

**OVERVIEW**

Use this guide to connect an Airmar CHIRP transducer to an APEX™, SOLIX®, or HELIX® CHIRP control head. Please read this guide before starting the installation so you may understand the connection requirements.


**Required Supplies for Installation with an Airmar junction box (not included, APEX and SOLIX G3 only):** An Airmar junction box [recommended, APEX and SOLIX G3 only] and Airmar transducer, a small flathead screwdriver, cable cutters, and wire strippers.

**Required Supplies for Installation with bare wires (not included):** An Airmar transducer with bare wires [required for HELIX, not recommended for APEX and SOLIX G3], cable cutter, wire stripper, and a Humminbird® transducer extension cable for your control head model as follows.

Control Head	Transducer Extension Cable
APEX and SOLIX	EC M3 14W10 OR EC M3 14W30
HELIX CHIRP	EC M10

**INSTALLATION WITH AN AIRMAR JUNCTION BOX (APEX AND SOLIX ONLY)**

For APEX and SOLIX control heads, Humminbird recommends the use of an Airmar junction box [part number ACC-JB-HB-1] for a more reliable, water-tight and corrosion resistant connection. Use the instructions included with your junction box and the table below to connect your Airmar CHIRP transducer to your APEX or SOLIX control head. For bare wire installation, proceed to **Installation with Bare Wires**.

 **WARNING!** Turn off power for all related equipment before you start the installation.


**Transducer Connections to Junction Box Terminals**

Transducer Cable	Terminal Position	Function	Sonar Cable
Blue	1	M/HF Depth +	Blue
Black	2	M/HF Depth -	Black
Inner Bare	3	M/HF Drain/Shield	Bare
N/C	4		N/C
White	5	Temp	White
Brown	6	Ground (XIDT/Temp)	Brown
Orange	7	XIDT	Orange
Inner Bare	8	Shield (XIDT/Temp)	Bare
Outer Bare	9	Overall Shield	Bare
Inner Bare	10	LF Drain/Shield	Bare
Blue/White	11	LF Depth +	Blue
Black/White	12	LF Depth -	Black

**INSTALLATION WITH BARE WIRES****(NOT RECOMMENDED FOR APEX AND SOLIX)**

Use the following instructions to connect your Airmar CHIRP transducer with bare wires to your Humminbird control head. Bare wire connection is required for HELIX control heads and is optional [but not recommended] for APEX and SOLIX control heads.

**1 | Connect the Transducer to the Extension Cable**

**⚠ WARNING!** Turn off power for all related equipment before you start the installation.

1. Turn off the power for the Humminbird control head and all connected equipment.
2. Review your Airmar CHIRP transducer installation guide for installation instructions.
3. Cut the Humminbird transducer extension cable in half, towards the female-socketed connector side. See the illustration Cutting the Humminbird Transducer Extension Cable in Half.

**⚠ WARNING!** Do NOT cut the cable close to the connector.

4. Remove the cable sleeve so the shielded wires are exposed.
5. Strip back the shield on these wires just enough to expose the wires [approximately less than 1/2 inch], preserving as much of the individual shields as possible.

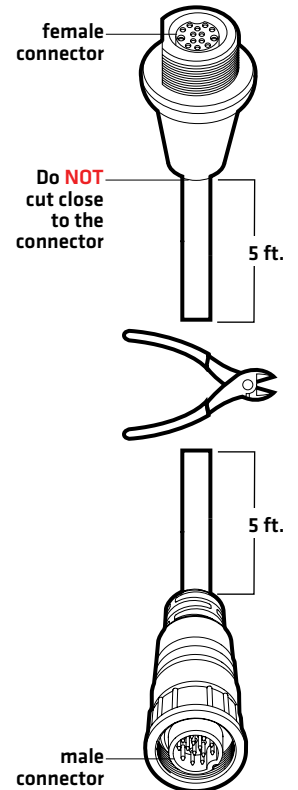
**Do not remove the shield from any unused wires.**

