

**OVERVIEW**

Use this guide to set up the IRIS402 Marine Network Camera on the Humminbird® control head network. We recommend that you read this guide completely before starting the network setup.

<b>Compatibility</b>	<p>The ONIX® and ION™ control heads are compatible with the IRIS402 Marine Network Camera. The ONIX control head displays video from one camera source. The ION control head allows you to display video from four camera sources. Visit our Web site at <a href="http://humminbird.com">humminbird.com</a> for the latest accessories and updated compatibility information as additional cameras may be added to the network in the future.</p>
<b>Preparation</b>	<p>Before the video camera is installed on the boat, it must be configured using a PC with Internet access. We recommend using your home or office computer network because a DHCP server is required for the configuration. Also, review the IRIS402 installation guide for the operating system, hardware installation, and power requirements.</p>
<b>Configuration Supplies</b>	<p>In addition to the IRIS402 Marine Network Camera, you will need the following supplies:</p> <ul style="list-style-type: none"> <li>PC with Internet access [DHCP server required]</li> <li>Networked router</li> <li>Ethernet power injector for each camera</li> <li>RJ45 cable for each Ethernet power injector</li> <li>Power source [see the IRIS402 installation guide for hardware and voltage requirements]</li> </ul>
<b>Installation Supplies</b>	<p>See <i><b>Install the Camera(s) on your Boat</b></i> to determine the installation method you will use. Also, refer to your IRIS402 installation guide for hardware and installation requirements. In addition to the IRIS402 Marine Network Camera, you will need the following supplies:</p> <ul style="list-style-type: none"> <li>Humminbird Ethernet adapter cable for each camera</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Ethernet power injector for each camera</li> <li>Humminbird AS EC CHART cable for each Ethernet power injector</li> </ul> <p><b>Optional Humminbird Accessories:</b> extension cables, Ethernet switchess</p>

**Customer Service:** To purchase the Ethernet adapter cable, AS EC CHART cable, Ethernet Switch, extension cables, and additional accessories, contact Humminbird Customer Service by visiting our Web site at [humminbird.com](http://humminbird.com) or by calling 1-800-633-1468.



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

## 1 | Connect the Camera[s] to your Home/Office Network

Before the camera is installed on the boat, it must be configured using a PC with Internet access. We recommend using your home or office network for the configuration because a DHCP server must be used, which is a typical setup in a home/office network.

### Assign Cameras 1 through 4

1. If you are installing more than one camera, designate each camera as Camera 1, Camera 2, Camera 3, or Camera 4.

### Connecting Camera(s) to a Home/Office Network (Overview)

Review the IRIS402 installation guide for power requirements and installation instructions. An overview of the instructions is shown in this section.

1. Turn off the PC and power source.
2. Insert the IRIS RJ45 Ethernet cable connector into the Ethernet port on the camera. Hand tighten the screw nut.
3. Insert the other end of the IRIS cable into the Power-Data Out port on the Ethernet power injector.

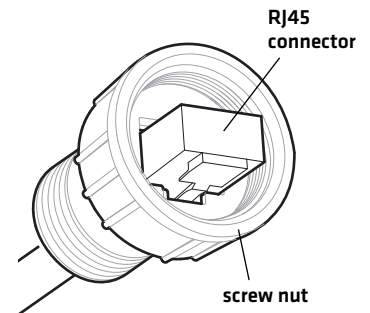
**If you are installing the Ethernet power injector,** see the IRIS402 installation guide and the Ethernet power injector guide to connect the Ethernet power injector to power. Use an additional RJ45 cable to connect the power injector to the router or PC.

**If an Ethernet power injector is not available,** connect the IRIS RJ45 cable connector [without the screw nut] to the Ethernet port on the router or PC. See your IRIS402 installation guide to connect the cable wires to a power source.

**If you are installing more than one camera,** and a router with multiple ports is not available, you can set up one camera at a time.

4. Turn on the computer.

**Inserting the IRIS RJ45 Cable Connector into the Camera Port**



## 2 | Download the IRIS Discovery Tool

Use the IRIS Discovery Tool to assign an IP address to the installed camera[s]. The Discovery Tool can be downloaded from your Humminbird online account or from the FAQ section of our Web site at [humminbird.com](http://humminbird.com).

