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HumminBIRD 531906-4ENA Ethernet Networking Installation Guide

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HumminBIRD 531906-4ENA Ethernet Networking

Product Information

- **Specifications**
  - **Model:** 531906-4EN_A
  - Compatible with many Humminbird models
  - Features discussed in this manual may require separate purchase
  - Some features are only available on international models
  - Product specifications and features are subject to change without notice

Product Usage Instructions

- **Install an Ethernet Connection**
  - To install an Ethernet connection, follow these steps:
  - Ensure that you have the necessary Ethernet cables and equipment (see “Purchase Ethernet Cables and Equipment” section).
  - Connect the control heads by following the instructions in the “Connect the Control Heads” section.
  - Power on the devices by following the instructions in the “Power On” section.
- **Update Your Control Head Software**
  - To update your control head software, follow these steps:
  - Visit the Humminbird website at [insert website] or contact Humminbird Technical Support for the latest software updates.
  - Download the software update file for your specific control head model.
  - Follow the instructions provided by Humminbird to install the software update on your control head.
- **Update Your Accessory Software**
  - To update your accessory software, follow these steps:
  - Contact Humminbird Technical Support for the latest software updates for your accessories.
  - Download the software update file for your specific accessory.
  - Follow the instructions provided by Humminbird to install the software update on your accessory.
- **Purchase Ethernet Cables and Equipment**
  - To purchase Ethernet cables and equipment, you have two options:
  - Visit the Humminbird website at [insert website] and browse the available accessories for your control head model.
  - Contact Humminbird Technical Support through the Help Center for assistance in purchasing the required cables and equipment.
- **Connect the Control Heads**

    - To connect the control heads, follow these steps:
    - Identify the Ethernet ports on your control heads.
    - Take an Ethernet cable and connect one end to the Ethernet port of the first control head.
    - Connect the other end of the Ethernet cable to the Ethernet port of the second control head.
    - Ensure that the connections are secure.
- **Power On**
    - To power on the devices, follow these steps:
    - Ensure that all connections are properly made.
    - Press the power button on each control head to turn it on.
    - Wait for the devices to initialize and display the home screen.
- **Understand Your Ethernet Switch LED Indicator Lights**
    - The Ethernet switch LED indicator lights provide information about the status of your Ethernet connection. Refer to the user manual for detailed explanations of each LED indicator light and its corresponding status.
- **FAQ**
    - **Q:** Can this device be used as a navigational aid?
    - **A:** No, this device should not be used as a navigational aid to prevent collision, grounding, boat damage, or personal injury.
    - **Q:** Can the electronic chart in this unit replace official government charts?
    - **A:** No, the electronic chart in your Humminbird 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.
    - **Q:** Can I disassemble or repair this electronic unit myself?
    - **A:** No, disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any unauthorized modification or repair attempts will void the warranty.

PRODUCT INTRODUCTION

Thank You!
Thank you for choosing Humminbird®, the #1 name in marine electronics. Humminbird has built its reputation by designing and manufacturing top-quality, thoroughly reliable marine equipment. Your Humminbird is designed for trouble-free use in even the harshest marine environment. We encourage you to read this manual carefully to get the full benefit from all the features and applications of your Humminbird product. Contact Humminbird Technical Support through our Help Center at **https://humminbird-help.johnsonoutdoors.com/hc/en-us**.

- **WARNING!** 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.
- **WARNING!** The electronic chart in your Humminbird 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.
- **WARNING!** Humminbird 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 control head's data files periodically. Data files should also be saved to your

computer before restoring the control head defaults or updating the software. Visit our Website at humminbird.johnsonoutdoors.com and download your control head operations manual for details.

- **WARNING!** 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
- **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 identify those features. Please read the manual carefully to understand the full capabilities of your model.
- **NOTE:** The Ethernet accessory is compatible with many Humminbird models, and every effort has been made to note the differences between the models and functions throughout this manual. The illustrations in this manual may look different than your display. The illustrations in this manual may not look the same as your product, but your unit will function similarly.
- **NOTE:** To purchase accessories for your control head, visit our Website at humminbird.johnsonoutdoors.com or contact Humminbird Technical Support through our Help Center at **https://humminbird-help.johnsonoutdoors.com/hc/en-us**.
- **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 into 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.

ENVIRONMENTAL COMPLIANCE STATEMENT: Johnson Outdoors Marine Electronics, Inc. intends to be a responsible corporate citizen, operating in compliance with known and applicable environmental regulations, and a good neighbor in the communities where we make or sell our products.
WEEE DIRECTIVE: EU Directive 2002/96/EC “Waste of Electrical and Electronic Equipment Directive (WEEE)” impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.
WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as a fixed or temporary installation in vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.
This symbol (WEEE wheelie bin) on a product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Johnson Outdoors Marine Electronics, Inc. will mark all EEE products following the
WEEE Directive. It is our goal to comply with the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirements do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.
ROHS STATEMENT: A product designed and intended as a fixed installation or part of a system in a vessel may be considered beyond the scope of Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
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Introduction

If your Humminbird control head has a built-in Ethernet connector, the unit can be connected to the Ethernet network. When you connect two units, data is shared between the units. You can use an Ethernet Switch to link multiple Humminbird control heads, share transducers, and more.
This manual will guide you through the following network setup instructions:

1. Connect two or more Humminbird units
2. Power On
3. Customize your Humminbird Ethernet Network
4. Share Waypoints

Alarms, navigation, sonar data, and the menu system are all affected by the Ethernet network settings. We encourage you to read this manual completely so that you may understand the full capabilities of your Humminbird Ethernet network.

Install an Ethernet Connection

Before you start, please note that the Ethernet network installation has the following requirements:

- **Update Software:** Your model may require a software update to enable Ethernet.
- **Purchase Ethernet Connection Cables (separate purchase required):** Your network configuration and Ethernet port shape will determine which Humminbird connection cables you will need to purchase.
- **Install the control heads and sources** (GPS, transducers, temp/speed accessories, etc.) for your Fishing System. See the installation guides included with your equipment for details.

Update Your Control Head Software

It is important to install the latest software update on your control head to enable networking features. Please find the required software version for your control head model below:

- **APEX/SOLIX Series:** 4.180 or later
- **HELIX Series:** 2.890 or later

Update Your Control Head Software with an SD Card
You will need an SD or microSD card (depending on your control head model).
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 data files periodically. See your control head operations manual for more information.

1. Before the control head software is updated or restored to system defaults, copy your screen snapshots (APEX/SOLIX only) and export your navigation data to an SD or microSD card. See your control head operations manual for instructions.
2. Insert a blank SD or microSD card into the computer card slot. If the card contains any previous software versions, delete them.
3. Go to humminbird.johnsonoutdoors.com, and click Support > Software Updates.
4. Click on your control head series and model. If prompted with a question about your network, select the appropriate answer. The available software update is listed as a download at the bottom of the page.
    - Read the notices and instructions, and select Download. Your download will begin automatically.

- Open your computer's downloads folder, and confirm that the software file name matches your control head model.
- If the software file is a zipped folder, extract all files.
- Move the software file or extracted files from the downloads folder to the SD or microSD card.

5. Repeat step 4 to download the software updates posted to each product.
6. Power on your Humminbird control head. Start Normal mode.
7. Insert the SD or microSD card (with the software file) into the control head card slot.
8. Follow the on-screen prompts to update the control head software.
9. When the software update is complete, remove the SD or microSD card from the control head card slot.
10. **Restart:** If you don't have any other software updates to install, power off the control head, and restart it.

Update Software with the One-Boat Network App

You can use the One-boat Network App to download and push software updates directly to your Humminbird control head.
NOTE: It is important to install the latest software update on your control head to enable all One-Boat Network features. For the latest software update, visit our Web site at humminbird.johnsonoutdoors.com.
NOTE: You must first download the One-Boat Network App and pair your mobile device to your control head. See the One-Boat Network App Operations Guide for more information.

1. Open the One-Boat Network App on your mobile device.
2. From the Home screen, tap Network + Updates.
3. Under Humminbird Units, tap Download Update. The download progress is displayed on the screen. You can also tap the More Options icon (…) next to the device you want to update, and then tap Download Update.
   - **NOTE:** Your update may take several minutes to download. You may close the app while you wait for the download to complete.
4. Once your download is complete, tap Transfer Software. 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 radial button to select where to upload the software update (Internal Storage, SD Card 1, or SD Card 2).
   - **NOTE:** You cannot download software updates to an SD or microSD card with CoastMaster or LakeMaster charts saved to it.
7. Tap Start Transfer (Apple iOS) or Transfer (Google Android). The upload progress is displayed under the selected unit in the One-Boat Network App and in the System Status view on the control head.
8. Follow the on-screen prompts on the control head to complete the software installation.

Update Your Accessory Software

If you have additional equipment connected to the network, update each product's software individually. Refer to the accessory operations manual for instructions.

Update Accessory Software with an SD Card

You will need an SD or microSD card (depending on your control head model).

1. Insert an SD or microSD card into the computer card slot. If the card contains any previous software versions, delete them.
2. Go to humminbird.johnsonoutdoors.com, and click Support > Software Updates.
3. Scroll down to Accessories and Mapping. Click on your accessory. The available software updates are listed as downloads at the bottom of the page.
    - Read the notices and instructions, and select Download. Your download will begin automatically.
    - Open your computer's downloads folder, and confirm that the software file name matches your accessory.
    - If the software file is a zipped folder, extract all files.
    - Move the software file or extracted files from the downloads folder to the SD or microSD card.
4. Power on your control head. Start Normal mode.
5. Confirm that your accessory is detected by your control head.
6. Insert the SD or microSD card (with the software file) into the control head card slot.
7. **APEX/SOLIX:** Select the Files tool. From the Software Update tab, scroll to the accessory on the Accessories list. Confirm that the most current software version is selected from the list, and select Install Now.
8. **HELIX:** The software will be automatically detected. It may take a few 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.
9. When the software update is complete, remove the SD or microSD card from the control head card slot.
10. **Restart:** If you don't have any other software updates to install, power off the control head, and restart it

Update Accessory Software with the One-Boat Network App

1. Open the One-Boat Network 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.
4. Tap Transfer Software next to the selected device once the download is complete.

