

InterLink™ Controller

531567-1_D



InterLink™

Thank You!

Thank you for choosing Humminbird®, America's #1 name in fishfinders. Humminbird® has built its reputation by designing and manufacturing top-quality, thoroughly reliable marine equipment. Your Humminbird® accessory is designed for trouble-free use in even the harshest marine environment. In the unlikely event that your Humminbird® accessory does require repairs, we offer an exclusive Service Policy - free of charge during the first year after purchase, and available at a reasonable rate after the one-year period. For complete details, see the warranty included in this manual. We encourage you to read this operations manual carefully in order to get full benefit from all the features and applications of your Humminbird® product.

Contact our Customer Resource Center at either **1-800-633-1468** or visit our website at **www.humminbird.com**.

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! *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. Handling and/or opening this unit may result in exposure to lead, in the form of solder.*

WARNING! *This product contains lead, a chemical known to the state of California to cause cancer, birth defects and other reproductive harm.*

NOTE: *Your control head might require a software upgrade to be compatible with the InterLink™ accessory. See **www.humminbird.com** for more information.*

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NOTE: Entries in this Table of Contents which list (with PC Connect Cable only) require the purchase of a separate accessory. You can visit our website at www.humminbird.com to order these accessories online or contact our Customer Resource Center at **1-800-633-1468**.

How the InterLink™ Works

Your InterLink™ Network Connection allows you to share accessory data, GPS position, waypoints, routes and your current track between two Humminbird® Fishing Systems in real time. When sharing is enabled, for example, you can mark a waypoint using one Fishing System, and it becomes instantly available on the second Fishing System. Also, some accessories, such as the WeatherSense® Fishing Condition Monitor, can be shared and controlled from both control heads.

***NOTE:** The InterLink™ does not support data sharing of sonar information, which includes the Wireless Sonar Link (WSL) accessory and transducer data.*

Your InterLink™ keeps a collection of shared objects and the sequence number of each change made to that collection. When you make a change to navigation data, the InterLink™ compares the changes with the existing data and updates it appropriately.

The InterLink™ can hold up to 3,000 saved shared waypoints, 50 saved shared routes of 50 saved waypoints each, the current route, the current route's waypoints, and the current track. The number of waypoints and routes that can be shared using the InterLink™ is limited by the capacity of the smaller of the two networked control heads. For example, if a unit with a 3,000 waypoint capacity and 1,000 locked waypoints is networked with a 750 waypoint capacity unit holding 200 locked waypoints, the number of shared waypoints will be restricted to a maximum of 550 waypoints. This is the remaining capacity of the smaller unit ($3,000 - 1,000 = 2000 > 750 - 200 = 550$).

Waypoints and routes are shared as follows:

- When a shared waypoint is added on a control head, it is added to the InterLink™, and also to the other control head, if it is connected to the InterLink™ and powered up.
- When a shared waypoint is edited on a control head, it is modified on the InterLink™, as well as on the other control head.

- When a shared waypoint is deleted from a control head, it is deleted on the InterLink™, and also from the other control head.
- When you request to share a non-shared waypoint from one control head, it is added to the InterLink™, and also to the other control head (as long as the capacity of the smaller of the two control heads will allow it).
- When you request to stop sharing a shared waypoint on one control head, it is deleted from the InterLink™, and also from the other control head.
- When you add a shared route, edit a shared route, or make a non-shared route shared, all affected waypoints are also automatically shared. If the capacity of any of the units cannot handle the additional waypoints, this operation may not succeed.
- When you change the status of a shared route to non-shared, or remove a waypoint from a shared route, the affected waypoints remain shared, since they may be used in other shared routes.

You can also daisy chain InterLink™ with other Humminbird® accessories such as a WeatherSense® in order to create a network that lets you share digital data around the boat. GPS and accessory data sharing begins as soon as the InterLink™ is connected, and is always functioning.

NOTE: *Functionality may be limited based on the model you are using. Chartplotters and units that are not combo units may be limited in the types of data that they can send and receive.*

NOTE: *To avoid any data corruption or loss, Humminbird® recommends that you backup all waypoints and routes via an MMC/SD card or through Humminbird® PC before sharing, editing, and deleting data across the InterLink™.*

InterLink™ Installation Overview

You will need to connect your InterLink™ to your two Humminbird® Fishing System control heads. The location of the InterLink™ and the accessory daisy chain is critical to ensure proper operation; please read all installation instructions carefully before installing.

NOTE: *The InterLink™ will only support 2 Humminbird® Fishing System control heads at a time.*

InterLink™ Connection Kit

The Humminbird® InterLink™ Controller Connection Kit includes the following items:

- InterLink™
- One 10-foot cable for attaching the first control head
- One 20-foot cable for attaching the second control head
- Hardware kit for stand-alone or stack mounting
- InterLink™ Accessory Manual.

NOTE: *10 foot extension cables are available as optional-purchase items. These can be used to extend the total cable length up to 50 feet.*

Connecting Your InterLink™ to the Control Head(s)

Perform the following procedure to connect your InterLink™ to your Humminbird® Fishing System control heads.

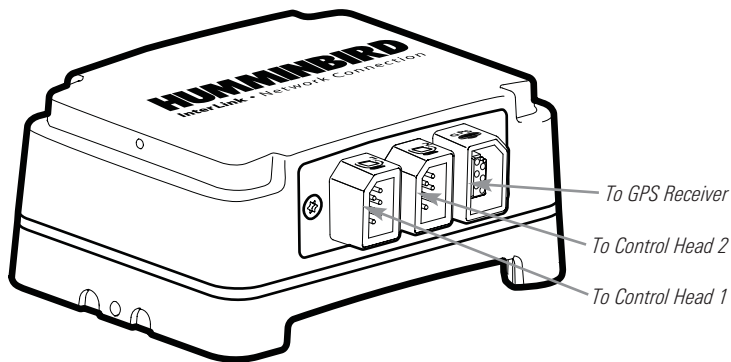
Perform the following installation procedure for your InterLink™ Accessory:

1. Lay out the cables and the InterLink™ to make sure that the cables will reach both control heads.
2. Interconnect the "To Control Head 1" connector either directly to the COM port on the control head or to the "Daisy Chain" connector of an accessory which is already attached to the control head. See the **Accessory System Interconnects** diagrams for more information.