1. From your PC, go to our Web site at [humminbird.com](http://humminbird.com).
2. Select My Humminbird. Sign in to your Humminbird account.

### OR

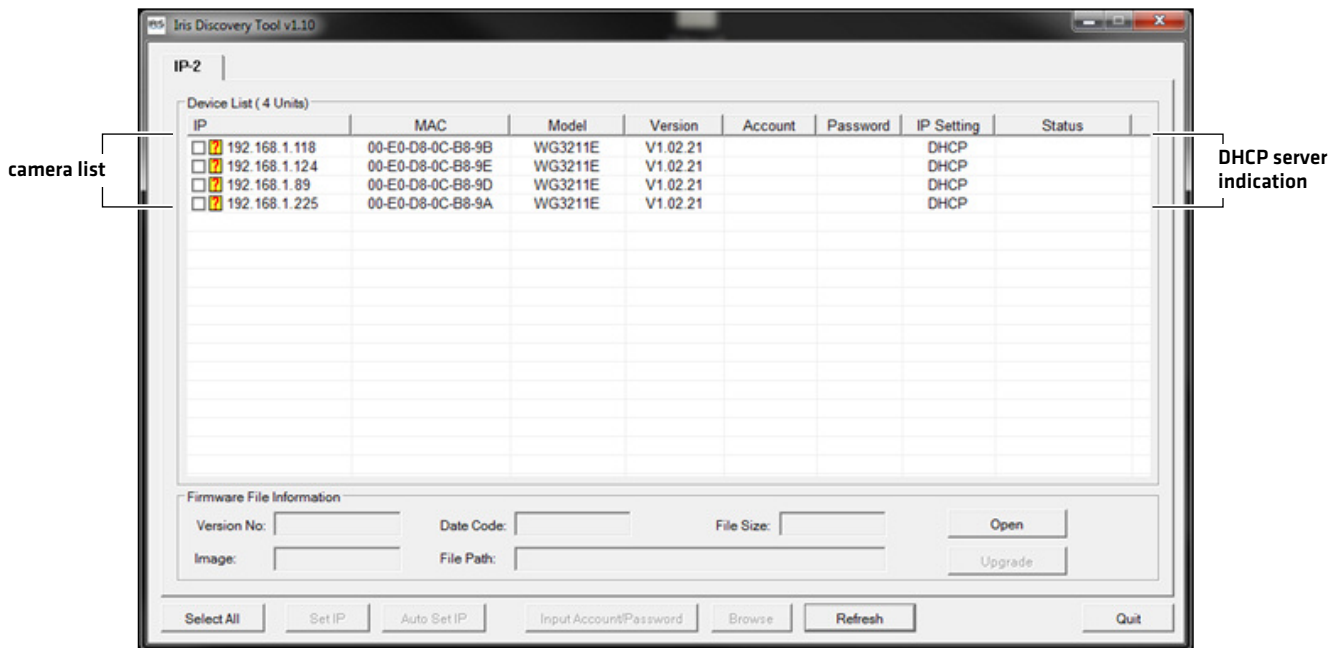
Select Support > Frequently Asked Questions, and search for IRIS Discovery Tool.

3. Select the IRIS Discovery Tool. Follow the on-screen prompts to download the file to your PC desktop.

**3 | Install the IRIS Discovery Tool**

1. Double-click the **IRIS Discovery Tool.exe** file on your PC desktop.
2. Follow the on-screen prompts to install the IRIS Discovery Tool on your PC.
3. Double-click the **IRIS Discovery Tool.exe** file on your PC desktop to open it.
4. When you open the IRIS Discovery Tool, the connected cameras will be listed in the dialog box. **Note the IP address for each camera in the order they appear on the list.** You will use these numbers in the camera configuration instructions.

When you are finished writing the numbers, proceed to the next section. Do NOT close the Iris Discovery Tool.



