEA 2000 Network

1. Press the HOME  key.
2. Select Settings.
3. Select NMEA 2000.
4. Select NMEA 2000 Network.
5. Tap the on/off button, or press the ENTER key, to turn it on/off.

NMEA 2000 Network Devices Selected Manually



Select NMEA 2000 Devices Manually (optional)

When equipment is connected to the fish finder, the equipment and its data will be detected automatically. Use the instructions in this section to manually select devices to use on the NMEA 2000 network. See the illustrations on the following pages.

1. Press the HOME  key.
2. Select Settings.
3. Select NMEA 2000.

SET UP A NMEA 2000 NETWORK

- ////////////////////////////////////
4. Select NMEA 2000 Devices.

5. Select Auto-Select. Tap the on/off button, or press the ENTER key, to turn it off.

6. Select devices to add to the NMEA 2000 network. (check mark = included, blank = not included)

NMEA 2000 Network Devices Selected Automatically

Home

NMEA 2000 > NMEA 2000 Devices

Back

Forward

Location

Camera

Close

User Preferences

Sonar

My Boat

Data Sources

System

NMEA 2000

Simulation

Select the NMEA 2000 sources to use on the Minn Kota Network

Auto-Select

turn on Auto-Select

This Fish Finder

NMEA2000 GPS SW: v1.17.1.312 SN:2097150

devices detected and selected on the NMEA 2000 network

NMEA2000 Wind meter SW: v1.17.1.312 SN:2097148

NMEA2000 environmental SW: v1.17.1.312 SN:2097147

AS GPS HS N2K SW: v1.240 SN:240709380005

NMEA2000 engine SW: v1.17.1.312 SN:2097146

NMEA2000 Log SW: v1.17.1.312 SN:2097149

NMEA2000 fluid level SW: v1.17.1.312 SN:2097145

AIS 2097144

NMEA 2000 MESSAGES [PGN] >

The following NMEA 2000 input/output messages are available when NMEA 2000 is turned on and the related NMEA 2000 equipment is detected and selected as a source.

Message (PGN)	Description	Input	Output
059392	ISO Acknowledgment	•	•
059904	ISO Request	•	•
060928	ISO Address Claim	•	•
126208	Group Function	•	•
126464	Receive/Transmit PGN List	•	•
126992	System Time	•	•
126996	Product Information	•	•
127245	Rudder	•	
127250	Vessel Heading	•	•
127251	Rate of Turn	•	

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SET UP A NMEA 2000 NETWORK

Message (PGN)	Description	Input	Output
127257	Attitude	•	
127258	Magnetic Variation	•	
127488	Engine Parameters, Rapid Update	•	
127489	Engine Parameters - Dynamic	•	
127496	Trip Parameters Vessel	•	
127497	Trip Parameters Engine	•	
127500	Load Controller Connection State	•	
127501	Binary Status Report	•	
127502	Switch Bank Command	•	
127505	Fluid Level	•	
127506	DC Detail Status	•	
127508	Battery Status	•	
127513	Battery Configuration Status	•	
128259	Speed Water Referenced	•	
128267	Water Depth	•	
129025	Position Rapid Update	•	•
129026	COG & SOG, Rapid Update	•	•
129029	GNSS Position Data	•	•
129033	Time & Date	•	•
129044	Datum	•	
129283	Cross Track Error	•	
129284	Navigation Data	•	•
129285	Navigation - Route/WP Information	•	
129539	GNSS DOPs	•	
129540	GNSS Sats in View	•	
130052	Loran C TD Data	•	
130306	Wind Data	•	
130310	Environmental Parameters	•	
130311	Environmental Parameters	•	
130312	Temperature	•	
130313	Humidity	•	

SET UP A NMEA 2000 NETWORK

Message (PGN)	Description	Input	Output
130314	Actual Pressure	•	
130323	Meteorological Station Data	•	
130569	Entertainment Current File Status		•
130570	Entertainment Library Data File	•	•
130571	Entertainment Library Data Group	•	•
130572	Entertainment Library Data Search	•	•
130573	Entertainment Supported Source Data	•	
130574	Entertainment Supported Zone Data	•	
130576	Small Craft Status	•	
130577	Direction Data	•	
130579	Entertainment System Config Status	•	
130581	Entertainment Zone Config Status	•	
130582	Entertainment Zone Volume Status	•	•
130584	Entertainment Bluetooth Devices	•	•
130585	Entertainment BT Source Status	•	

➤ NMEA 2000 AIS Messages (PGN)

The following NMEA 2000 input/output messages are available when NMEA 2000 is turned on and an AIS is detected and selected as a source on the NMEA 2000 network.

Message (PGN)	Description	Input	Output
129038	Class A Position Report	•	
129039	Class B Position Report	•	
129041	AIS A to N Position Report	•	
129793	AIS UTC and Date Report	•	
129794	AIS Static and Voyage Report A	•	
129798	AIS SAR Aircraft Position	•	
129802	AIS Broadcast Safety Message	•	
129809	AIS Class B Static Data, Part A	•	
129810	AIS Class B Static Data, Part B	•	

SET UP A NMEA 2000 NETWORK

SET UP NMEA 2000 ENGINE SOURCES

When a NMEA 2000 Engine is connected to the NMEA 2000 network, it is detected by the fish finder. The fish finder will provide prompts to set up engines in the system. The fish finder assigns a number to each engine. The sources are numbered lowest to highest, where 0 (zero) is the lowest and first source identified. You can use the sources identified by the fish finder, or you can manually assign an engine to each source number.

For example, Engine 1 reports data from the engine identified as the number 0 Instance in installation (typically the engine located on the port side of the boat towards the bow), and Engine 2 is the engine identified as the number 1 instance in installation (typically the engine located on the starboard side of the boat towards the keel).

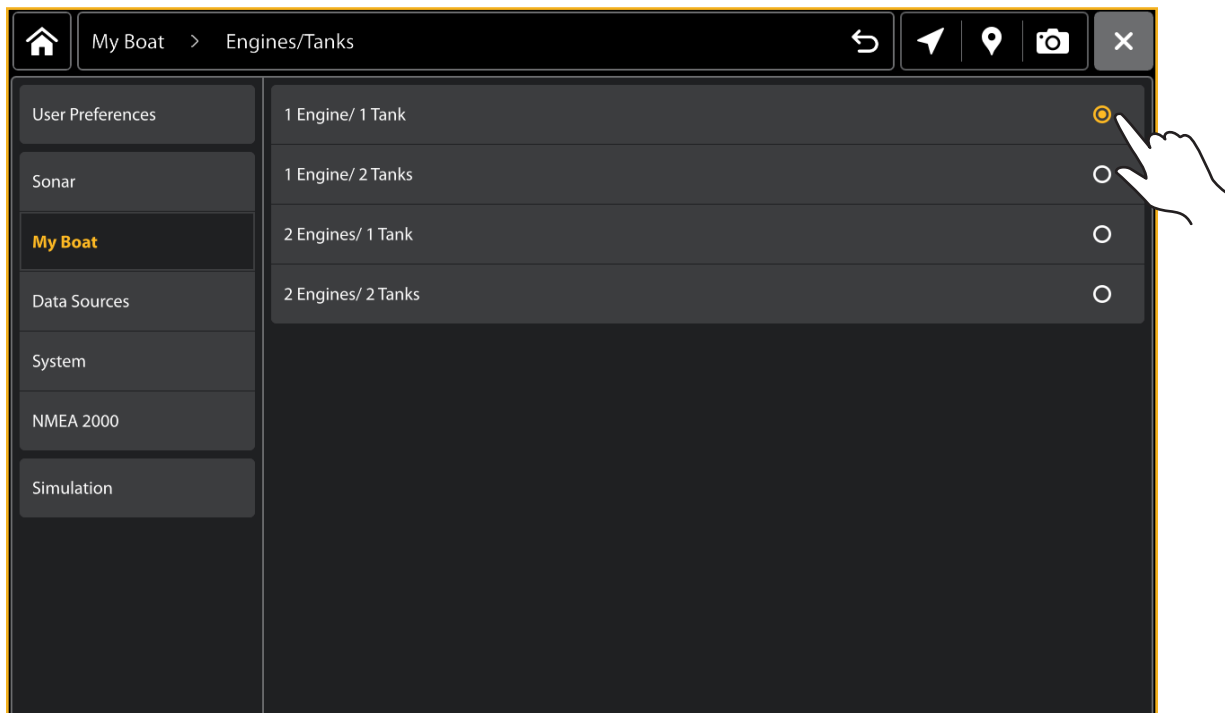
NOTICE: See *Views: Set up an Instrument View* to set up the instrument views for your engine data.

Set up the Number of Engines

The number of engines and tanks are entered using the Setup Guide during initial installation. Use the instructions in this section to change the number of engines and tanks displayed on the fish finder.

1. Press the HOME  key.
2. Select Settings.
3. Select My Boat.
4. Select Engines/Tanks.
5. Select the total number of engines and fuel tanks on your boat.

Engine/Tank Setup

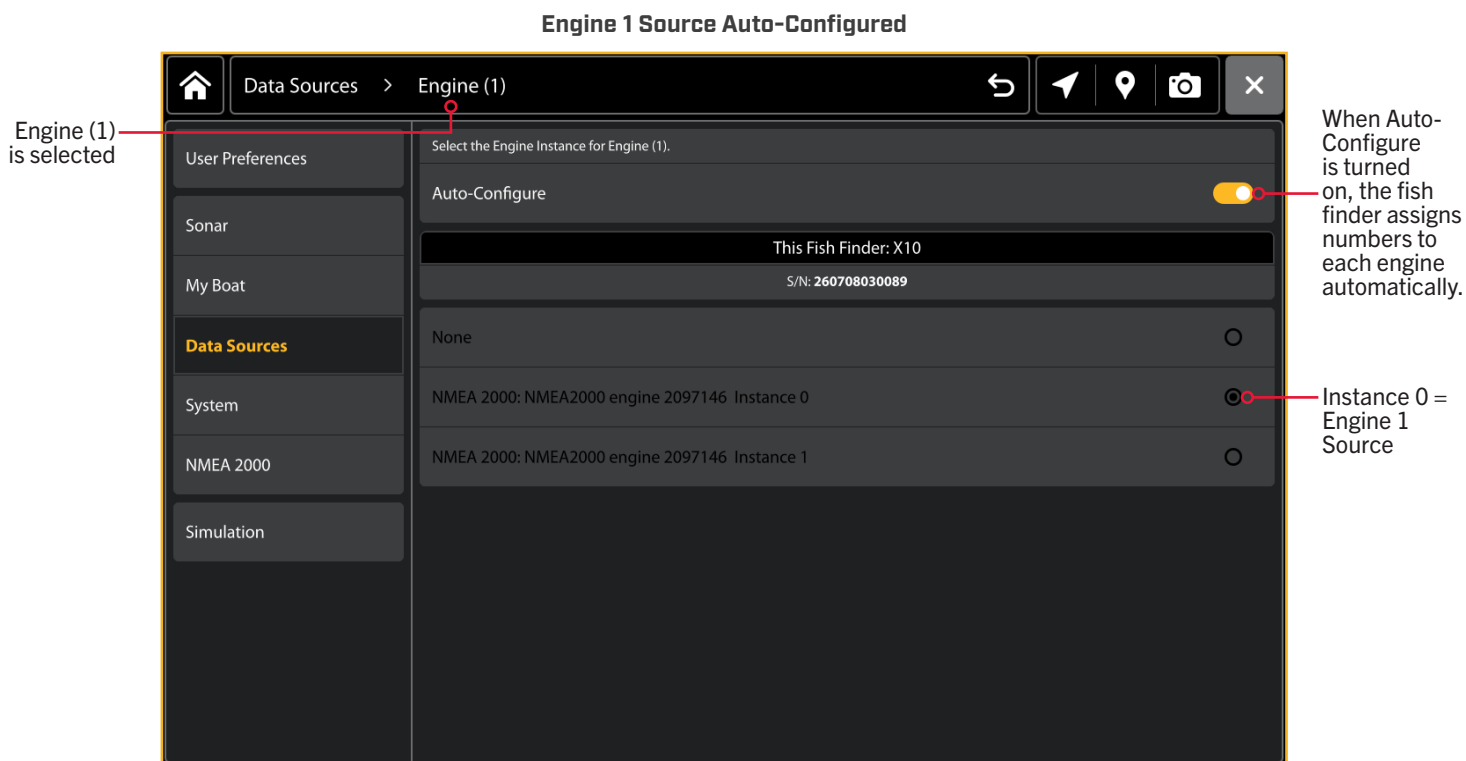


SET UP A NMEA 2000 NETWORK

› Change the Engine Source Assignments

The instructions in this section are optional and allow you to change which engine is assigned as the Engine 1 or Engine 2 source in the fish finder.

