



Tascam DR-40 Teardown

Teardown/Disassembly of the Tascam DR-40 released back in 2012.

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INTRODUCTION

Teardown/Disassembly of the Tascam DR-40 released back in 2012.

Side Note: Ignore the watermark on the images. I forgot to disable it when I exported the photos from Lightroom.

TOOLS:

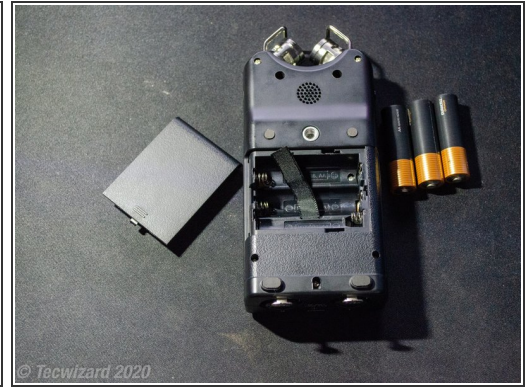
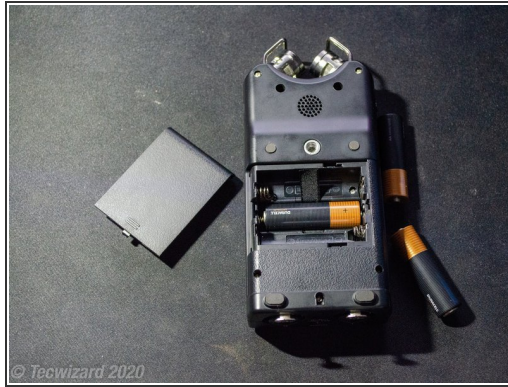
- [Phillips #1 Screwdriver](#) (1)
 - [Phillips #0 Screwdriver](#) (1)
 - [Anti-Static Wrist Strap](#) (1)
 - [Flathead 3/32" or 2.5 mm Screwdriver](#) (1)
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Step 1 — Preperation



- Ensure you have a clean, static-free working environment. Some parts in the Tascam DR-40 are sensitive and could be easily damaged.
- ⓘ If you don't have a static-discharge strap, periodically touch a metallic object to discharge any static electricity, preferably an object that is grounded. A metal PC case will most likely do.

Step 2 — Remove SD Card and Batteries



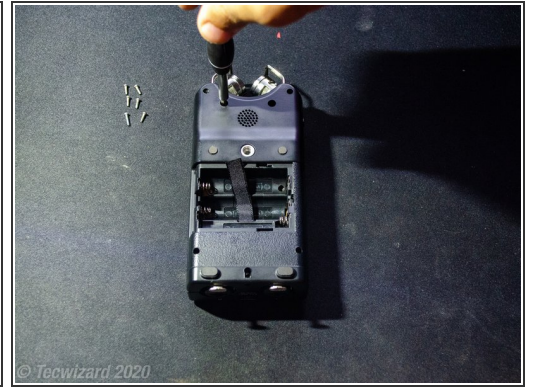
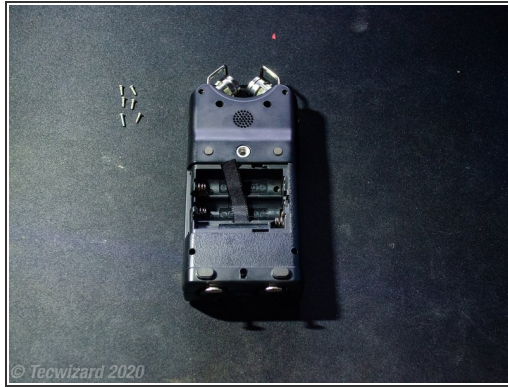
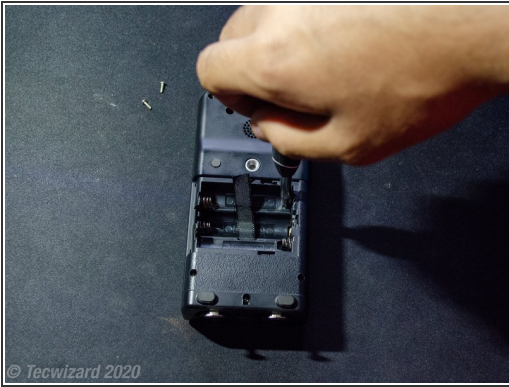
- Open the rubber flap on the right side of the device and push the SD Card in until it clicks and pops out, allowing you to remove it.
 - ❗ The SD Card will prevent the rear housing from lifting up if left in the device.
- Open the back cover and remove the batteries from the device.
 - ❗ Use the strap to remove the last battery in the middle.