**Example of noted IP addresses from the above illustration.**

Camera Number	IP Address
Camera 1	192.168.1.118
Camera 2	192.168.1.124
Camera 3	192.168.1.89
Camera 4	192.168.1.225

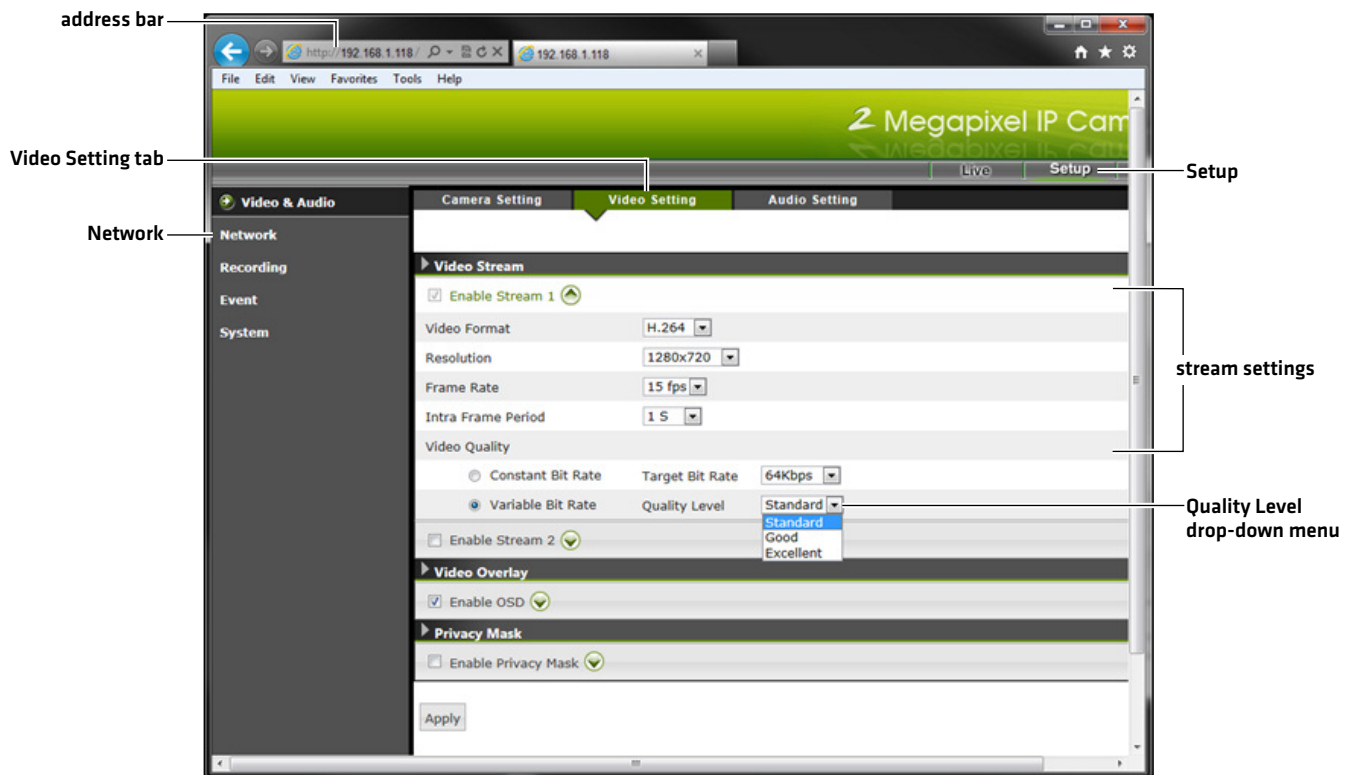


**NOTE:** If there are multiple cameras connected to the PC, you might notice that each IP address starts with the same first set of numbers, and the only difference between each IP address is the set of numbers after the last decimal point. This is correct.

**4 | Configure the Stream Settings**

Use the instructions in this section to configure the stream settings for the selected camera. You will set up each camera individually.

1. Open your Internet Explorer [or other] browser on your PC.
2. In the address bar, enter the IP address you noted for Camera 1 [in the previous section]. Press the Enter key.  
The IRIS configuration tool will open.
3. Click Setup.
4. Click the Video Setting tab.
5. Click the drop-down arrow for Enable Stream 1.

