



MacBook Pro Audio Stuck on Digital Out

Macbook stuck on digital optical out with red light coming out of headphone port. Internal speakers will not work.

Written By: Krishan Patel



INTRODUCTION

For anyone who has a Macbook / Pro with the red light stuck coming out of the headphone port and no sound!

Mac in images was an Early 2015 13" Macbook pro but this guide may help other model owners.

On investigating the issue on my mac I discovered the issue was due to a poorly soldered pin on the headphone jack whose solder joint was already pretty poor and had become disconnected over time. This meant that more often than not, it was triggering the optical out red light and preventing sound from my internal speakers.

This guide is for anyone for who has tried inserting something into their headphone port but this is not working or not fixing the audio consistently. As such this guide is for people who have ruled out debris in the headphone jack or a faulty sensor down the jack hole.

- **Not recommended if your Mac is in warranty.**
- **Requires minor soldering.**

I do not cover removal of the bottom case of a Macbook or soldering technique in this guide.

Some part of this guide also require the Macbook to be running for diagnosing the issue. Please ensure you are comfortable with careful handling of a powered on laptop with open case.



TOOLS:

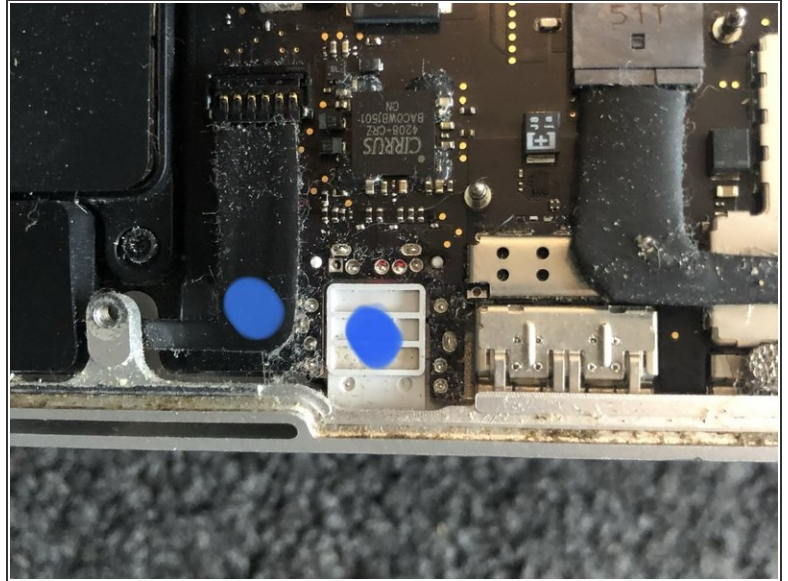
- [Soldering Iron](#) (1)
 - [Solder](#) (1)
 - [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
 - [Paper Clip](#) (1)
-

Step 1 — MacBook Pro Audio Stuck on Digital Out



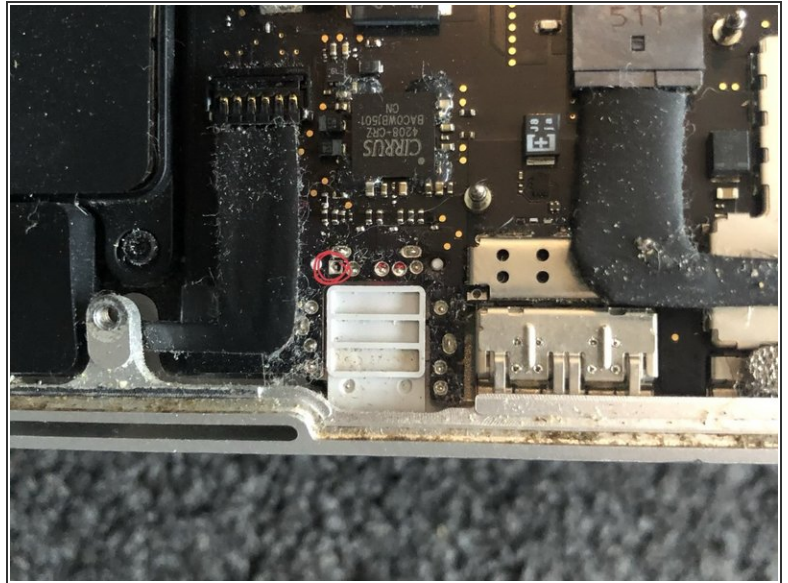
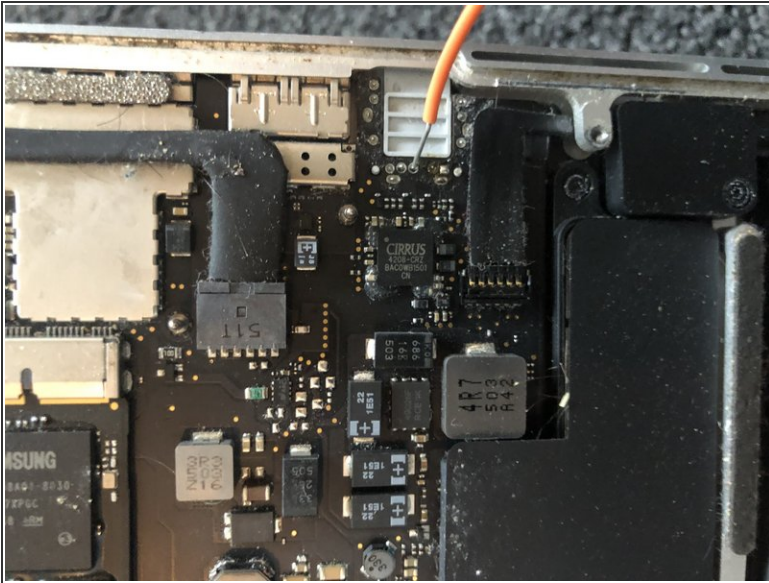
- Start with your laptop off with the case & hinge open
- ⚠ Turn on the laptop. After this point be very careful not to touch the board especially with anything conductive.
- Once your Mac has booted, carefully navigate the OS to play a long audio track that will keep playing for the remainder of this guide.
- If you experience the issue this guide is intended for, no sound will play but a red light will turn on in the headphone port.
- ⓘ This silent audio will be used to find the source of the problem later on.

