

# Five Pin to Dual Three Pin Breakout Cable Assembly Instructions

This is the breakout cable for Endora, a dual output microphone. There is a 5-Pin Female XLR on one end and two 3-Pin Male XLR's on the other. They share a common ground connection. The 5-Pin plugs into Endora, the 3-Pin XLR's into the recorder or mic preamp. The White XLR for front and Red XLR for rear.

We are building this:

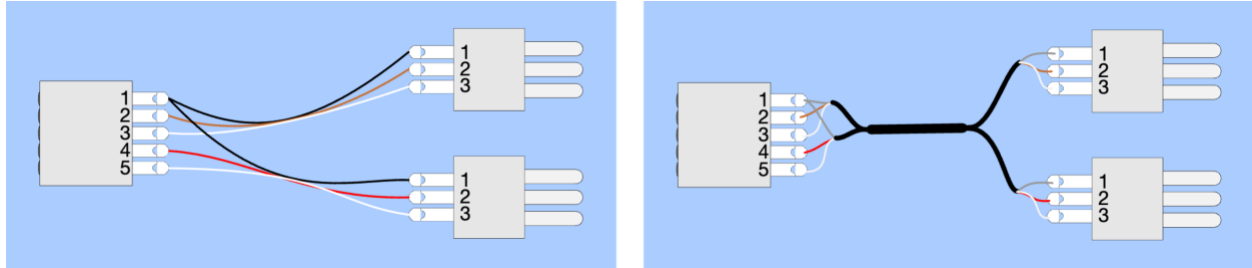


Figure 1 5-Pin to Dual 3-Pin. Straight Connections, and what it looks like with the two-channel cable.

Materials needed:

Part	Quantity
5 Pin Female cable mount XLR	1
3 Pin Male cable mount XLR	2
2 channel Mic Cable	10ft
White XLR boot	1
Red XLR boot	1
1/8" Heat Shrink	2.5ft*
3/8" Heat Shrink	3"

\*Based on XLR spacing to recorder or audio interface

Tools:

1. Soldering Iron
2. Electronic Solder
3. Wire cutter
4. Wire Stripper
5. Heat Shrink or Hot Air Gun
6. Single edge razor blade

**Terminate the 5-Pin end of the cable:**

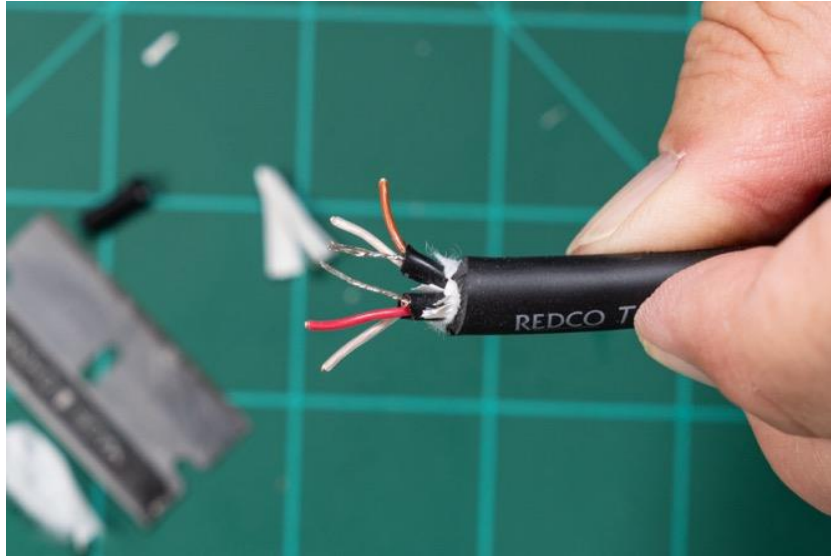
1. Open the 5-Pin XLR packet and find the cable sleeve.



2. Slide this over one end of the mic cable. Due to the cable diameter, this is a bit difficult and takes some wiggling.
3. Trim back the outer sleeve to expose the two inner cables. They will have some white structural paper and nylon stranding that will have to be cut away.