**Configuring the Video Camera for Streaming**

6. Click the drop-down menus to set the following streaming settings:

**Resolution: 1280 x 720**

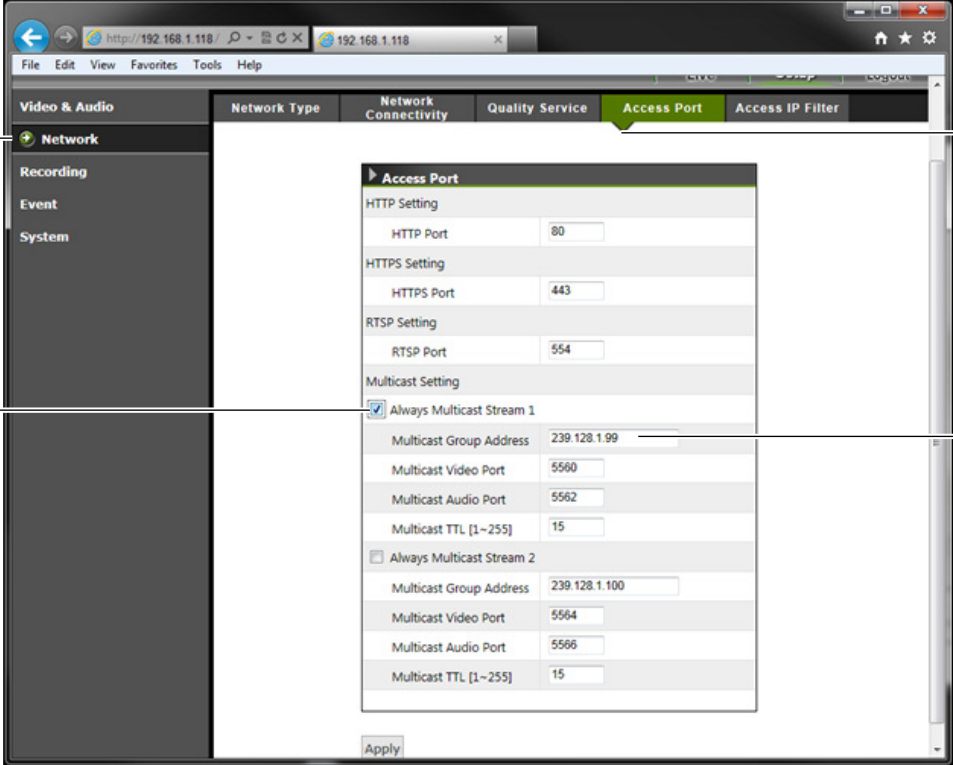
**Frame Rate: 15 fps**

**Quality Level: Standard**

7. Click Apply.
8. Proceed to the next section. Do not close the configuration tool.

**5 | Set the Multicast Group Address**

1. Click Network.
2. Click the Access Port tab.
3. Click the Always Multicast Stream 1 box to add a check mark to it.

**Setting the Multicast Group Address**


The screenshot shows the 'Access Port' configuration page. The 'Always Multicast Stream 1' checkbox is checked. The 'Multicast Group Address' field is highlighted with a callout pointing to a table.

**Click to add a check mark to Always Multicast Stream 1**

**Access Port tab**

**Enter the group address for the selected camera according to the Multicast Group Address table**

4. Select the Multicast Group Address field, and enter the Multicast Group Address for the selected camera as shown in the following table.

Camera Number	Multicast Group Address
Camera 1	239.128.1.99
Camera 2	239.128.1.100
Camera 3	239.128.1.101
Camera 4	239.128.1.102

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5. Click Apply.
6. Click Live.