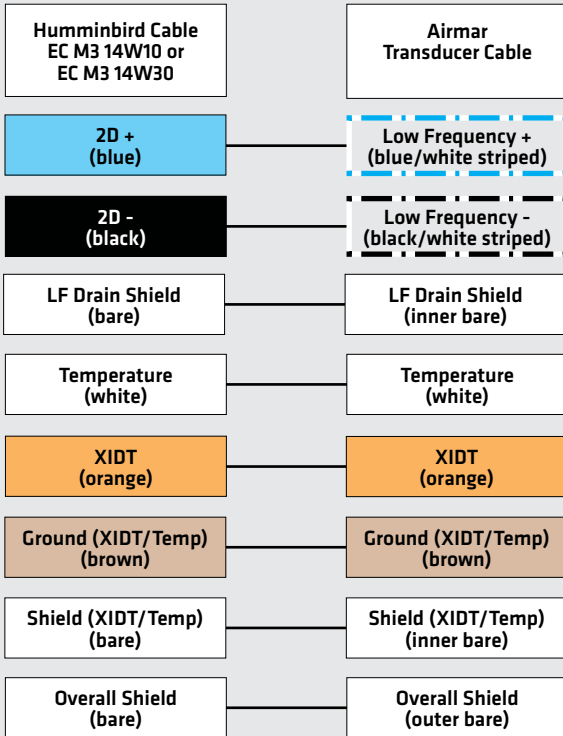
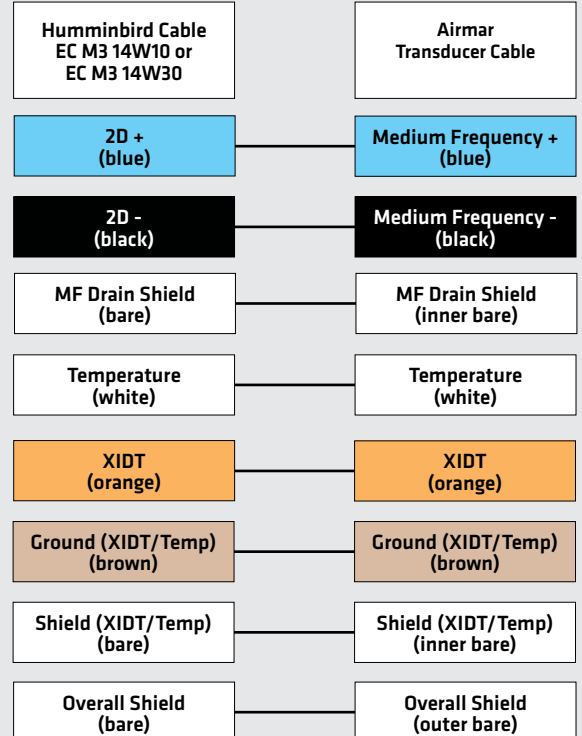
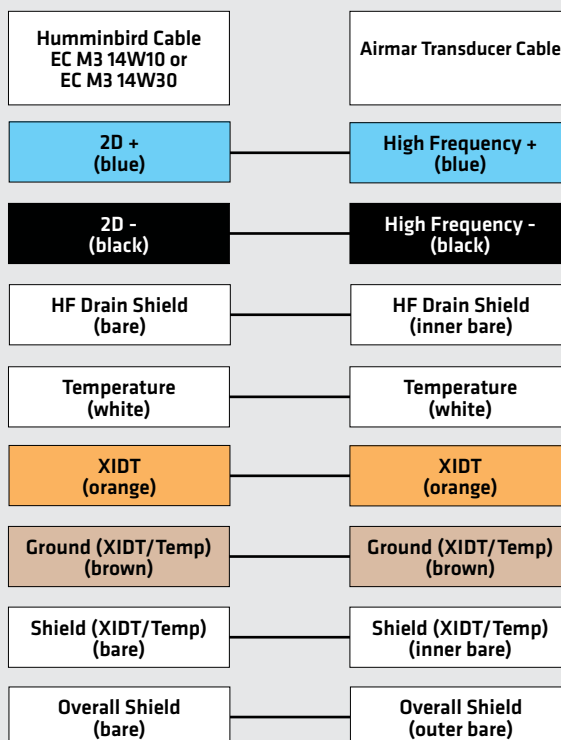
6. Determine if you will install the low, medium, or high frequency wires on the Airmar CHIRP transducer cable.