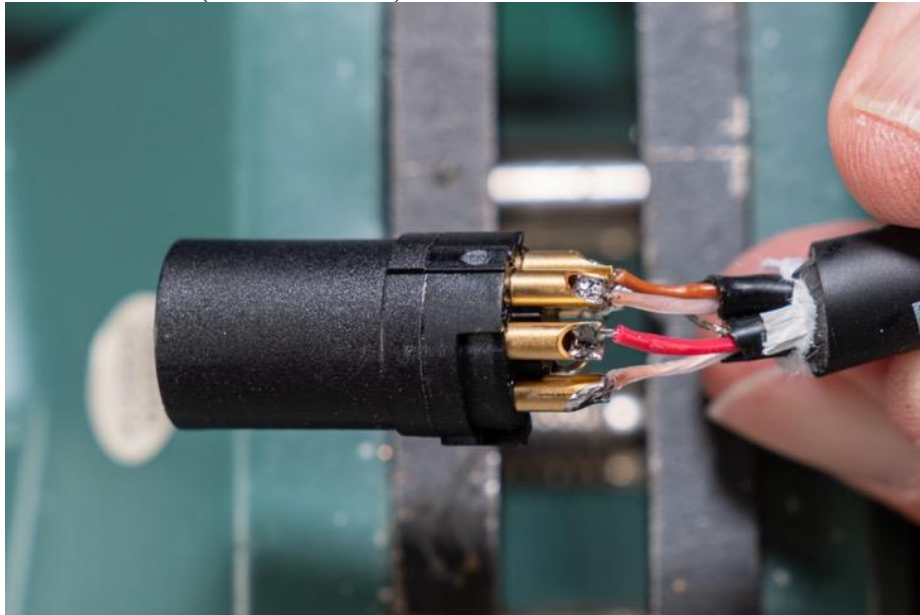


4. Cut the structural material away, cut back the inner shield and prep the two internal cables so they look like this:



**Note: Wire “1” has White and Brown wires, Wire “2” has White and Red**

5. Twist the two ground wires together and tin the end.
6. Strip about 1/8” from the insulated wires and tin.
7. Put the XLR internal connector in a hobby vice and tin all five solder cups.
8. Solder the wires to the connector:
  - a. Pin-1 Ground
  - b. Pin-2 Brown
  - c. Pin-3 White (from Wire “1”)
  - d. Pin-4 Red
  - e. Pin-5 White (from Wire “2”)



9. Put the cable clamp on the wire in the and then insert into the XLR shell.



10. Slide the XLR sleeve up and screw it on to the XLR shell.

**The 3 Pin Breakout side of the cable:**

1. Slide the 3" long 1/2" Heat Shrink tubing over the cable.

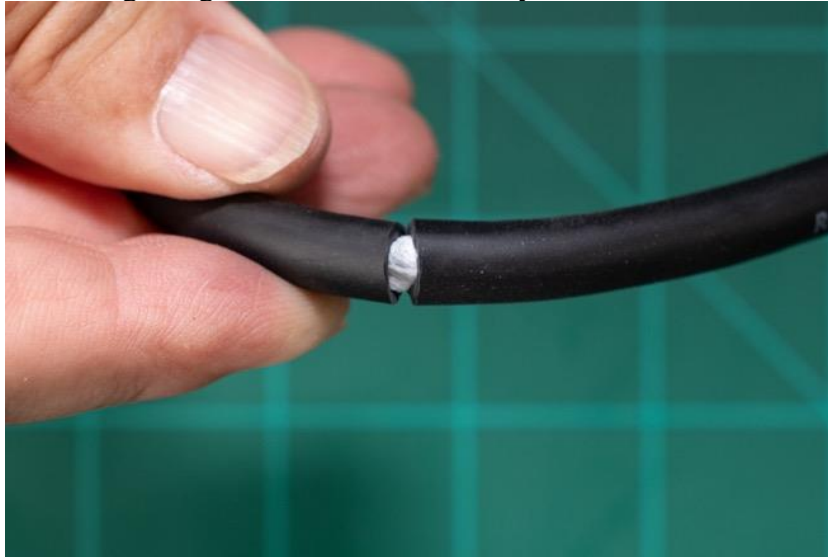


2. Cut the 1/8" heat shrink tubing in half.

3. Using the 1/8" heat shrink tubing as a guide, measure back about 15" (the length of the heat shrink tubing) and strip the outer sleeving from the cable:

**Note: The 15" is based on being able to get to opposite sides of a Zoom F6, or similar recorder.**

- a. Use a single edge razor blade to carefully cut the outer sleeve.