Purchase Ethernet Cables and Equipment

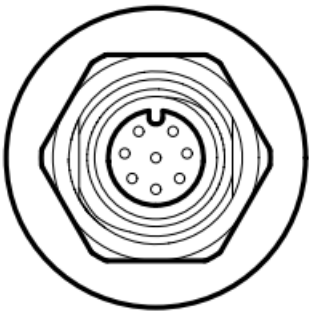
The shape of the Ethernet ports determines the cable(s) you need to purchase for direct control head-to-control head connection. Use the table below to determine your cable needs. To network more than two control heads, you will need to purchase the Humminbird AS ETH 5PGL Ethernet Switch. For each APEX or SOLIX control head, you want to connect to the switch, you will need 1 AS EC [length]E cable. For each HELIX control head, you want to connect to the switch, you will need 1 AS EC [length]E cable and 1 AS EC QDE cable.

Control Heads	Required Cables
(2) HELIX Units (Hourglass-shaped Ethernet Ports)	(2) AS EC QDE & (1) AS EC [length]E
(1) HELIX Unit (Hourglass-Shaped Port) and (1) APEX or SOLIX Unit (Round Ethernet Port)	(1) AS EC QDE & (1) AS EC [length]E
(2) APEX or SOLIX Units (Round Ethernet Ports)	(1) AS EC [length]E

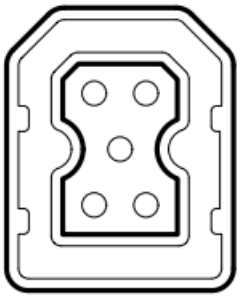
- **NOTE:** The AS EC [length]E cable is available in a variety of lengths. To purchase the Ethernet Cables and extension cables, visit our Web site at humminbird.johnsonoutdoors.com.

- **NOTE:** A 5PGL switch is compatible with HELIX G3N and G4N control heads and all SOLIX and APEX control heads. A network of exclusively 5PGL switches and compatible control heads can contain 4+ Ethernet Switches, 5+ Humminbird control heads, and one of each type of accessory. Networks that include at least one 5PXG switch can only support three Ethernet Switches and four Humminbird control heads.
- **NOTE:** For a 5PGL switch and a 5PXG switch to be compatible on the same network, all control heads on the network must be compatible with the 5PGL. Non-CHIRP control heads are not compatible with a network containing a 5PGL switch.

APEX/SOLIX (Round) Ethernet Port



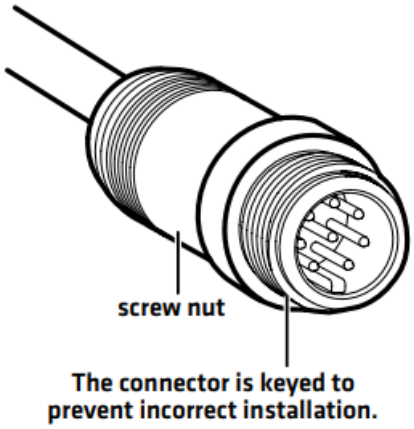
HELIX (Hourglass) Ethernet Port



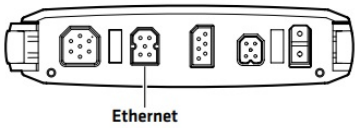
Connect the Control Heads

1. Confirm that the control heads are powered off.
2. Review the illustrations on the preceding pages. Find your control head models and locate the Ethernet port on each control head.
3. Connect the Ethernet cable(s) and route them to each control head. Connect the Ethernet cable(s) to each Ethernet port, noting the following:
    - The connectors are keyed to prevent incorrect installation, so be careful not to force the connectors into the port.
    - On round cable connectors, hand-tighten the screw nut to secure the connection.
    - For APEX and SOLIX units, the Ethernet cable can be connected directly to the control head.
    - For HELIX units, the cable may connect to the unit through a cable collector or cable tray. Consult your control head installation guide for details.
    - **CAUTION!** Do NOT mount the cables where the connectors could be submerged in water or flooded. If cables are installed in a splash-prone area, it may be helpful to apply dielectric grease to the inside of the connectors to prevent corrosion. Dielectric grease can be purchased separately from a general hardware or automotive store.

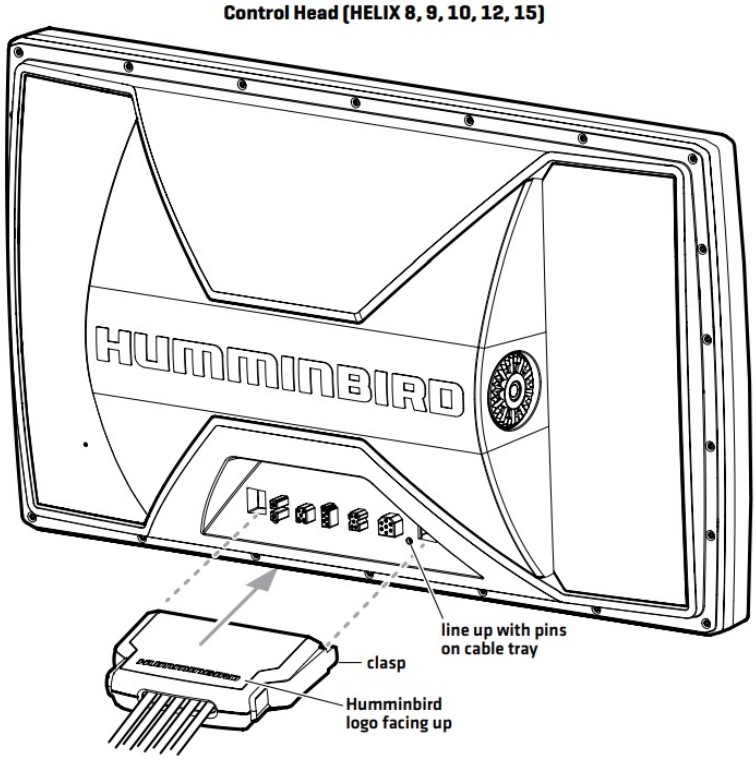
Hand-Tightening the Screw Nut



HELIX 8, 9, 10, 12, 15 Cable Tray



Connecting the Cable Tray to the Control Head (HELIX 8, 9, 10, 12, 15)



When you have installed an Ethernet network, the power-on process is the same as powering on a single control head, however, your transducer connections will determine how the control head starts normal operation. Alarms, navigation, sonar data, and the menu system are all affected by the Ethernet network settings. We encourage you to read this manual completely so that you may understand the full capabilities of your Humminbird Ethernet network.

Power On

1. Press the POWER key.
2. When you power on the control head, it will start Normal mode automatically if a functioning transducer is detected.
    - If a transducer is not attached to the control head, but there is another transducer connected to the network, press the
    - MENU key when the Title screen is displayed. Select Normal from the Start-up Menu. (This step is only required for first time setup or after defaults have been restored on the unit.)
    - If you are prompted to select a sonar source at start-up, see Select a Sonar Source for more information.

3. Repeat steps 1 and 2 until all the control heads in the network are powered on.

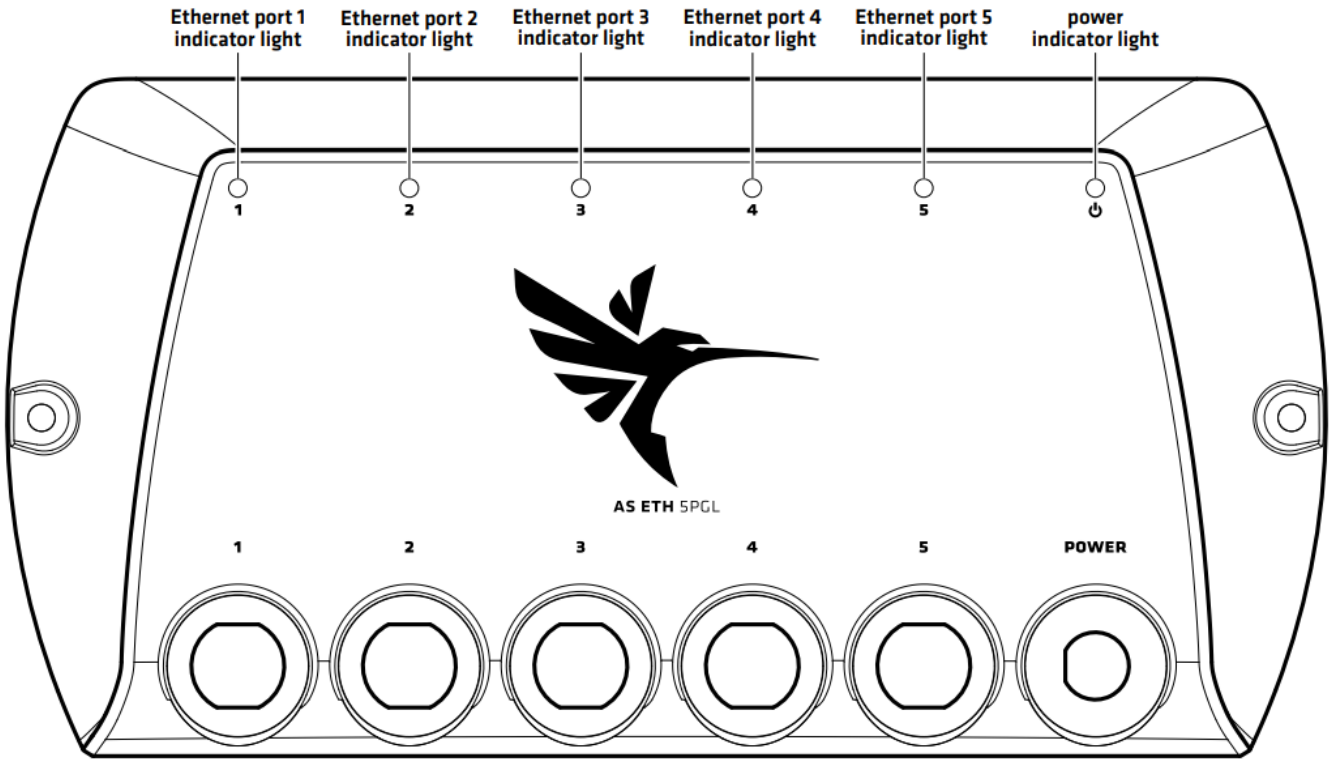
LED Indicator Lights

Understand Your Ethernet Switch LED Indicator Lights

If your Ethernet network includes one or more AS ETH 5PGL Ethernet Switches, use the table below to understand the LED indicator lights.