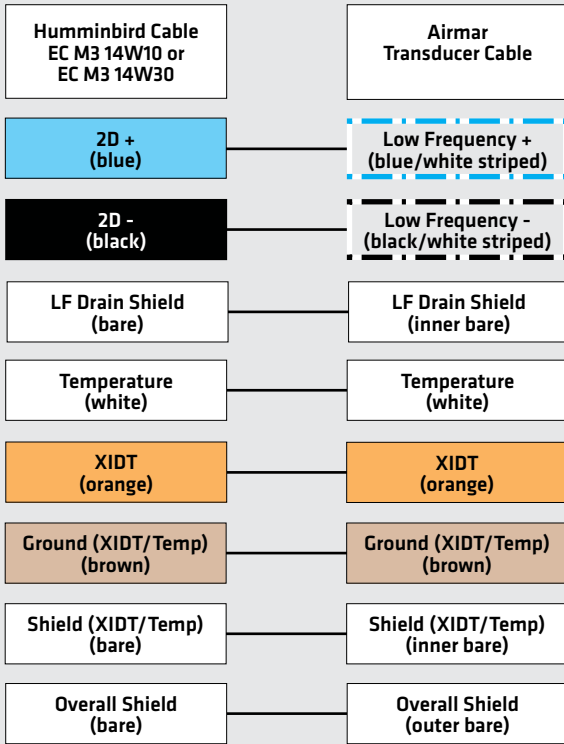
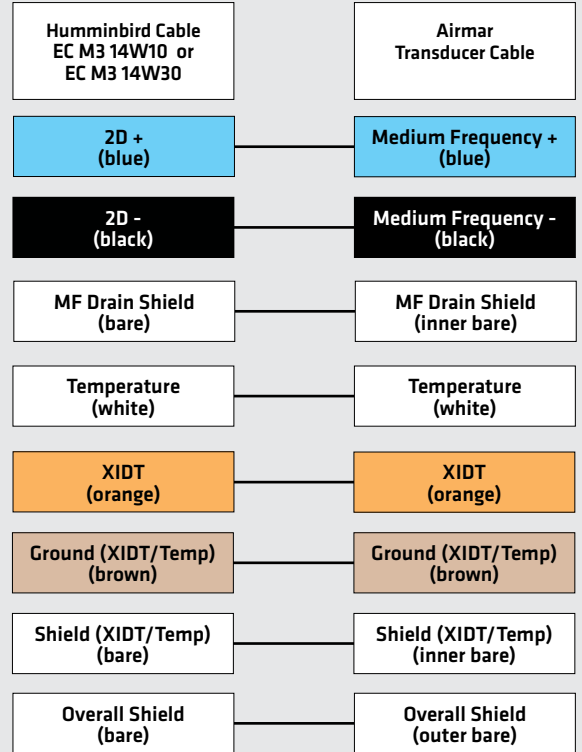
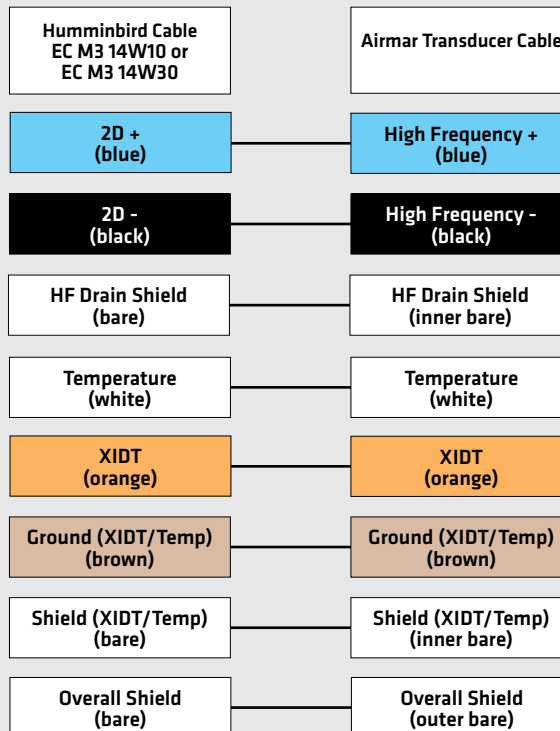
**Details:** You can connect the Airmar transducer's low, medium, or high frequency wires to the Humminbird transducer extension cable. You cannot wire more than one frequency to the control head. However, if you have an APEX or SOLIX control head, you may wire more than one frequency using the Humminbird black box sonar module [see [humminbird.com](http://humminbird.com) for details and purchasing information].

