

360 IMAGING[®] for HELIX[®]

Operations Guide

532074-3EN_A





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 **NOTE:** 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.


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

 **NOTE:** To purchase accessories for your control head, visit our Web site at humminbird.com or contact Humminbird Customer Service at **1-800-633-1468**.

 **NOTE:** 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. Humminbird is not responsible for incorrect translations or discrepancies between documents.

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

 **NOTE:** Humminbird 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.

 **NOTE:** For 360 Imaging troubleshooting and maintenance information, please see your 360 Imaging Installation Guide. The guide can also be downloaded from our Web site at humminbird.com.

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INTRODUCTION

We encourage you to read this manual carefully in order to understand 360 Imaging and how to use this Humminbird advanced accessory on the water. Some of the equipment requirements and menu options depend on the type of mount you have installed. Whether you have a Transducer Deployment System or a Trolling Motor Mount, every effort has been made to clearly identify those features throughout this manual.

Important Information

Before you use the 360 Imaging transducer on the water, it is important to understand the following:

Speed	The 360 Imaging transducer pod can be used in the water at 0 to 7 mph. The transducer pod should NOT be in the water during high speed travel.
Obstructions	Be aware of obstructions in the water that could damage the transducer pod. Also be aware of bridges or anything above the boat that could damage the Transducer Deployment System.
Maintaining Power	The Transducer Deployment System must stay powered ON while the boat is underway to keep the pod retracted and fully stowed.
Powering Off	When the boat is at dock or in storage, the 360 Imaging transducer should be turned off to prevent draining the battery. See Power Off for more information.
Pod Cover	The pod cover must be installed on the Transducer Deployment System for trailering and storage. See Power Off for more information.
Setting up the Control Head	The control head must be set up correctly to add the 360 Imaging features to the Menu System and View Rotation. See Set up the Network and 360 Imaging Alarms .

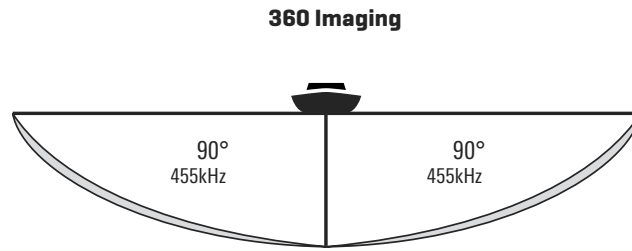
HELIX Control Head

This accessory manual describes the functionality that is added to your HELIX control head when it is connected to the 360 Imaging transducer. For additional information about the HELIX control head operations, see the **HELIX Operations Manual**. To download the manual from our Web site, go to humminbird.com.

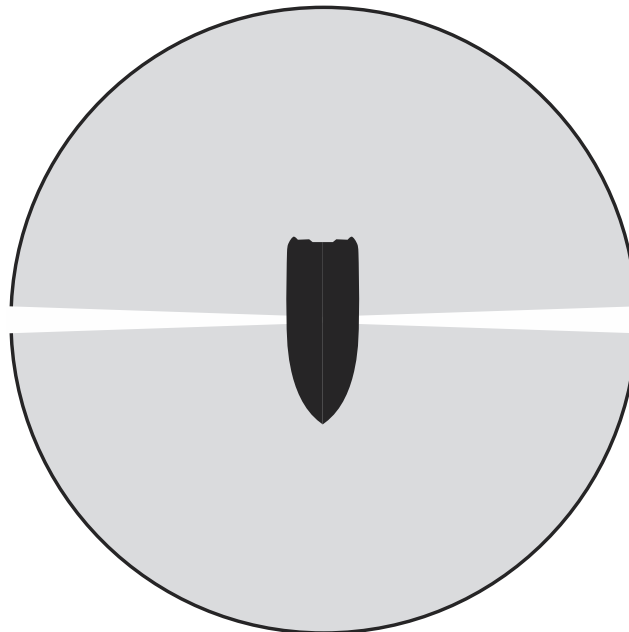
360 IMAGING SONAR


The 360 Imaging transducer scans the water with razor-thin, rotating beams. These 455 kHz, high-definition beams sweep a very wide area of water around and below your boat. The beams are wide from side to side but very thin from front to back.

The 360 Imaging rotating beams can also be set to provide Side Imaging views on the screen. See **Set up the Network and 360 Imaging Alarms and Views** for more information.



⚙ 360 Degree Total Coverage

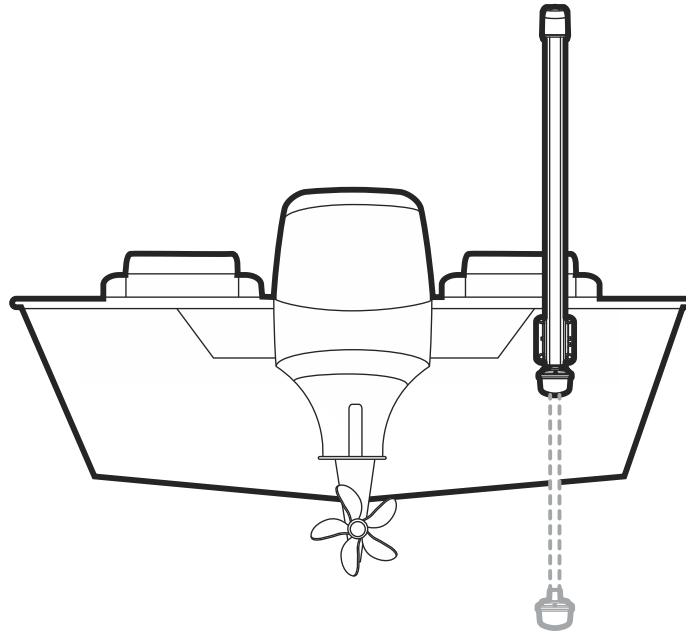


 **NOTE:** The transducer's performance is affected by such factors as boat speed, wave action, bottom hardness, water conditions, and installation.

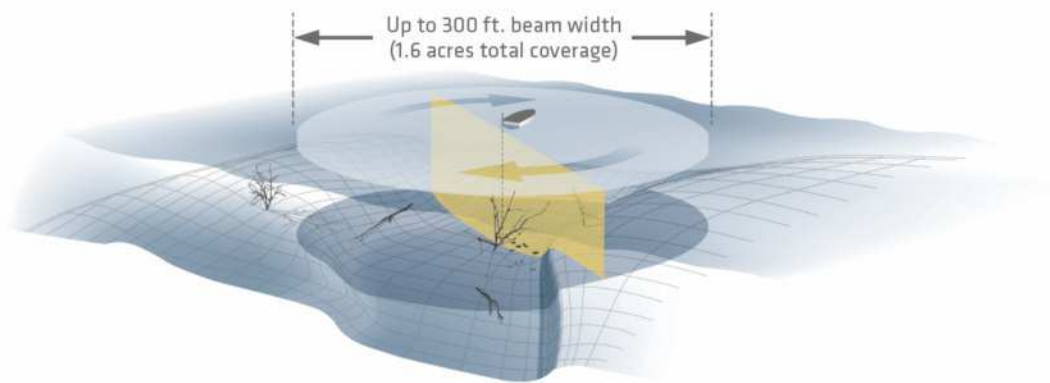
How 360 IMAGING WORKS

The 360 Imaging Transducer Deployment System deploys the transducer pod into the water, past the hull, prop, and other obstructions. The beams sweep to provide an unobstructed, 360° view of the area around and below your boat. If you have the Trolling Motor 360 Imaging, the transducer pod deploys into the water with the trolling motor.

360 Imaging Transducer Deployment System



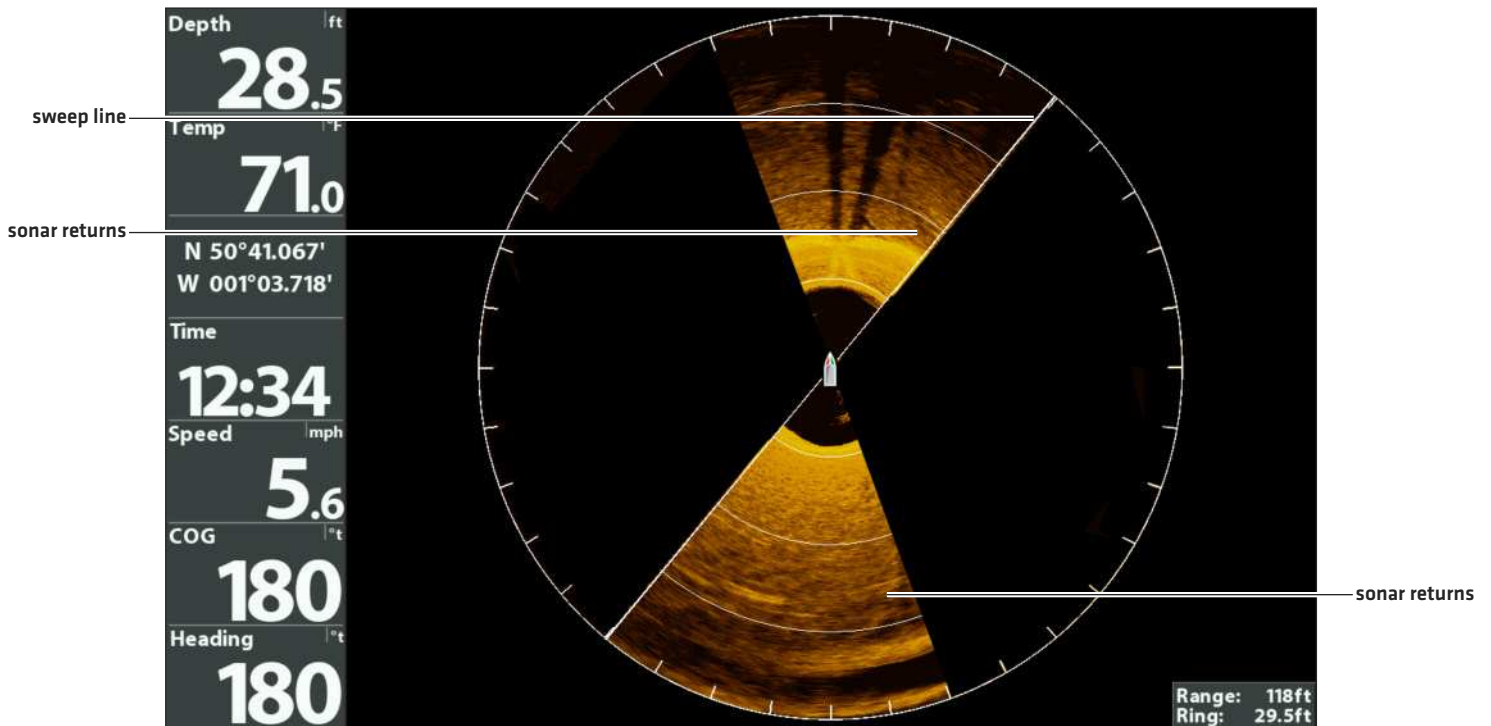
As it sweeps, the 360 Imaging transducer scans the water with its razor-thin, high-definition beams. Visualize the 360 Imaging beams as a thin sonar wall extending 150 feet to either side of your boat. This wall rotates to create a 300-foot circle.



The sweep line on the 360 Imaging display reveals detailed sonar returns in real time. The historical returns remain on the display until the beams sweep again. You can 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:** An object that is standing on the bottom will appear as a clearly defined bright shape with an adjacent dark sonar “shadow.” 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.


360 View



POWER ON AND CONFIRM CONNECTIONS

All equipment should be connected and powered before you turn on the control head.

CAUTION! It is important to finish all installation connections before powering on the control head. It may take up to a minute for the 360 Imaging transducer and other attached equipment to be detected by the control head.

1. Turn on the power source from the main switch.
2. On the control head, press the  POWER key.

If you are powering on a control head in a multiple-control head Ethernet network, power on the control head that is connected to the 360 Imaging transducer first.

3. When the Title screen is displayed, press the MENU key to open the Start-Up Options Menu.
4. Use the Cursor Control key to choose Normal, and press the RIGHT Cursor key to select it.
5. Press and hold the VIEW key. Select System > Accessory Test.

Confirm that **360 Imaging** and **GPS + Heading Sensor** are listed as Connected. It will take a minute for the equipment to be detected.

6. Press and hold the VIEW key. Select System > GPS Diagnostic View.

Confirm that External GPS is displayed and the GPS Fix Type indicates Enhanced or 3D Fix.

NOTE: If the GPS Diagnostic View or Accessory Test is not displayed in the View Rotation, press the MENU key twice to open the Main Menu. Select the Views tab > GPS Diagnostic View or Accessory Test. Change the setting for each view to Visible.