Power LED	Light on = power; Light off = no power
Port LED: Green Light	Gigabit connection
Port LED: Amber Light	100 megabit connection
Port LED: Flashing Light	Data transfer in progress
Port LED: No Light	Not connected

5PGL Ethernet Switch LED Indicator Lights

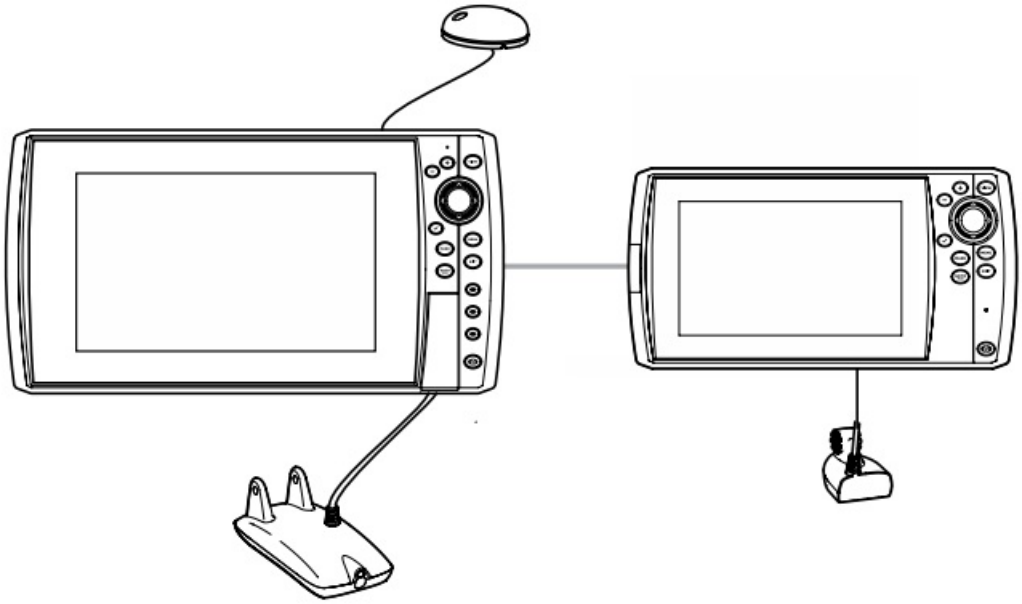


Ethernet Network Overview

- When the Humminbird network is installed, each control head may automatically select some primary sources (transducer, temperature, and GPS) based on the equipment connected to that control head, but you can choose any compatible source on the network.
- For example, if you have more than one GPS receiver installed on the network, whether internal or external, you can select one GPS receiver to be the shared source for all control heads on the network.

    - **Local:** The source is connected directly to the control head, and it is only reporting data to that control head.
    - **Shared:** The source is set up to send data to both control heads in the network, so they share the same information.
- It is important to note that when a source is shared on the network, the source's data will be synchronized between units.
- The Menu System and View Rotation will change to match the shared source's capabilities. Review each source section to understand how a shared source will affect your control head.
    - **NOTE:** Ethernet networks containing only 5PXG switches can support non-CHIRP control heads. If a unit is not CHIRP-capable, it cannot use sources connected to a CHIRP control head (unless CHIRP mode is turned off). A CHIRP unit can use sources from any other control head on the network. See Sonar Source Overview: Set up Sonar for details.

Example of a Network Configuration



Set Up a New Network

Use the instructions in this section if you have more than one APEX or SOLIX control head connected to the network.

Preparation

1. Confirm all control heads and network equipment are powered on and connected. Review the status bar in the top right corner of the screen to confirm the status of your network:

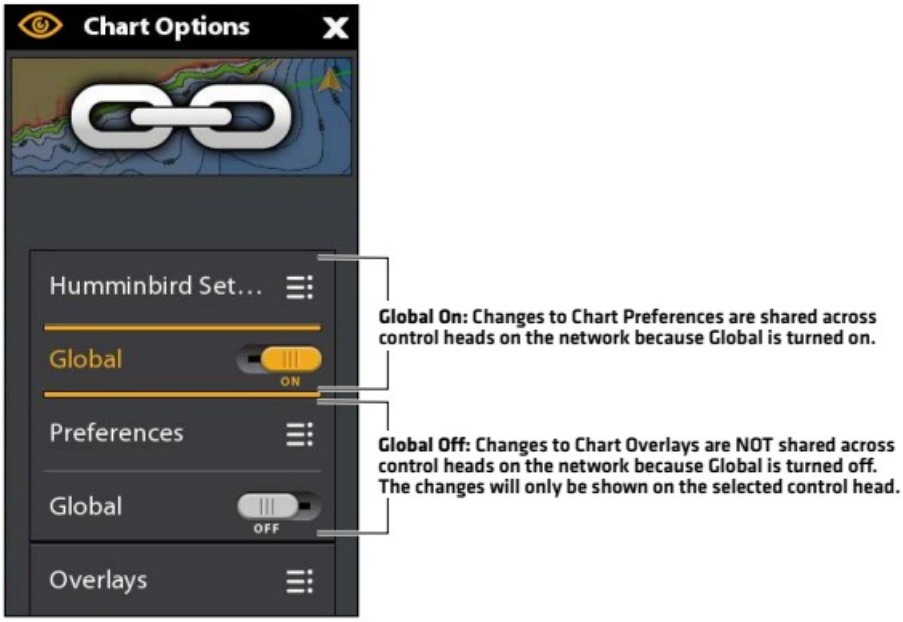
Status Bar Icon	Icon Description
	Network is syncing
	Network is synced
	Network sync has failed

2. **Global:** If there are any settings you'd like to keep on a control head, and not share globally, make sure the Global menu on that setting is turned off (see Understand Global Settings).
3. **Navigation data:** Navigation data will be synchronized. To export navigation data from a control head and save it, export the data to an SD card. See your control head operations manual for more information.
4. **Export Menu Settings:** When control heads are synchronized to a main unit, their menu settings are changed to match the main unit. To save menu settings from a selected remote control head, export the menu settings to an SD card. See your control head operations manual for more information.

Understand Global Settings

When you set up a new network, the control heads are synchronized. Settings such as alarms, map sources, favorite views, preferences, overlays, sonar sources, and GPS sources are shared across control heads.

- Many menu settings include the Global on/off button. When Global is turned on, the selected menu setting on the control head is shared with the other control heads in the network.
- When Global is turned off, the selected menu setting is only available on the selected control head.



Customize the Unit Name

Each control head is assigned a unit name, which is based on its model number and serial number. Use the

following instructions to edit the unit name so that it is easier to identify each unit on the network.

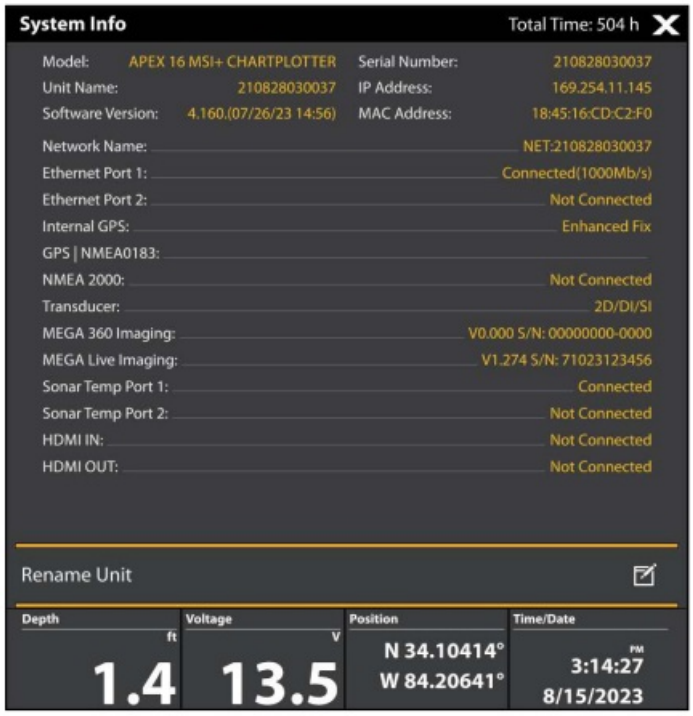
Customize the Unit Name
APEX/SOLIX Series

1. Press the HOME key.
2. Select Settings > Network > System Info > Rename Unit.
3. Use the on-screen keyboard to edit the name.
4. Select Save to save the new name.