NOTE: Several installation scenarios are depicted in the Accessory System Interconnects graphics on the following pages. Pick the one which best represents your configuration on your boat. The GPS receiver can be connected directly to the Interlink™ as shown in Scenario 2, or directly to the control heads as shown in Scenarios 1 and 3.

CAUTION: It is very important to install the Interlink™ at the end of the daisy chain of any accessories attached to either control head for data sharing to occur correctly.

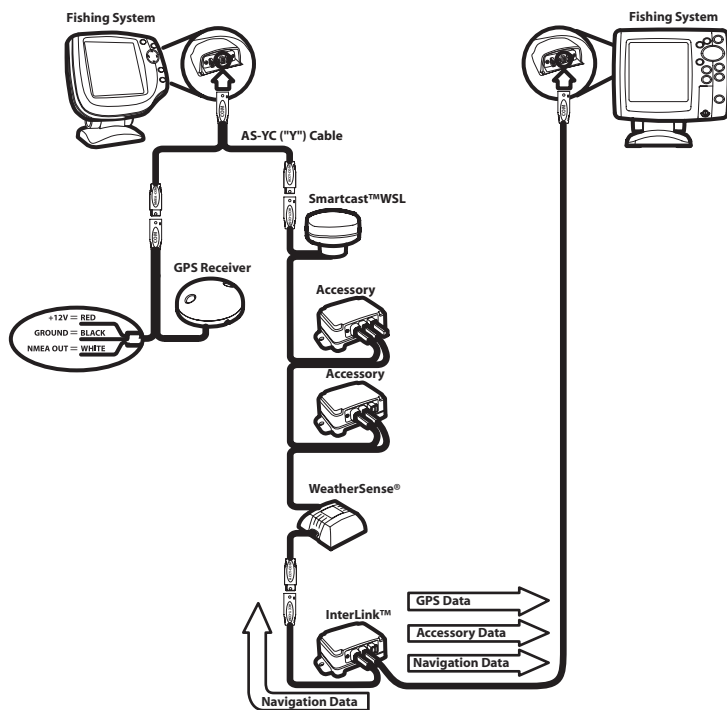
InterLink™ Ports



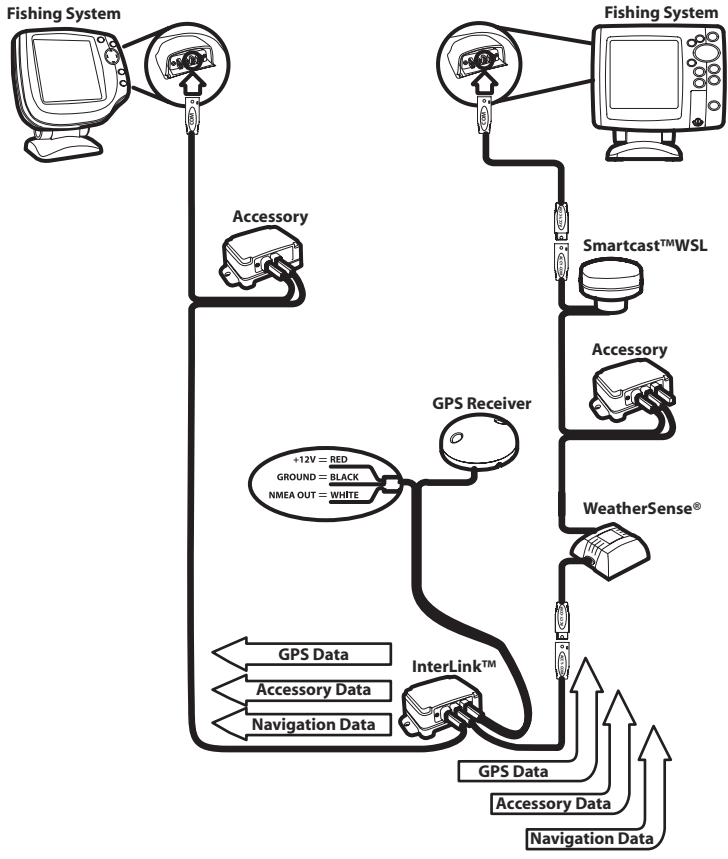
NOTE: 10' extension cables may be purchased from Humminbird® if your planned cable route exceeds 20' (6 m). Maximum cable length, including extension cables, should not exceed 50' (16 m). Visit our website at www.humminbird.com, or call our Customer Resource Center at 1-800-633-1468 to purchase extension cables.

3. Connect the "To Control Head 2" connector either directly to the COM port on the control head or to the daisy chain connector of an accessory already attached to the control head. See the **Accessory System Interconnects** diagram for more information.