1. Press the HOME  key.
2. Select Settings.
3. Select Data Sources.
4. Under Engine Data, select Engine 1 or Engine 2.
5. Turn off Auto-Configure.
6. Select an Engine from the list.



SET UP FUEL TANKS ›

The Setup Guide provides prompts to set up the fuel tanks in the system, and it assigns a source number to each fuel tank. If a NMEA 2000 fuel tank sensor and a fuel flow rate sensor are installed, the fish finder can display fuel levels automatically. If only a fuel flow rate sensor is installed, you need to set up the fuel tanks manually to manage fuel levels.

› Set up the Number of Tanks

The number of engines and tanks are entered using the Setup Guide during initial installation. Use the instructions in this section to change the number of engines and tanks displayed on the fish finder.

1. Press the HOME  key.
2. Select Settings.
3. Select My Boat.

SET UP A NMEA 2000 NETWORK

4. Select Engines/Tanks.
5. Select the total number of engines and fuel tanks on your boat.

If you do not have a NMEA 2000 fuel tank sensor, proceed to **Set the Fuel Tank Capacity**.

› Set the Fuel Tank Capacity

If there is a fuel flow rate sensor installed, but not a NMEA 2000 fuel tank sensor, use the instructions in this section to set up fuel tank data manually. You can also use these instructions to confirm Automatic Fuel Management Mode if you have a NMEA 2000 fuel tank sensor and a fuel flow rate sensor installed.

1. Set up the number of fuel tanks on the boat. See **Set up the Number of Tanks**.
2. Press the HOME  key.
3. Select the Fuel tool.
4. Select Settings.
5. Select Manual.

NOTICE: If NMEA 2000 fuel tank sensor and a fuel flow rate sensor are installed, select Auto to automatically detect the fuel tank capacity.

6. Select Fuel Capacity.
7. Use the on-screen keyboard to enter the total fuel capacity of the tank.

If there is more than one tank on the boat, indicate the total amount of fuel from all tanks.

8. Select Save.

› Open the Fuel Tool

1. Press the HOME  key.
2. Select Tools.
3. Select the Fuel tool.

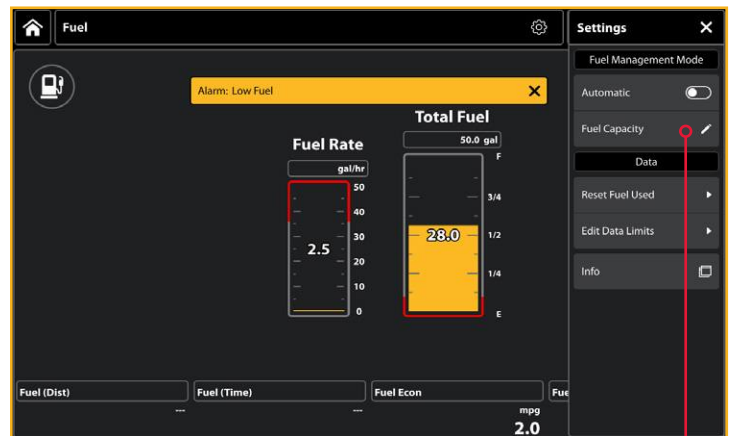
› Refill the Tank(s)

The menu options in this section are determined by the Fuel Management Mode (Manual or Automatic). See **Set the Fuel Tank Capacity** for more information.

1. Open the Fuel tool.
2. Select the Settings icon, and select Refuel.
3. **To fill the tank to the top**, select Fill Up or Reset Fuel Used.

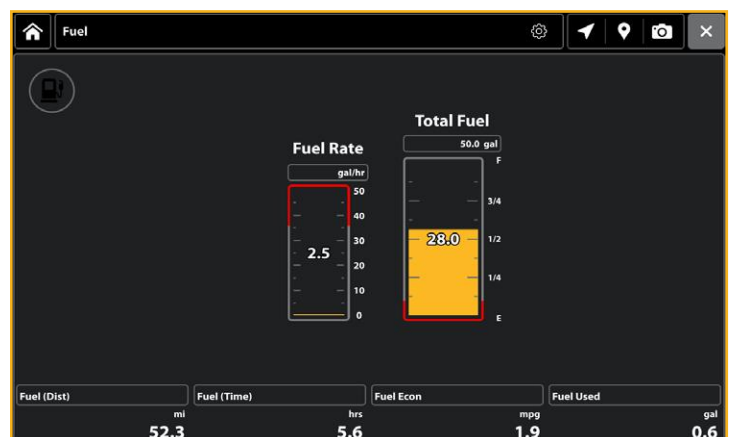
To add an amount to the tank, select Add Fuel. Use the on-screen keyboard to enter the amount and save it.

Setting up Fuel Tanks Manually



edit fuel capacity

Displaying the Fuel Tool



SET UP A NMEA 2000 NETWORK

» Change the Fuel Tank or Fuel Flow Source Assignments

The instructions in this section are optional and allow you to change which fuel tank is assigned as the Tank 1 or Tank 2 source in the fish finder. You can also use these instructions to change the fuel flow rate Sensors (Fuel Flow) assignments. The menu options are determined by the type of sensors installed.

1. Press the HOME  key.
2. Select Settings.
3. Select Data Sources.
4. Under Fuel Data, select Tank 1 or Tank 2.
If fuel flow rate sensors are installed, select Fuel Flow - Engine 1 or 2.
5. Turn off Auto-Configure.
6. Select a fuel tank from the list.

SET UP YOUR FISH FINDER NETWORK

When the Minn Kota integrated system is fully installed and everything is connected on the same switch, the network will be auto-configured so the fish finders and equipment are synchronized across the network. Depending on your network configuration, your options may include sources from remote fish finder(s), NMEA 0183, Ethernet, and NMEA 2000.

NOTICE: All fish finders must be on the same software version to be connected to the network.

Use the instructions in this section to complete the following network setup requirements:

1. Configure a new network.
2. Select transducers from the network.
3. Change GPS sources.
4. Select data sources.
5. Set vessel display settings.

1 | VIEW NETWORK »

Use the instructions in this section to view the fish finders connected to the network. The network synchronizes the fish finder settings.

1. Press the HOME  key.
2. Select Settings.
3. Select System.
4. Select Network Info.

2 | SELECT SONAR SOURCES »

When a transducer is first connected to the fish finder or network, it will be detected by all fish finders in the network. The fish finder selects the transducer connected to it as the primary sonar source. See minnkota.johnsonoutdoors.com for transducer configuration options.

NOTICE: Minn Kota has provided the best setting for your unit. You can use the settings included with your fish finder, or you can adjust these advanced options.

» Open the Sonar Source Menu

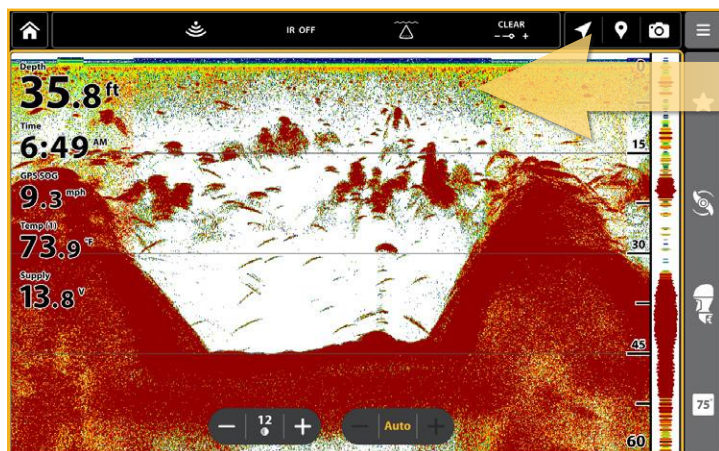
1. Press the HOME  key.
2. Select Settings.
3. Select Sonar.
4. Select Sonar Source.

SET UP YOUR FISH FINDER NETWORK

› Sonar Source Overview

When the network is configured, you can select any transducer from the network to provide the sonar data on the fish finder. The sonar sources can be shared between fish finders or you can use individual sonar sources on each fish finder.

The transducer you select on the 2D Sonar tab will provide the data for the 2D Sonar Views and related digital readouts.



Sonar Source Select

2D Source 2D Pinging Transducer Setting

2D Sonar

None (No 2D Sonar Source)

Down Imaging

Side Imaging

360 Imaging

MEGA Live

This Unit

XPLOR 10 240506050130 HIGH ON 2D / DI / SI

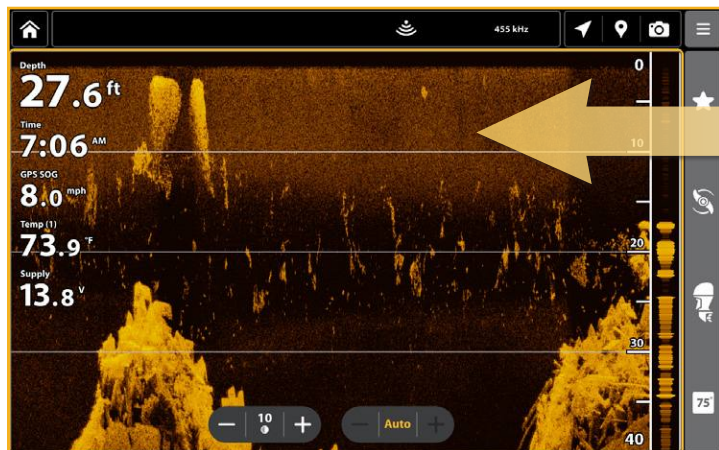
Remote Units

APEX 13 MSI+ 230104030095 LOW/HIGH ON 2D / DI / SI

SOLIX 12 MSI+ G3 210612030052 LOW OFF 2D / DI / SI

XPLOR 9 240506050078 HIGH ON 2D / DI / SI / MEGA 360

The transducer you select on the Down Imaging tab will provide the data for the Down Imaging Views and related digital readouts.



Sonar Source Select

DI Source DI Pinging Transducer Setting

2D Sonar

None (No DI Sonar Source)

Down Imaging

Side Imaging

360 Imaging

MEGA Live

This Unit

XPLOR 10 240506050130 CMDI+ ON 2D / DI / SI

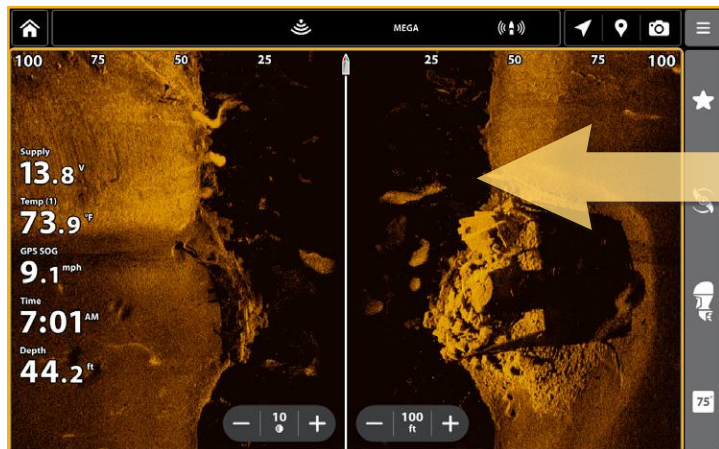
Remote Units

APEX 13 MSI+ 230104030095 455/800/MEGA ON 2D / DI / SI

SOLIX 12 MSI+ G3 210612030052 455/800/MEGA ON 2D / DI / SI

XPLOR 9 240506050078 455/800/MEGA+ ON 2D / DI / SI / MEGA 360

The transducer you select on the Side Imaging tab will provide the data for the Side Imaging Views and related digital readouts.