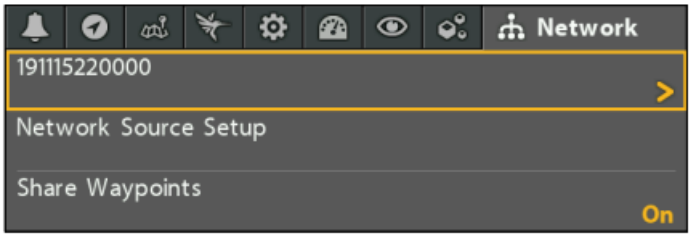
HELIX Series

1. **Main Menu:** Press the MENU key twice.
2. Select the Network tab.
3. Select the unit name and press the RIGHT Cursor key.
4. Use the Cursor Control keys to edit the name.
5. Press the CHECK key to save the new name.

Selecting the Unit Name (APEX/SOLIX)



Selecting the Unit Name (HELIX)



Open the Network Source Menu

The Network Data Sources menu (APEX/SOLIX) and Network Source Setup dialog box (HELIX) display all the sources connected to the network. The sources may be shared on the network or operating locally with their connected control head.
NOTE: On APEX/SOLIX control heads, the sonar source is displayed in a separate menu. To see your sonar sources, press the HOME key and then select Settings > CHIRP Sonar > Sonar Source (see Select a Sonar Source for more information).

Open the Network Source Menu

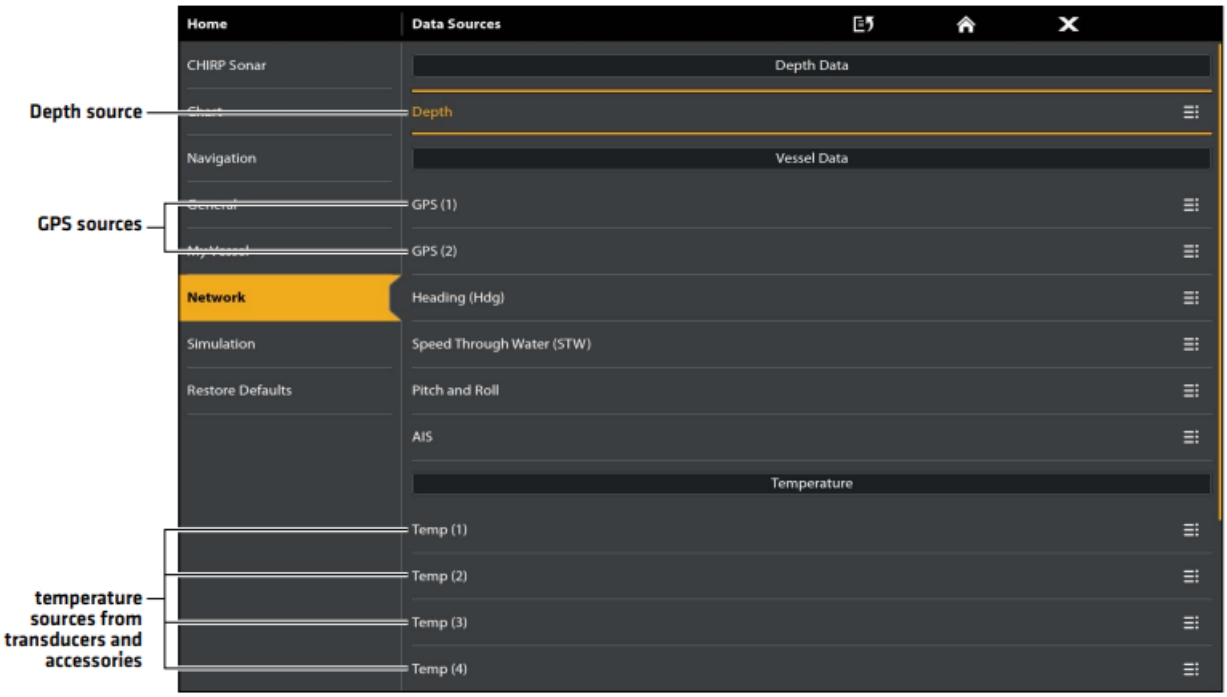
APEX/SOLIX Series

1. Press the HOME key.
2. Select Settings > Network > Data Sources.

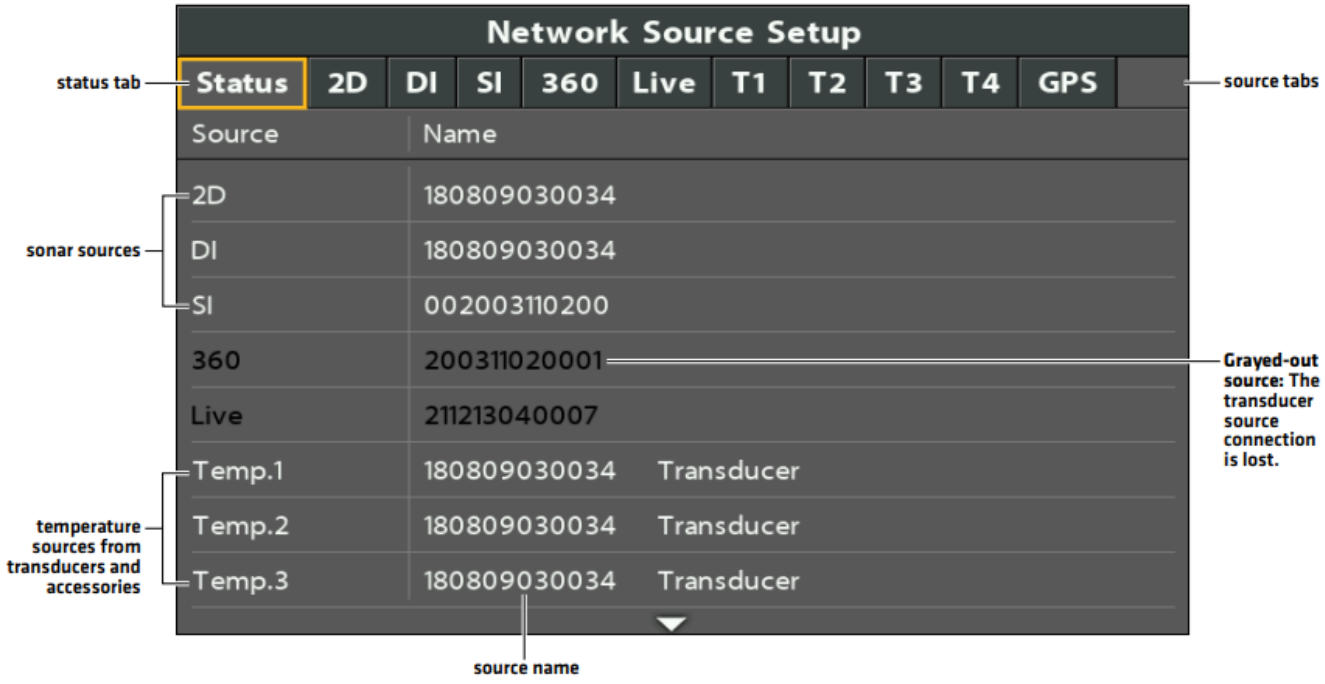
HELIX Series

1. **Main Menu:** Press the MENU key twice.
2. Select the Network tab.
3. Select Network Source Setup and press the RIGHT Cursor key

Network Data Sources Menu (APEX/SOLIX)



Network Source Setup Dialog Box (HELIX)



Sonar Source Overview

When you select a new transducer source, the alarms, menu settings, view rotation, and digital readouts will update automatically on the control head.

- **Menu Settings:** If the sonar source is shared, the control heads will synchronize menu settings, while other menu settings will continue to operate individually on each control head. When you change a shared menu setting on one control head, it will be updated on the other control heads that are sharing the source.
- **Views:** The view rotation will update to display views that are compatible with the selected transducer.
- **Alarms:** When Sonar sources are shared on the network, the alarms are also shared. The shared alarm settings can be controlled from either control head, and the alarms will display or sound on both control heads. To turn off a shared alarm, press the EXIT key on any control head.

Set Up Sonar

Use the instructions below to select sonar sources for each control head. Before you can select frequencies from the network, the control heads must be set up with their connected transducer.

1. **Set up the Transducer (HELIX models only)**
   The following instructions are only required the first time you set up each HELIX control head with an attached transducer.
   - **Main Menu:** Press the MENU key twice.
   - Select the Sonar tab > Connected Transducer.
   - Press the Right or Left Cursor keys to scroll through the compatible transducers for that model. Select the transducer that is attached to the control head.
   - Repeat steps 1 to 3 for each control head. If there is not a transducer attached to a control head, you can skip this section for that control head.
2. **Turn on/off CHIRP Mode (for 5PXG-only networks)**
   A CHIRP unit can use sources from any other control head on the network. If a unit is not CHIRP-capable, it

cannot use sources connected to the CHIRP control head unless CHIRP Mode is turned off.

NOTE: Non-CHIRP units are not compatible with networks containing a 5PGL switch.

APEX/SOLIX Series

1. Press the HOME key.
2. Select Settings > CHIRP Sonar.
3. Select 2D CHIRP, Down Imaging CHIRP, or Side Imaging CHIRP.
4. Tap the on/off button, or press the ENTER key, to turn it on or off.