Accessory Test

Depth		Accessory Test		
28.5	ft	360 Imaging v2.033	CONNECTED	360 Imaging listed as connected
71.0	°F	GPS + Heading Sensor	CONNECTED	GPS + Heading Sensor listed as connected
N 50°41.067'		i-Pilot v1.191	CONNECTED	
W 001°03.718'		NMEA2K Gateway v1.030	CONNECTED	
		CHIRP-Radar	CONNECTED	
Time		Remote	UNCONNECTED	
12:34		Remote Dongle	UNCONNECTED	
Speed	mph	Speed	UNCONNECTED	
5.6		Temperature	CONNECTED	
COG	°t			
180				
Heading	°t			
180				

GPS Diagnostic View

<p>Depth ^{ft} 28.5</p> <p>Temp ^{°F} 71.0</p> <p>N 34°06.248' W 084°12.383'</p> <p>Time 1:14</p> <p>Speed ^{mph} 0.1</p> <p>COG ^{°t} 123</p> <p>Heading ^{°t} 123</p>	<p>GPS Diagnostic View</p> <p>Source External GPS</p> <p>NORTH 34°06.248'</p> <p>WEST 084°12.383'</p> <p>Date 08/15/17</p> <p>Time 1:14:15 PM</p>	<p>Fix Type Enhanced</p> <p>HDOP 1.00</p> <p>Est Pos Error 3ft</p> <p>Average CNO 39</p> <p>Top 4 45</p> <p>Speed 0.1mph</p> <p>COG 123°t</p> <p>SD Card ---</p> <p>SD Card 1.70/1.8GB</p>
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fix type shown as 3D fix or enhanced

external GPS

SET UP THE NETWORK AND 360 IMAGING ALARMS

This section will guide you through the following control head setup instructions.

Transducer Deployment System and Trolling Motor Mount:

- Selecting 360 Imaging on the network
- Selecting the beams and temperature sources for the 2D Sonar Views, Side Imaging Views, and Down Imaging Views

Transducer Deployment System only:

- Setting the Deployment Depth
- Setting the Retract Alarm
- Setting the Deployment Speed Alert



NOTE: If you have selected the 360 Imaging transducer on the network and set the Deployment Depth during the installation, the other settings in this section are optional. The depth source, temperature source, and alarms will be selected automatically based on the other connected equipment. Use this section to confirm installation settings or to change the sources and alarms to your preference. The settings will be saved after you power off the control head.

1 | Select 360 Imaging on the Network

When you select the 360 Imaging transducer on the network, the related views and menus will be added to the Fishing System.

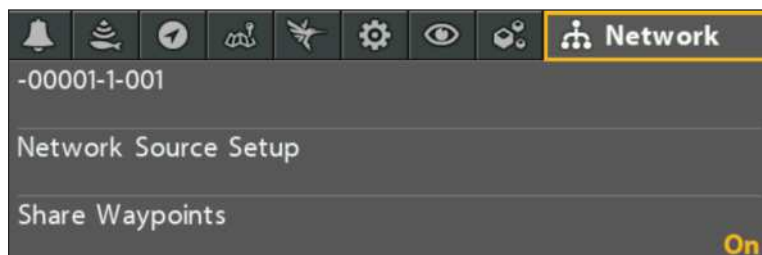
1. **Main Menu:** Press the MENU key twice.



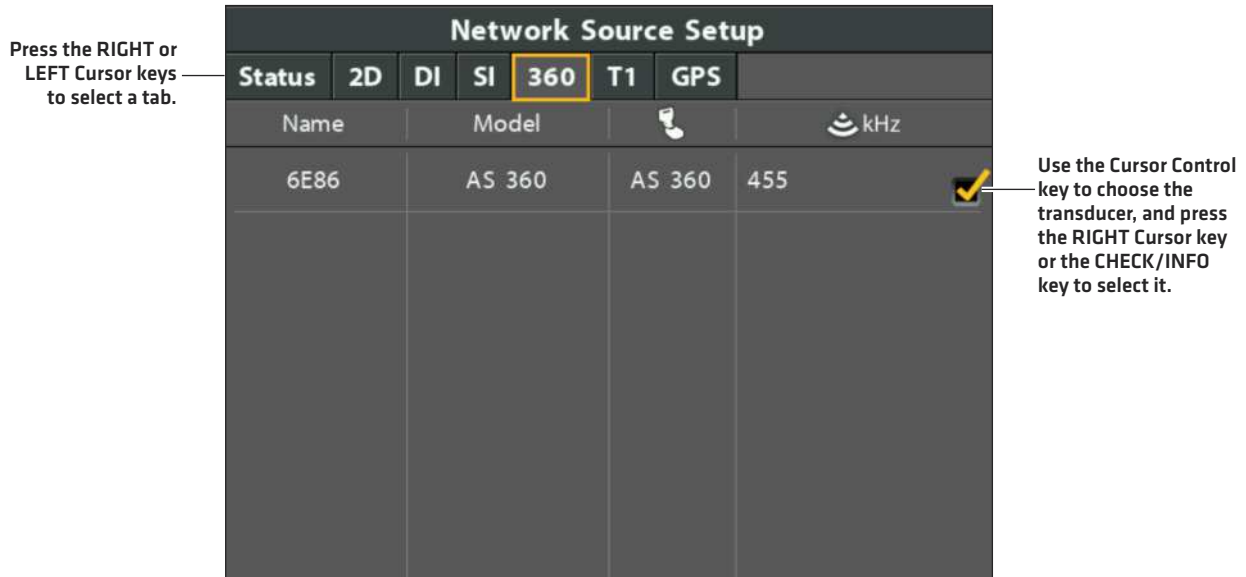
NOTE: If a System View is displayed on the screen, you will only need to press the MENU key once to open the Main Menu.

2. **Network Source Setup Dialog Box:** Select the Network tab > Network Source Setup. Press the RIGHT Cursor key.
3. Select the 360 tab from the Network Source Setup dialog box.
4. Select **AS 360** from the transducer list. Press the RIGHT Cursor key or the CHECK/INFO key. A checkmark will display in the box to show it is selected.
5. Do not close the dialog box. Proceed to the next section to select the other sources for the control head views.

Opening the Network Source Setup Dialog Box



Selecting the 360 Imaging Transducer



2 | Select Beams and Temperature Sources

The sonar and temperature sources may be auto-populated in the Network Source Setup dialog box, but it is important to confirm that the source selections match your transducer and frequency preferences.

1. From the Network Source Setup dialog box, use the Cursor Control key to select a tab and choose a source. Press the CHECK/INFO key to select the source as follows:

2D Traditional Sonar	Select the 2D tab and select a 2D sonar source for the traditional sonar views.
Down Imaging	Select the DI tab and select a Down Imaging sonar source.
Side Imaging	Select the SI tab and select a Side Imaging sonar source.
Temperature Data	The 360 Imaging transducer does not provide temperature. Select a Temperature tab (T1, T2, etc.) and select a temperature source or use the default temperature source.
GPS Receiver/Heading Sensor	Select the GPS tab and select the sensor that is attached to the control head. The type will be listed as Ext [externally connected]. A GPS Receiver/Heading Sensor is required for the 360 Imaging configuration.

2. **Close:** Press the EXIT key until the dialog box is closed.

Selecting 2D Sonar Source for the Traditional 2D Sonar Views

Press the RIGHT or LEFT Cursor keys to select a tab.

Network Source Setup								
Status	2D	DI	SI	360	T1	GPS		
Name	Model			kHz				
170629580099	HELIX 10x SI	CHIRP GPS G2N	MEGA Imaging	Med/High CHIRP				<input checked="" type="checkbox"/>

Use the Cursor Control key to choose the transducer, and press the RIGHT Cursor key or the CHECK/INFO key to select it.

Selecting Side Imaging Beam Source

Press the RIGHT or LEFT Cursor keys to select a tab.

Network Source Setup								
Status	2D	DI	SI	360	T1	GPS		
Name	Model			kHz				
170629580099	HELIX 10x SI	CHIRP GPS G2N	MEGA Imaging	455/800/MEGA CHIRP				<input checked="" type="checkbox"/>
6E86	AS 360	AS 360	455				<input type="checkbox"/>	

beam frequency column

360 Imaging transducer (also available as a Side Imaging source)

Use the Cursor Control key to choose the transducer, and press the RIGHT Cursor key or the CHECK/INFO key to select it.



Select a Tab
Select a Source



Confirm


Notes about Selecting the Sonar and Temperature Sources on the Network

In addition to the 360 Imaging transducer, you will have another Humminbird transducer connected directly to the control head and/or available in a Humminbird multiple-control head Ethernet network.

The 360 Imaging transducer does not provide depth or temperature data, so they must be provided by another transducer.

The sources selected in the Network Source Setup dialog box will enable the beams and related digital readout data for the 2D Sonar Views, Side Imaging Views, and Down Imaging Views. It is also important to consider the following:


Side Imaging and Down Imaging	<p>If there is a Side Imaging transducer connected to the control head, it will be selected automatically as the Side Imaging and Down Imaging source.</p> <p>You can also use the 360 Imaging transducer to provide the Side Imaging beam data for the views, but AS 360 needs to be selected from the Network Source Setup dialog box for this configuration [see Select Beams and Temperature Sources in this section].</p>
Beam Availability	<p>The availability of beams is determined by the type of transducer that is connected to the control head and your Humminbird model. If a connected transducer is not displayed in the Network Source Setup dialog box, select the Main Menu > Sonar tab > Transducer Select or Connected Transducer, and set the transducer type.</p>

 **NOTE:** If the control head is not capable of displaying a certain frequency from a transducer on the network, NONE will be displayed in the beam frequency column in the Network Source Setup dialog box.


 **NOTE:** If you have questions about which transducers are compatible with your control head, visit our Web site at humminbird.com or contact Humminbird Customer Service at **1-800-633-1468**.

3 | Set the Deployment Depth [Transducer Deployment System only]

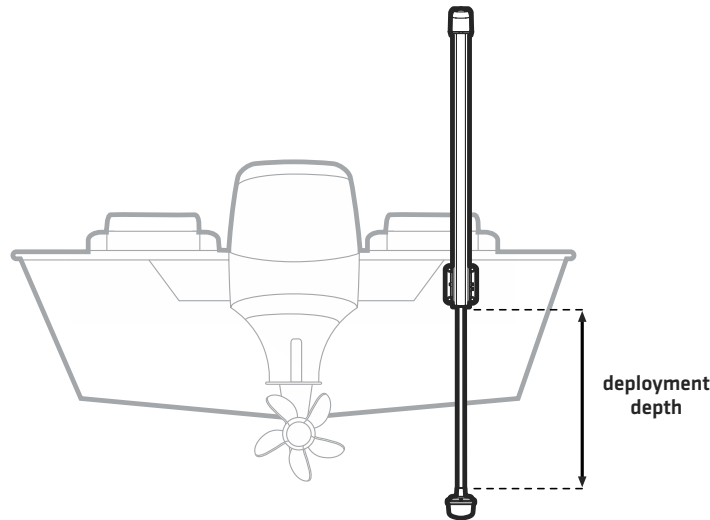
The 360 Imaging transducer pod should be set to deploy past the hull, propeller, and anything else that will block the beams.


 **NOTE:** If the deployment depth was set during installation, or if you have a Trolling Motor Mount, you can skip this step.

1. **Main Menu:** Press the MENU key twice. If the Main Menu is already open, proceed to the next step.
2. Select the Accessories tab > 360 Sonar Settings > 360 Depth.
3. Press the RIGHT or LEFT Cursor keys to adjust the setting.

 **NOTE:** The 360 Depth setting deploys the transducer in increments of 1% to 100%, where 100% = 29 inches [73.7 cm].

Deploying the Transducer Past All Beam Obstructions



 **WARNING!** The pod should NOT be in the water during high speed travel. The pod should only be deployed when the boat is traveling between 0 to 7 mph.

4 | Set the 360 Retract Alarm [Transducer Deployment System only]

The 360 Imaging transducer pod should only be used when the boat is traveling 0 to 7 mph. You can set up the control head to provide an alert at a specific speed. If the set speed has been exceeded, an on-screen alert will display to retract the transducer.

1. From the Main Menu, select the Alarms tab > 360 Retract Alarm.
2. Press the RIGHT or LEFT Cursor keys to adjust the setting.

5 | Set the Deployment Alert Speed [Transducer Deployment System only]

You can set the control head to alert you when the boat is traveling at an optimal speed for 360 Imaging. When the boat is traveling at the set speed, the control head will display an on-screen alert so you can deploy the transducer.

1. From the Main Menu, select the Accessories tab > 360 Sonar Settings > Deploy Speed.
2. Press the RIGHT or LEFT Cursor keys to adjust the speed at which the control head will display an alert.
3. **Close:** Press the EXIT key until the Menu System is closed.

START/STOP 360 IMAGING OPERATION

The menu options to start and stop operation are determined by the type of mount you have installed. See the following sections to start using the 360 Imaging transducer.

- **Trolling Motor Mount:** Start Pinging, Stop Pinging
- **Transducer Deployment System:** Deploy, Retract, Adjust the Deployment Depth

TROLLING MOTOR MOUNT

Use the following instructions to start pinging and stop pinging with the Trolling Motor 360 Imaging.