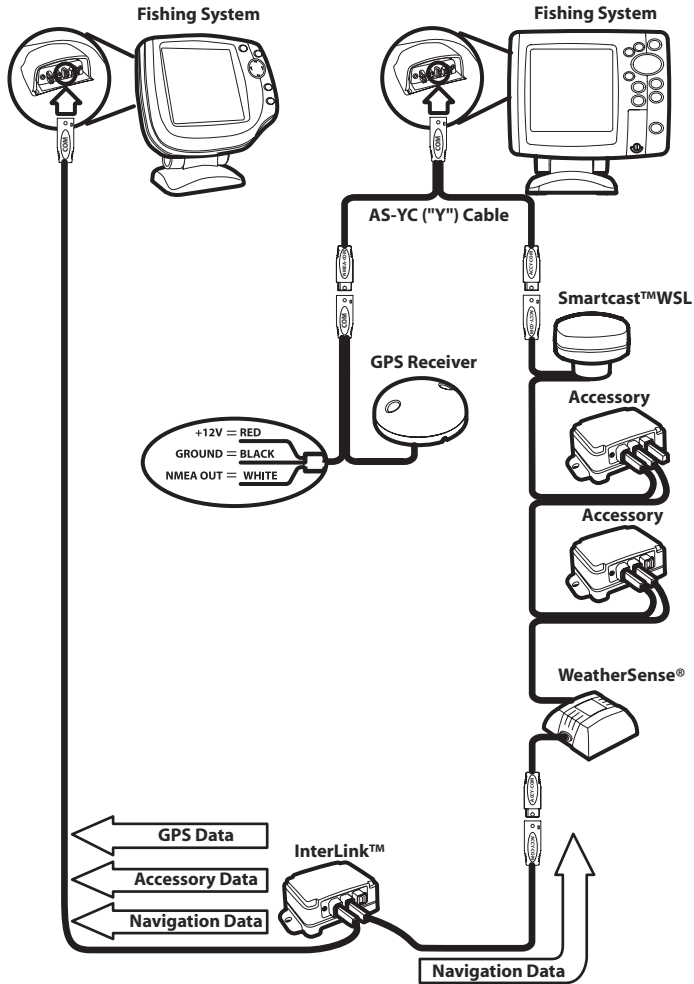
Accessory System Interconnects, Scenario 1



Accessory System Interconnects, Scenario 2



Accessory System Interconnects, Scenario 3

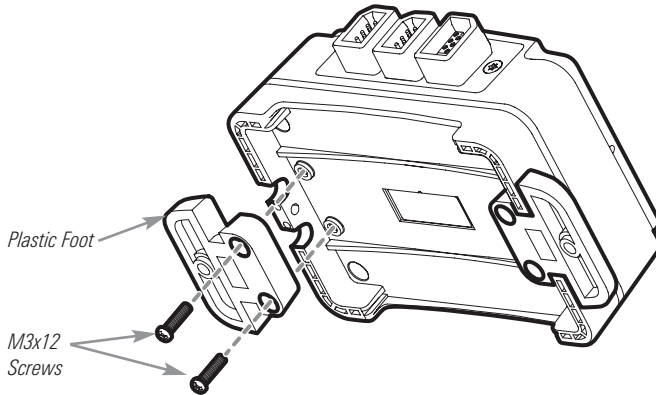


NOTE: If more than one GPS receiver is installed on the boat, the control heads interpreting the data from these GPS receivers may display slightly different locations due to the nature of GPS calculations.

- 4a. If the InterLink™ will stand alone on the mounting surface, use the four included M3x12 thread-forming screws to connect the two plastic feet to the bottom of the InterLink™, two screws for each foot.

Preparing the InterLink™ for Stand-Alone Mounting

Install the Plastic Feet

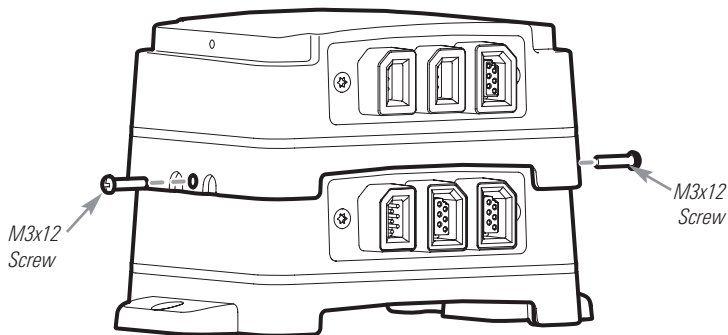


or...

- 4b. If you will be stacking the InterLink™ with another compatible Humminbird® accessory, use two of the included M3x12 thread-forming screws to connect the two accessories, stacked one on top of the other. Proceed to Step 6.

Preparing the InterLink™ for Stack Mounting

Stack Mounting Two Units



- Use the installed plastic feet to mark and then drill the two 1/8" holes to a depth of 5/8" in the mounting surface, one for each foot, needed to attach the InterLink™ to the boat. Fill the holes in the mounting surface with marine-grade silicone sealant, then attach the InterLink™ to the mounting surface using the two included #8 x 5/8" wood screws.

NOTE: On fiberglass hulls, it is best to use progressively larger drill bits to reduce the chance of chipping or flaking the outer coating.

NOTE: Apply marine-grade silicone caulk or sealant to both screw and drilled holes as needed to protect your boat from water damage.

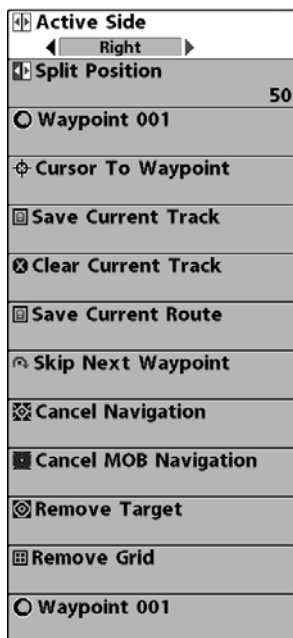
NOTE: If the mounting surface is thin or made of a light-weight material, you may need to add reinforcing material below the mounting surface in order to support the InterLink™.