HELIX Series

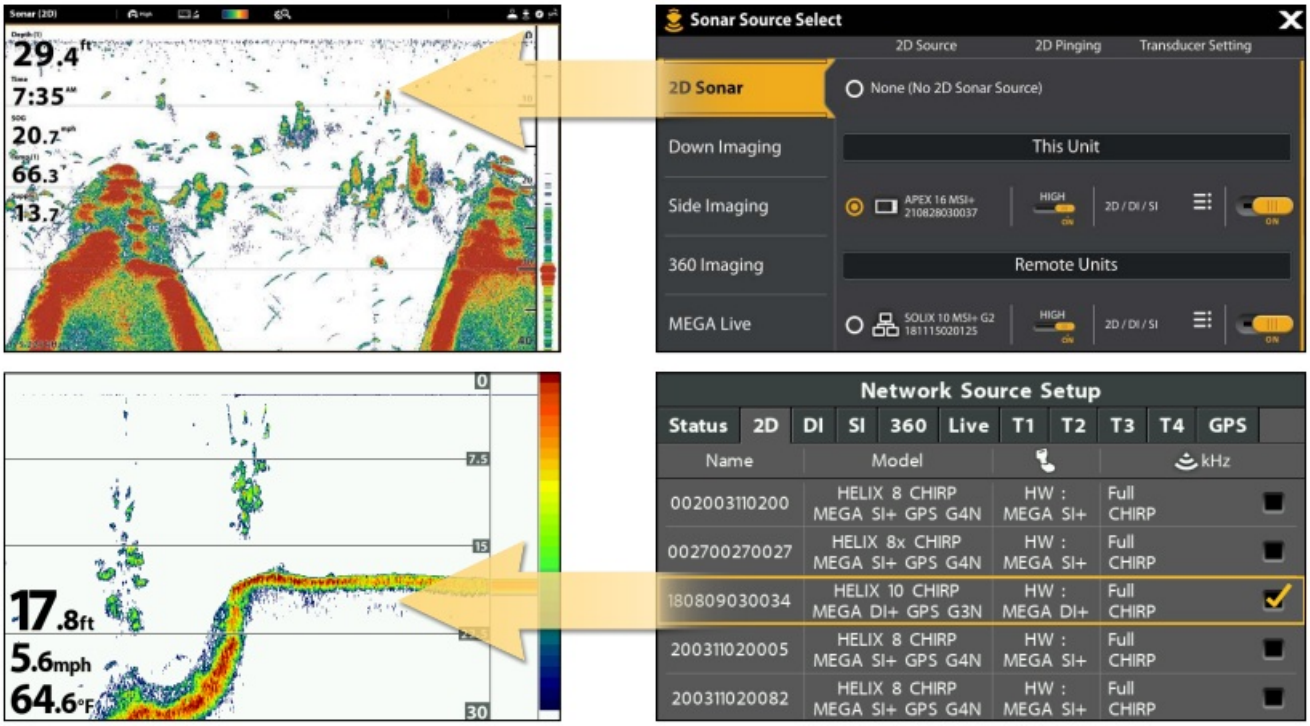
1. **Main Menu:** Press the MENU key twice.
2. Select the Setup tab > CHIRP Configuration.
3. Select 2D CHIRP Mode, DI Chirp Mode, or SI CHIRP Mode. Press the RIGHT Cursor key to turn it on or off.

Select a Sonar Source

When you first set up the network, the control head will automatically choose the transducer connected to it. APEX and SOLIX control heads without a connected transducer will not select an alternate sonar source and will default to “None”. Use the instructions in this section to change the sonar source.

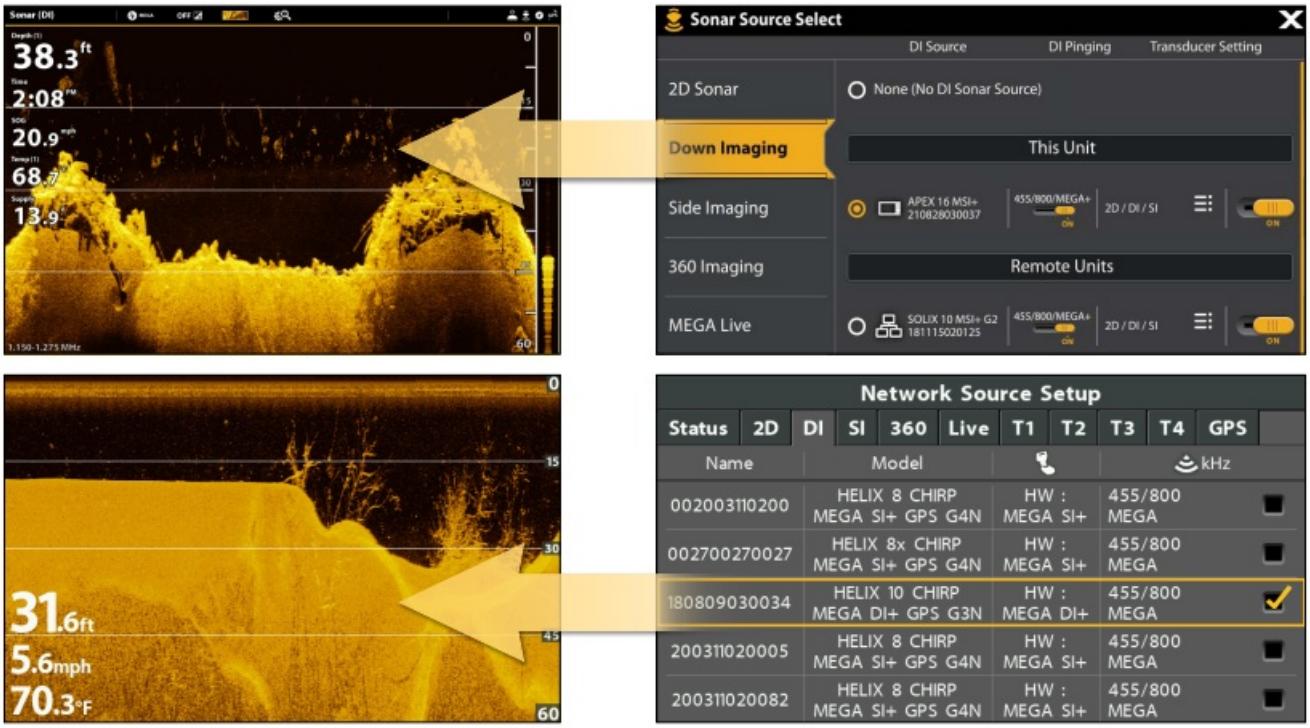
Overview

The transducer you select on the 2D Sonar tab (APEX/SOLIX) or the 2D tab (HELIX) will provide the data for the 2D Sonar Views and related digital readouts.

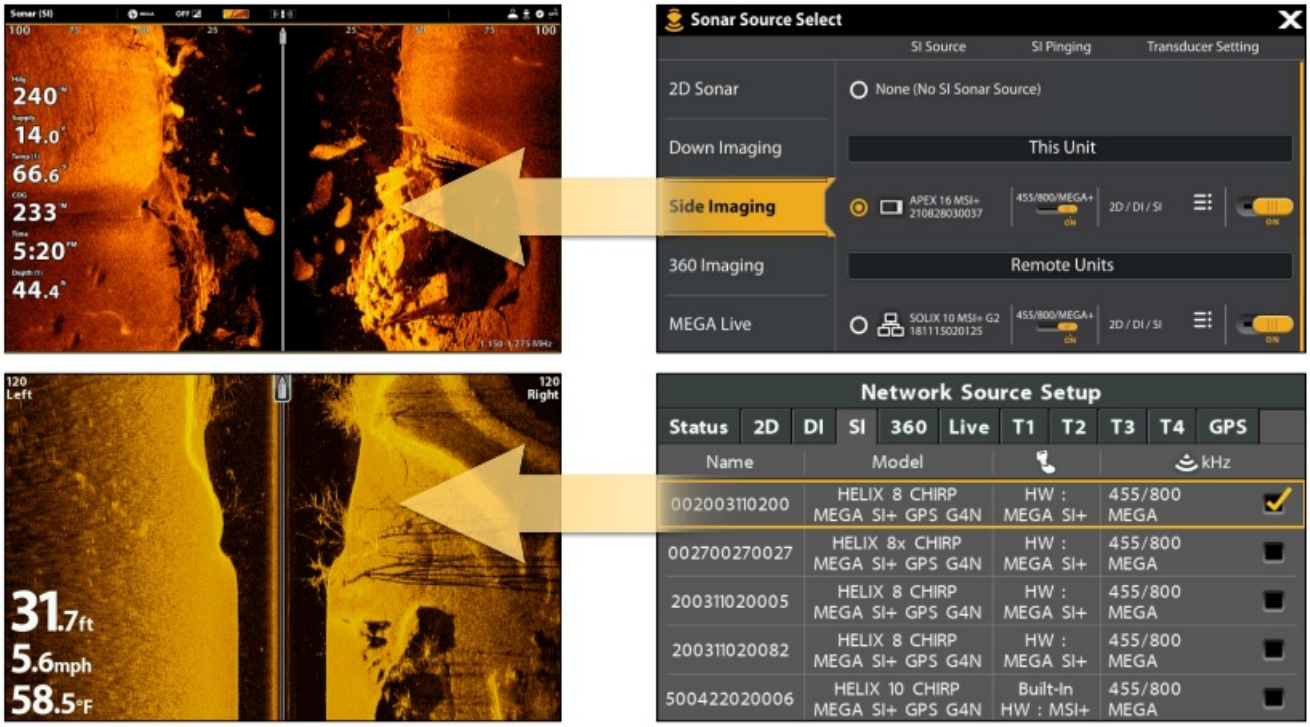


The transducer you select on the Down Imaging tab (APEX/SOLIX) or the DI tab (HELIX) will provide the data for

the Down Imaging Views and related digital readouts.



The transducer you select on the Side Imaging tab (APEX/SOLIX) or the SI tab (HELIX) will provide the data for the Side Imaging Views and related digital readouts.



As you select sonar sources for each view, it is important to consider the following information:

- **Default:** When you first set up the network, the control head will automatically choose the transducer source connected to it. You can use the default settings, or you can select which transducer you want to use.
- **Accessories:** If you have installed an accessory transducer, and it is not displayed in the transducer list, see Set up Sonar.