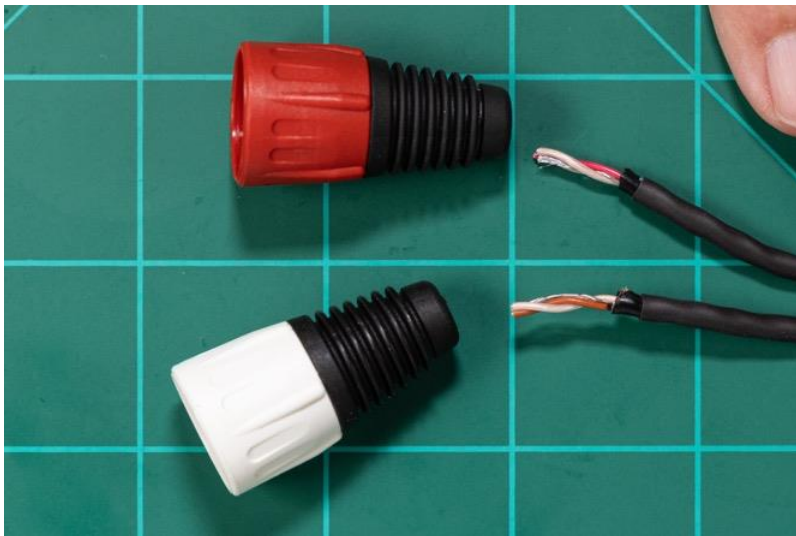
- b. Partially slice lengthwise the outer sleeve and pull away.
  - c. Cutoff the white internal strengthening material leaving just Wire-1 and Wire-2.
  - d. Slide the 1/8" heat shrink tubing over each internal wire.
  - e. Using the hot air gun, shrink the tubing to the wires.
4. Slide the 1/2" heat shrink tubing over the cable.



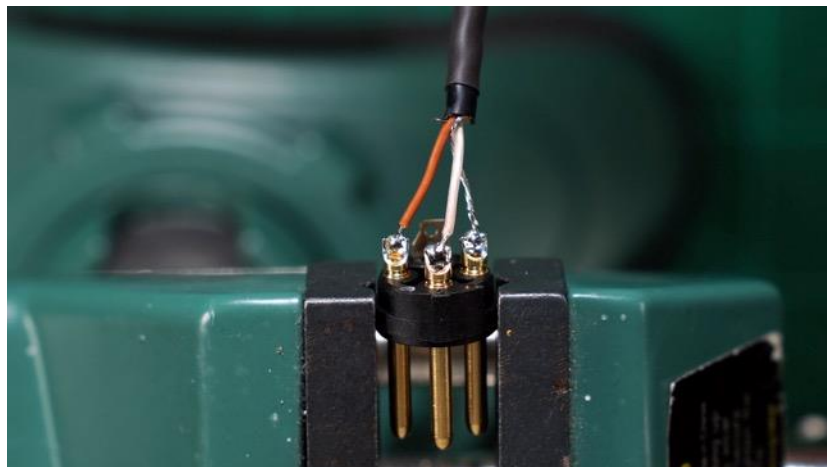
5. Shrink the 1/2" Tubing, centering it on the joint area.



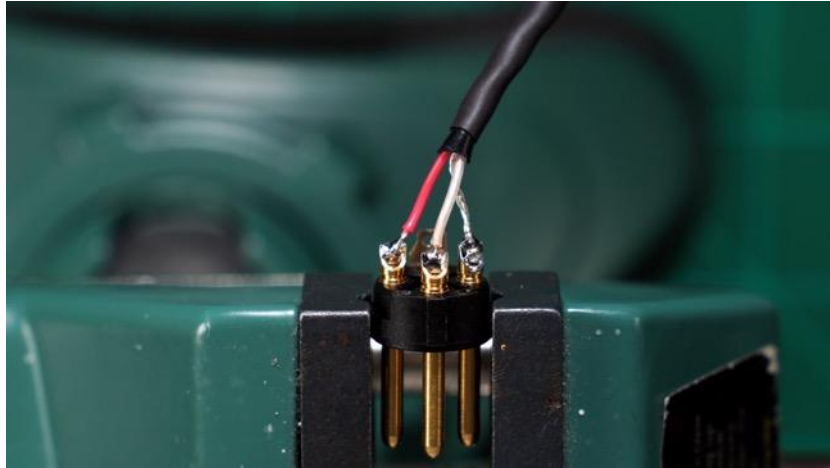
6. Connect the 3-Pin XLR connectors.
  - a. Strip back enough of the heat shrink and plastic sleeving to expose the ground wire, the White wire for each and Brown for Wire-1 and Red for Wire-2.
  - b. Slide the White XLR boot onto Wire-1 and the Red XLR boot on Wire-2.



- c. Prep and solder Wire-1: Shield to Pin-1, Brown to Pin-2 and White to Pin-3



- a. Prep and solder Wire-2: Shield to Pin-1, Red to Pin-2 and White to Pin-3



- b. Slide the XLR Clamp over the wire and position as shown.



- c. Slide the external XLR shell over the whole assembly.



- d. When fully inserted it will look like this:



- e. Slide the XLR boot already on the wire.



- f. Perform the same step for Wire-2 and the Red XLR boot.

Test the cable with Endora. You need to use Phantom Power on both connections. If you want to use Endora as a single output Cardioid microphone, you must use the front and White XLR cable as this is the one that supplied power to the internal polarizing bias voltage circuit.