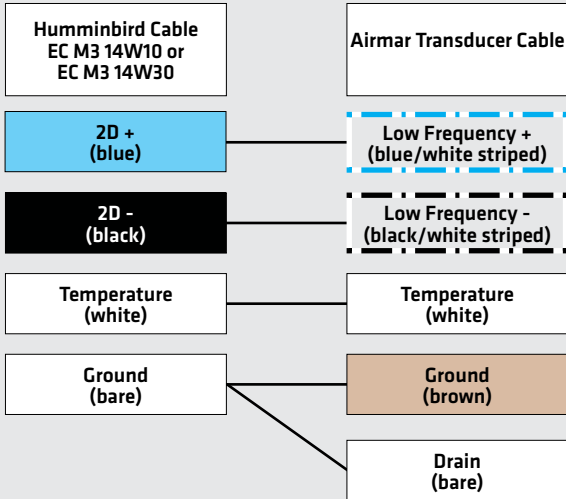
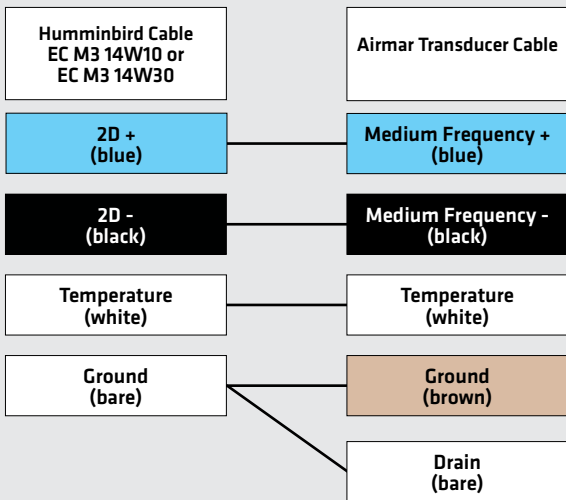
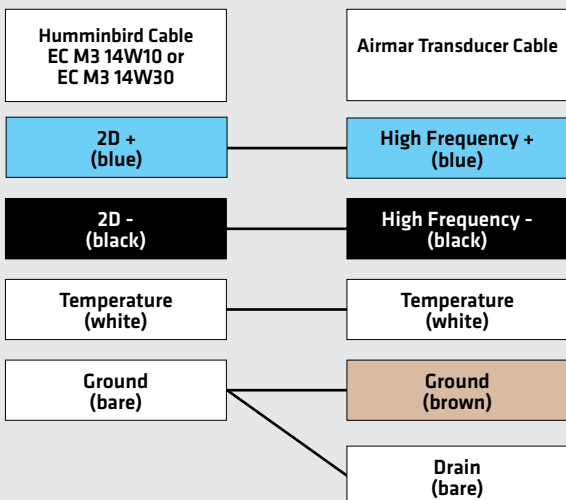
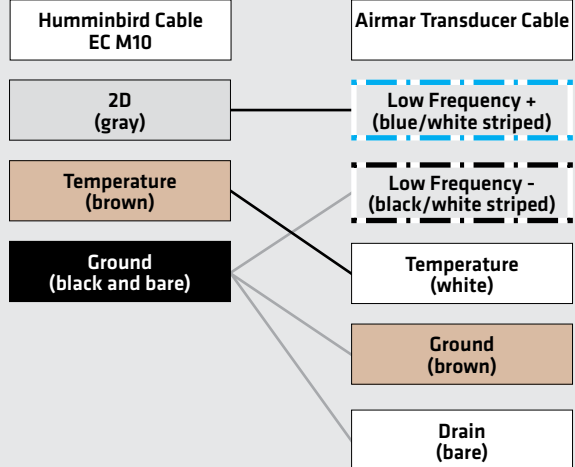
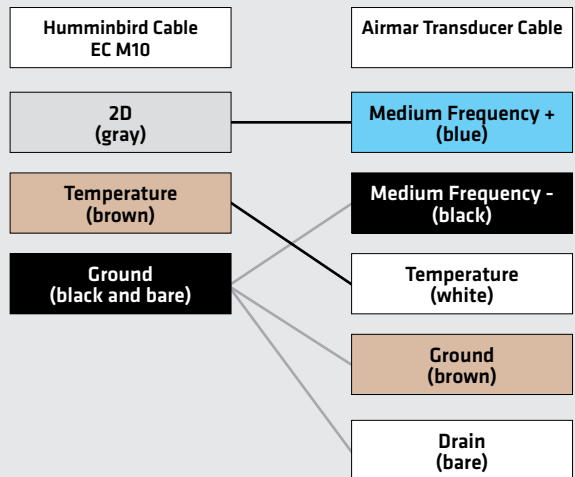
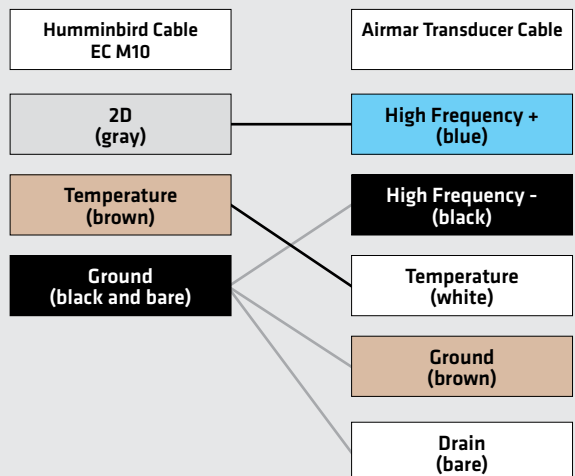
**Example:** If the Airmar transducer has 200 kHz and 50 kHz frequencies, 200 kHz will be the high frequency, and 50 kHz will be the low frequency. You can select 200 kHz or 50 kHz. There will be a medium frequency only if there are three frequencies available on the CHIRP transducer, and the connection is the same as the wiring required for high frequency wires.