Sonar Source Select

SI Source SI Pinging Transducer Setting

2D Sonar

None (No SI Sonar Source)

Down Imaging

Side Imaging

360 Imaging

MEGA Live

This Unit

XPLOR 10 240506050130 CMDI+ OFF 2D / DI / SI

Remote Units

APEX 13 MSI+ 230104030095 455/800/MEGA ON 2D / DI / SI

SOLIX 12 MSI+ G3 210612030052 455/800/MEGA ON 2D / DI / SI

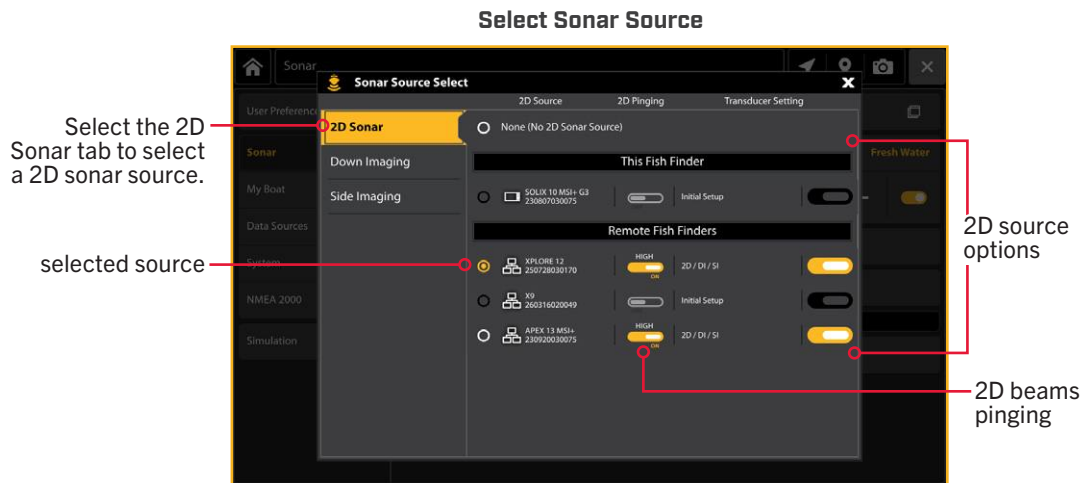
XPLOR 9 240506050078 455 / MEGA ON 2D / DI / SI / MEGA 360

SET UP YOUR FISH FINDER NETWORK

› Select Sonar Sources

Use the instructions in this section to assign sonar sources to each fish finder. The sonar sources can be shared between fish finders or you can use different sonar sources on each fish finder.

1. From the Sonar Source Menu, select the first tab. In the following illustration, the first tab is 2D.



2. Select the transducer connection location. The connection locations are displayed as follows:



Selected fish finder (Local): the fish finder you are actively using



Remote fish finder: additional fish finders connected to the network

3. Repeat steps 1 and 2 for each tab. You can select one sonar source on each tab.

NOTICE: The list is determined by the connected equipment on the network and the transducer type. DualBeam PLUS sonar sources will only be displayed on the 2D tab, Down Imaging sources will only be displayed on the Down Imaging tab, etc.

NOTICE: If you have installed an accessory transducer, and it is not displayed in the transducer list, see *Installation Information*. When you turn on/off pinging or change the transducer settings, all fish finders sharing the transducer are affected.

3 | SELECT GPS SOURCES (OPTIONAL) ›

The fish finder defaults to the internal GPS receiver as the primary source (GPS [1]). If you connect an external GPS receiver to an APEX or SOLIX fish finder, it will be assigned as the primary source GPS (1). If the fish finder is part of an Ethernet or NMEA 2000 network, you can also select the GPS receivers from the network.

GPS (1) provides position data, Speed over Ground (SOG), Course over Ground (COG), waypoints, routes, tracks, and navigation calculations to the fish finder.

GPS (2) provides position data that is displayed in the GPS (2) data box.

You can also manually change which GPS receiver is the selected source for GPS (1) or GPS (2). For example, if you've connected an external GPS receiver to the fish finder, it will automatically be assigned as GPS (1), but you can assign it to GPS (2). This can be changed from the GPS Tool or from the Data Sources menu in Settings.

1. Press the HOME key.
2. Select Settings.
3. Select System.
4. Select Network Info.

SET UP YOUR FISH FINDER NETWORK

› Open the GPS Tool

1. Press the HOME  key.
2. Select Tools.
3. Select the GPS tool.

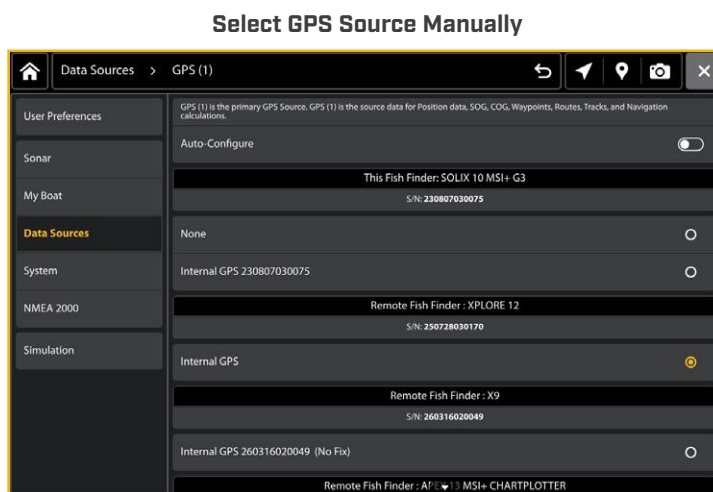
› Select GPS Sources Automatically

1. Under GPS Source, select GPS (1) or GPS (2).
2. Select Auto-Configure. Tap the on/off button, or press the ENTER key, to turn it on.

› Select GPS Sources Manually

Use the instructions in this section to manually select a GPS source.

1. Under GPS Source, select GPS (1) or GPS (2).
2. Select Auto-Configure. Tap the on/off button, or press the ENTER key, to turn it off.
3. Select a GPS receiver from the list.



4 | SELECT DATA SOURCES (OPTIONAL) ›

When the network has been configured, you can choose sources from the entire network. Depending on your network configuration, your options may include sources from remote fish finder(s), NMEA 0183, Ethernet, and NMEA 2000. Sources are shared across the network. In some situations, sources can be individualized for each fish finder. For example, Fish Finder A can use one transducer and Fish Finder B can use a different transducer.

Auto-Configure: The Auto-Configure on/off button is displayed in each source category. When Auto-Configure is turned on, the sources are selected automatically by the fish finder. When Auto-Configure is turned off, you can select sources based on your preferences.

For example, if there are multiple heading sensors attached, the fish finder network will choose one sensor to provide the heading.

› Select Sources Automatically (default)

Auto-Configure is turned on by default, so the instructions in this section are only necessary if you've manually changed the source selection and want to return to a source being chosen automatically.

1. Press the HOME  key.
2. Select Settings.
3. Select Data Sources.
4. Select a Data Category, and select the data type under that category.
5. Select Auto-Configure. Tap the on/off button, or press the ENTER key, to turn it on.

› Select Sources Manually (optional)

Use the instructions in this section to manually select a source.

1. Press the HOME  key.
2. Select Settings.
3. Select Data Sources.
4. Select a Data Category, and select the data type under that category.
5. Select Auto-Configure. Tap the on/off button, or press the ENTER key, to turn it off.
6. Select a source from the list.

SET UP YOUR FISH FINDER NETWORK

Manually Selecting a Source for Temp [1]

Temp (1) selected

information about selected source

When Auto-Configure is off, you can manually select a source.

selected source assigned to Temp (1)

The sources you select will provide the data for the related digital readouts and more, depending on your selection. In the illustration above, see Information about the Selected Source.

The Temp 1 digital readout data is provided by the Temp (1) source.

MANAGE YOUR FISH FINDER

Many of the fish finder settings can be accessed from the Settings tool (User Preferences) or from the Power X-Press Menu.

› Open the Settings Tool

1. Press the HOME  key.
2. Select Settings.
3. Select User Preferences.

› Open the Power X-Press Menu

Many of the fish finder settings can be accessed quickly from the Power X-Press Menu. You can also turn off Radar transmission or change the transducer source from this menu.

1. Press the POWER  key.

ADJUST LIGHTING ›

The lighting menus can be accessed from the Power X-Press Menu.

› Adjust the Backlight

1. Open the Power X-Press Menu.
2. Select Backlight.
3. Tap the +/- buttons, or use the Cursor pad/Joystick and +/- ZOOM keys, to adjust the setting.

› Turn on/off Night Mode

1. Open the Power X-Press Menu.
2. Select the Settings icon.
3. Select Night Mode and then select On, Off, or Auto.

CHANGE KEY SOUNDS ›

› Turn on/off Key Sounds

1. Press the HOME  key.
2. Select Settings.
3. Select User Preferences.
4. Select Key Sounds.
5. Tap the on/off button, or press the ENTER key.

SPECIFICATIONS

The following sections contain the product specifications for the X Series, A Series, XPLORE, APEX and SOLIX G3 fish finder and the (included) transducer. For additional information about your product and/or transducers, visit our Web site at minnkota.johnsonoutdoors.com.

X7 SERIES COMPACT MEGA SI >

Control Head

X7 Display Size (diagonal)	7.0 inches (177.8 mm)
Pixel Matrix	WSVGA 1024 x 600
Display Type.....	TFT Color
Backlight.....	LED
Communication	Bluetooth, NMEA 2000 Bus (LEN = 2), Ethernet, WiFi
Power Input	10-20 VDC
Current Draw.....	1.5 Amps
Recommended Fuse	5 Amps
IXP Rating.....	IPX7 Waterproof/Submersible @ 1 m for 30 minutes and dust tight

CHIRP Compact MEGA SI Transducer (included)

XNT 14 HW CMSI T (includes built-in temperature probe)

Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)
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MEGA Side Imaging

Operating Frequency	455 kHz, MEGA Imaging+
Range Capability	455 kHz: 405 - 505 kHz MEGA Imaging: 1.100-1.200 MHz
Area of Coverage	455 kHz: 85° @ -10 dB MEGA Imaging+: 75° @ -10 dB

MEGA Down Imaging

Operating Frequency	455 kHz, MEGA Imaging
Range Capability	455 kHz: 420-520 kHz – 400ft (122m) MEGA Imaging: 1.125-1.225 MHz – 200ft (61m)

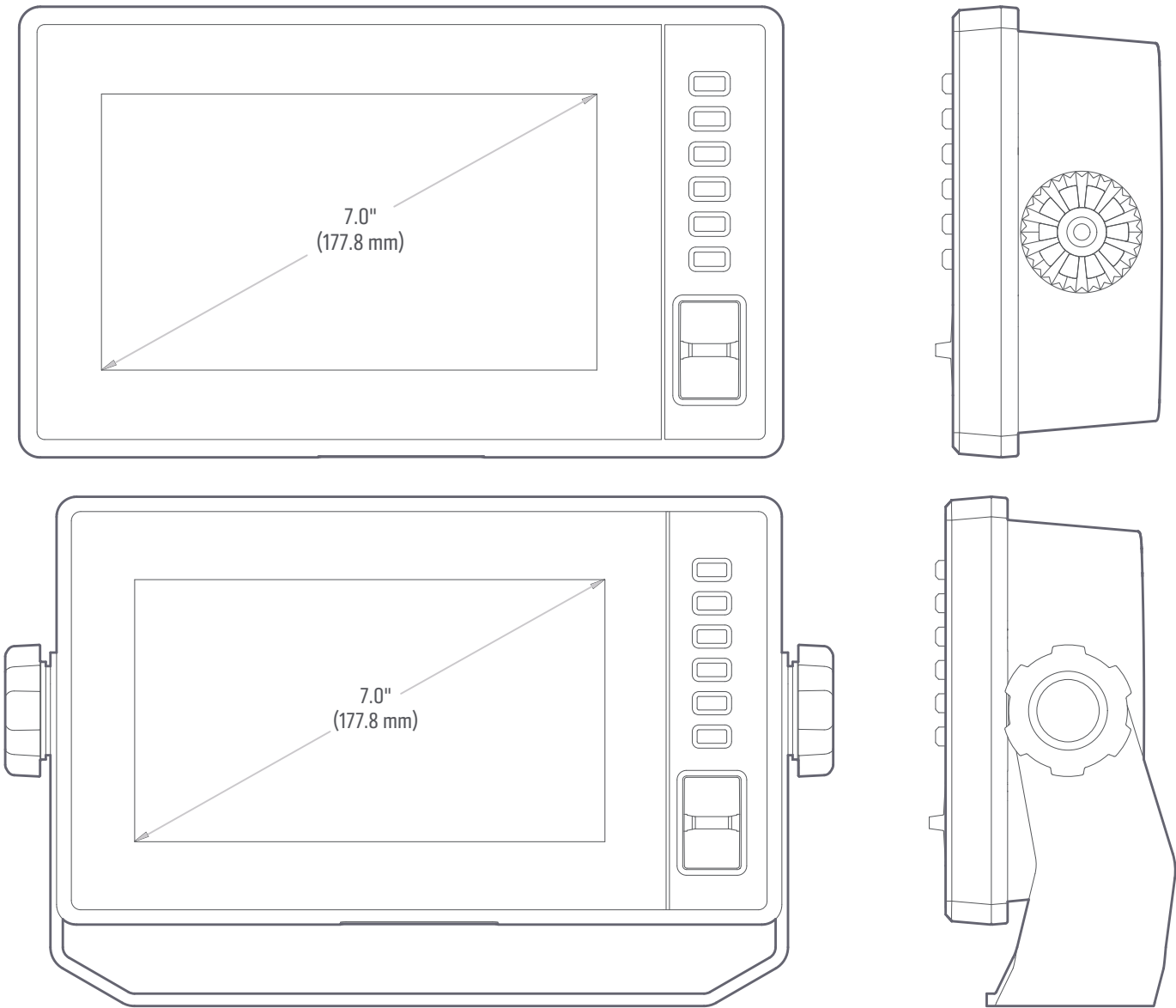
NOTICE: Minn Kota verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition, and slope.