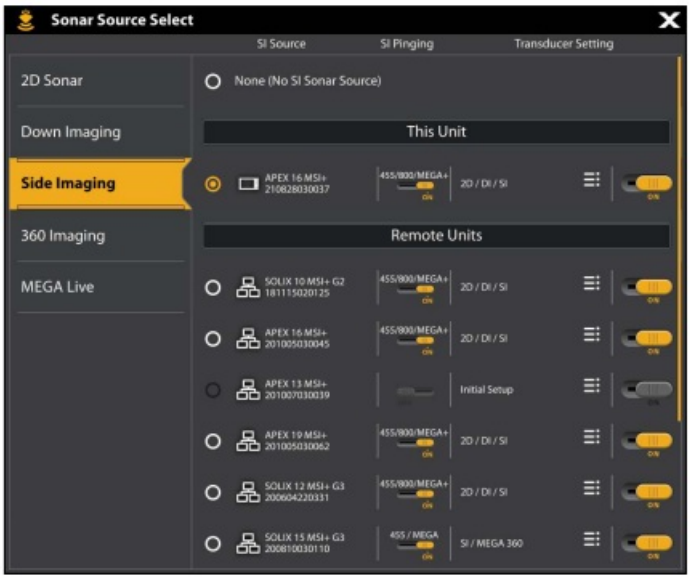
- **Side Imaging Transducers:** XMT and XTM 9 HW MSI 150T transducers can be selected as the source for Down Imaging, but they must first be selected as the source for Side Imaging.

Select Sonar Sources

APEX/SOLIX Series

1. Press the HOME key.
2. Select Settings > CHIRP Sonar > Sonar Source.
3. Select the 2D Sonar tab.
4. Select the transducer connection location. The connection locations are displayed as follows:
    - Selected Control Head (Local): the control head you are actively using
    - Remote Control Head: additional control heads connected to the network
    - Repeat steps 3 and 4 for each tab. You can select one sonar source on each tab.
    - **NOTE:** 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.
    - **NOTE:** If you have installed an accessory transducer, and it is not displayed in the transducer list, see your control head operations manual.

Selecting Beams for the Side Imaging View (APEX/SOLIX)



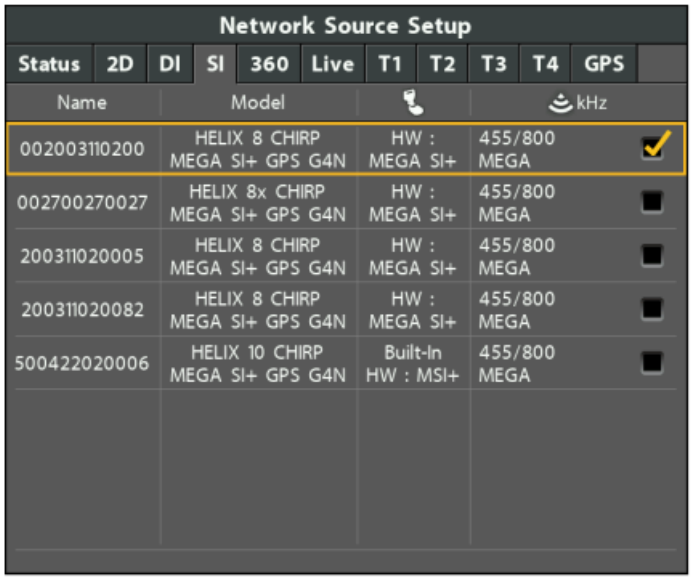
HELIX Series

1. Open the Network Source Setup dialog box.
2. Select the 2D tab. The 2D tab lists the beams available for the 2D Sonar Views.
3. **Select:** Press the DOWN or UP Cursor keys to choose a source.
4. Press the RIGHT Cursor key or the CHECK/INFO key to select it (check mark = selected).
5. Repeat steps 3 and 4 for each sonar tab.
6. **Save:** Press the EXIT key twice to close the dialog box. Network settings are saved even after the unit is powered off.

7. Repeat the steps in this section on each control head to choose a sonar source. Local Setup (default): To use separate transducers for each control head, repeat these steps on each control head until you've set a transducer for each unit. Shared Setup: To use the same transducer with more than one control head, repeat these steps on each control head and select the same transducer for all units.

NOTE: It is not recommended to ping two transducers of the same frequency at the same time.

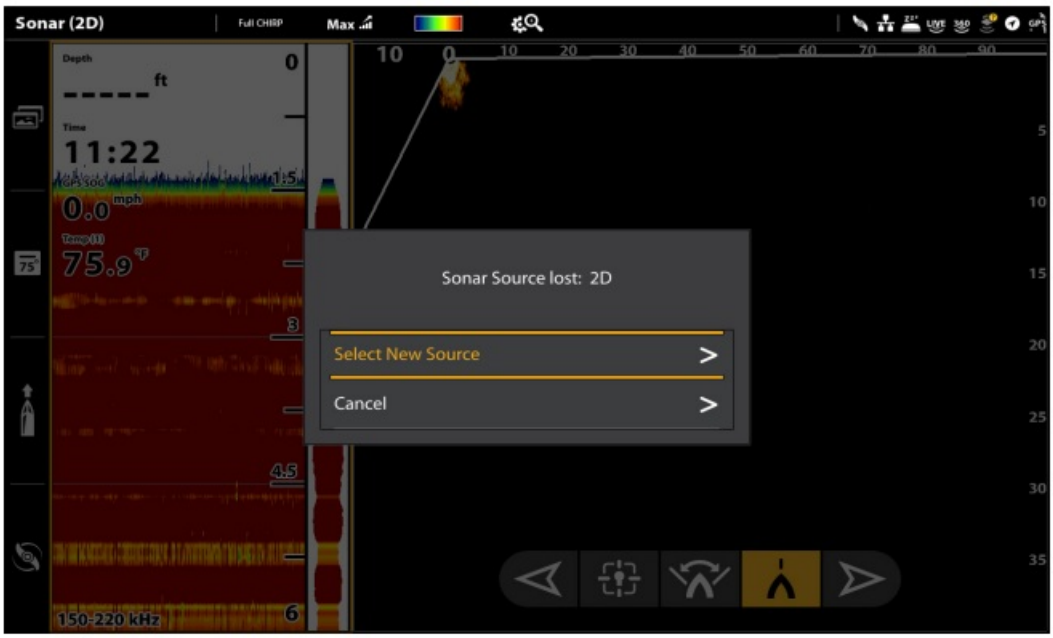
Selecting Beams for the Side Imaging View (HELIX)



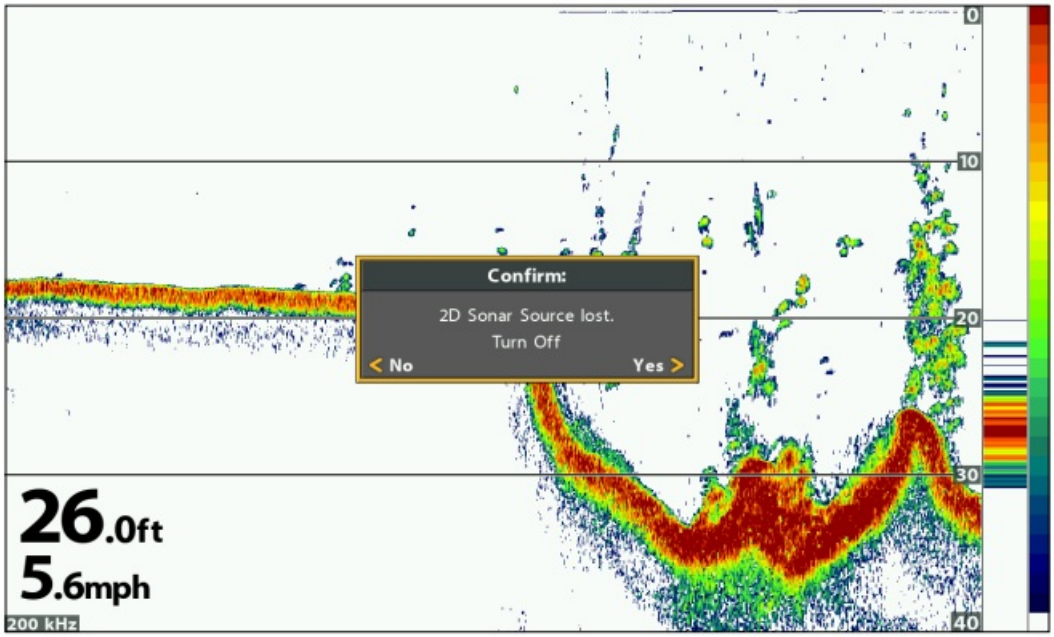
Change from a Lost Sonar Source

If the control head cannot detect the selected transducer, follow the on-screen prompts to switch to another transducer in the network. If you switch to a Local source, you are selecting the transducer connected directly to the control head.

Changing the Sonar Source (APEX/SOLIX)



Changing the Sonar Source (HELIX)



Temperature Source Overview

When you select a new temperature source, the alarms, menu settings, view rotation, and digital readouts will automatically update on the control head.

- **Menu Settings:** If the temperature source is shared, the control heads will synchronize menu settings (Shared), while other menu settings will continue to operate individually (Local) on each control head. When you change a shared menu setting on one control head, it will be updated on the other control heads that are sharing the source.
- **Views:** The view rotation will update to display views or digital readouts that are compatible with the selected temperature source.
- **Alarms:** When temperature sources are shared on the network, the alarms are also shared. The shared alarm settings can be controlled from either control head, and the alarms will display or sound on both control heads. To turn off a shared alarm, press the EXIT key on each control head.

NOTE: The remaining temperature menu options are controlled locally. The Shared and Local menu options may change to accommodate new product features.

Shared Temperature Menu Settings		
Temp. Alarm	Units - Temp	Aux. Temp Alarm

Select a Temperature Source

Temperature sources can be detected from a transducer's built-in temperature feature or from optional-purchase temperature/ speed accessories connected to the network. When you first set up the network, the control head will automatically choose the temperature source connected to it. Use the instructions below to select sources

based on your preferences.