- When the control head detects the InterLink™, the InterLink™ menu items will be added automatically to the Menu system. This includes an InterLink™ Setup Dialog Box which appears when you power up either control head. See ***How the InterLink™ Affects the Control Head User Interface*** for more information.

The Menu System

The menu system is divided into easy-to-use menu modules. The main components of the menu system are:

Start-Up Options Menu - Press the MENU key during the power up sequence to view the Start-Up Options menu.



X-Press™ Menu

X-Press™ Menu - The X-Press™ menu allows you to access the settings that are changed frequently without having to navigate through the whole menu system. Press the MENU key once to display the X-Press™ Menu. When you select a menu item from the X-Press™ menu, the menu will collapse, leaving only the menu choice on the screen. Use the UP or DOWN Cursor keys to reactivate the X-Press™ menu.

NOTE: The X-Press™ Menu choices will vary depending on which view is active when you press the MENU key, as well as whether you are in Normal or Advanced User Mode.

Alarms	
Depth Alarm	Off
Fish ID Alarm	<input type="radio"/>
Low Battery Alarm	Off
Off Course Alarm	300ft
Arrival Alarm	150ft
Drift Alarm	Off

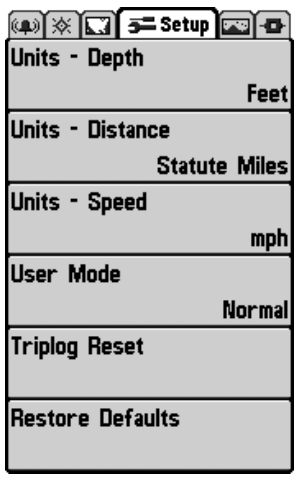
Main Menu System
Normal User Mode

Main Menu Tabs - Less frequently-adjusted menus are grouped into the Main Menu System. The Main Menu system is organized under tab headings to help you find a specific menu item quickly.

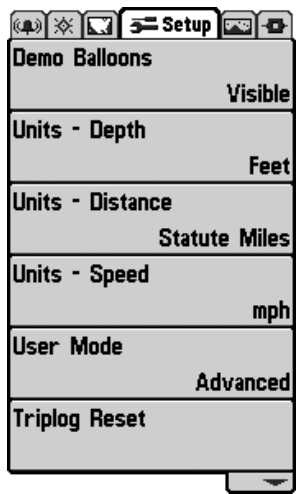
Press the MENU key twice for the Main Menu, then use the 4-WAY Cursor LEFT or RIGHT key to select a tab, and use the DOWN or UP key to select a specific menu item under that tab, then use the LEFT or RIGHT keys again to change a menu setting. Press the EXIT key to move quickly to the top of the tab. A down arrow at the bottom of a menu means that you can scroll to additional menu choices using the DOWN Cursor key. A right or left arrow on a menu choice means that you can use the RIGHT or LEFT Cursor keys to make changes or to see more information.

NOTE: The Main Menu choices will vary depending on whether you are in Normal or Advanced User Mode.

User Mode (Normal or Advanced) - An Advanced Mode is provided for users who desire the highest level of control over the Fishing System and Normal Mode for users who desire greater simplicity and fewer menu choices. Additional Advanced menu choices will be displayed throughout the menu system when you navigate to specific menus while in Advanced Mode. Any changes made while in Advanced Mode will remain in effect after you switch back to Normal Mode. For example, if you set specific views to be visible while in Advanced User Mode, and then return to Normal User Mode, those views will still be visible.



Setup Tab,
Normal Mode



Setup Tab,
Advanced Mode

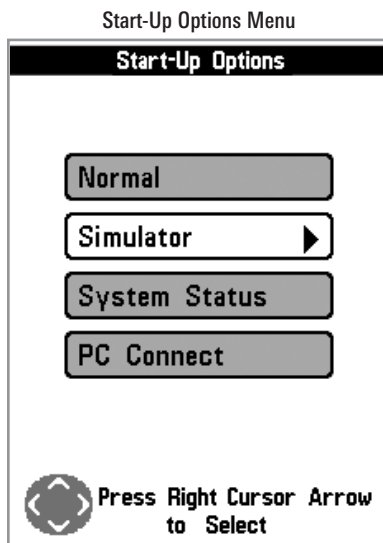
Total Screen Update - when you change any menu settings that affect the current view, the view will update immediately (i.e. you don't have to exit the menu to apply the change to the screen).

Start-Up Options Menu

Press the MENU key when the Title screen is displayed to access the Start-Up Options menu.

Use the UP or DOWN 4-WAY Cursor keys to position the cursor, then the RIGHT Cursor key to select one of the following choices. If you wait too long, the system will default to whichever menu mode happens to be highlighted:

- Normal
- Simulator
- System Status
- PC Connect (use with PC Connect Cable).



See the following paragraphs for more information about each of these choices.

Normal Operation

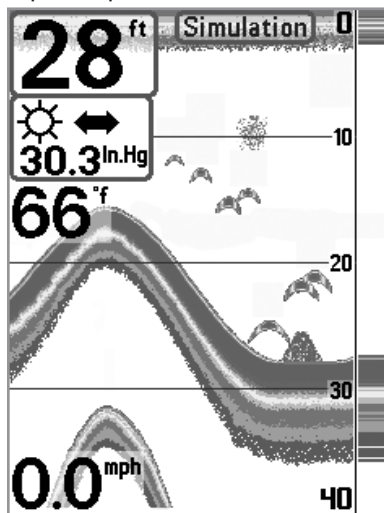
Use **Normal operation** for on the water operation with a transducer connected. In addition, your Fishing System uses advanced transducer detection methods to determine if a transducer is connected. If a functioning transducer is connected, Normal operation will be selected automatically at power up and your Fishing System can be used on the water.