NOTICE: Product specifications and features are subject to change without notice.

SPECIFICATIONS



X7 CONTROL HEAD MEASUREMENTS



X7 In-Dash Mount		X7 Gimbal Mount	
Width	9.37" (238 mm)	Width	10.69" (272 mm)
Height	5.52" (140 mm)	Height	6.57" (167 mm)
Depth	2.77" (70 mm)	Depth	3.18" (81 mm)



SPECIFICATIONS

X SERIES/XPLORE COMPACT MEGA SI+ »

Control Head

X9/XPLORE 9 Display Size (diagonal)	9.0 inches (228.6 mm)
X10/XPLORE 10 Display Size (diagonal)	10.1 inches (256.54 mm)
X12/XPLORE 12 Display Size (diagonal)	12.1 inches (307.34 mm)
X16 Display Size (diagonal)	15.5 inches (393.7 mm)
Pixel Matrix	X9/XPLORE 9: HD 1280 x 720 X10/XPLORE 10 and X12/XPLORE 12: WXGA 1280 x 800 X16: HD 1920 x 1080
Display Type	TFT Color
Backlight	LED
Communication	Bluetooth, NMEA 2000 Bus (LEN = 2), Ethernet, WiFi
Power Input	10-20 VDC
Current Draw	X9/XPLORE 9 and X10/XPLORE 10: 2.2 Amps X12/XPLORE 12: 2.4 Amps X16: 3.5 Amps
Recommended Fuse	5 Amps
IXP Rating	IPX7 Waterproof/Submersible @ 1 m for 30 minutes and dust tight

CHIRP Compact MEGA SI + Transducer (included)

XM 14 HW CMSI T (includes built-in temperature probe)

Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)
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MEGA Side Imaging+

Operating Frequency	455 kHz, MEGA Imaging+
Range Capability	455 kHz: 405 - 505 kHz, 800 ft (244 m) Side to Side MEGA Imaging+: 1.100-1.200 MHz, 400 ft (122 m) Side to Side
Area of Coverage	455 kHz: [2] 75° @ -10 dB MEGA Imaging+: [2] 75° @ -10 dB

MEGA Down Imaging+

Operating Frequency	455 kHz, MEGA Imaging+
Range Capability	455 kHz: 420 - 520 kHz, 400 ft (122 m) MEGA Imaging+: 1.125-1.225 MHz, 200 ft (61 m)
Area of Coverage	455 kHz: 75° @ -10 dB MEGA Imaging+: 70° @ -10 dB

2D CHIRP

Default Operating Frequency	Dual Spectrum CHIRP: 150 kHz - 220 kHz
Optional Operating Frequency	200 kHz, 83 kHz, and 50 kHz High CHIRP, Medium CHIRP, Low CHIRP

SPECIFICATIONS



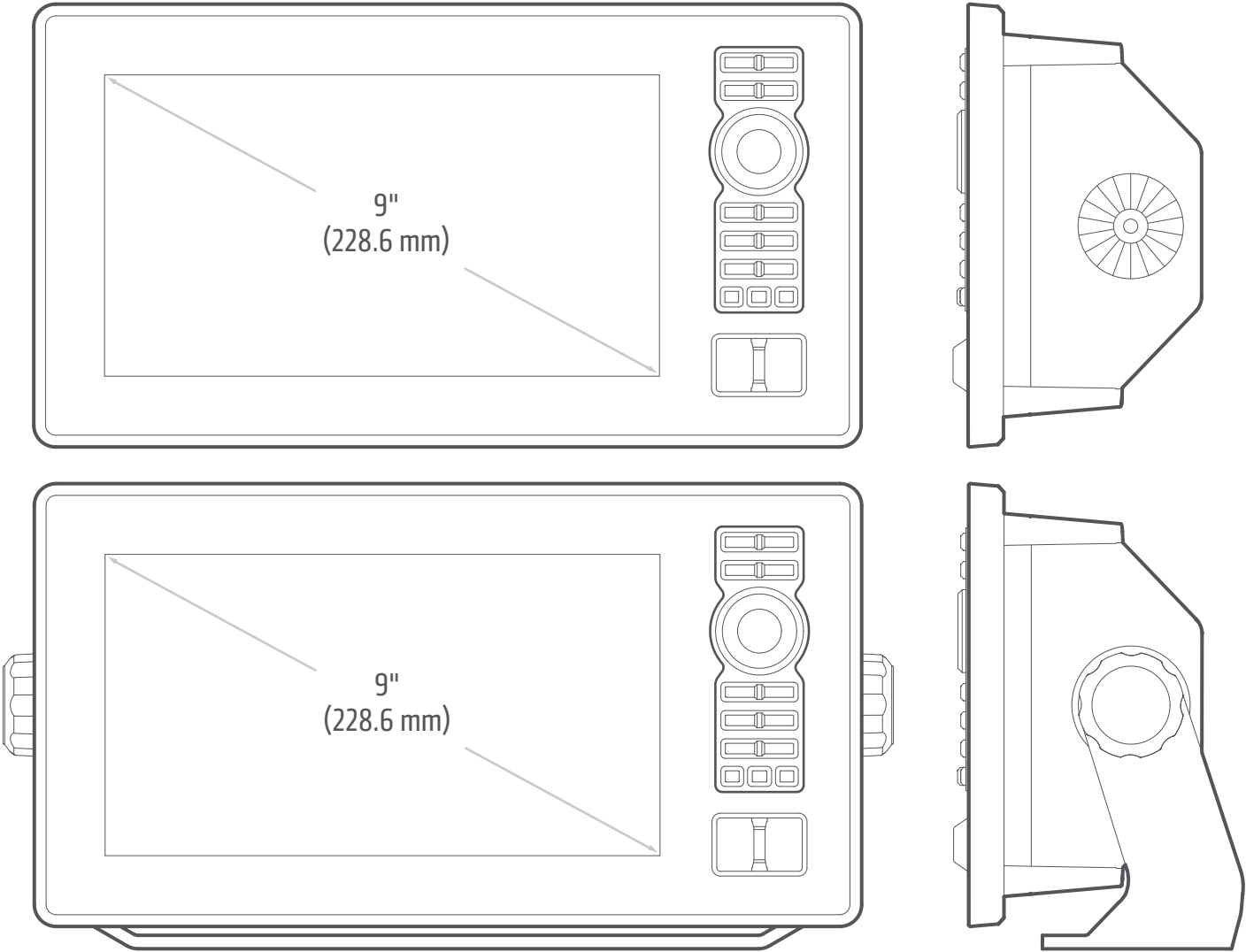
Depth Capability	1200 ft (365 m)
Area of Coverage	Full: 25° - 42°@-10 dB in 150 - 220 kHz Wide: 42°@-10 dB in 140 - 200 kHz Narrow: 25°@-10 dB in 180 - 240 kHz
Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)

NOTICE: Minn Kota verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition, and slope.

NOTICE: Product specifications and features are subject to change without notice.



X9/XPLORE 9 CONTROL HEAD MEASUREMENTS

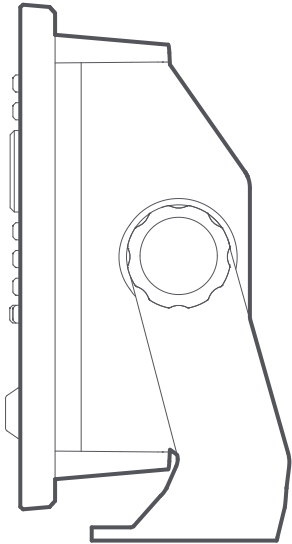
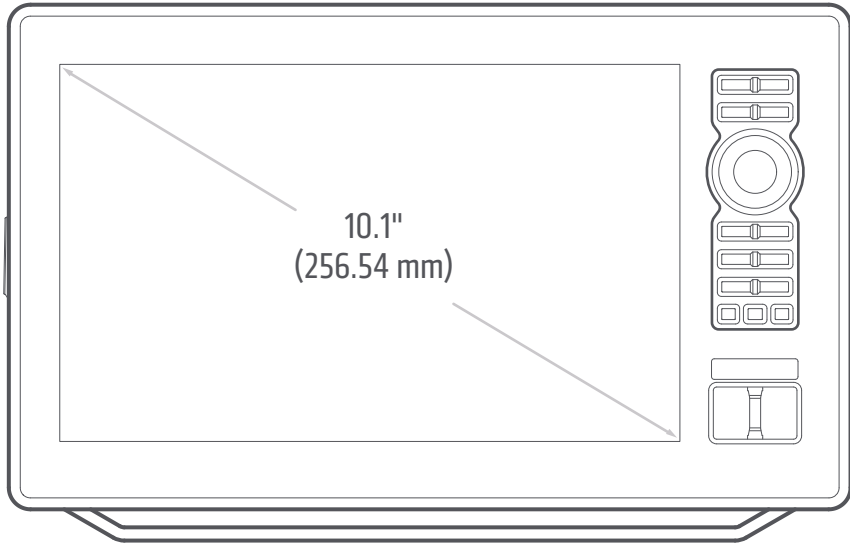
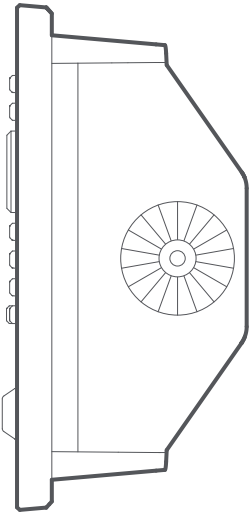
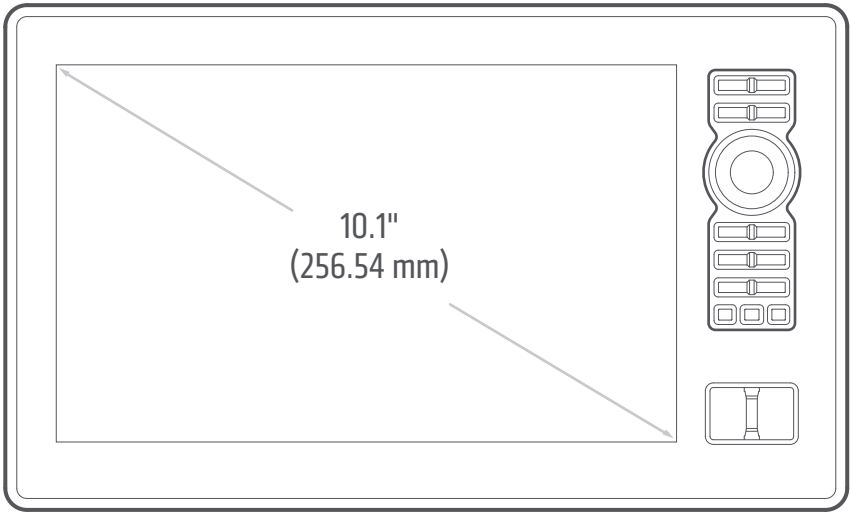