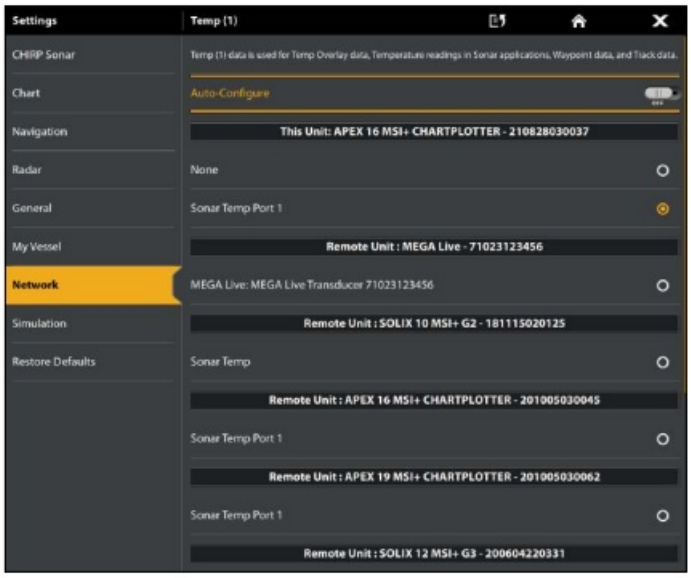
APEX/SOLIX Series

The Temp (1), Temp (2), Temp (3), and Temp (4) options within the Network Data Sources menu represent the digital readout positions on the screen. You can choose a different temperature source for each digital readout, so each control head can display up to four temperature digital readouts on the display.

Auto-Configure: When Auto-Configure is turned on, the sources are selected automatically by the control head. When AutoConfigure is turned off, you can select sources based on your preferences.

1. Open the Network Data Sources Menu.
2. Select Temp (1), Temp (2), Temp (3), or Temp (4).
3. Select Auto-Configure. Tap the on/off button, or press the ENTER key, to turn it off.
4. Select a source from the list.
5. Repeat steps 2 through 4 to select a different temperature option.
6. Repeat the steps in this section on each control head to choose a temperature source for each tab. You can select the same source or a different source.
7. For information on sharing temperature sources across the Network, see Understand Global Settings.

Selecting a Temperature Source (APEX/SOLIX)



HELIX Series

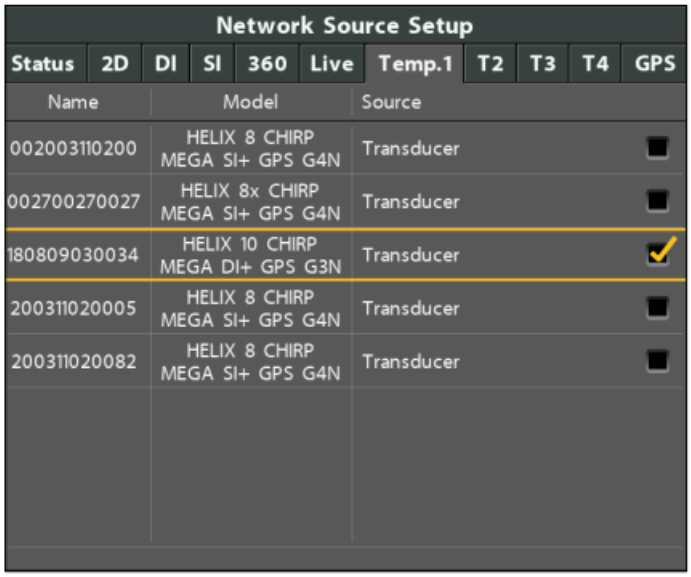
The T1, T2, T3, and T4 tabs at the top of the Network Source Setup dialog box represent the digital readout positions on the screen. You can choose a different temperature source for each digital readout box, so each control head can display up to four temperature digital readouts on the display.

NOTE: There will be less than four temperature tabs displayed if there aren't four temperature sources connected to the network.

1. Open the Network Source Setup dialog box.
2. Select the tab for T1, T2, T3, or T4.

3. **Select:** Press the DOWN or UP Cursor keys to choose a source.
4. Press the RIGHT Cursor key or the CHECK/INFO key to select it (check mark = selected).
5. Repeat steps 2 through 4 to select a different temperature tab.
6. **Save:** Press the EXIT key twice to close the dialog box. Network settings are saved even after the unit is powered off.
7. Repeat the steps in this section on each control head to choose a temperature source for each tab. You can select the same source or a different source.
8. **Local Setup:** To use separate temperature sources for each control head, repeat these steps on each control head until you've set a temperature source for each unit and each digital readout.
9. **Shared Setup:** To use the same temperature sources on more than one control head, repeat these steps on each control head and select the same temperature sources on all units.

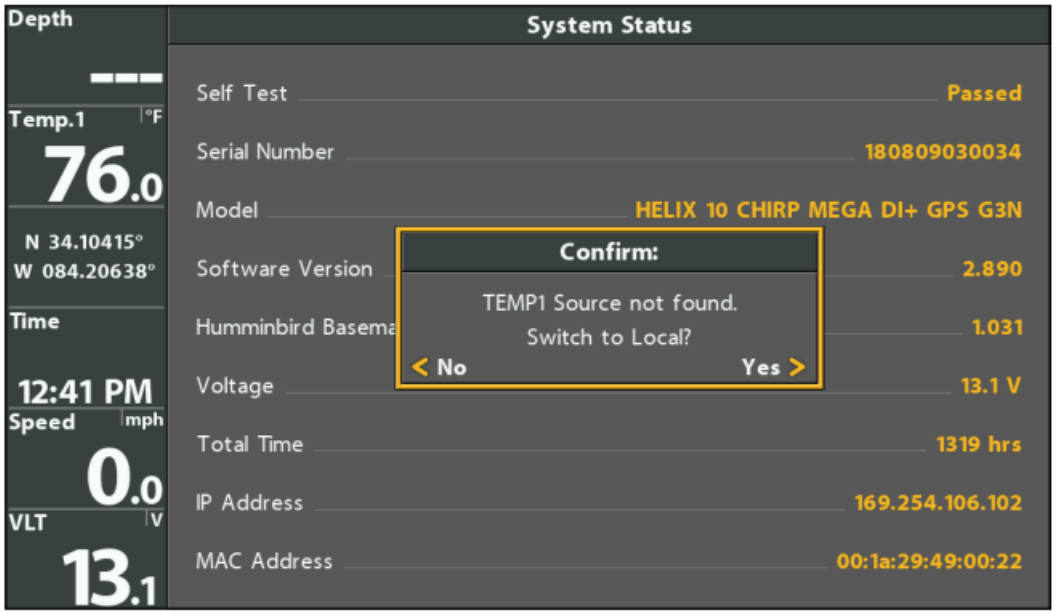
Selecting a Temperature Source (HELIX)



Change from a Lost Temperature Source (HELIX Models Only)

If the control head cannot detect the selected transducer, follow the on-screen prompts to switch to another transducer in the network. If you switch to a Local source, you are selecting the transducer or temperature accessory connected directly to the control head.
NOTE: APEX/SOLIX control heads will not prompt you to switch to another transducer in the network. Use the Network Data Sources Menu to select a new source (see Select a Temperature Source).

Temperature Source Lost (HELIX)



GPS Source and Sharing Waypoints Overview

When you select a new GPS source, the position, view rotation, and digital readouts will automatically update on the control head. To view waypoint data on the network, it is important to understand the GPS source and how to share waypoint data.

- **Views:** The view rotation will update to correspond with the GPS receiver.
- **Navigation:** Waypoint data can be shared, and you can build a route on either control head with the shared waypoints. See Share Waypoints for more information.

Select a GPS Source

When you power on the network for the first time, the control head will automatically choose the connected or internal GPS receiver to provide data to the control head. Use the instructions below to change the GPS source for the selected control head.

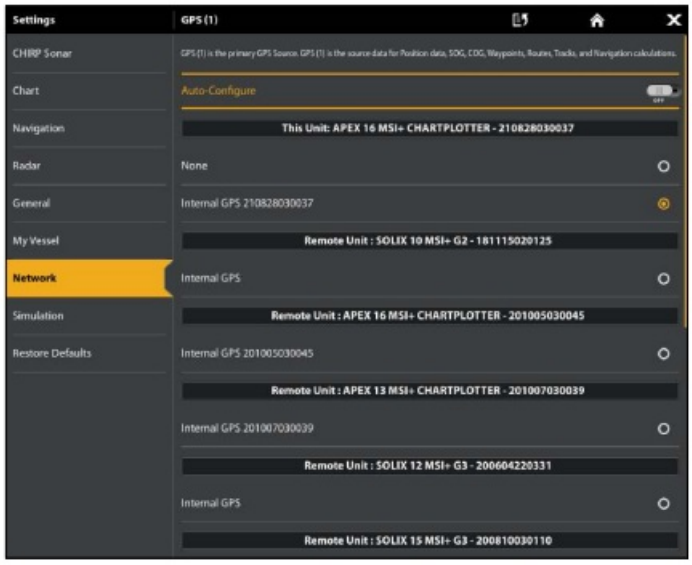
APEX/SOLIX Series
GPS (1) provides position data, Speed over Ground (SOG), Course over Ground (COG), waypoints, routes, tracks, and navigation calculations to the control head. GPS (2) provides position data that is displayed in the GPS (2) data box. The APEX/SOLIX control head defaults to the internal GPS receiver as the primary source (GPS [1]). If you connect an external GPS receiver to the control head, it will be assigned as the secondary source GPS (2). You can also manually change which GPS receiver is the selected source for GPS(1) or GPS (2). Auto-Configure: When Auto-Configure is turned on, the sources are selected automatically by the control head. When Auto-Configure is turned off, you can select sources based on your preferences.

1. Open the Network Data Sources Menu.
2. Select GPS (1) or GPS (2).
3. Select Auto-Configure. Tap the on/off button, or press the ENTER key, to turn it off.
4. Select a source from the list.
5. Repeat steps 2 through 4 to select another GPS source.
6. Repeat the steps in this section on each control head to choose a GPS source for each tab. You can select the same source or a different source.
7. For information on sharing GPS sources across the Network, see Understand Global Settings.