Exit Normal operation by powering your Fishing System off.

Simulator

Use the **Simulator** to learn how to use your Fishing System before taking your boat on the water. The Simulator is a very powerful tool that simulates on the water operation, providing a randomly-updated display. We recommend going through this manual while using the Simulator, since all of the menus function and affect the display the way they actually do when in Normal operation.

Simulator, Shown with optional
Speed/Temp and WeatherSense® Accessories



NOTE: To get the full benefit of the Simulator, it is important to select Simulator manually from the Start-Up Options menu as opposed to letting the Fishing System enter Simulator automatically (as it will if a transducer is not connected and you do nothing during power up). Manually selecting Simulator from the Start-Up Options menu allows you to pre-configure your Fishing System for on the water operation. Any menu changes you make will be saved for later use.

A message will appear on the display periodically to remind you that you are using the Simulator.

Exit the Simulator by powering your Fishing System off.

System Status

Use **System Status** to view system connections and to conduct a unit self-test.

The following screens are displayed in turn when you press the VIEW button when using System Status:

- Self Test
- Accessory Test
- GPS Diagnostic View.
- PC Connect (with optional-purchase PC Connect Cable only).

Exit System Status by powering your Fishing System off.

Self Test

Self Test displays results from the internal diagnostic self test, including unit serial number, Printed Circuit Board (PCB) serial number, software revision, total hours of operation and the input voltage.

System Status Self Test Screen

SYSTEM STATUS	
SELF TEST	
PASSED	
S/N	
0-1-100000000	
SOFTWARE VERSION	
2.005	
VOLTAGE	TOTAL TIME
13.8 ^v	84hrs
PCB S/N	
0-0-0000000	
Press VIEW for Next Screen	

Accessory Test

Accessory Test lists the accessories connected to the system.

Accessory Test Screen

SYSTEM STATUS	
ACCESSORY TEST	
GPS	CONNECTED
SmartCast WSL	CONNECTED
Speed	CONNECTED
Temperature	CONNECTED
WeatherSense	CONNECTED
InterLink	CONNECTED

NOTE: The speed accessory will be detected only if the paddlewheel has moved since your Fishing System was powered up.

NOTE: GPS will be shown as Connected when your Fishing System detects a GPS Receiver.

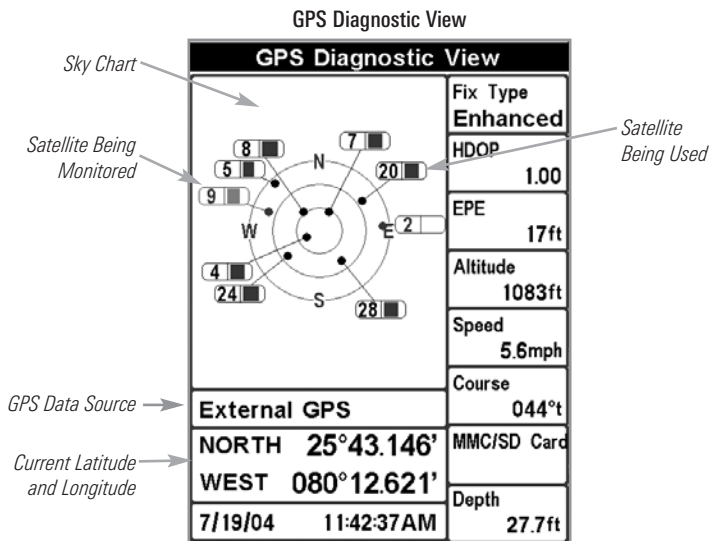
NOTE: InterLink™ will be shown as Connected when your Fishing system detects an InterLink™.

GPS Diagnostic View

GPS Diagnostic View shows a sky chart and numerical data from the GPS receiver. The sky chart shows the location of each visible GPS satellite with its satellite number and a signal strength bar. A dark gray bar indicates that the satellite is being used to determine your current position. A light gray bar indicates that the satellite is being monitored, but is not yet being used.

NOTE: The GPS Diagnostic View only appears if the GPS Receiver is connected.

This view also reports the current position, local time and date, and other numeric information. The current GPS Fix Type is reported as No Fix, 2D Fix, 3D Fix, or Enhanced. An Enhanced fix has been augmented using information from WAAS, EGNOS, or MSAS. A 3D or Enhanced Fix is required for navigation. HDOP (the Horizontal Dilution of Precision) is a GPS system parameter which depends on the current satellite configuration. HDOP is used to calculate the Estimated Position Error.



PC Connect

(With PC Connect Cable only)

Use **PC Connect** to update the software of the Fishing System control head. This feature requires the use of the PC Connect Cable. Complete instructions are included with the PC Connect Cable accessory.

NOTE: *The PC Connect Cable requires a separate purchase. For more information visit our website at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468.*

Exit PC Connect mode by powering the Fishing System off.

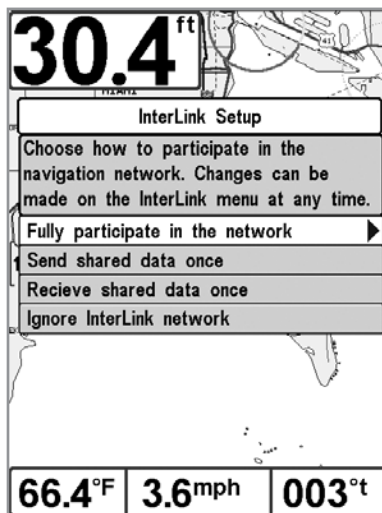
NOTE: *Your control head might require a software upgrade to be compatible with the InterLink™ accessory. See www.humminbird.com for more information.*

How the InterLink™ Affects the Control Head User Interface

The first time a control head is connected, it sends its serial number to the InterLink™, and several scenarios are possible:

- If the InterLink™ recognizes the control head as a participant, data synchronization occurs. If data has changed outside of the network, the InterLink™ may ask which data to synchronize.
- If the InterLink™ does not recognize the control head as a participant, registration begins. First, the InterLink™ sends its status (number of shared waypoints and routes stored, as well as its current capacity) to the control head to determine which of the four options is available. Then, you will be given a choice of the available options via the InterLink™ Setup dialog box which appears when you power up either control head.