Start Pinging

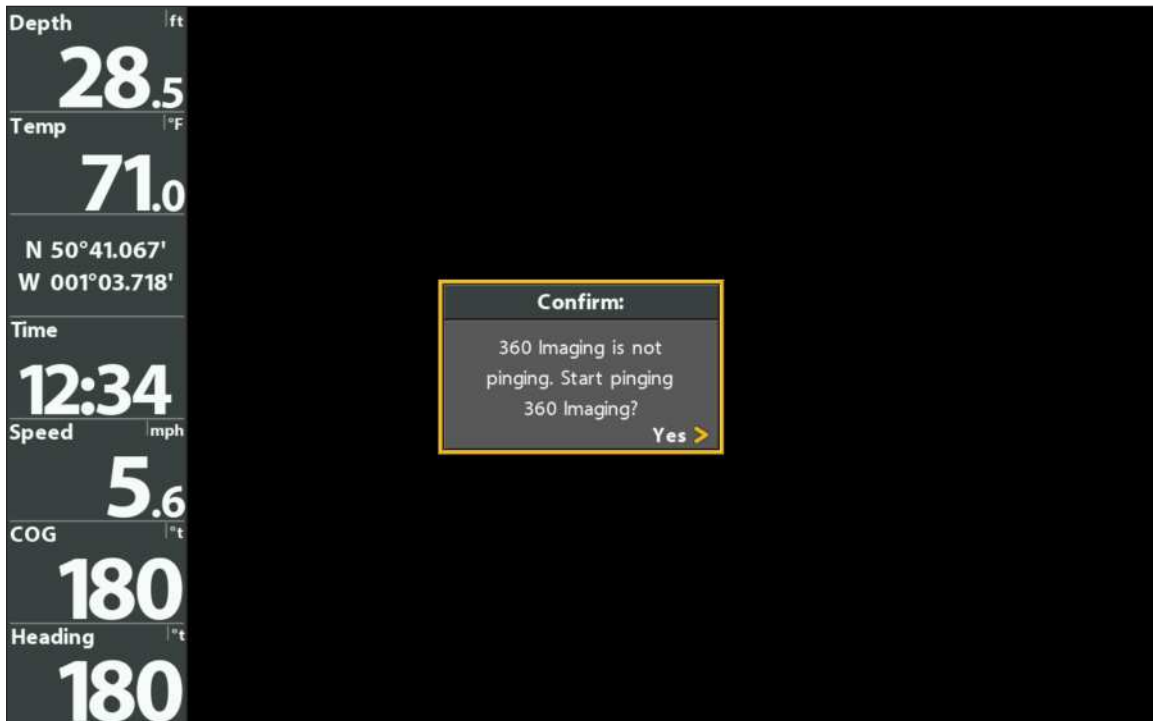
If you have the Trolling Motor 360 Imaging, the transducer pod deploys into the water with the trolling motor. You can then start pinging from the 360 View or from the Menu System.

Start Pinging from a 360 View

When a 360 View is first displayed on the screen, the control head will provide an on-screen alert to start 360 Imaging operation.

1. Press the VIEW key until a 360 View or 360 Imaging Combo View is displayed on the screen.
2. An on-screen alert will display. Press the RIGHT Cursor key to start 360 Imaging operation.

Start Pinging from the 360 View



Start Pinging from the X-Press Menu

1. With a 360 View or 360 Imaging Combo View displayed on the screen, press the MENU key once.
2. Select Start 360 Ping, and press the RIGHT Cursor key.

Start Pinging from the Power Submenu

You can also start pinging from the Power submenu.

1. Press the POWER key.
2. Select 360 Ping, and press the RIGHT Cursor key to select On.

Stop Pinging

It is important to stop pinging the 360 Imaging transducer when it is not in use.

Stop Pinging from the X-Press Menu

1. With a 360 View or 360 Imaging Combo View displayed on the screen, press the MENU key once.
2. Select Stop 360 Ping, and press the RIGHT Cursor key.

Stop Pinging from the Power Submenu

1. Press the POWER key.
2. Select 360 Ping, and press the LEFT Cursor key to select Off.

TRANSDUCER DEPLOYMENT SYSTEM

Use the following instructions to deploy and retract with the 360 Imaging Transducer Deployment System.

Deploy the Transducer

The transducer can be deployed from the Menu System, from a 360 View, or from the Transducer Deployment System. The transducer will deploy based on the 360 Depth setting (see *Set up the Network and 360 Imaging Alarms: Set the Deployment Depth*).

Deploy from the Main Menu

1. **Main Menu:** Press the MENU key twice.
2. Select the Accessories tab > Deploy 360 Sonar.
3. Press the RIGHT Cursor key to deploy the transducer.

Deploy from a 360 View

When a 360 View is first displayed on the screen, the control head will provide an on-screen deployment alert.

1. Press the VIEW key until a 360 View or 360 Imaging Combo View is displayed on the screen.
2. An on-screen alert will display. Press the RIGHT Cursor key to deploy the transducer.

Deploying from the 360 View



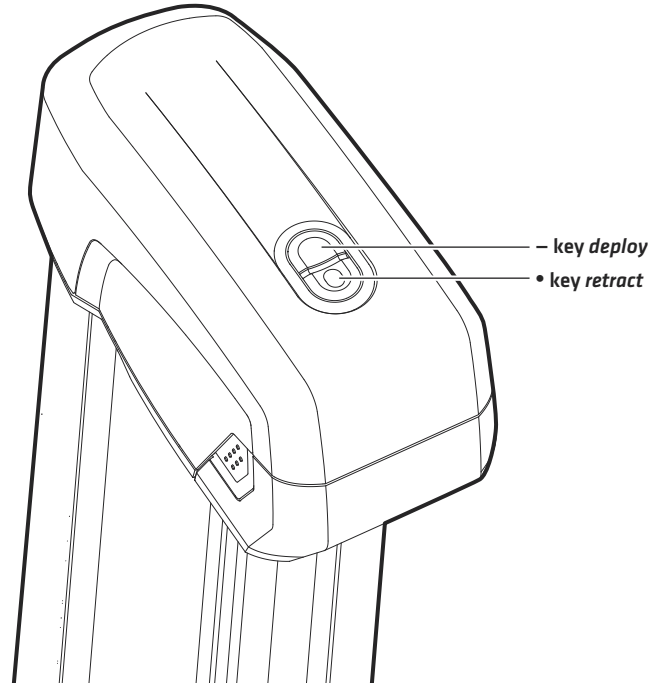
Deploy from the Transducer Deployment System

1. On the Transducer Deployment System, press and hold the —key. Release the key when the transducer pod has reached the depth you prefer.



NOTE: The depth you set manually from the — key on the Transducer Deployment System will automatically update the 360 Depth menu option setting [see **Adjust the Deployment Depth**].

Using the Keys on the Transducer Deployment System



Retract the Transducer

The transducer pod can be retracted from the control head or from the Transducer Deployment System. See the instructions below for the different options you can use.

Retract from the Main Menu

1. **Main Menu:** Press the MENU key twice.
2. Select the Accessories tab > Retract 360 Sonar.
3. Press the RIGHT Cursor key to retract the transducer.

Retract from a 360 View

1. **X-Press Menu:** With the 360 View or 360 Imaging Combo View displayed on the screen, press the MENU key once.
2. Select Retract, and press the RIGHT Cursor key.

Retract from the Transducer Deployment System

1. On the Transducer Deployment System, press and hold the ● key. Release the key when the transducer pod is fully stowed.



NOTE: If you turn off the control head, the transducer will retract after approximately 30 seconds. If the 360 Imaging transducer is on an Ethernet network, all control heads must be powered off before the transducer will retract. It will not retract if another control head on the network is using it. To power off the Transducer Deployment System, see **Power Off** for important information.

Adjust the Deployment Depth

If you need to adjust the deployment depth, you can access the 360 Depth menu option from the Main Menu. You can also adjust the depth from the Transducer Deployment System.

Adjust the Deployment Depth from the Control Head

The 360 Imaging transducer pod should be set to deploy past the hull and anything else that will block the beams.

1. **Main Menu:** Press the MENU key twice.
2. Select the Accessories tab > 360 Sonar Settings > 360 Depth.
3. Press the RIGHT or LEFT Cursor keys to adjust the setting.



NOTE: The 360 Depth setting deploys the transducer in increments of 1% to 100%, where 100% = 29 inches [73.7 cm].

4. **Close:** Press the EXIT key until the Menu System is closed.

Adjust the Deployment Depth from the Transducer Deployment System

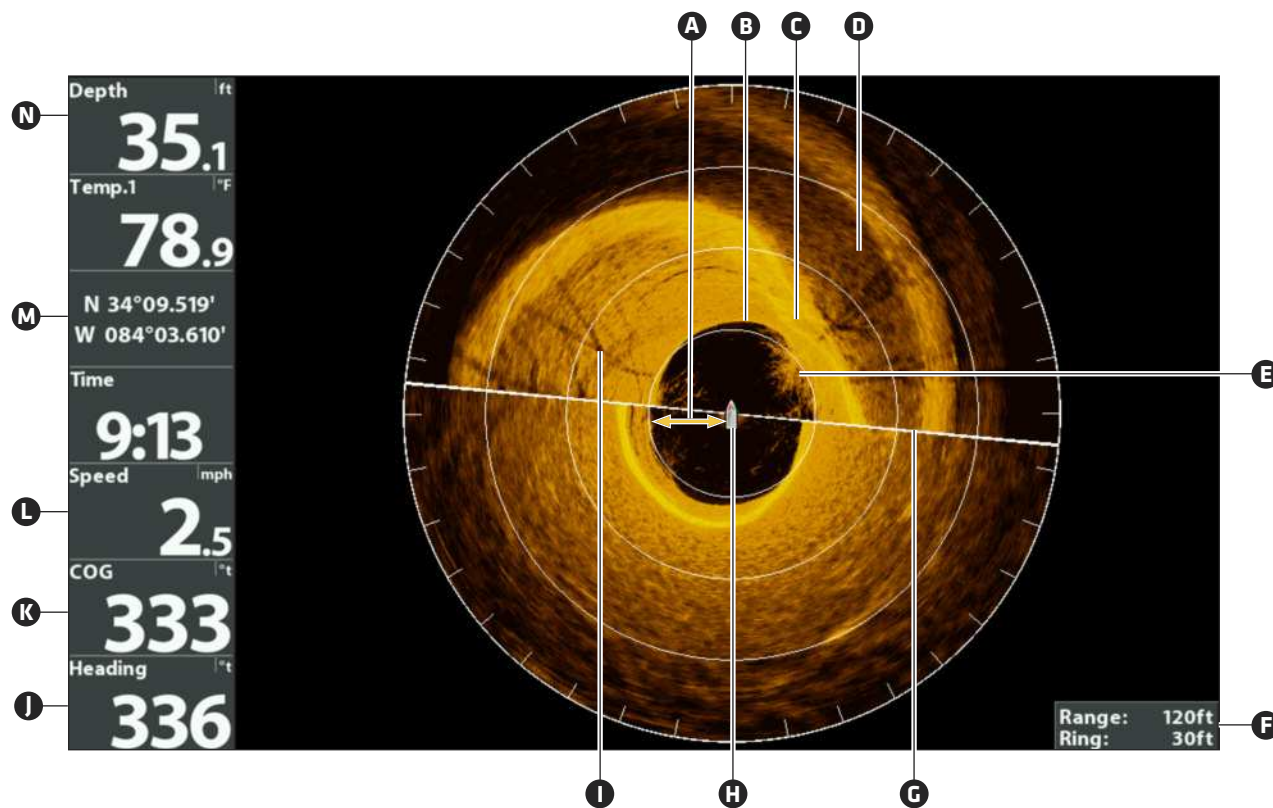
1. On the Transducer Deployment System, press and hold the —key to move the pod down, or press and hold the ● key to move the pod up. Release the key when the transducer pod has reached the depth you prefer.



NOTE: The depth you set manually from the Transducer Deployment System will automatically update the 360 Depth menu option setting.

WHAT'S ON THE 360 IMAGING DISPLAY


360 Imaging uses its unique transducer to provide an unobstructed view of the water around and below your boat. The razor-thin, high-definition beams produce the detailed sonar data that you see on the display. 360 Imaging reveals a variety of recognizable features so that you can interpret the structure and bottom contour, and the following items in this illustration.



