

Title: How to Solder Your Own XLR Microphone Cable

- Today I'm going to show you how to solder your own XLR microphone cable.

Empty bag, show pieces

The main part of the connector has the 3 metal pins that will carry the signal. In addition, there are three more pieces that cover the bare wire and keep everything in place.

Closeup of Connection. Subtitle: 1-Ground, 2-Hot, 3-Cold

- Three pieces of wire will need to be soldered to the connector in the following order: Ground, hot, and cold. The connector should be numbered, though often the numbers are very small.

Pick Up Cable

- I'm using a cable that already has the connector on the other end.

Putting Sheath on Cable. Caption: DON'T FORGET TO DO THIS!

- First you have to put the sheath on the cable. You can tell which piece is the sheath by the rubber tip. If you forget to do this before you solder, you'll have to cut off the connector and start again

Use Wire Stripper on Outer Casing

- The next step is to use a wire stripper to remove the outer casing of the cable. This will expose the hot and cold wires, as well as the ground wire which is woven around the others. In order to prep the ground wire for soldering, it has to be twisted together. There's too much ground wire to solder onto the connector, so I'm twisting it in two pieces, one of which I'll trim off later.

Use wire stripper on hot and cold wires

- Next, with a wire stripper I remove about a quarter of an inch of the sheating of the hot and cold wires. The hot wire is generally a bold color, and the cold wire is a more subdued color. In this case, hot is dark blue, and cold is clear. Now twist the exposed wire. This preps the wires for tinning.

Put connector in Vise

- I like to secure the cable connector in a vise to keep it in place for soldering.

Trim extra ground wire

- Here I'm trimming the twisted portion of ground wire I've decided not to use. This leaves three twisted wires that are ready to go.

Clamp the Wire

- I'm using a clamp to keep the cable and wires in place during soldering.

Tinning the Wires

- Now I'm tinning the wires. This means melting a small amount of solder into each wire using a soldering iron. This will make the final joint stronger.

Putting solder on connector pins

- I also melt some solder onto each of the three connectors. Melting the solder completely until it joins with the metal pin. This is one way to avoid a so called “cold” solder joint, which is very brittle.

Soldering Connections Together

- Now I simply connect the tinned wires and the pins together with the soldering iron. No extra solder is needed at this point. The solder on both pieces simply melts together. I then hold the wire in place until the solder cools and hardens, which happens very quickly.

Putting Plastic Sheath In Place

- Another sheath, this one plastic, is now slipped onto the cable. It's built such that when the connector is screwed together, it'll clamp down on the cable and keep the joints from being pulled loose.

Add final piece

- (no voiceover)

Connector in Vise

- After adding the final cover, I put the connector back in the vise so I can hold the cable while screwing everything together. That way I don't twist the cable and potentially break the connections I've just made.

Plug the cable into the cable tester

- If you have a cable tester, it's a great way to test to make sure that you've soldered everything together properly, and nothing is broken. Now it's time to plug in a microphone and make some music.
- This has been "How to Solder your own XLR Microphone Cable"