InterLink™ Setup Dialog Box



The options are:

1. **Ignore the InterLink™ network** - This option is always available. Choosing this options means that the InterLink™ will be ignored until this option is changed using the InterLink™ submenu on the Accessory main menu tab.
2. **Send shared data to the InterLink™** - This one-time option is available only if the data on the control head can fit on the InterLink™. This may require that all duplicate data on the InterLink™ is downloaded to the control head, so that only non-duplicate data is stored on the InterLink™ to save space. After this operation is complete, the control head will ignore the InterLink™ until the next time it is powered off and on again.
3. **Receive shared data from the InterLink™** - This one-time option is available only if the data in the InterLink™ can fit onto the control head. After this operation is complete, the control head ignores the InterLink™ until the next time it is powered off and on again.
4. **Fully participate in the network** - This option is available if the data in the InterLink™ fits onto the control head and the data in the control head fits onto the InterLink™. When you select this option, data in the InterLink™ and shared data on the control head are merged, and kept synchronized, so that changes to one will change the other. The InterLink™ stores the serial numbers, data capacities, and the sequence number of the last synchronization for both control heads.

NOTE: Participation can be changed at any time using the InterLink™ submenu on the Accessory main menu tab.

Sharing Data

If there is room on the network, all waypoints and routes will be automatically shared.

The following rules apply to navigation data sharing:

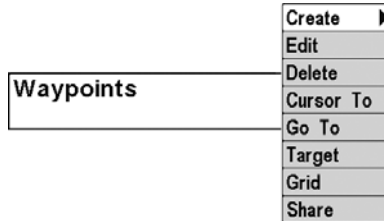
- Saved waypoints and routes are shareable.
- If a route is being shared, all the waypoints contained in that route are also shared.
- The current route is shared by both control heads, but navigation parameters are computed by each control head separately. Waypoints in the current route are temporarily shared.
- Saved tracks are not shared.
- Data sharing will not affect sonar performance.

To find out what data is being shared, use the Accessories main menu tab to select the InterLink™ menu. See *InterLink Status* for more information.

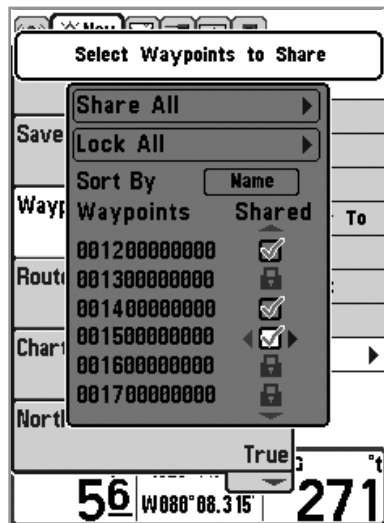
Sharing Waypoints

You can determine which waypoints to lock or to share by selecting the Share option from the Waypoints submenu under the Navigation main menu tab. Choosing Share displays the Select Waypoints to Share dialog box. See the *Select Waypoints to Share Dialog Box* illustration for more information.

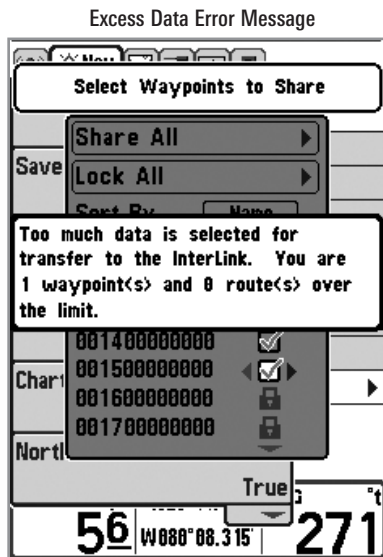
Waypoints Submenu



Select Waypoints to Share Dialog Box



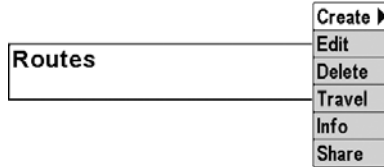
From the Select Waypoints to Share box, you can choose to share all of the waypoints, lock all of the waypoints, or mark the waypoints individually. Once you mark the waypoints that you want to share, press the EXIT key and a message will come up asking you to confirm your changes. If at any point you select too much data to send to the InterLink™, an error message will appear that tells you how many excess waypoints you have selected. Press the EXIT key to adjust your selection to fit the capacity available. Changes will not be saved until the number of shared waypoints is within the allowable limit.



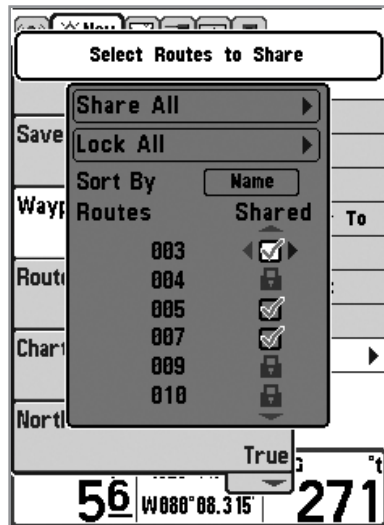
Sharing Routes

You can determine which routes to lock or to share by selecting the Share option from the Routes submenu under the Navigation main menu tab. Choosing Share displays the Select Routes to Share dialog box. See the *Select Routes to Share Dialog Box* illustration for more information.