X9/XPLORE 9 In-Dash Mount		X9/XPLORE 9 Gimbal Mount	
Width	11.69" (297 mm)	Width	11.69" (297 mm)
Height	6.26" (159 mm)	Height	6.57" (167 mm)
Depth	3.3" (84 mm)	Depth	3.88" (99 mm)

SPECIFICATIONS



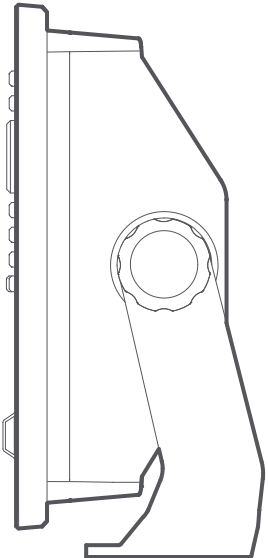
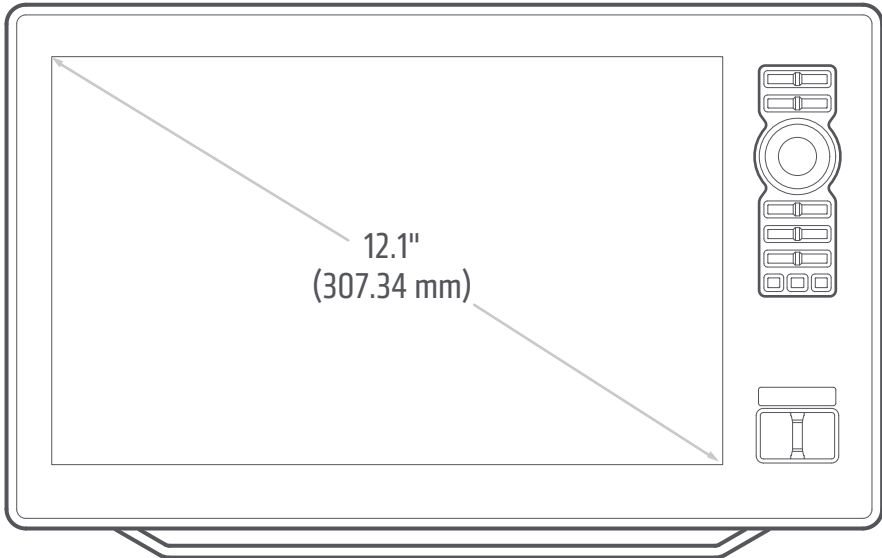
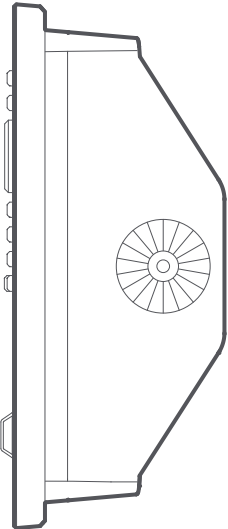
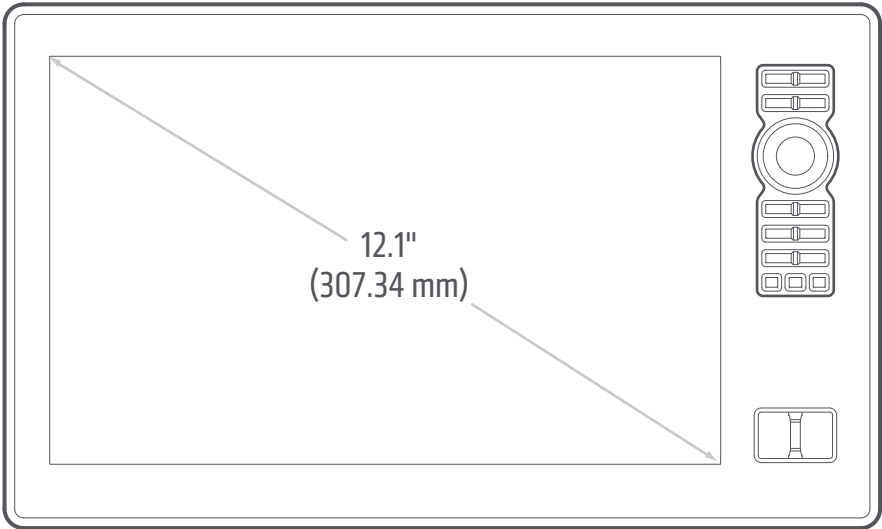
X10/XPLORE 10 CONTROL HEAD MEASUREMENTS >



X10/XPLORE 10 In-Dash Mount		X10/XPLORE 10 Gimbal Mount	
Width	12.01" (305 mm)	Width	12.01" (305 mm)
Height	7.25" (184 mm)	Height	7.70" (196 mm)
Depth	3.3" (84 mm)	Depth	3.89" (99 mm)



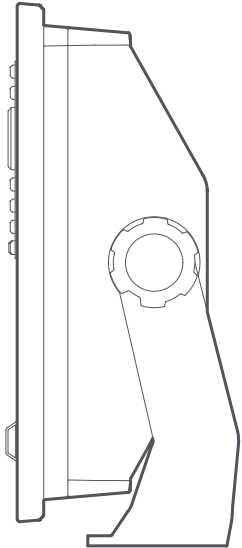
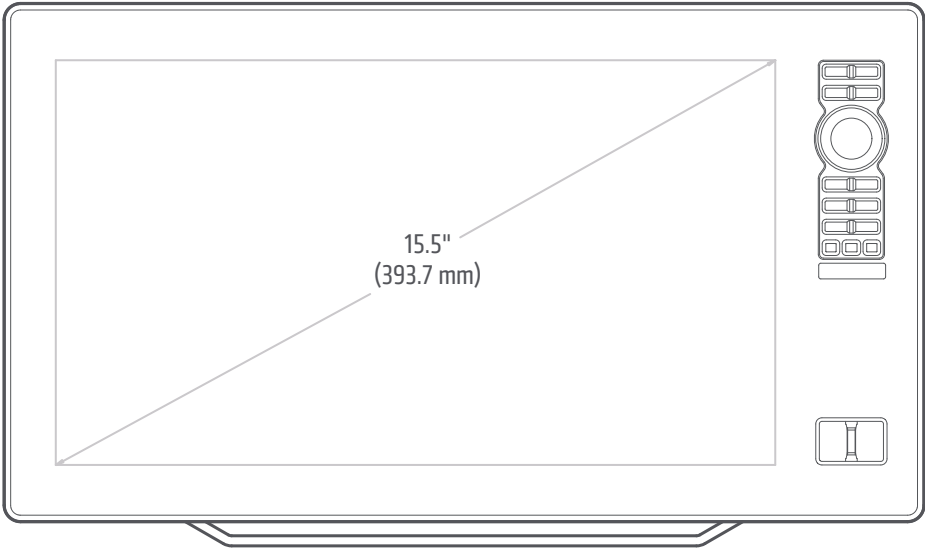
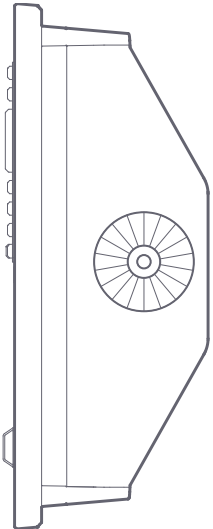
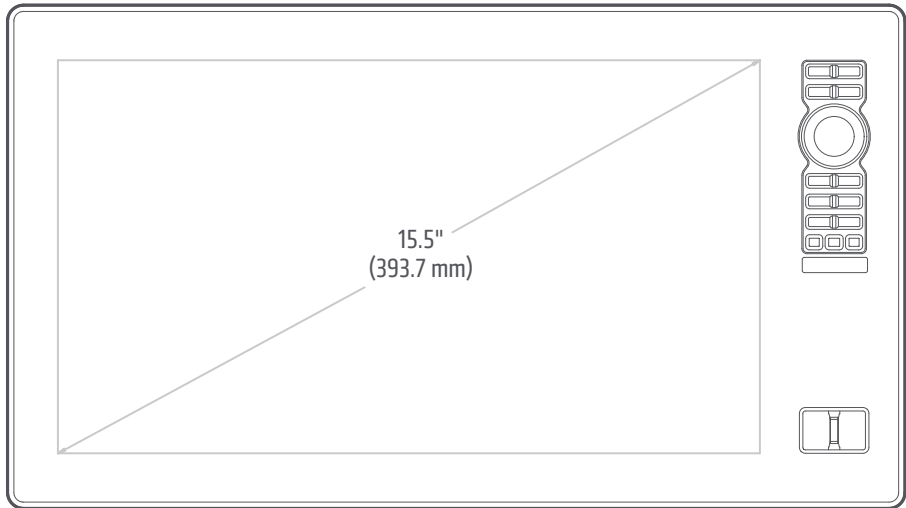
X12/XPLORE 12 CONTROL HEAD MEASUREMENTS



X12/XPLORE 12 In-Dash Mount		X12/XPLORE 12 Gimbal Mount	
Width	14.15" (359 mm)	Width	14.15" (359 mm)
Height	8.46" (215 mm)	Height	8.91" (226 mm)
Depth	3.4" (86 mm)	Depth	3.99" (101 mm)

SPECIFICATIONS

X16 CONTROL HEAD MEASUREMENTS



X16 In-Dash Mount		X16 Gimbal Mount	
Width	17.33" (440 mm)	Width	17.33" (440 mm)
Height	9.76" (248 mm)	Height	10.84" (275 mm)
Depth	3.79" (96 mm)	Depth	4.38" (111 mm)

SPECIFICATIONS

A SERIES/APEX MEGA SI+ >

Control Head

A13/APEX 13 Display Size (diagonal)	13.3 inches (337.82 mm)
A16/APEX 16 Display Size (diagonal)	15.6 inches (396.24 mm)
A19/APEX 19 Display Size (diagonal)	18.5 inches (469.9 mm)
Pixel Matrix	FHD 1920 x 1080
Display Type	TFT Color
Backlight	LED
Communication	Bluetooth, NMEA 2000 Bus (LEN = 2), Dual Ethernet, WiFi
Power Input	10-20 VDC
Current Draw	A13/APEX 13: 3.1 Amps A16/APEX 16: 4.3 Amps A19/APEX 19: 4.4 Amps
Recommended Fuse	10 Amps
IXP Rating	IPX7 Waterproof/Submersible @ 1 m for 30 minutes and dust tight

Port 1: 2D, DI, SI, 360

CHIRP MEGA SI + Transducer (included)

XM 14 HW MSI T (includes built-in temperature probe)

Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)
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MEGA Side Imaging+

Operating Frequency	455 kHz, 800 kHz, MEGA Imaging+
Range Capability	455 kHz: 405 - 505 kHz, 800 ft (244 m) Side to Side 800 kHz: 780 - 840 kHz, 250 ft (76 m) Side to Side MEGA Imaging+: 1050 - 1175 kHz, 500 ft (152 m) Side to Side
Area of Coverage	455 kHz: (2) 86° @ -10 dB (180° Total Coverage) 800 kHz: (2) 55° @ -10 dB (130° Total Coverage) MEGA Imaging+: (2) 86° @ -10 dB (180° Total Coverage)

MEGA Down Imaging+

Operating Frequency	455 kHz, 800 kHz, MEGA Imaging+
Range Capability	455 kHz: 435 - 535 kHz, 400 ft (122 m) 800 kHz: 800 - 860 kHz, 125 ft (38 m) MEGA Imaging+: 1100 - 1200 kHz, 250 ft (76 m)
Area of Coverage	455 kHz: 75° @ -10 dB 800 kHz: 45° @ -10 dB MEGA Imaging+: 75° @ -10 dB

SPECIFICATIONS



2D CHIRP

Default Operating Frequency	Dual Spectrum CHIRP: 150 kHz - 220 kHz
Optional Operating Frequency	200 kHz, 83 kHz, and 50 kHz High CHIRP, Medium CHIRP, Low CHIRP
Depth Capability	1200 ft (365 m)
Area of Coverage	Full: 25° - 42°@-10 dB in 150 - 220 kHz Wide: 42°@-10 dB in 140 - 200 kHz Narrow: 25°@-10 dB in 180 - 240 kHz
Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)