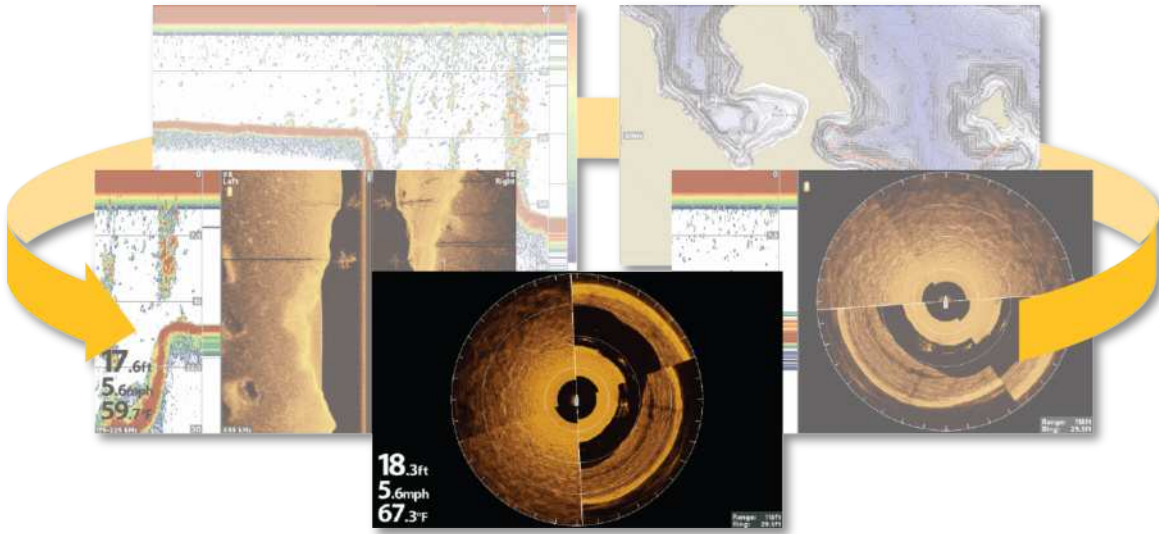
- A Water Column:** Shows the relative depth of the water under the boat at a given time. Variations in the width of the water column show variations in the distance to the bottom as the boat passes over.
- B Bottom Return**
- C Topography Changes (light):** The light part of the display shows where the beams are hitting hard bottom or rising terrain.
- D Topography Changes (dark):** Dark parts of the display indicate soft bottom (sand, mud) or descending terrain.
- E White streaks** may indicate fish and a **clouded area** may indicate a bait ball.
- F Range** is the 360 Range setting, and **Ring** is the distance between each Range Ring on the display. See *Change the Sweep Speed and Range* for more information.
- G Sweep Line:** As the sweep line rotates on the view, it reveals the sonar returns from the 360 Imaging beams.
- H Boat Icon:** The boat icon can be set to hidden or visible on the view. See *Change the 360 View Display Settings*.
- I Structure:** Possible vegetation where fish may be hiding.
- J Heading:** The boat's heading measured in degrees from North, where 000° is North, 090° is East, 180° is South, and 270° is West (*Heading Sensor required*).
- K Course:** The current direction the boat is traveling measured in degrees from North, where 000° is North, 090° is East, 180° is South, and 270° is West (*GPS required*).
- L Speed:** The measurement of the boat's progress across a given distance (*GPS required*).
- M Position:** The boat's current latitude/longitude location determined by GPS.
- N Depth:** The depth of the water as provided by another attached transducer (see *Set up the Network and 360 Imaging Alarms*).

VIEWS

When the 360 Imaging transducer is set up on the control head, the 360 View is added to the View Rotation.

 **NOTE:** The available views will depend on your control head model and the beams you've selected in the Network Source Setup dialog box. See **Set up the Network and 360 Imaging Alarms** for details.

View Rotation



Next View: Press the VIEW key to advance to the next view in the View Rotation. Press the VIEW key repeatedly until the view you want to use is displayed on the screen.



Previous View: Press the EXIT key to see the previous view in the View Rotation. Press the EXIT key repeatedly until the view you want to use is displayed on the screen.

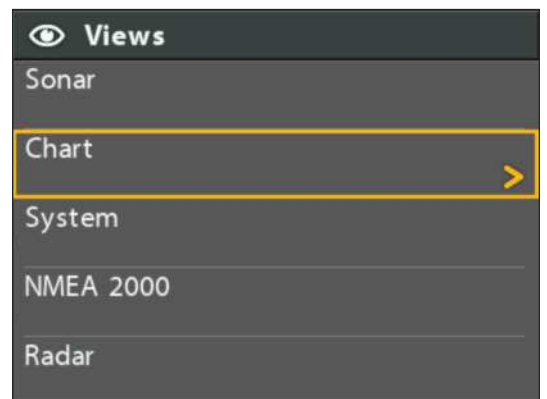


Save a View: Press and hold a VIEW PRESET key to save a shortcut to the on-screen view. You can save one view on each VIEW PRESET key. Press the VIEW PRESET key to quickly return to the view at any time.

Views X-Press Menu: Press and hold the VIEW key. Use the Cursor Control key to select a view category [Sonar, Chart, System, NMEA 2000, Radar] and a view.

The Views X-Press Menu allows you to quickly access a view instead of scrolling through the View Rotation.

Views X-Press Menu



360 View

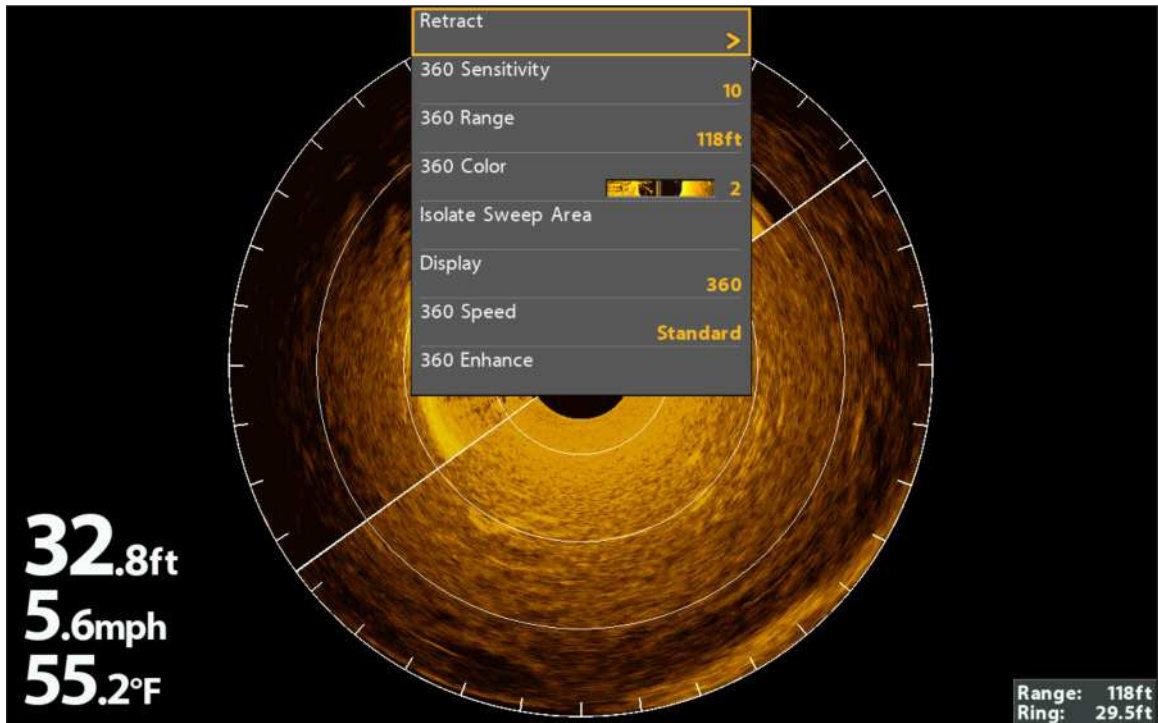
The 360 View allows you to see the 360 Imaging data on the full screen.

360 X-Press Menu	Press the MENU key once. The X-Press Menu allows you to retract the transducer or stop pinging, adjust the beam range, change the color, isolate the sweep area, and enhance the display.
Cursor and Zoom	Use the Cursor Control key to display the cursor and move it over a sonar return. Press the +ZOOM key to magnify the View. Press the EXIT key to remove the Cursor. See Zoom In/Out for more information.
Mark and Display Waypoints	You can mark and display waypoints on the 360 View. See Mark and Display Waypoints .
Digital Readouts	Digital Readout data can be displayed on-screen as an overlay or in data boxes. To change the readouts that are displayed on the 360 View, select the Main Menu > Setup tab > Select Readouts. Use the Cursor Control key to select a Readout position and set the information that will be displayed in each digital readout window.

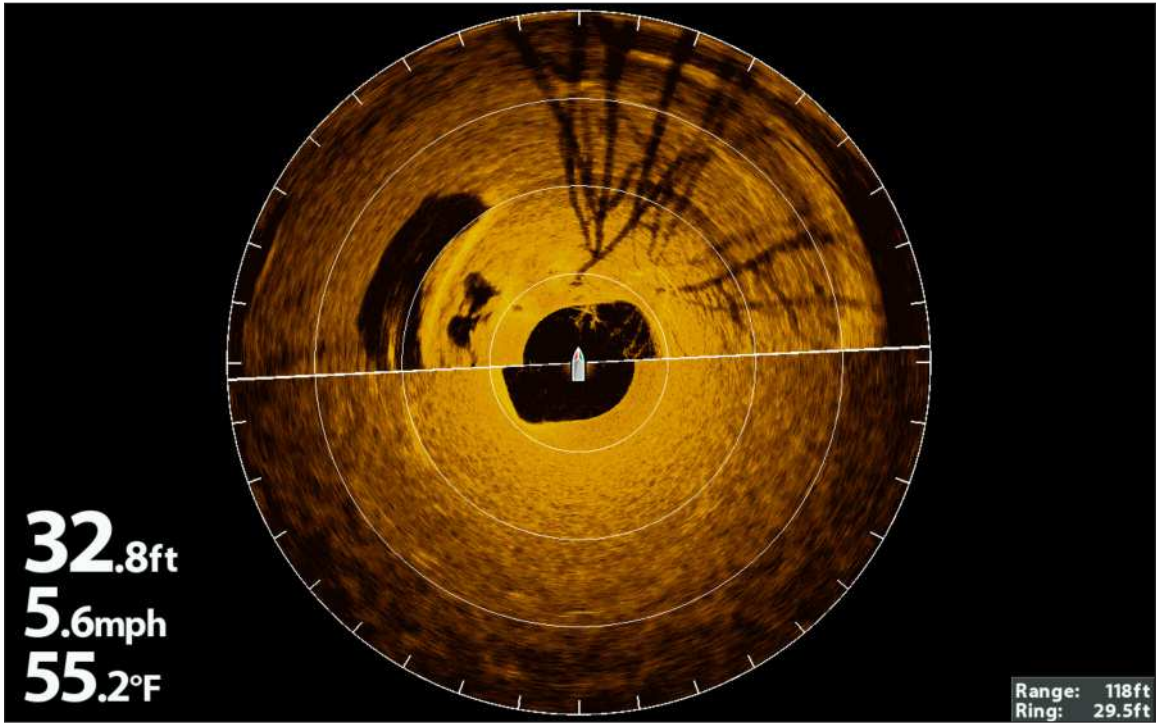


NOTE: Digital readouts may change with the selected view, attached accessories, and whether or not the control head is navigating. See your control head operations manual and the Operations Summary Guide for details.

360 View with the X-Press Menu Displayed



360 View with Digital Readouts Set to Overlay

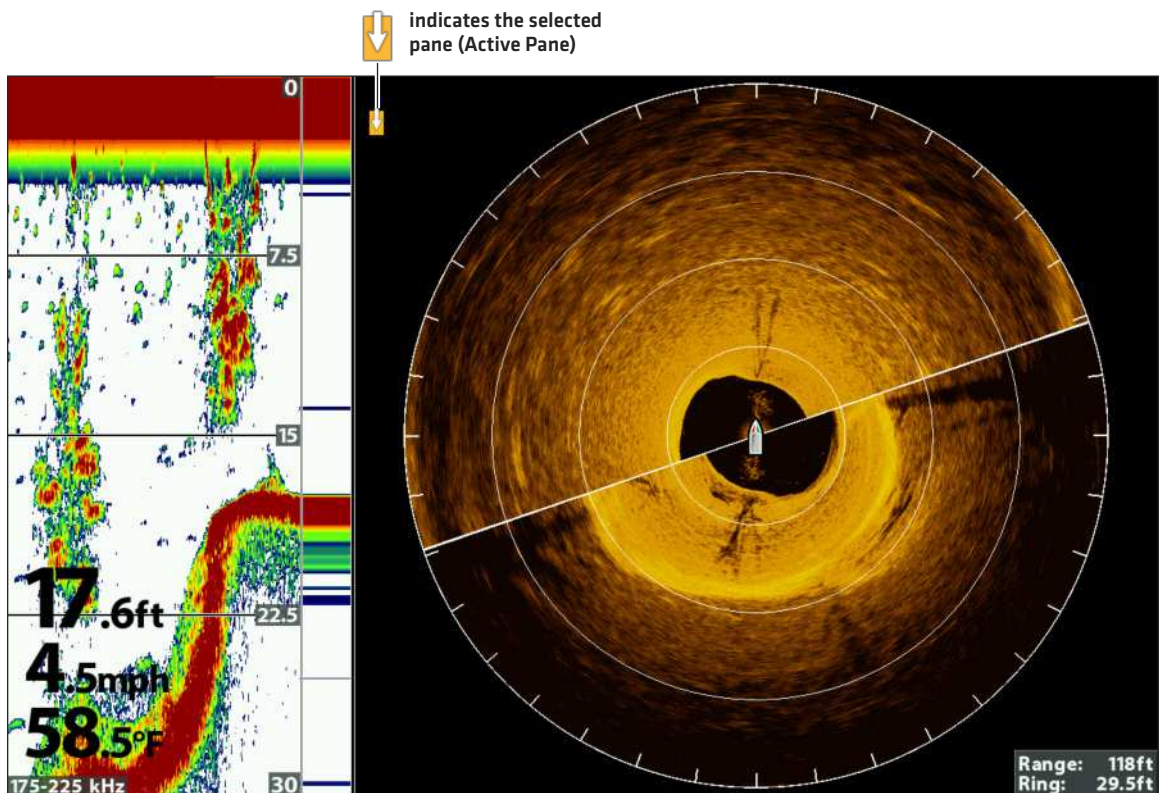


360/Sonar Combo View

The 360/Sonar Combo View shows sonar information and 360 Imaging information in a combination split screen, where the Sonar View is displayed on the left and the 360 View is displayed on the right.