Routes Submenu



Select Routes to Share Dialog Box



From the Select Routes to Share box, you can choose to share all of the routes, lock all of the routes, or mark the routes individually. Once you mark the routes that you want to share, press the EXIT key and a message will come up asking you to confirm your changes. If at any point you select too much data to send to the InterLink™, an error message will appear that tells you how many excess routes you have selected. If you have selected a route that causes too many waypoints to be shared, a similar error message will also be displayed. Press the EXIT key to adjust your selection to fit the capacity available. Changes will not be saved until the number of shared routes is within the allowable limit.

NOTE: *Any of the routes you share will automatically cause the waypoints contained in them to be shared as well.*

InterLink™ Submenu

To view the InterLink™ Submenu:

1. From the Accessories main menu, use the 4-WAY Cursor Control keys to select InterLink.
2. Use the 4-WAY Cursor Control keys to choose options in the InterLink™ submenu.

InterLink™ Submenu

InterLink	InterLink Status ▶
	Stop Participating

InterLink™ Status Window

Number of Routes the InterLink™ Can Accept

Not Participating Icon

Number of Waypoints the 755c Control Head has Marked as Shared

Number of Waypoints the 755c Control Head has Marked as Locked

Interlink Status			
Interlink			
		Full	Empty
● Wyppts	250	100	
⌂ Routes	10	25	
Control Heads			
Shared	755c	787c2	
● Wyppts	250	250	
⌂ Routes	10	10	
Locked	755c	787c2	
● Wyppts	400	300	
⌂ Routes	15	5	
		4.5 mph	112°t

The InterLink™ Submenu contains the following menu choices:

InterLink™ Status allows you to see a listing of the data on the local control head (the one you're using), the remote control head (the other control head attached to the InterLink™), and the InterLink™ itself. The InterLink™ status window shows how much space is remaining on the Interlink™, how much data is being shared across the Interlink, if a control head is participating, how much data each control head is sharing, and how much data each control head has locked.

Start Participating allows you to re-start the registration process for a control head that is not currently participating.

Stop Participating allows you to un-register your control head from the InterLink™.

Troubleshooting

Before contacting the Humminbird® Customer Resource Center, 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 also comes with it for specific confirmation 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 positive battery terminal and black to negative terminal or ground
- the fuse is operational
- the battery voltage of the power connector is at least 10 Volts.

Correct any known problems, including removing corrosion from the battery terminals or wiring, or actually 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:

- Using the Installation Guide that also comes with your Fishing System, check to make sure that the transducer cable is securely connected to the Fishing System. 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.

Control Head Doesn't Recognize the InterLink™ when the InterLink™ is Attached

- If the InterLink™ is connected, but it isn't being recognized, check the Accessory Test View to make sure the InterLink™ is listed. If the InterLink™ is not listed in the Accessory Test View, or if it is listed, but it is not shown as Active, make sure that all of the interconnecting cables are installed correctly.

NOTE: Your control head may require a software upgrade to be compatible with InterLink™ accessory. See www.humminbird.com for more information.

Display Problems

There are several main conditions or sources of possible interference that may cause problems with the quality of the information displayed on the control head. Look in the following table for some symptoms of display problems and possible solutions:

Problem	Possible Cause
The control head loses power at high speeds.	If the power output of your boat's engine is unregulated, the control head may be protecting itself using its over-voltage protection feature. Make sure the input voltage does not exceed 20 Volts.
When the boat moves at higher speeds, the bottom disappears or suddenly weakens, or the display contains gaps.	The transducer position may need to be adjusted. A mix of air and water flowing around the transducer (cavitation) may be interfering with the interpretation of sonar data. See your Installation Guide for suggestions on adjusting the transducer position. Electrical noise from the boat's engine may be interfering with sonar reception. See <i>Finding the Cause of Noise</i> for more information.
There are no fish detected, even when you know they are in the water under the boat, or sonar readings seem weak or faulty.	Sonar readings may be affected if the transducer is not positioned correctly (i.e. mounted at an angle, not straight down), or there is some kind of mechanical interference, either because it is mounted inside a hull that is too thick for proper sonar transmission, the bond between the transducer and the hull is not airtight, or because the transducer is dirty. Check with your Installation Guide for guidance on re-positioning the transducer, and make sure the transducer is clean. Low battery voltage may be affecting the power of signal transmission. Electrical noise from the boat's engine may be interfering with sonar reception. See <i>Finding the Cause of Noise</i> for more information.

Finding the Cause of Noise

Electrical noise usually affects the display with many black dots at high speeds, and high sensitivity readings. One or more of the following sources can cause noise or interference:

Possible Source of Noise	Isolation
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Other electronic devices

Turn off any nearby electronic devices to see if the problem goes away, then turn them on one at a time to see if the noise re-appears.

The boat's engine

To determine whether the boat's engine is the source of the noise, increase the RPMs while the boat is in neutral and stationary to see if the noise increases proportionately; if noise appears when you rev the engine, the problem could be the spark plugs, alternator, or tachometer wiring. Replace the spark plugs with resistor plugs, install an alternator filter, or route the control head power and transducer cables away from the engine wiring.

Cavitation from the boat's propeller

Turbulence created by the propeller can cause noise; make sure the transducer is mounted at least 15" (38 cm) from the propeller, and that the water flows smoothly over the face of the transducer at all times.

Humminbird® Accessories

Accessories customize your Fishing System to your needs and enable you to stay on the edge of new technology. When an accessory is connected to the Fishing System, additional menus and readouts are added automatically to the Main Menu System. Accessories available today that are supported by your Fishing System include:

WeatherSense® Fishing Condition Monitor: purchase and plug in the WeatherSense® accessory to your Fishing System to obtain barometric pressure readouts and trend data in real time.