Port 2: 2kW 2D

2D CHIRP

Optional Operating Frequency	200 kHz, 83 kHz, and 50 kHz High CHIRP, Medium CHIRP, Low CHIRP
Depth Capability	1200 ft (365 m) / 5,000 ft (1,524 m)*
Power Output (MAX)	2,000 Watts (RMS)

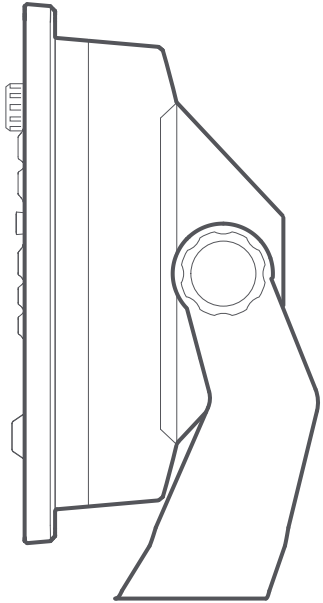
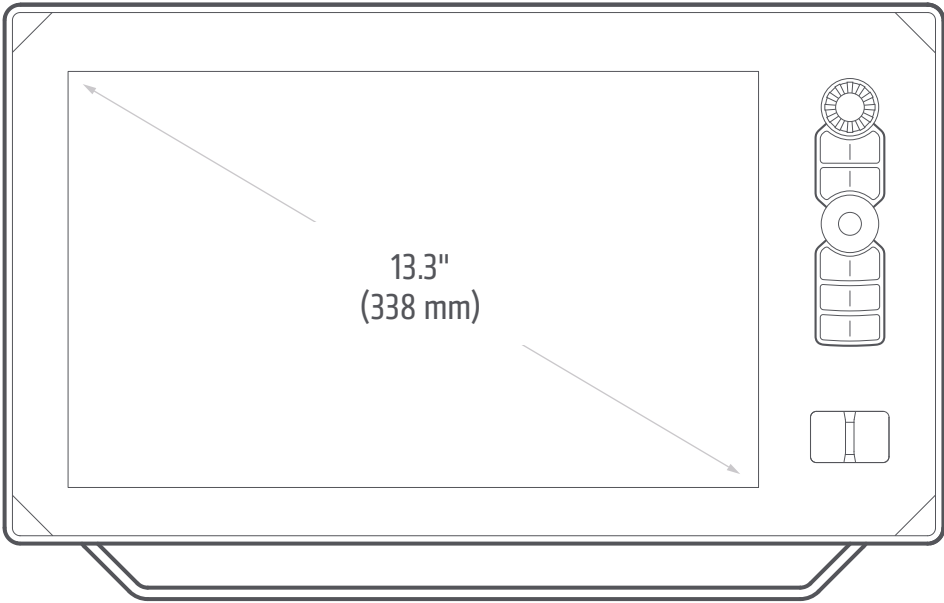
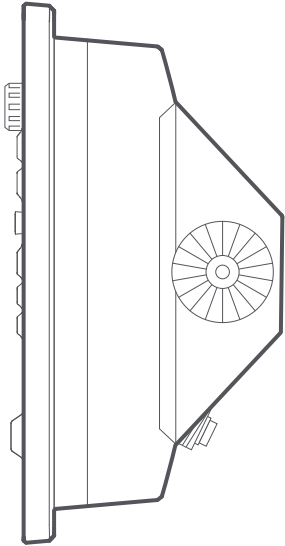
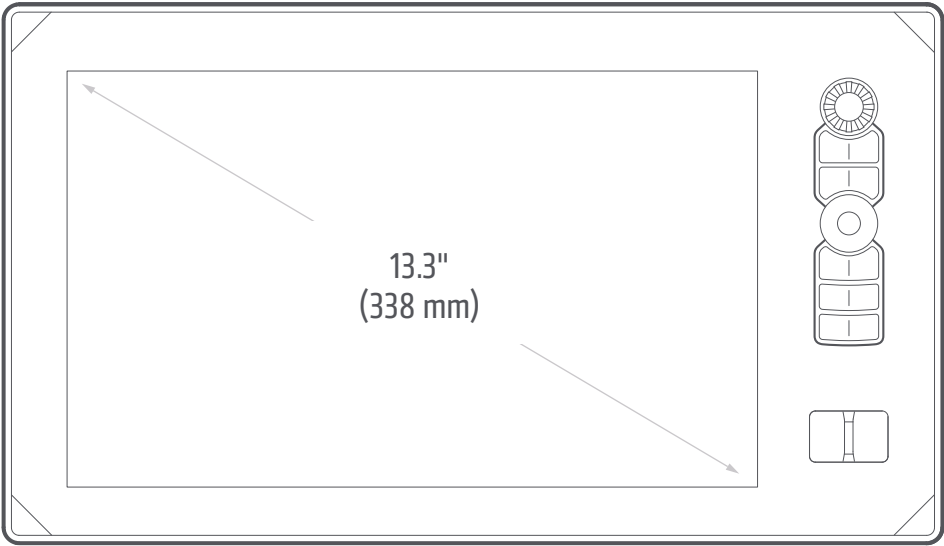
**Optional Airmar CHIRP SM3000 required for extreme deep water use.*

NOTICE: Minn Kota verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition, and slope.

NOTICE: Product specifications and features are subject to change without notice.



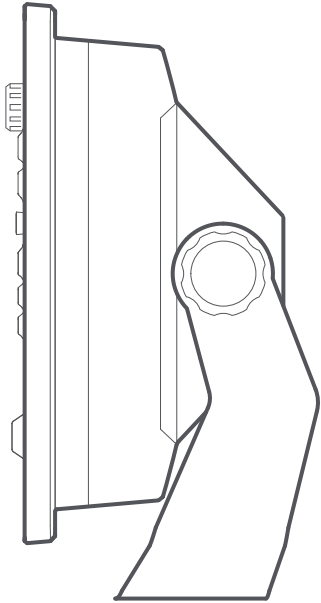
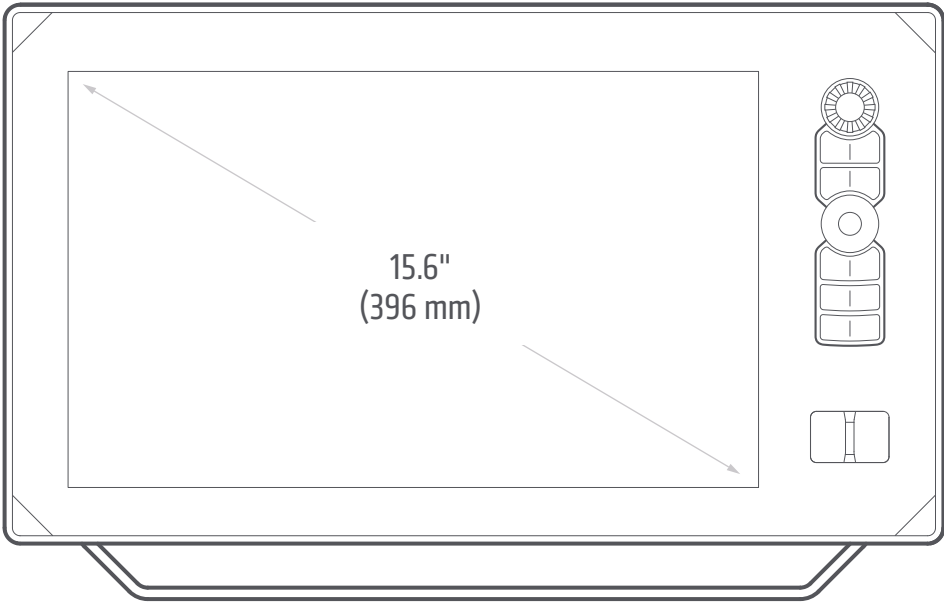
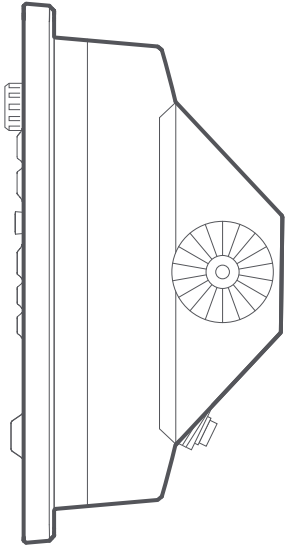
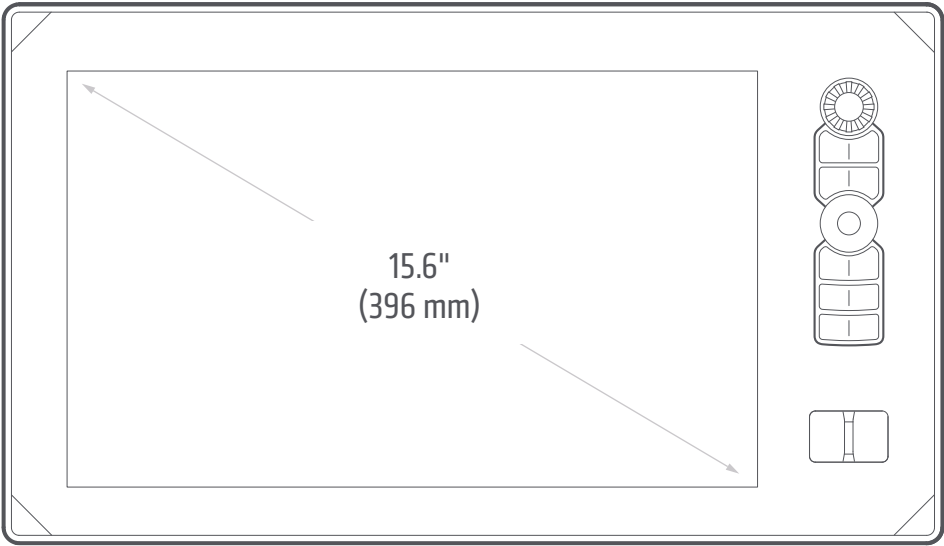
A13/APEX 13 CONTROL HEAD MEASUREMENTS



A13/APEX 13 In-Dash Mount		A13/APEX 13 Gimbal Mount	
Width	15.6" (396 mm)	Width	15.6" (396 mm)
Height	8.96" (227 mm)	Height	9.88" (251 mm)
Depth	5.67" (144 mm)	Depth	4.88" (124 mm)