Active Side	The arrow points to the active side. Press the MENU key once and select Active Side from the X-Press Menu. Choose RIGHT or LEFT to set the active side.
X-Press Menu	After you set the Active Side, press the MENU key once to open the X-Press Menu. The X-Press Menu provides menu options for the active view.
Sonar	Use the 2D traditional Sonar View with the 360 View to maximize your sonar data. To see raw returns on the Sonar View, select the Main Menu > Sonar tab > SwitchFire > Max Mode. To enhance the 360 View, select the X-Press Menu > 360 Enhance.

360/Sonar Combo View

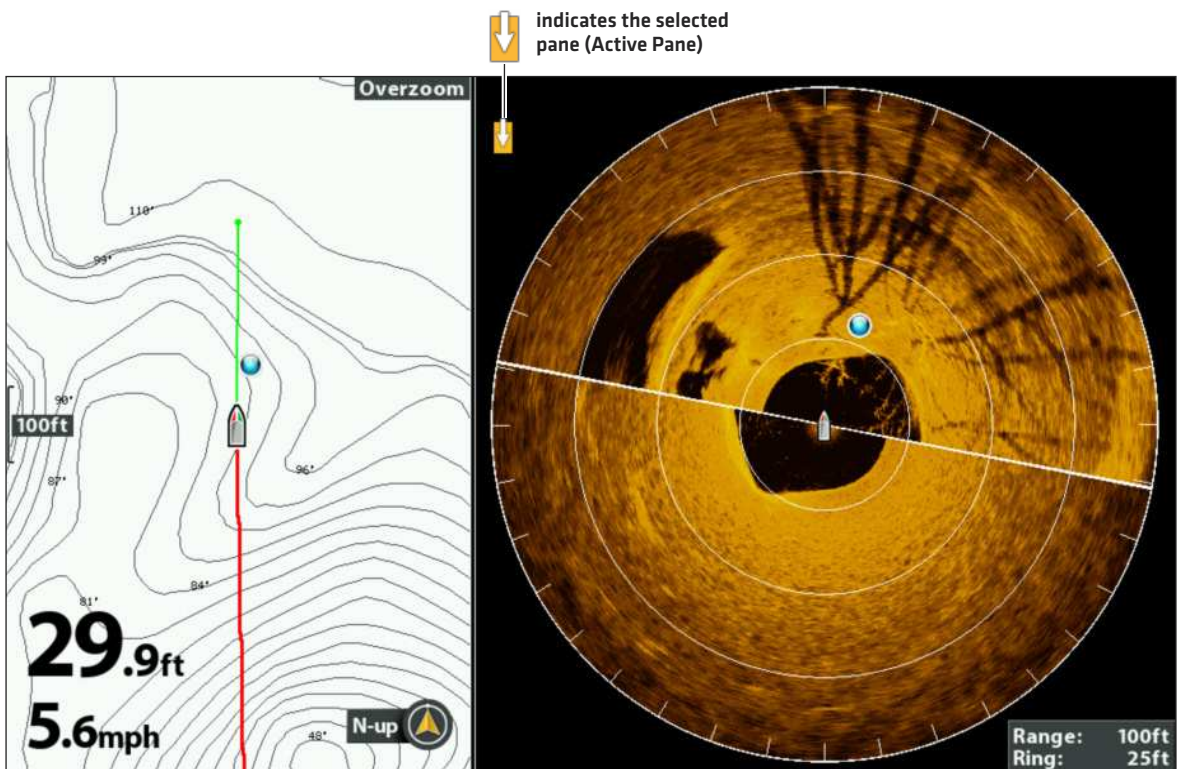


360/Chart Combo View

The 360/Chart Combo View shows chart information and 360 Imaging sonar information in a combination split screen, where the Chart View is displayed on the left and the 360 View is displayed on the right.

Active Side	The arrow points to the active side. Press the MENU key once and select Active Side from the X-Press Menu. Choose RIGHT or LEFT to set the active side.
X-Press Menu	After you set the Active Side, press the MENU key once to open the X-Press Menu. The X-Press Menu provides menu options for the active view.
Navigation	Use the Chart View with the 360 View to determine the position of structure and fish. To mark waypoints on the 360 View, see <i>Mark and Display Waypoints</i> .


360/Chart Combo View



Side Imaging View

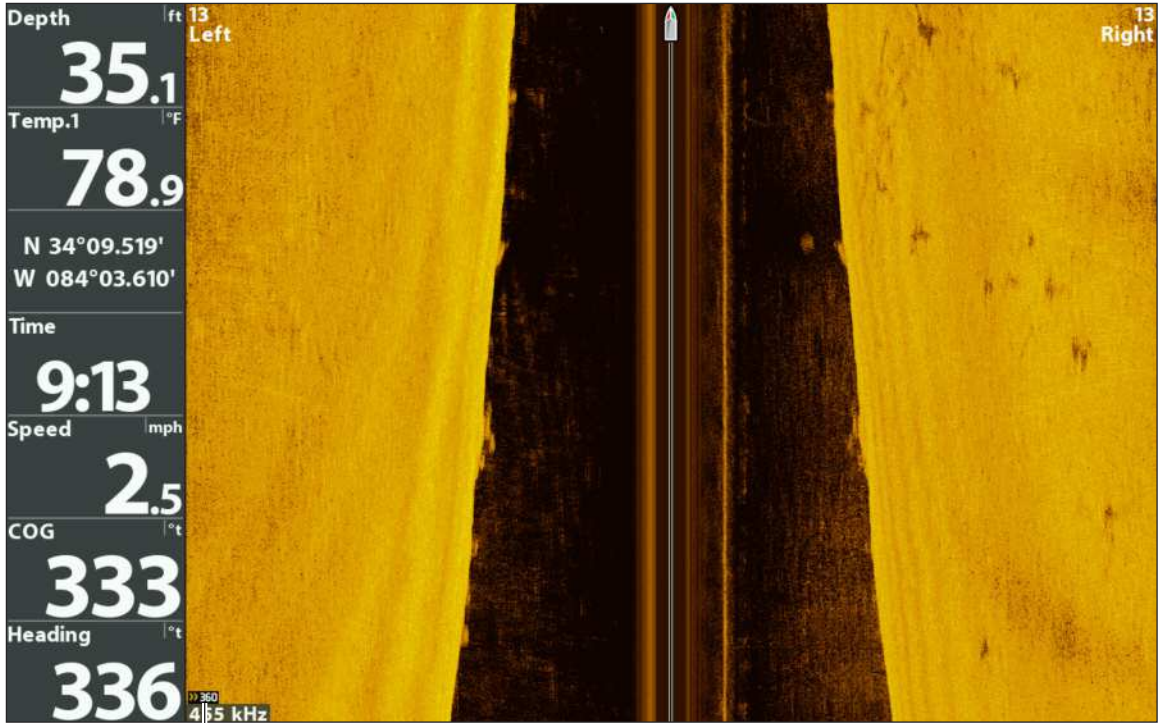
If a 360 Imaging transducer or a Side Imaging transducer is connected to the control head, the Side Imaging View will be available in the View Rotation. It is also important to understand the following:

SI Source	If there is a Side Imaging transducer connected to the control head, it will be selected automatically as the Side Imaging source. You can also use the 360 Imaging transducer to provide the Side Imaging beam data for the Side Imaging Views, but AS 360 needs to be selected from the Network Source Setup dialog box for this configuration [see Set up the Network and 360 Imaging Alarms].
Start Side Imaging	If you are using the 360 Imaging transducer as your Side Imaging source, it must be deployed or pinging, depending on the type of mount you have installed. Transducer Deployment System: Select the Main Menu > Accessories tab > Deploy 360 Sonar. Trolling Motor Mount: Press the POWER key. Select 360 Ping > On.
SI Range and 360 Range	If the 360 Imaging transducer is providing data for the Side Imaging Views, the 360 Range setting and the SI Range setting will be shared. When you change the 360 Range setting, the SI Range setting will also be changed, and vice versa.
More Information	See your control head operations manual and Operations Summary Guide for more information about Side Imaging. These manuals were included with your control head, or they can be downloaded from our Web site at humminbird.com .

 **NOTE:** The 360 Imaging transducer provides data for the 360 View OR the Side Imaging View. These views cannot be displayed at the same time if they are sharing the 360 Imaging transducer in a multiple-control head Ethernet network.

To use the Side Imaging View on one control head, and the 360 View on a different control head, a separate Side Imaging transducer must be selected as the Side Imaging source. See **Set up the Network and 360 Imaging Alarms** for more information about selecting sonar sources.

Side Imaging View with AS 360 Selected as the SI Source



The 360 icon indicates that the beam data in the Side Imaging View is being pinged from the 360 Imaging transducer. If there is not a 360 icon on the display, a Side Imaging transducer is providing the beam data for the Side Imaging View.

CHANGE THE 360 VIEW DISPLAY SETTINGS

Use the following instructions to change how the 360 View is displayed.

Change the Display Settings

1. **Main Menu:** Press the MENU key twice.
2. Select the Accessories tab > 360 Sonar Settings.
3. Use the Cursor Control key to select an option from the submenu, and press the RIGHT or LEFT Cursor keys to change the menu setting, as follows:


360 Range Overlay	Select On to display the range rings on the view, or select Off to hide the range rings.
360 Heading Offset	If the position of objects on the display are slightly different than what you observe in the environment around you, use this menu option to rotate the display and correct the alignment. See your 360 Imaging installation guide for more information.
360 Boat Icon	Select On to display the boat icon, or select Off to hide the boat icon.
Navigation on 360	To mark and display waypoints on the 360 View, select On. See Mark and Display Waypoints for more information.
360 Offset	The 360 Offset Icon represents the installation location of the GPS Receiver/Heading Sensor. Adjust the setting to match the distance between the 360 Imaging transducer and the GPS Receiver/Heading Sensor. See your 360 Imaging installation guide for more information.

4. **Close:** Press the EXIT key until the Menu System is closed.

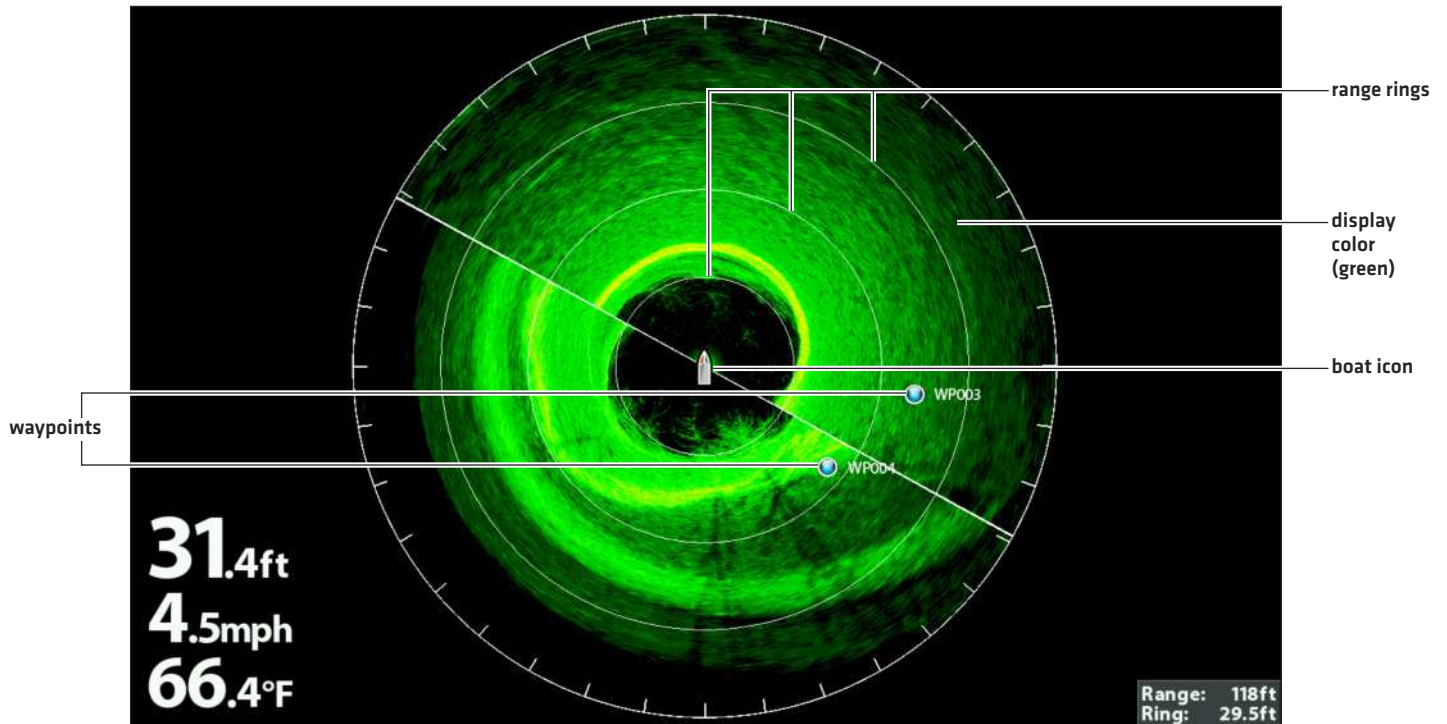
Change the View Color

The 360 Imaging X-Press Menu allows you to quickly change the display palette while you fish.