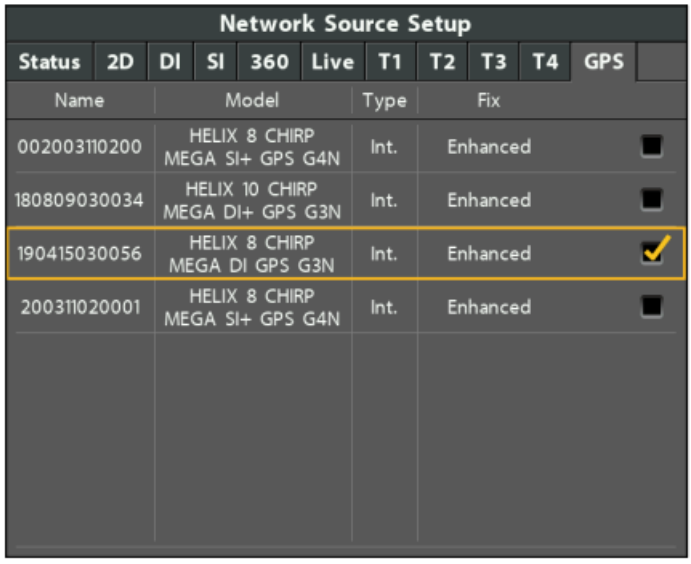
HELIX Series

1. Open the Network Source Setup dialog box.
2. Select the GPS tab.
3. **Select:** Press the DOWN or UP Cursor keys to choose a source.
4. Press the RIGHT Cursor key or the CHECK/INFO key to select it (check mark = selected).
5. **Save:** Press the EXIT key twice to close the dialog box. Network settings are saved even after the unit is powered off.
6. Repeat the steps in this section on each control head to choose a GPS source for each tab. You can select the same source or a different source.
7. **Local Setup:** To use separate GPS receivers for each control head, repeat these steps on each control head until you've set a GPS receiver for each unit. Shared Setup: To use the same GPS receiver on more than one control head, repeat these steps on each control head and select the same GPS receiver on all units.

Selecting a GPS Source (APEX/SOLIX)



Selecting a GPS Source (HELIX)



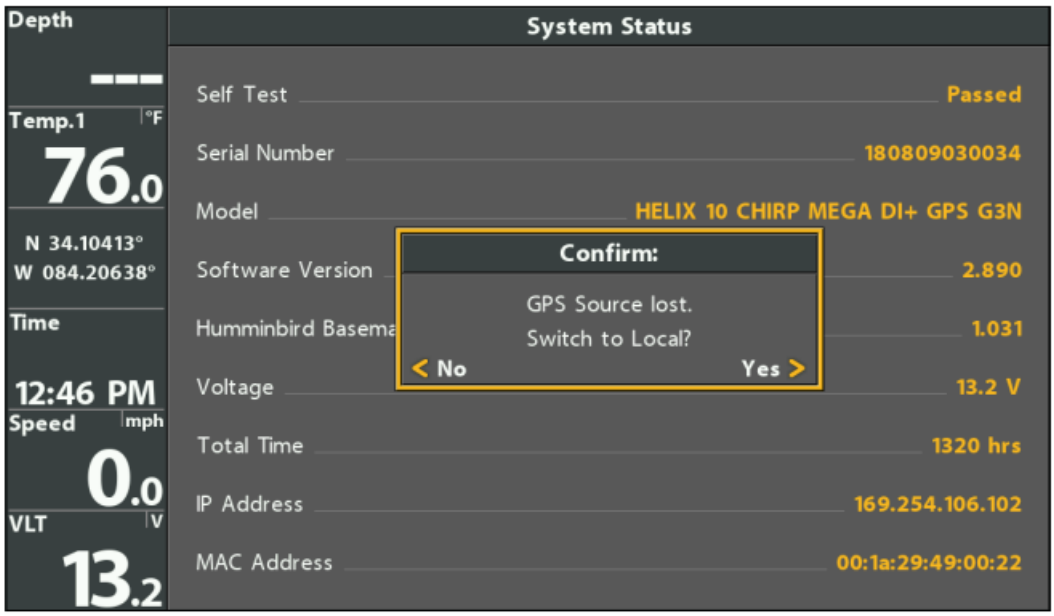
NOTE: The current GPS Fix is reported as No Fix, Fixed, or Enhanced. An Enhanced Fix has been augmented using information from WAAS, EGNOS, or MSAS. An Enhanced Fix is required for navigation.

Change from a Lost GPS Source (HELIX Models Only)

If the control head cannot detect the set GPS receiver, the control head will display an error message so that you can reset the
GPS source as follows:

- If the shared GPS receiver is not detected, the control head will switch automatically to the local GPS receiver (internal or connected to the control head). Follow the on-screen instructions to save the local GPS receiver as the selected source.
    - **NOTE:** If the shared GPS source has been selected manually, your control head will not switch automatically to the local GPS receiver. See Select a GPS Source to select a new source manually.
- If no GPS data is displayed, the source has been lost. See Select a GPS Source to select another GPS receiver in the network.
    - **NOTE:** APEX/SOLIX control heads will not prompt you to switch to another GPS source in the network. Use the Network Data Sources Menu to select a new source (see Select a GPS Source).

GPS Source Lost (HELIX)



Share Waypoints

When you network control heads, waypoints are shared between control heads by default. You will observe the following: When a waypoint is marked on one control head, the waypoint will also be displayed on the other control head. If the waypoint is saved, it will be saved to the local control head where it was marked.

- **Routes:** When waypoints are viewed on both control heads, you can build a route from either control head using the shared waypoints. The route is saved to the control head where it was created.
- **NOTE:** Routes and tracks are not shared on the network. On HELIX models, when the units are powered off, the waypoint data is saved only on its local control head where it was originally marked.
- **NOTE:** On HELIX models, although the navigation data is viewable, it is not copied on every control head. In

other words, a new route will be saved to the control head where the route was initiated. If you edit navigation data, the data will be saved back to its local control head.

Turn Share Waypoints On/Off

NOTE: APEX and SOLIX control heads on a network will share waypoints automatically. Turning on Share Waypoints enables your APEX or SOLIX control heads to share waypoints with HELIX control heads.

APEX/SOLIX Series

1. Press the HOME key.
2. Select Nav Data.
3. Under Options, select Waypoints > Share Waypoints.
4. Tap the on/off button, or press the ENTER key, to turn it on or off.
5. Repeat steps 1 through 4 on each control head so that each control head is sharing its waypoint data on the network.

HELIX Series

1. **Main Menu:** Press the MENU key twice.
2. Select the Network tab > Share Waypoints.
3. Press the RIGHT Cursor key to turn it on or off.
4. Repeat steps 1 through 3 on each control head so that each control head is sharing its waypoint data on the network.

Restore Defaults

If you choose to restore defaults on a Humminbird control head, it is important to note that the menu settings, including your saved network settings, will be reset to their factory defaults. See your Humminbird control head operations manual for more information.
CAUTION! Use this menu with caution! Before you restore system defaults, export your control head menu settings to an SD card. It is also recommended to export your navigation data to an SD card. See your control head operations manual for details.

APEX/SOLIX Series

1. Press the HOME key.
2. Select Settings > Restore Defaults.
3. Select the settings or application to restore.
4. Follow the on-screen prompts to confirm the reset.
    - **NOTE:** Restoring defaults on one APEX or SOLIX control head on the network will cause all networked APEX or SOLIX control head defaults to be restored.

HELIX Series

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

2. Select the Setup tab > Restore Defaults.
3. Follow the on-screen prompts to confirm the reset.

Troubleshooting

Before contacting Humminbird Technical Support, please read the following section. Taking the time to review these troubleshooting guidelines may allow you to solve a performance problem yourself, and therefore avoid sending your unit back for repair

Fishing System Doesn't Power Up

If your Fishing System doesn't power up, use the installation guide that is included with your Fishing System to confirm specific details, making sure that:

- the power cable is properly connected to the Fishing System control head,
- the power cable is wired correctly, with red to the positive battery terminal and black to the negative terminal or ground, and the drain/shield wire to the boat's chassis ground terminal
- the fuse is operational, and
- the battery voltage of the power connector is at least 12 Volts.
- Correct any known problems, including removing corrosion from the battery terminals or wiring, or replacing the battery if necessary

Fishing System Defaults to Simulator with a Transducer Attached

- A connected and functioning transducer will cause the newly started Fishing System to go into Normal operating mode automatically. If, when you power up the Fishing System, it goes into Simulator mode automatically, even though a transducer is already connected, this means that the control head is not detecting the transducer. Perform the following troubleshooting tasks:
- Check the connections of all transducers that are connected to the control head or Ethernet network. See the transducer installation guide that was included with your Fishing System for connection information. Reconnect if necessary, and power up the Fishing System again to see if this fixes the problem.
- Replace the non-functioning transducer with a known good transducer if available and power up the control head again.
- Check the transducer cable. Replace the transducer if the cable is damaged or corroded.

Contact Humminbird

Any questions relating to the product should be directed to our Help Center at **https://humminbird-help.johnsonoutdoors.com/hc/en-us**. or in writing to the address below:

- Humminbird Service Department
- 678 Humminbird Lane
- Eufaula AL 36027 USA

Social Media Resources:

- Facebook.com/HumminbirdElectronics.
- Twitter.com. (@humminbirdfish)
- Instagram.com/humminbirdfishing.
- YouTube.com/humminbirdtv.

Documents / Resources

	HumminBIRD 531906-4ENA Ethernet Networking [pdf] Installation Guide 531906-4ENA Ethernet Networking, 531906-4ENA, Ethernet Networking, Networking

References

- humminbird.johnsonoutdoors.com
- User Manual

Manuals+, Privacy Policy