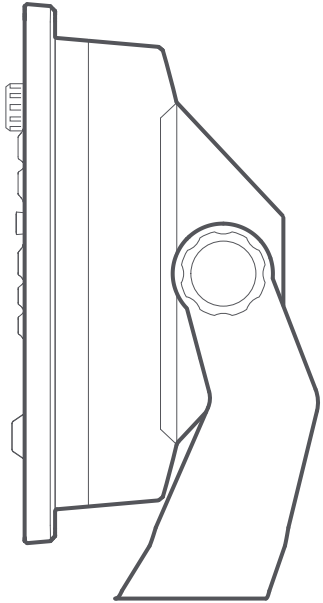
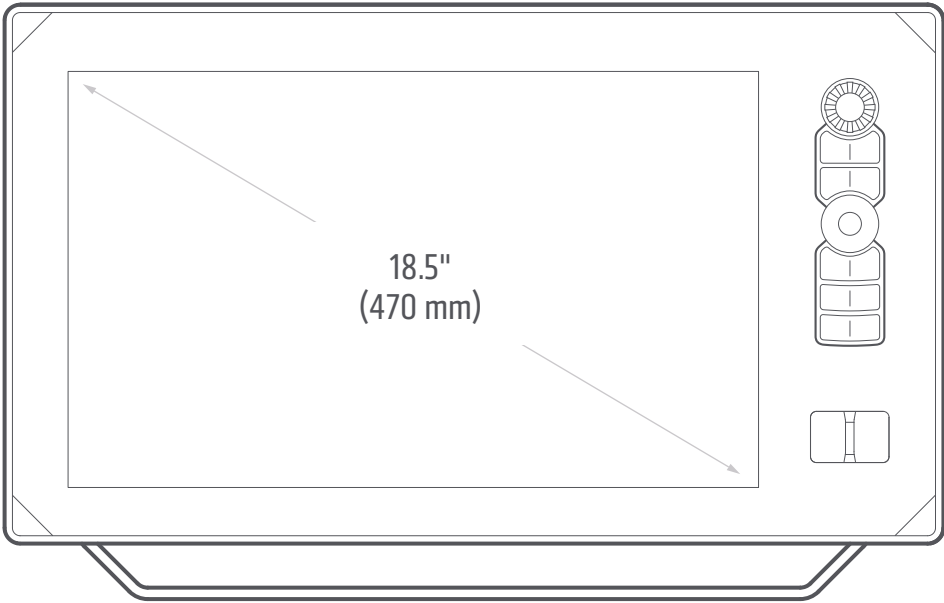
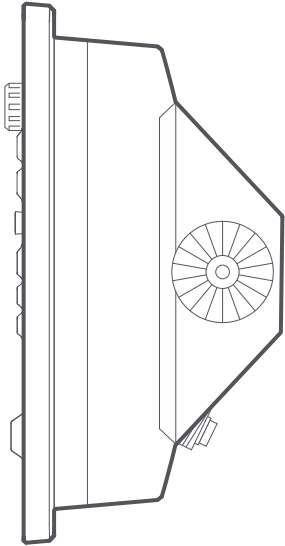
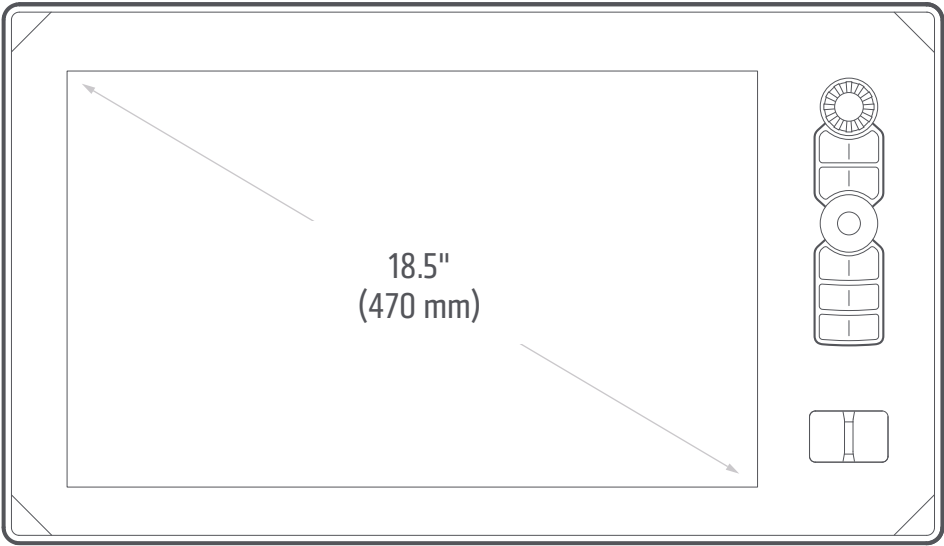
SPECIFICATIONS

A16/APEX 16 CONTROL HEAD MEASUREMENTS



A16/APEX 16 In-Dash Mount		A16/APEX 16 Gimbal Mount	
Width	17.65" (448 mm)	Width	17.65" (448 mm)
Height	10.13" (257 mm)	Height	11.05" (281 mm)
Depth	5.48" (139 mm)	Depth	4.93" (125 mm)

A19/APEX 19 CONTROL HEAD MEASUREMENTS >



A19/APEX 19 In-Dash Mount		A19/APEX 19 Gimbal Mount	
Width	20.27" (515 mm)	Width	20.27" (515 mm)
Height	11.66" (296 mm)	Height	12.58" (320 mm)
Depth	5.33" (135 mm)	Depth	4.95" (126 mm)

SPECIFICATIONS

SOLIX MEGA SI+ G3 >

Control Head

SOLIX 10 Display Size (diagonal)	10.1 inches (256.54 mm)
SOLIX 12 Display Size (diagonal)	12.1 inches (307.3 mm)
SOLIX 15 Display Size (diagonal)	15.4 inches (391.16 mm)
Pixel Matrix	WXGA 1280 x 800
Display Type	TFT Color
Backlight	LED
Communication	Bluetooth, NMEA 0183 Bus, NMEA 2000 Bus (LEN = 2), Ethernet, WiFi
Power Input	12 VDC
Current Draw	SOLIX 10: 2.4 Amps SOLIX 12: 2.9 Amps SOLIX 15: 4 Amps
Recommended Fuse	SOLIX 10: 5 Amps (slow blow or MDL equivalent) SOLIX 12: 5 Amps (slow blow or MDL equivalent) SOLIX 15: 7.5 Amps (slow blow or MDL equivalent)
IXP Rating	IPX7 Waterproof/Submersible @ 1 m for 30 minutes and dust tight

CHIRP MEGA SI + Transducer (included)

XM 14 HW MSI T (includes built-in temperature probe)

Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)
--------------------	--

MEGA Side Imaging+

Operating Frequency	455 kHz, 800 kHz, MEGA Imaging+
Range Capability	455 kHz: 405 - 505 kHz, 800 ft (244 m) Side to Side 800 kHz: 780 - 840 kHz, 250 ft (76 m) Side to Side MEGA Imaging+: 1050 - 1175 kHz, 500 ft (152 m) Side to Side
Area of Coverage	455 kHz: (2) 86° @ -10 dB (180° Total Coverage) 800 kHz: (2) 55° @ -10 dB (130° Total Coverage) MEGA Imaging+: (2) 86° @ -10 dB (180° Total Coverage)

MEGA Down Imaging+

Operating Frequency	455 kHz, 800 kHz, MEGA Imaging+
Range Capability	455 kHz: 435 - 535 kHz, 400 ft (122 m) 800 kHz: 800 - 860 kHz, 125 ft (38 m) MEGA Imaging+: 1100 - 1200 kHz, 250 ft (76 m)
Area of Coverage	455 kHz: 75° @ -10 dB 800 kHz: 45° @ -10 dB MEGA Imaging+: 75° @ -10 dB

SPECIFICATIONS

Dual Spectrum CHIRP

Default Operating Frequency	150 kHz - 220 kHz
Depth Capability	1200 ft (366 m)
Area of Coverage	Full: 25° - 42°@-10 dB in 150 - 220 kHz Wide: 42°@-10 dB in 140 - 200 kHz Narrow: 25°@-10 dB in 180 - 240 kHz
Power Output (MAX)	500 Watts (RMS), 4000 Watts (Peak to Peak)

NOTICE: Minn Kota verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition, and slope.

NOTICE: Product specifications and features are subject to change without notice.

SOLIX MEGA DI+ G3 »

Control Head

SOLIX 10 Display Size (diagonal).....	10.1 inches (256.54 mm)
SOLIX 12 Display Size (diagonal).....	12.1 inches (307.3 mm)
SOLIX 15 Display Size (diagonal).....	15.4 inches (391.16 mm)
Pixel Matrix	WXGA 1280 x 800
Display Type.....	TFT Color
Backlight.....	LED
Communication	Bluetooth, NMEA 0183 Bus, NMEA 2000 Bus (LEN = 2), Ethernet, WiFi
Power Input	12 VDC
Current Draw.....	SOLIX 10: 2.4 Amps SOLIX 12: 2.9 Amps SOLIX 15: 4 Amps
Recommended Fuse	SOLIX 10: 5 Amps (slow blow or MDL equivalent) SOLIX 12: 5 Amps (slow blow or MDL equivalent) SOLIX 15: 7.5 Amps (slow blow or MDL equivalent)
IXP Rating.....	IPX7 Waterproof/Submersible @ 1 m for 30 minutes and dust tight

CHIRP MEGA DI + Transducer (included)

XM 14 HW MDI T (includes built-in temperature probe)

Operating Frequency	455 kHz, 800 kHz, MEGA Imaging+
Depth Capability	455 kHz: 800 ft (122 m) 800 kHz: 250 ft (76 m) MEGA Imaging+: 1050 - 1175 kHz, 500 ft (152 m) Side to Side
Area of Coverage	455 kHz: 75° @ -10 dB 800 kHz: 45° @ -10 dB MEGA Imaging+: 75° @ -10 dB

SPECIFICATIONS



Power Output (MAX) 500 Watts (RMS), 4000 Watts (Peak to Peak)

2D Sonar

Operating Frequency 200 kHz

Depth Capability 1200 ft (366 m)

Area of Coverage 20°@-10 dB in 200 kHz

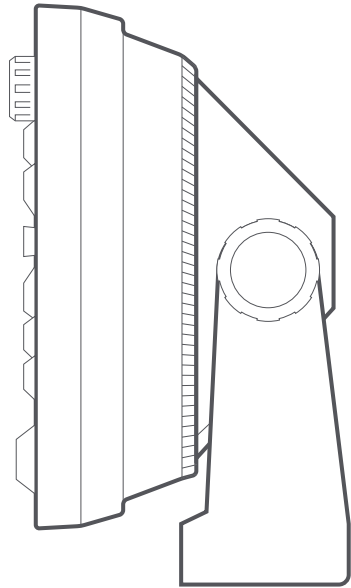
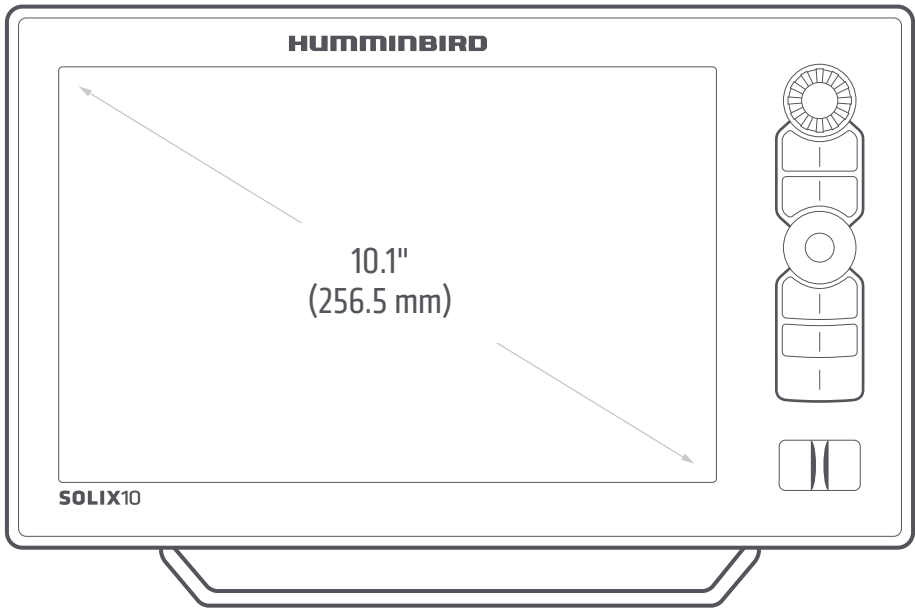
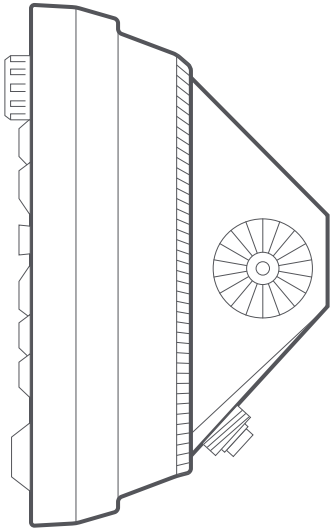
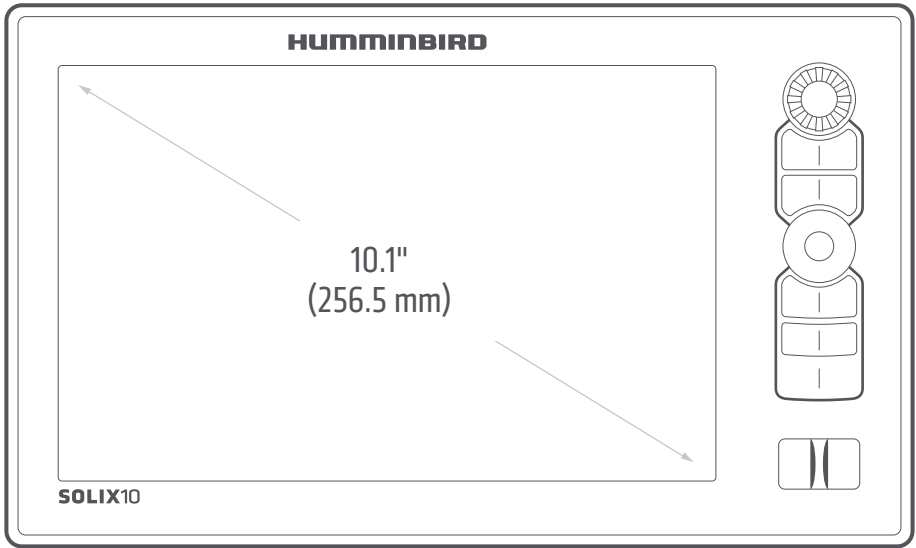
Power Output (MAX) 500 Watts (RMS), 4000 Watts (Peak to Peak)

NOTICE: Minn Kota verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition, and slope.

