How to Repair a Frayed Headphone Cable

In this guide you will learn how to repair a frayed headphone cable.

Written By: Tyler
INTRODUCTION

Tired of replacing old headphone sets? Here’s a step-by-step guide on repairing frayed headphone cables in an environmentally efficient and affordable way. This guide will require soldering skills.

TOOLS:
- Soldering Iron (1)
- Solder (1)
- Glue Gun (1)
- Wire stripper/crimping tool (1)

PARTS:
- replacement headphone plug (1)
Step 1 — How to Repair a Frayed Headphone Cable

- Cut above the frayed portion of the cable using wire cutters.
- Using the wire cutters, strip away approximately one inch of wire coating.

⚠️ Use caution to avoid cutting too far into the wire.
Step 2

- After stripping the wire, four wires should be exposed. The wires should be three different colors.
  - **Red**: Right channel
  - **Gold/copper**: Ground
  - **Blue/green**: Left channel
- Twist the two ground wires together.
Step 3

- Unscrew the plug housing.
- Thread the wire through the plug housing.

Step 4

- Remove the enamel from the red and blue wires with a wire stripper.
Step 5

- With a soldering iron, apply a small amount of solder to the end of each wire.

  This is especially important for the twisted ground wires; the solder should hold them together.

Step 6

- Thread the wires through each hole and wrap them back over.

  See the third picture for a diagram of where each wire goes.

- Next, twist each wire with itself to secure it to the lead. This can be seen in the second picture.
Step 7

- Solder over each lead's hole, connecting the wire to the lead.  
  Your solder joints should completely cover the hole and surround the wire.

- After each wire is connected, use a drop of hot glue to secure the wires and prevent them from touching each other.

Step 8

- Screw the housing back onto the jack and test your work.

- If the sound turns on and off this is a connection error. To fix it, look at your solder joints and make sure the wires are fully connected to the leads. If not, apply more solder to the joints, covering the wire.