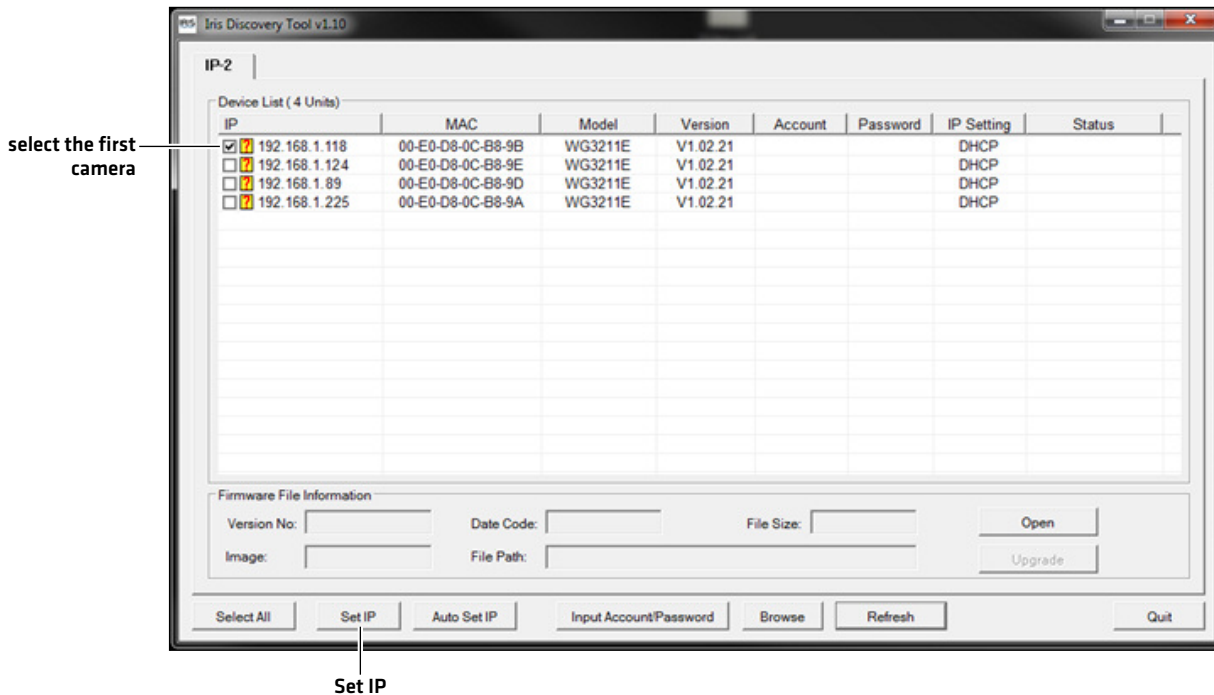
Confirm that live video from the selected camera is displayed in the configuration tool on your PC.

If live video is not displayed, restore defaults [Setup > System > Maintenance], and repeat the instructions in this guide.

7. Repeat the instructions in **Configure the Stream Settings** and **Set the Multicast Group Address** for each camera.

### 6 | Configure the Camera(s) for the Boat

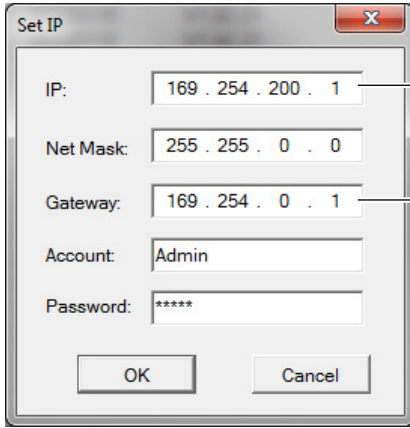
1. Return to the IRIS Discovery Tool on your PC.
2. Click the first camera box to add a check mark to it.
3. Click Set IP.



**IP VIDEO CAMERA Setup Guide**

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4. Select the IP field, and enter the **Boat IP address** for the selected camera as shown in the Boat IP Address table.

**Entering the Boat IP Address and Gateway for Camera 1**


IP Address: enter the Boat IP address for each camera.

The Gateway number is the same for all cameras.