Wireless Sonar Link (WSL): purchase the Wireless Sonar Link (WSL) accessory to receive remote sonar signals from a SmartCast® Remote Sonar Sensor (RSS). Radio signals from the RSS are received by the WSL and are transmitted over the Accessory Bus to the Fishing System.

PC Connect Cable: Purchase the PC Connect Cable to connect the Fishing System to a PC in order to upload product software updates and new features obtained from www.humminbird.com. This accessory requires the MSWindows-compatible HumminbirdPC™ software downloaded from our website to your PC in order to communicate with the Fishing System.

Be sure to check out our website www.humminbird.com for additional new and exciting accessories to grow your Fishing System!

NOTE: Each accessory requires a separate purchase. You can visit our website at www.humminbird.com or contact our Customer Resource Center at 1-800-633-1468 for additional details.

Maintenance

If your boat remains in the water for long periods of time, algae and other marine growth can reduce the effectiveness of the transducer. Periodically clean the face of the transducer with hot water.

If your boat remains out of the water for a long period of time, it may take some time to wet the transducer after it is returned to the water. Small air bubbles can cling to the surface of the transducer and interfere with proper operation. These bubbles will dissipate with time, or you may wipe the face of the transducer with your fingers after the transducer is in the water.

1-Year Limited Warranty

We warrant the original retail purchaser that products made by Humminbird® have been manufactured free from defects in materials and workmanship. This warranty is effective for one year from the date of original retail purchase. Humminbird® products found to be defective and covered by this warranty will be replaced or repaired free of charge at Humminbird® option and returned to the customer freight prepaid. Humminbird® sole responsibility under this warranty is limited to the repair or replacement of a product that has been deemed defective by Humminbird®. Humminbird® is not responsible for charges connected with the removal of such product or reinstallation of replaced or repaired parts.

This warranty does not apply to a product that has been:

- Improperly installed;
- Used in an installation other than that recommended in the product installation and operation instructions;
- Damaged or has failed because of an accident or abnormal operation;
- Repaired or modified by entities other than Humminbird®.

Please retain your original receipt as a proof of the purchase date. This will be required for in-warranty service.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ON THE PART OF HUMMINBIRD® AND WILL BE THE CUSTOMER'S EXCLUSIVE REMEDY, EXCEPT FOR ANY APPLICABLE IMPLIED WARRANTIES UNDER STATE LAW WHICH ARE HEREBY LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. IN NO EVENT WILL HUMMINBIRD® BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY RELATING TO THE PRODUCTS.

Some states do not allow limitations on an implied warranty, or the exclusion of incidental or consequential damages, so the above exclusions may not apply to you. You may also have other rights, which vary from state to state.

Humminbird® Service Policy

Even though you'll probably never need to take advantage of our incredible service policy, it's good to know that we back our products this confidently. We do it because you deserve the best. We will make every effort to repair your unit within three business days from the receipt of your unit at our factory. This does not include shipping time to and from our factory. Units received on Friday are typically shipped by the following Wednesday, units received Monday are typically shipped by Thursday, etc.

All repair work is performed by factory-trained technicians to meet exacting factory specifications. Factory-serviced units go through the same rigorous testing and quality control inspections as new production units.

After the original warranty period, a standard flat rate service charge will be assessed for each repair (physical damage and missing parts are not included). Any repairs made after the original warranty will be warranted for an additional 90 days after service has been performed by our factory technicians. You can contact our Customer Resource Center or visit our website to verify the flat rate repair fee for your product (visit the Product Support section):

<http://www.humminbird.com>

We reserve the right to deem any product unserviceable when replacement parts are no longer available or impossible to obtain. This Service Policy is valid in the United States only. This applies only to Humminbird® products returned to our factory in Eufaula, Alabama. This Service Policy is subject to change without notice.

Returning Your Unit for Service

Before sending your unit in for repair, please contact the factory, either by phone or by email, to obtain a Repair Authorization Number for your unit. Please have your product model name and serial number available before calling the factory. If you contact the factory by e-mail, please include your product model name and serial number in the e-mail, and use Request for Repair Authorization Number for your e-mail subject header. You should include your Repair Authorization Number in all subsequent communications about your unit.

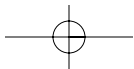
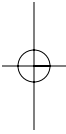
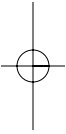
For IN-WARRANTY service, complete the following steps:

- Obtain a Repair Authorization Number from the Humminbird® Customer Resource Center.
- Tag product with your name, street address, phone number and your assigned Repair Authorization Number.
- Include a brief written description of the problem.
- Include a copy of your receipt (to show proof and date of purchase).
- Return product freight prepaid to Humminbird®, using an insured carrier with delivery confirmation.

For OUT-OF-WARRANTY service, complete the following steps:

- Obtain a Repair Authorization Number from the Humminbird® Customer Resource Center.
- Include payment in the form of credit card number and expiration date, money order or personal check. Please do not send cash.
- Tag product with your name, street address, phone number and your assigned Repair Authorization Number.
- Include a brief written description of the problem.
- Return product freight prepaid to Humminbird®, using an insured carrier with delivery confirmation.

Notes



Contact Humminbird®

Contact the Humminbird® Customer Resource Center
in any of the following ways:

By Telephone:
(Monday - Friday 8:00 a.m. to 4:30 p.m.
Central Standard Time):

1-800-633-1468

By e-mail:
(typically we respond to your e-mail
within three business days):

custserv@johnsonoutdoors.com

For direct shipping, our address is:

Humminbird
Service Department
678 Humminbird Lane
Eufaula, AL 36027 USA