NOTICE: Product specifications and features are subject to change without notice.



SOLIX 10 CONTROL HEAD MEASUREMENTS »

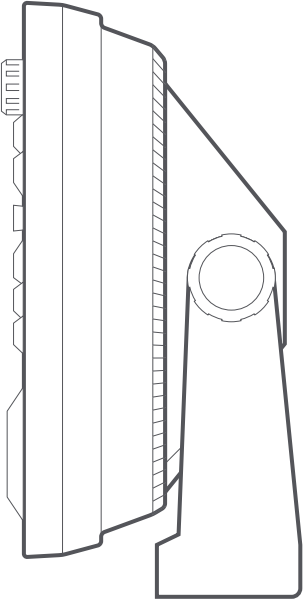
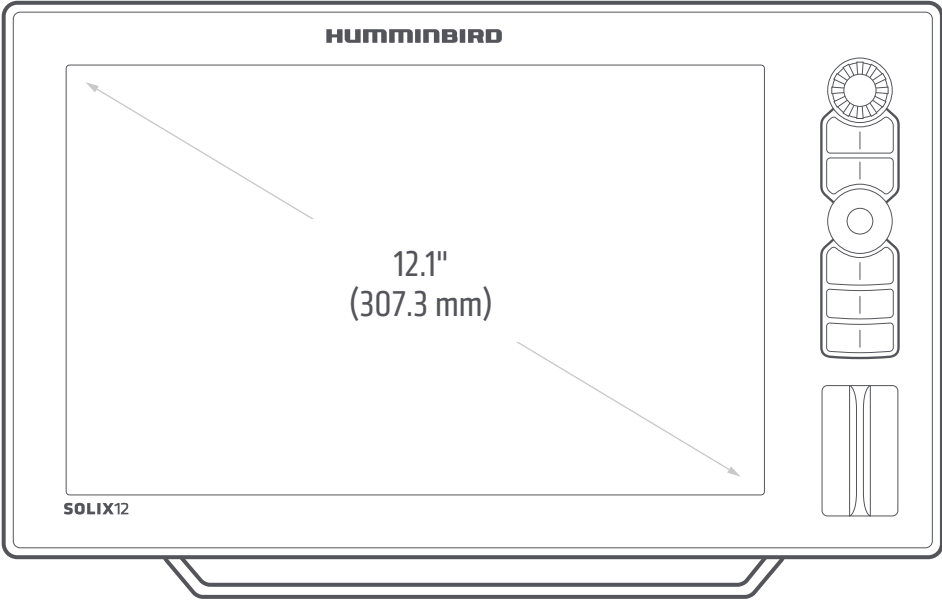
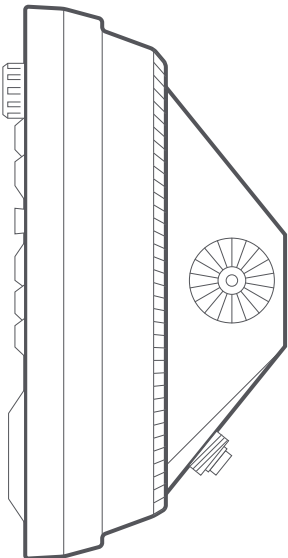
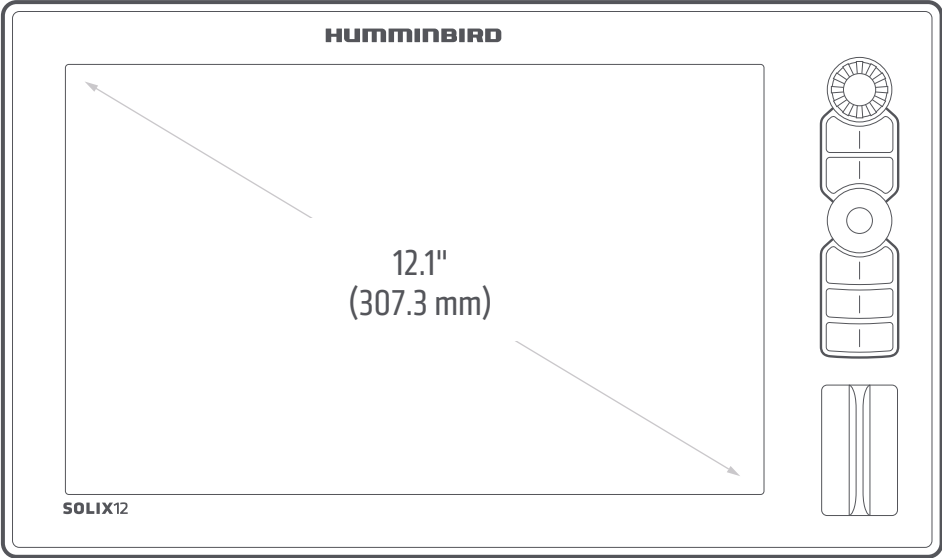


SOLIX 10 In-Dash Mount		SOLIX 10 Gimbal Mount	
Width	11.8" (299.7 mm)	Width	11.8" (299.7 mm)
Height	7.1" (197.3 mm)	Height	7.9" (200.4 mm)
Depth	1.2" (30.5 mm)	Depth	4.8" (122 mm)

SPECIFICATIONS



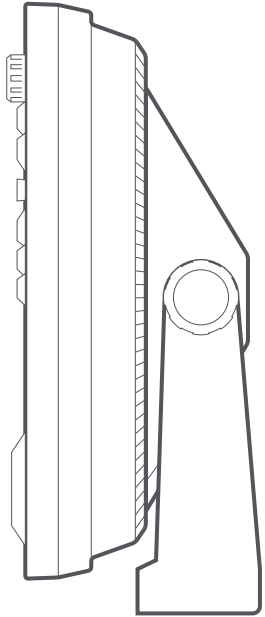
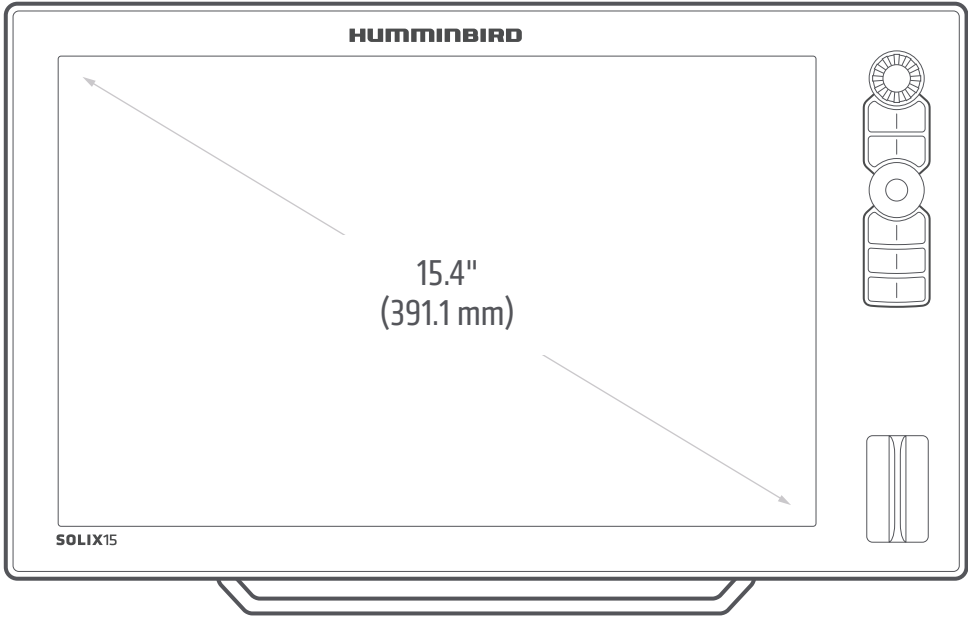
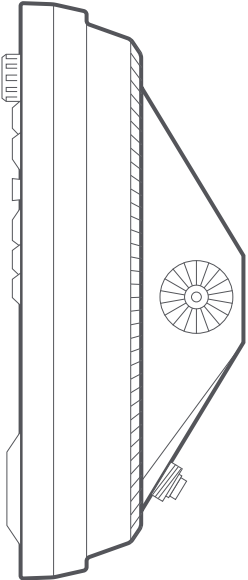
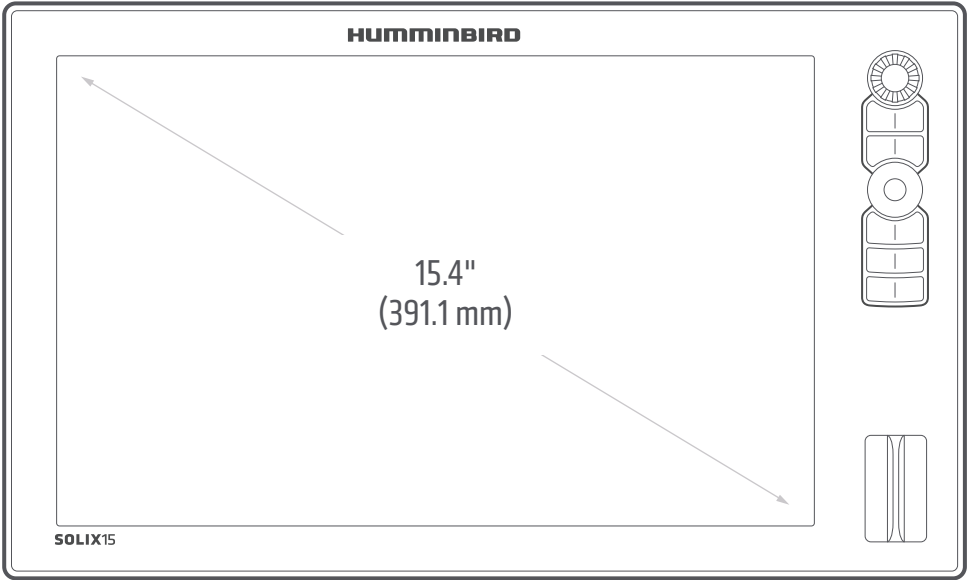
SOLIX 12 CONTROL HEAD MEASUREMENTS >



SOLIX 12 In-Dash Mount		SOLIX 12 Gimbal Mount	
Width	13.8" (350.5 mm)	Width	13.8" (350.5 mm)
Height	8.2" (208.5 mm)	Height	8.7" (221 mm)
Depth	1.2" (30.5 mm)	Depth	4.8" (122 mm)



SOLIX 15 CONTROL HEAD MEASUREMENTS »



SOLIX 15 In-Dash Mount		SOLIX 15 Gimbal Mount	
Width	16.5" (419.9 mm)	Width	16.5" (419.9 mm)
Height	10.1" (256.5 mm)	Height	10.5" (266.7 mm)
Depth	1.2" (30.5 mm)	Depth	4.8" (122 mm)

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Minn Kota

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Eufaula, AL 36027

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Minn Kota
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* NOTE: A copy of the Qt software is not required to upgrade your fishing system. The Minn Kota application software and control head include a separate service warranty. Please see minnkota.johnsonoutdoors.com and the separate warranty card included with your unit for details.

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RF EXPOSURE COMPLIANCE: This device has been evaluated and found compliant in accordance with EU EN 62479:2010 and EN 62311:2008 for human RF exposure.

This product has been so constructed that the product complies with the requirement of Article 10(2) as it can be operated in at least one Member State as examined and the product is compliant with Article 10(10) as it has no restrictions on putting into service in all EU member states.

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This equipment is home use (Class B) electromagnetic wave suitability equipment and to be used at home and it can be used in all areas.

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Part #533106-1_A

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