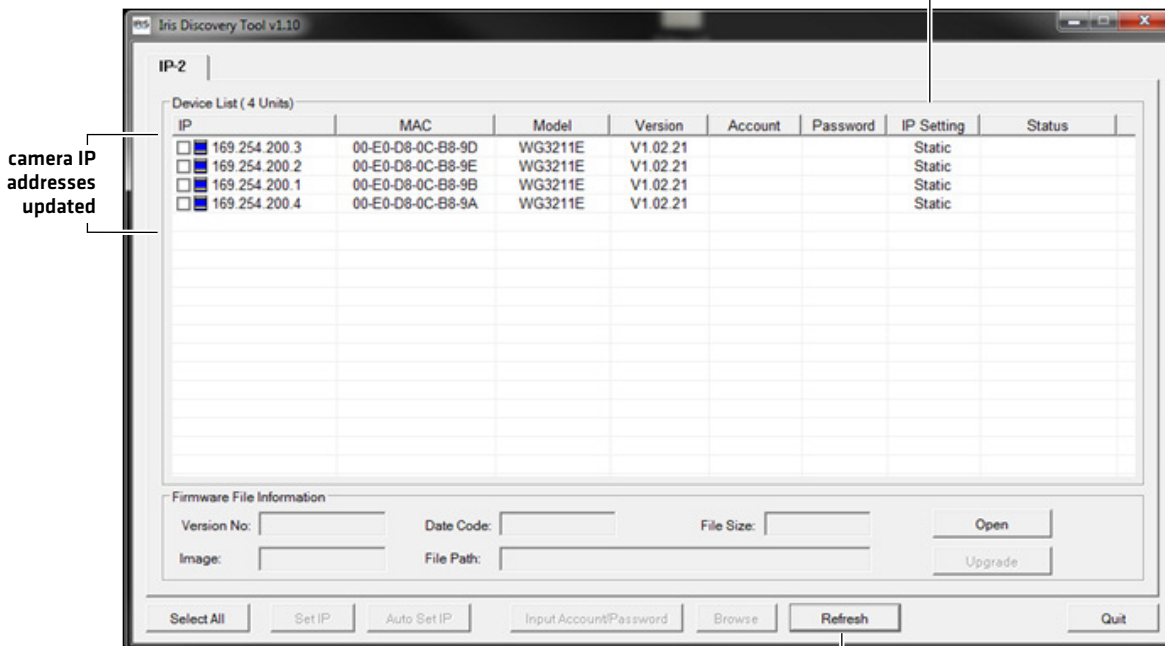
Camera Number	Boat IP Address
Camera 1	169.254.200.1
Camera 2	169.254.200.2
Camera 3	169.254.200.3
Camera 4	169.254.200.4

5. Select the Gateway field, and enter the following number: **169.254.0.1**


**NOTE:** Do NOT change the Net Mask, Account, and Password.

6. Click OK.
7. Repeat steps 2 through 6 for each camera.
8. When you are finished setting up all cameras, click the Refresh button in the dialog box.

Review the camera list. If the cameras were set up correctly, the boat IP addresses will be listed in the IP column, and the IP Setting will be displayed as Static. The live camera feed on your PC will be lost, so it will not be displayed on the screen.

**IP Setting updated to Static**


camera IP addresses updated

Refresh

9. Close your Internet browser and the Discovery Tool. Select OK to Quit.
10. Turn off the computer.
11. Turn off the camera power source. Remove the camera installation so it can be installed on the boat.

## **7 | Install the Camera[s] on your Boat**

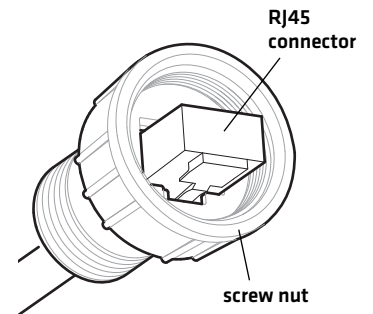
You can connect the camera[s] to the Humminbird control head network using an Ethernet power injector or using the Humminbird Ethernet adapter cable. Refer to the section that applies to the installation you will be using.

Also, review the IRIS402 installation guide for power requirements and installation instructions. If you've purchased an Ethernet power injector separately, review the installation guide for instructions and requirements.

### **Connecting through an Ethernet Power Injector**

1. Turn off the Humminbird control head network and main power switch.
2. Insert the IRIS RJ45 Ethernet cable connector into the Ethernet port on the camera. Hand tighten the screw nut.
3. Insert the other end of the IRIS cable into the Power-Data Out port on the Ethernet power injector.
4. Insert the AS EC CHART RJ45 Connector into the Lan-In port on the Ethernet power injector.
5. Connect the other end of the AS EC CHART cable to the Ethernet port on the control head or the Ethernet Switch. Hand tighten the screw nut.
6. See the IRIS402 installation guide to connect power and finish the installation.
7. Repeat steps 2 through 6 to connect additional cameras.