Step 2 — See if your issue might be caused by a poor contact



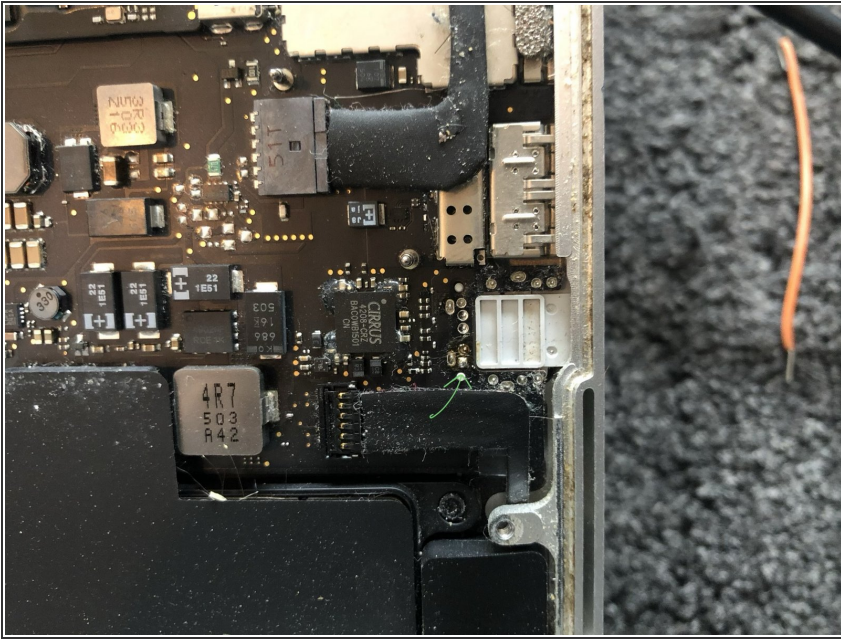
- The headphone jack is shown with a red ring.
- ⚠ Wear a grounding band or at least ground yourself before proceeding.
- Apply gentle pressure to the 2 areas marked in blue with your finger.
- ⓘ This pressure slightly flexes the area and may cause poorly soldered pins to re contact.
- If the sound returns and the red light turns off the issue is likely caused by a poor solder connection on the board. If not this fix may not work for you.

Step 3 — Identify specific pins with a bad connection



- Using a piece of wire or a pin or a small paper clip, you can test each pin. You are trying to touch each pin to its surrounding solder connection.
 - ⚠ Be careful not to bridge any pins to each other.
 - Pause on each pin and see if the sound starts playing when you probe each one.
 - 📘 You may need to probe more than one pin at the same time. Look for pins that have a visibly poor solder joint.
 - Identify one or more badly soldered pins.
- ⚠ Turn off your machine before proceeding.

Step 4 — Re-solder the poor contact(s)



- Reflow and add some fresh solder to the bad pin with a fine tipped soldering iron.
- ⓘ Do not over heat the area but make sure the original solder has started to reflow.
- Here you can see my bad pin with a new fillet of solder.
- Screw the case back on your mac!

With any luck you should now have reliable sound via your speakers and headphone jack.