1. **X-Press Menu:** With a 360 Imaging View displayed on-screen, press the MENU key once.
2. Select 360 Color.
3. Press the RIGHT or LEFT Cursor Keys to select a palette.
4. **Close:** Press the EXIT key.

 **NOTE:** The palette you choose will be applied to all 360 Views in the View Rotation.

Changing the Display Settings



ENHANCE THE VIEW

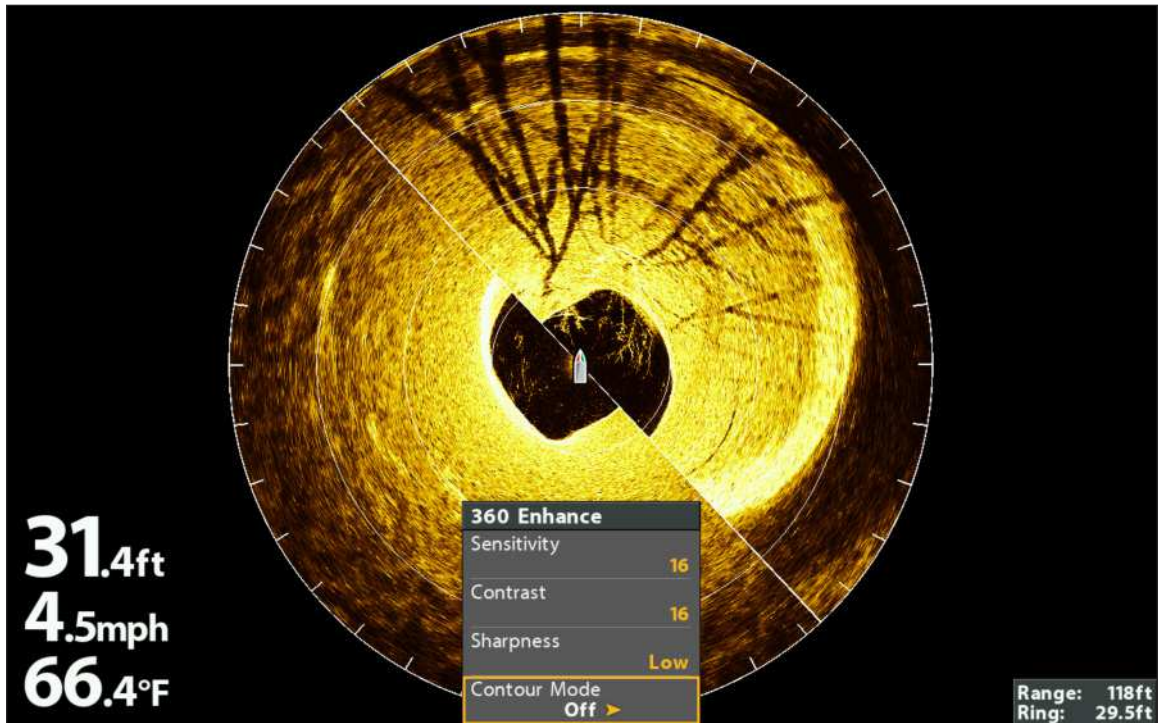
360 Enhance allows you to adjust the 360 View in four categories: Sensitivity, Contrast, Sharpness, and Contour Mode. The display will update as you adjust each category.


Adjust 360 Enhance Settings

1. **X-Press Menu:** With the 360 View or Combo View displayed on the screen, press the MENU key once.
2. Select 360 Enhance.
3. Use the Cursor Control key to select and adjust the following settings:

Sensitivity	Controls how much detail is shown on the display. When operating in very clear water or greater depths, increase the sensitivity to show weaker returns that may be of interest. Decrease the sensitivity to eliminate the clutter from the display that is sometimes present in murky or muddy water.
Contrast	Accents the light and dark parts of the 360 Imaging data to provide greater definition.
Sharpness	Filters the view and sharpens the edges of the 360 Imaging data.
Contour Mode	<p>Controls how the water column is displayed in the view.</p> <p>When Contour Mode is 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.</p> <p>When Contour Mode is turned on, 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.</p>

Adjusting the 360 Enhance Settings



 **NOTE:** The Sensitivity and Contrast are set high in the above illustration. The high Sensitivity setting displays more weak returns on the display, and the high Contrast setting shows more definition between the light and dark returns.

Zoom In/Out

The **ZOOM** keys allow you to view the 360 display closer or farther away. You can also zoom in and out of a selected area based on the cursor position.

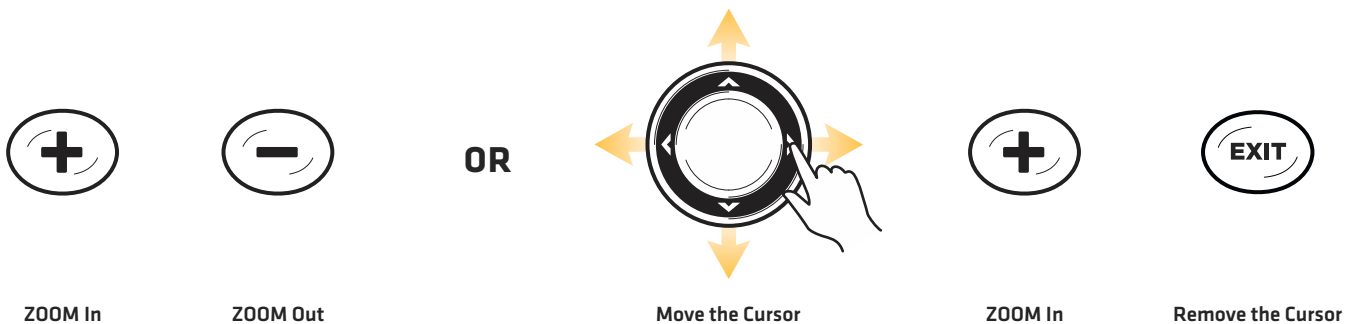
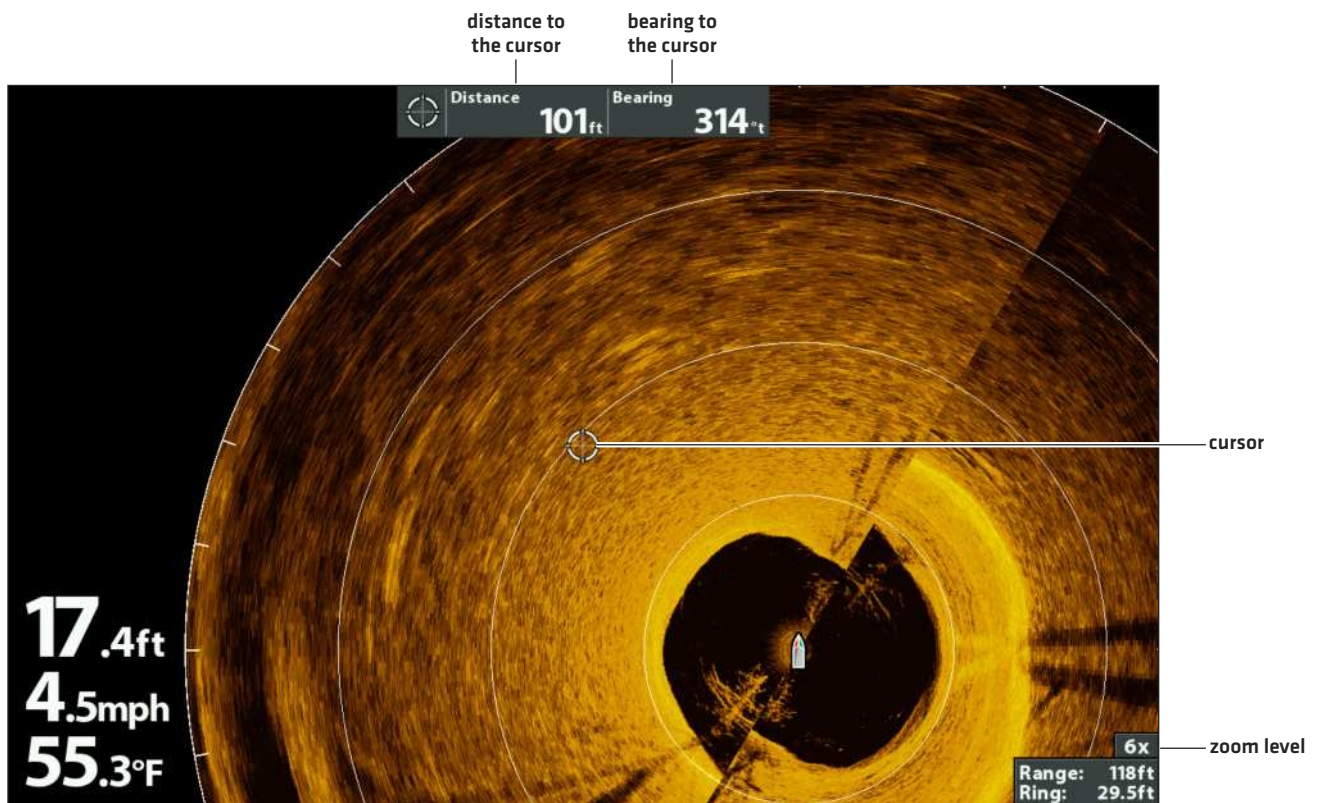
Zoom

1. Display the 360 View on-screen.
2. **Zoom In:** Press the +ZOOM key.
Zoom Out: Press the -Zoom key.

Select and Zoom

1. Use the Cursor Control key to move the cursor to a position on the 360 View.
2. **Zoom In:** Press the +ZOOM key.
Zoom Out: Press the -Zoom key.
3. **Close:** Press the EXIT key to remove the Cursor.

Using the Cursor and ZOOM Keys on the 360 View



CHANGE THE SWEEP SPEED AND RANGE

The 360 Imaging menu options allow you to change the sweep speed and range. The settings you use will influence how quickly the screen refreshes and how much detail is shown on the screen.

Change the Sweep Speed

The 360 Speed menu option allows you to adjust the speed of the sweep. When the sweep speed is slower, more detail is shown on the screen. When the sweep is faster, more information is displayed but less detail is shown.

1. **X-Press Menu:** With the 360 View or Combo View displayed on the screen, press the MENU key once.
2. Select 360 Speed.
3. Press the RIGHT or LEFT Cursor keys to select a sweep speed.

Change the 360 Range

360 Range controls how far the 360 Imaging beams will ping. 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 see farther into the water and see an overview of details on the screen. For optimal performance, select 240 feet.

1. **X-Press Menu:** With the 360 View or Combo View displayed on the screen, press the MENU key once.
2. Select 360 Range.
3. Press the RIGHT or LEFT Cursor keys to adjust the range.



NOTE: If the 360 Imaging transducer is providing data for the Side Imaging Views, the 360 Range setting will control the SI Range setting.