7. On the next page, select the table for your Humminbird model [**APEX to Airmar Connection**, **SOLIX G3 to Airmar Connection**, **SOLIX G1 and G2 to Airmar Connection**, or **HELIX CHIRP to Airmar Connection**] and select the low, medium, or high frequency wire connection chart in that column.
8. Use the installation guide included with the Airmar CHIRP transducer to confirm the wires you will be using. Confirm with the Airmar manual that they match the designations [high frequency +, high frequency -, etc.] in the wiring chart you have selected in step 7.
9. Connect the Humminbird transducer extension cable to the Airmar CHIRP transducer cable using the wiring chart you selected in step 7.

**Cutting the Humminbird Transducer Extension Cable in Half**

**APEX to Airmar Connection**
**Grey Port**
**Low Frequency Wires**

**Medium Frequency Wires**

**Yellow Port**
**High Frequency Wires**


**SOLIX G3 to Airmar Connection**
**Low Frequency Wires**

**Medium Frequency Wires**

**High Frequency Wires**


**SOLIX G1 and G2 to Airmar Connection**
**Low Frequency Wires**

**Medium Frequency Wires**

**High Frequency Wires**

**HELIX CHIRP to Airmar Connection**
**Low Frequency Wires**

**Medium Frequency Wires**

**High Frequency Wires**


## 2 | Finish the Connection

1. Replace the wire shields where possible.
2. Tape or apply heat-shrink insulation to each connection to prevent shorting the wiring.



**NOTE:** To protect the wire connections, use a junction or break-out box [separate purchase required].

3. Fold back [or cut off] the extra wires and apply heat shrink insulation.



**NOTE:** Do NOT connect the orange wire on the Airmar CHIRP transducer cable.

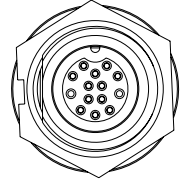
## 3 | Route the Cable to the Control Head

1. Route the Humminbird transducer extension cable to the Humminbird control head.
2. Connect the cable connector to the Transducer port [HELIX CHIRP], Sonar-Temp port [SOLIX], or grey or yellow port [APEX].

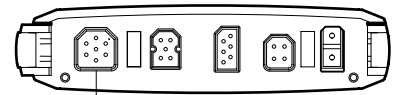


**NOTE:** See your control head installation guide for port connection details.

### SOLIX Sonar-Temp Port and APEX Grey/Yellow Ports



### HELIX 8, 9, 10, 12, 15 CHIRP [Cable Tray]



transducer