**Inserting the IRIS RJ45 Cable Connector into the Camera Port**



### **Connecting through the Ethernet Adapter Cable**

1. Turn off the Humminbird control head network and main power switch.
2. Insert the IRIS RJ45 Ethernet cable connector into the Ethernet port on the camera. Hand tighten the screw nut.
3. Insert the other end of the IRIS cable into the Ethernet port on the adapter cable.
4. Connect the other end of the adapter cable to the Ethernet port on the control head or the Ethernet Switch. Hand tighten the screw nut.
5. See the IRIS402 installation guide to connect the IRIS cable wires to power and finish the installation.
6. Repeat steps 2 through 5 to connect additional cameras.



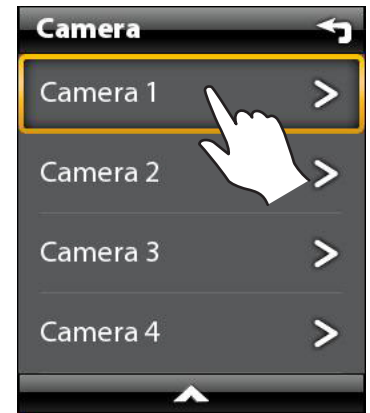
**8 | Display the Video Camera Stream on the Control Head**

1. Power on the Humminbird control head network.
2. When the first view is displayed on the control head screen, press the HOME key.
3. Select Views.
4. Select Video.
5. Select a full-screen Video View or a multi-pane view. The streaming video from Camera 1 will be displayed on-screen.

**If you have multiple video cameras installed**, press the MENU key. Select Camera. Select the next camera in the menu [Camera 1, 2, 3, or 4] and confirm each camera is displayed.

**If you have multiple control heads installed**, repeat the steps in this section to check the Video View on each control head.

If a camera is not detected on the network, restart the control head network and check the Video View again. Also, see **Review Camera Configuration on the Control Head** for additional information. If the camera still doesn't display, check all hardware connections and review the settings in the IRIS Discovery Tool.

**Selecting a Camera from the X-Press™ Menu****9 | Review Camera Configuration on the Control Head [optional]**

The instructions in this section are optional and allow you to change which video camera is assigned as the Camera 1, Camera 2, Camera 3, or Camera 4 source in the control head. You can also use these instructions to review the camera configuration and IP address.

1. Press the HOME key.
2. Select Settings > Network.
3. Under Source Settings, select Data Sources.
4. Under Video, select a Camera.

**When Auto-Configure is turned on**, the control head automatically assigns a video camera to display as Camera 1, 2, 3, or 4.

**To change the camera source assignment**, turn off Auto-Configure. Select a camera from the list.

**Camera 1 Source Auto-Configured (ION Control Head)**

Camera (1) is selected



The screenshot shows the 'Camera (1)' configuration screen. A yellow box highlights the 'Select the video camera source for Camera (1)' prompt. The 'Auto-Configure' toggle is turned on. The 'My Vessel' section shows IP addresses for various components, with a callout indicating that the .1 IP address is the Camera 1 Source.

Category	IP Address	Selected
Auto-Configure		<input checked="" type="checkbox"/>
Navigation	169.254.200.2	<input type="checkbox"/>
Radar	169.254.200.4	<input type="checkbox"/>
General	169.254.200.3	<input type="checkbox"/>
My Vessel	169.254.200.1	<input type="checkbox"/>

When Auto-Configure is turned on, the control head automatically assigns a camera to display as Camera 1, 2, 3, 4.

.1 IP address = Camera 1 Source

**CONTACT HUMMINBIRD**

Contact Humminbird Customer Service in any of the following ways:

**Web site** [humminbird.com](http://humminbird.com)**E-mail** [service@humminbird.com](mailto:service@humminbird.com)**Telephone** 1-800-633-1468**Direct Shipping** Humminbird  
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