ISOLATE A SECTION OF THE SWEEP

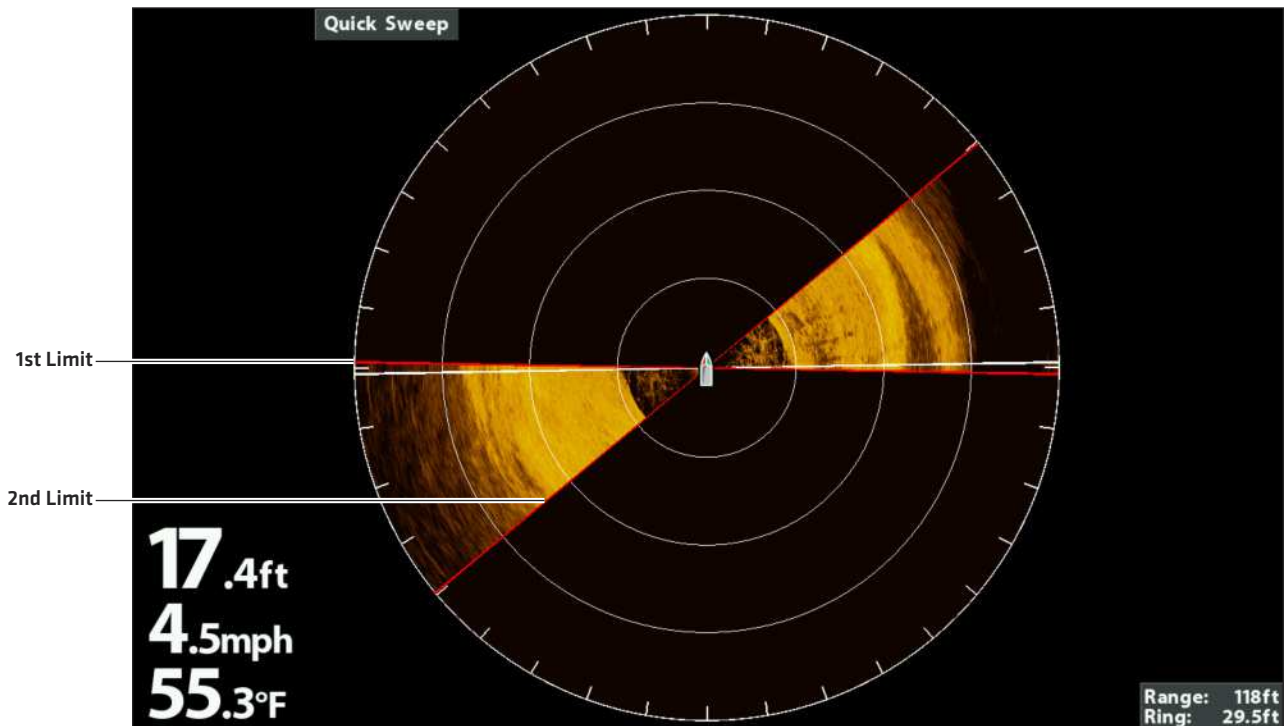
There are many options to focus on a section of the sweep. You can set the sweep angle and section yourself, or you can use a preset section.

Activate Quick Sweep

Use Quick Sweep to focus quickly on a section of the view. When the Quick Sweep area is set, the full 360 View will continue to display on-screen, but the sweep will only cover the angle you select.

1. **Set the 1st Limit:** Press the CHECK/INFO key.
2. **Set the 2nd Limit:** Press the CHECK/INFO key.
3. **Resume the Full 360 Sweep:** Press the CHECK/INFO key.

Pressing the CHECK/INFO Key to Set the Angle of the Quick Sweep



Set the 1st Limit



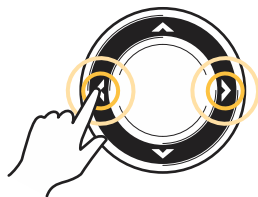
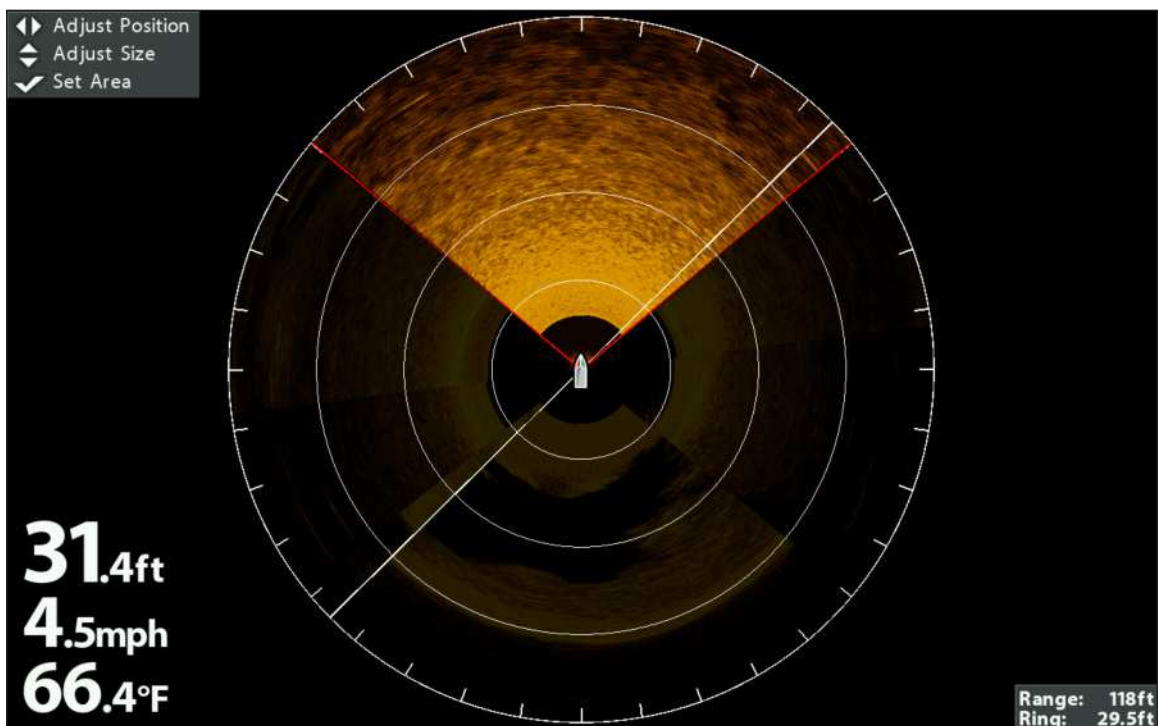
Set the 2nd Limit

Isolate the Sweep Area

Isolating the sweep area allows you to focus the sweep on a section of the water. The sweep area can be set between 10° to 360°, and you can adjust it as you prefer.

1. **X-Press Menu:** With the 360 View or Combo View displayed on the screen, press the MENU key once.
2. Select Isolate Sweep Area. Press the RIGHT Cursor key.
3. The sweep area can be adjusted as follows:
 - Adjust the Sweep Position:** Press the RIGHT or LEFT Cursor keys.
 - Adjust the Sweep Size:** Press the UP or DOWN Cursor keys.
4. **Confirm the Selection:** Press the CHECK/INFO key.
5. **Close:** Select Resume Full Sweep from the X-Press Menu.

Adjusting the Isolated Sweep Area (between the red lines)



Adjust Sweep Position

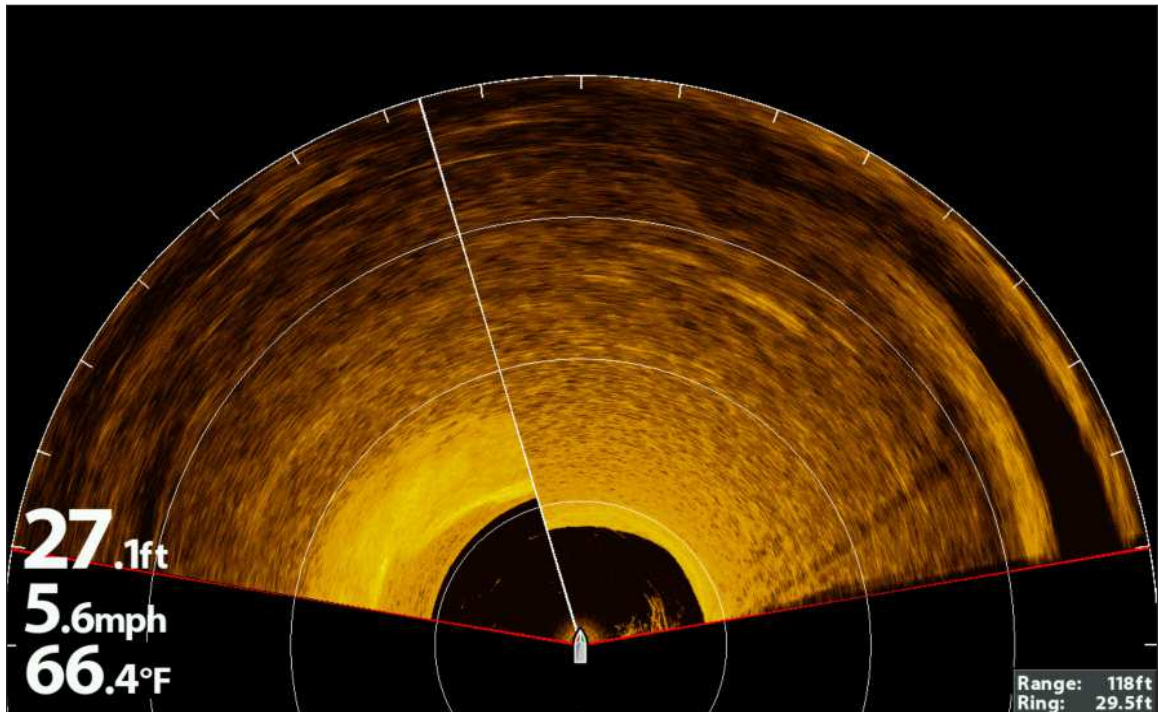


Adjust Sweep Size




Confirm

Using the Isolated Sweep Area



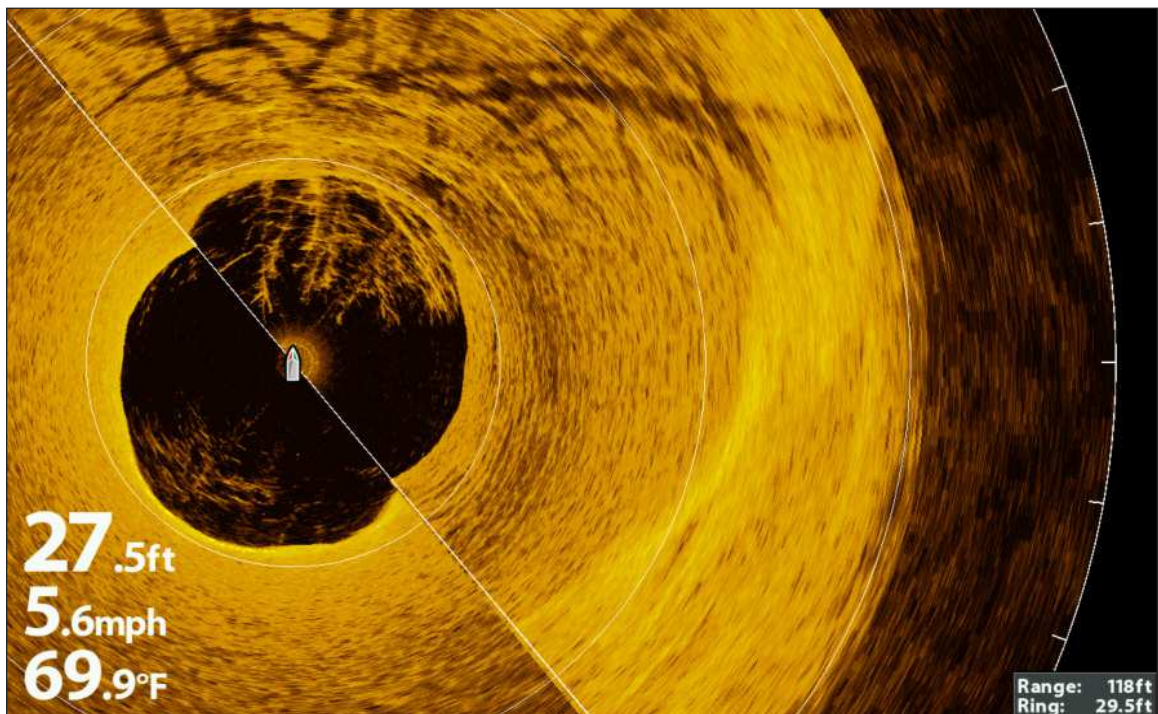
Select a Preset Display

Use the Display menu option to choose a preset portion of the 360 Imaging sweep.

 **NOTE:** If you use Isolate Sweep Area in this mode, the view will switch to the full 360 View.

1. **X-Press Menu:** With the 360 View displayed on the screen, press the MENU key once.
2. Select Display.
3. Press the RIGHT or LEFT Cursor keys to select a display option.

360 View with RIGHT Selected in the Display Menu Option



MARK AND DISPLAY WAYPOINTS

When the **Navigation on 360** menu option is turned on, you can use the following navigation functions in a 360 Imaging View:

- **Display Waypoints** as they are marked on the view. Waypoints can be marked at the boat position or cursor position. If Navigation on 360 is turned off, you can mark waypoints, but they won't be displayed on the 360 View.
- **In a 360/Chart Combo View**, you can see where your boat is positioned in relation to a waypoint on the Chart View and in relation to underwater structure in the 360 View [see **Views** for more information].

Turn on/off Navigation in the 360 Views

Turn on the **Navigation on 360** menu option to mark and display waypoints on the 360 View. To hide waypoints on the 360 View, select off.

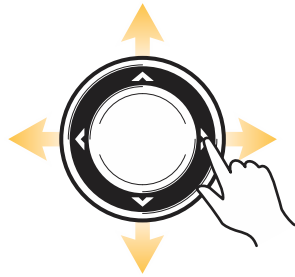
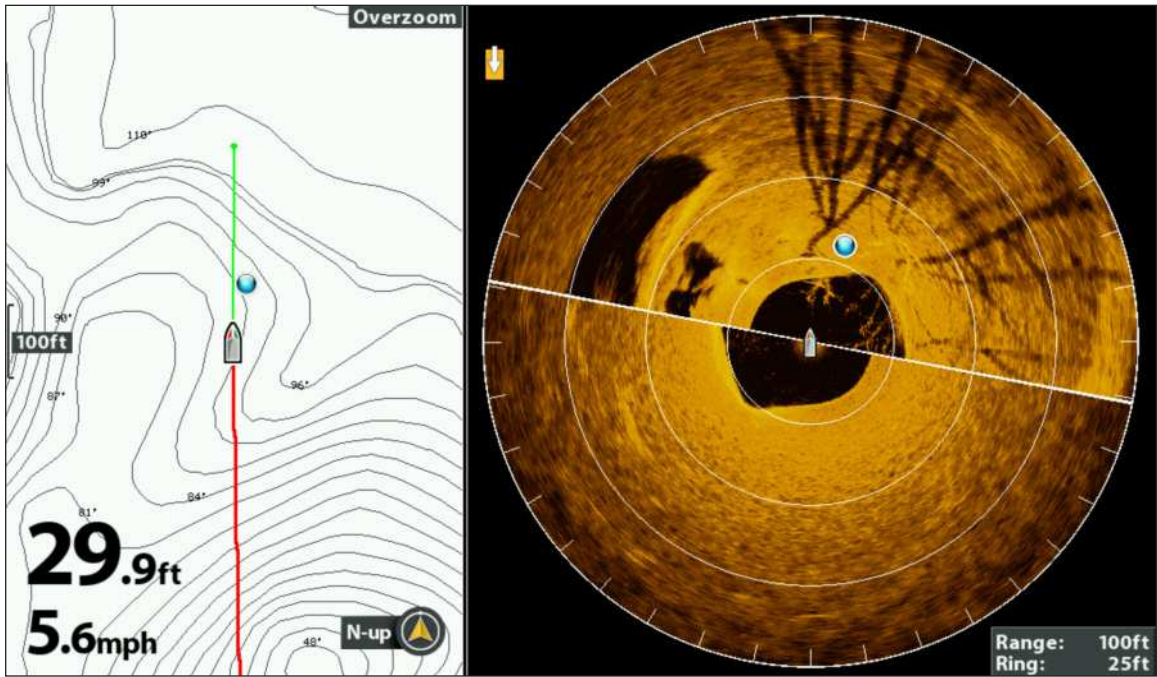
1. **Main Menu:** Press the MENU key twice.
2. Select the Accessories tab > 360 Sonar Settings > Navigation on 360.
3. Press the RIGHT or LEFT Cursor keys to select On or Off.



NOTE: The GPS Receiver/Heading Sensor must be connected to the control head to enable these features on the 360 View.

Turn on **Navigation on 360** in the 360/Chart Combo View, and you can see where your boat is positioned in relation to underwater structure.

Using Marked Waypoints in the 360/Chart View



Move the Cursor



Mark a Waypoint



Start Navigation
(Chart View Only)



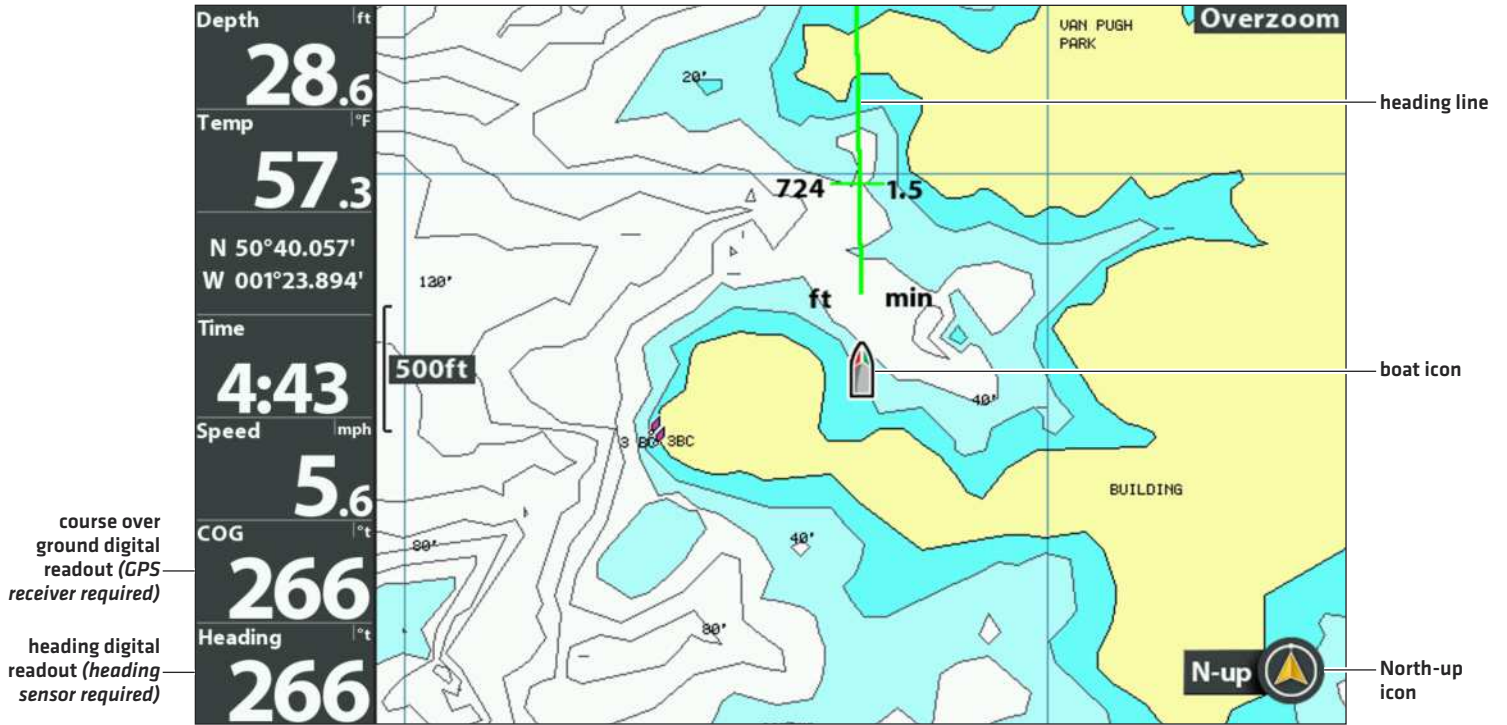
NOTE: The available views are determined by your Humminbird control head model and the installed transducer.

USE THE GPS RECEIVER/HEADING SENSOR WITH CHART VIEWS

When the GPS Receiver/Heading Sensor is connected to the control head, not only are the Chart Views and GPS navigation features enabled, but the control head will also receive heading data and additional features from the Heading Sensor.

Heading Digital Readout	To add the Heading Digital Readout to the Chart View or the Sonar View, select the Main Menu > Setup tab > Select Readouts. Select a Readout Position and use the RIGHT or LEFT Cursor keys to select Heading.
Heading Offset	To adjust the zero point of the Heading Sensor, select the Main Menu > Navigation tab > Heading Offset. Press the RIGHT or LEFT Cursor keys to adjust the setting. See the 360 Imaging Installation Guide for details.
Boat Icon	When the Heading Sensor is attached, the boat icon will always be displayed as a boat shape. It will not change to a circle when the boat is stationary.
Heading Line	If it is turned on, the heading line extends from the bow of the boat icon. To turn on the Heading Line, select the Main Menu > Navigation tab > Heading Line > On.
North-Up Icon	If it is turned on, the North-Up Icon displays the direction of True North. It also displays the View Orientation, and the icon will change as the orientation and the data source change. To display the North-Up Icon, select the Main Menu > Chart tab > North Up Indicator > On. See <i>Change the Chart Orientation</i> for more information.
Pitch and Roll Digital Readouts	To add the Pitch and Roll Digital Readouts to the Chart View or the Sonar View, select the Main Menu > Setup tab > Select Readouts. Select a Readout Position and use the RIGHT or LEFT Cursor keys to select Pitch. Repeat these steps to select Roll in the next readout position.

Chart View with the GPS Receiver/Heading Sensor Attached to the Control Head



NOTE: For details about chartplotters and navigation, see your control head operations manual and the Waypoint Management Guide. You can download Humminbird manuals from our Web site at humminbird.com.

CHANGE THE CHART ORIENTATION

You can change the orientation of the Chart View. The Chart Orientation is also influenced by the GPS Receiver/Heading Sensor attached to the control head.


North-Up	North is shown at the top of the display. Objects located to the north of the boat are drawn above the boat.
Head Up	The boat's current heading points up, and the track rotates around the boat so that the boat always points up on the view. The heading is provided by the Heading Sensor connected to the control head. If a Heading Sensor is not connected, the heading will be calculated using the GPS receiver's COG [Course Over Ground].
Course-Up	During navigation, the projected course is shown at the top of the view. Objects ahead of the boat are drawn above the boat. When the boat is not navigating, the course-up reference is provided by the COG [Course Over Ground] calculation.

Select the Chart Orientation

1. **Main Menu:** Press the MENU key twice.
2. Select the Chart tab > Chart Orientation.
3. Press the RIGHT or LEFT Cursor keys to select how the Chart will be displayed.

UPDATE THE SOFTWARE


Set up an online account at humminbird.com so that you will receive the latest Humminbird news and software updates for your Humminbird model. You can also download HumminbirdPC from your account, which allows you to manage your waypoints, routes, and tracks on your personal computer.

 **WARNING!** Humminbird 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 control head's data files periodically. Data files should also be saved to your PC before restoring the unit's defaults or updating the software. See your Humminbird online account at humminbird.com and the [Waypoint Management guide](#).


Required Equipment: Personal computer with Internet access, and a formatted microSD or SD memory card.

Update the Software

1. Install a formatted microSD or SD memory card into the card reader connected to your PC.
2. **Register your Humminbird Product:** Log on to humminbird.com. Click My Humminbird. Set up a new account or log into your current account and add the 360 Imaging accessory to your My Equipment tab.
3. **Download:** Select the My Equipment page. The available software updates are listed as Downloads under each registered product.
 - Under Downloads, click the file name.
 - Read the instructions in the dialog box and select Download.
 - Follow the on-screen prompts to save the software file to the microSD or SD card.
4. Install the microSD or SD card with the updated software files into the control head card slot.
5. **Power On:** The control head will recognize the new software and run through a series of prompts to confirm the software installation.

 **NOTE:** It may take up to two minutes for the software to be detected on the network, and the control head will display a dialog box to indicate that the update is in progress.

6. **Restart:** When the updates are completed, press and hold the POWER key to power off the control head. After the control head shuts down, press the POWER key to start the control head.

 **NOTE:** If you have questions about the software update process, contact Humminbird Customer Service.

POWER OFF

The Transducer Deployment System is designed with software that keeps the pod fully retracted and stowed while the boat is in use.



WARNING! To keep the pod retracted, the Transducer Deployment System must stay powered ON while the boat is underway. When the boat is stored or at dock, the pod must be fully retracted, and the 360 Imaging transducer must be turned off to prevent draining the battery. The pod cover must be installed for trailering and storage.

1. Power off the Control Head

Press and hold the POWER key.



CAUTION! Turning off the control head will NOT power off the 360 Imaging transducer.

2. Power off the Transducer

Turn off power on the main switch, breaker, or battery switch.



NOTE: Powering off the 360 Imaging transducer will be determined by the installation and power connection on your boat.

3a. Install the Pod Cover (Transducer Deployment System only)

The pod cover must be installed for trailering and storage.

Install the cover over the fully retracted pod. Insert the T-clips into the tracks on each side of the Transducer Deployment System. Turn each T-clip so it stays in the track. Tighten the straps.

OR

3b. Check the 360 Trolling Motor Bracket (Trolling Motor 360 Imaging only)

Confirm the Depth Collar Knob is fully tightened [by hand]. Check the stability of the trolling motor bracket after initial use and periodically thereafter to ensure that the installation and lock remain stable. See your installation guide for details.

CONTACT HUMMINBIRD

Contact Humminbird Customer Service in any of the following ways:

Web site:

humminbird.com

E-mail:

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Telephone:

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Direct Shipping:

Humminbird
Service Department
678 Humminbird Lane
Eufaula, AL 36027 USA

Hours of Operation:

Monday - Friday

8:00 a.m. to 4:30 p.m. [Central Standard Time]

Social Media Resources:



[Facebook.com/HumminbirdElectronics](https://www.facebook.com/HumminbirdElectronics)



[Twitter.com \[@humminbirdfish\]](https://twitter.com/humminbirdfish)



[YouTube.com/humminbirdtv](https://www.youtube.com/humminbirdtv)