Step 3 — Identifying the Screws



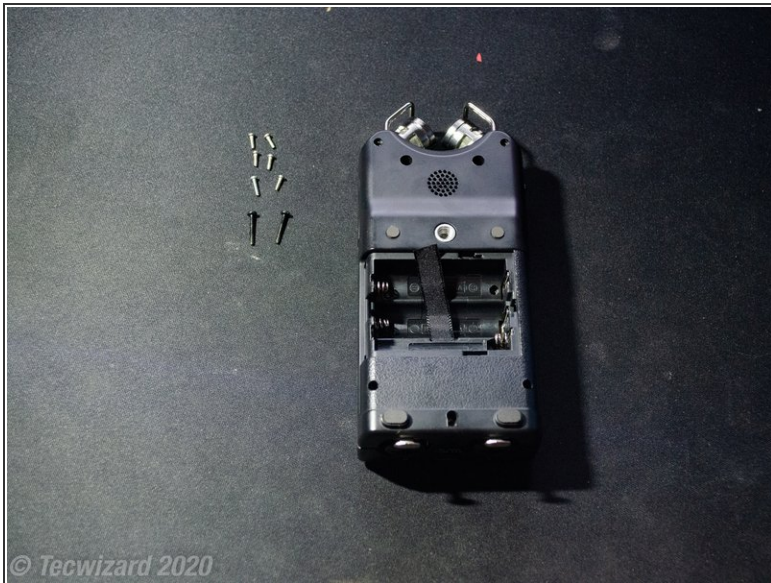
- There are a total of 10 Phillips Screws that hold both halves of the housing together.
 - ❗ The two screws close to the rear speaker and the one inside the battery housing are different sizes/lengths to the rest of the housing screws.

Step 4 — Removing the Screws



- Use a Phillips #1 Screwdriver to remove the screws from the housing. Keep in mind that there are 3 screws that are different lengths as mentioned in the last step.
- ⓘ Removing the front two screws is not necessary to remove the rear housing. The front two screws only hold the microphone assembly to the front housing.
- ⓘ The silver screw in the battery housing is longer than the other silver screws. Be sure to organize it accordingly.

Step 5 — Organization is Key



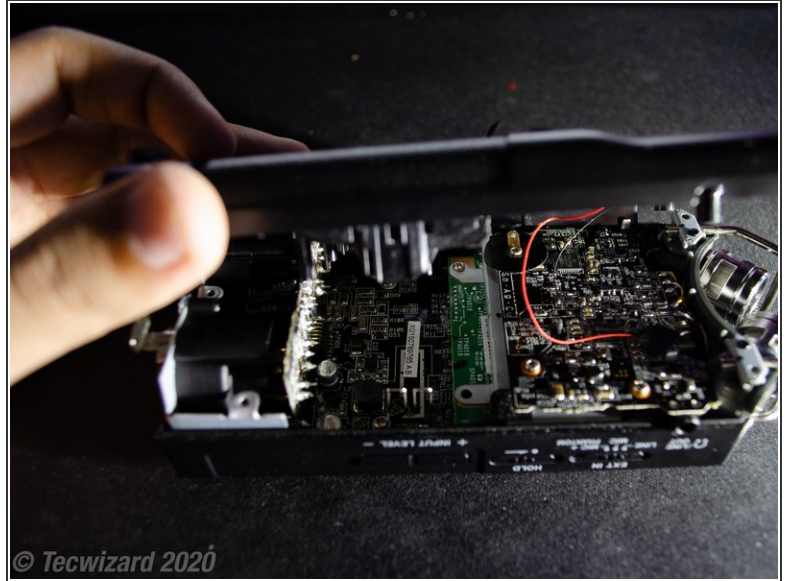
- You should be left with 8 screws. Take note of the two bottom screws that came from the screw holes near the speaker.
 - Now take note of the silver screw above the bottom left black screw that came from the battery housing.
 - This screw is longer than the other 5 silver screws so make sure to organize your screws accordingly.
- i** Before proceeding, make sure the rubber dust cover for the SD Card is open (as shown) so it doesn't get in the way of opening the rear housing.

Step 6 — Opening the Rear Housing



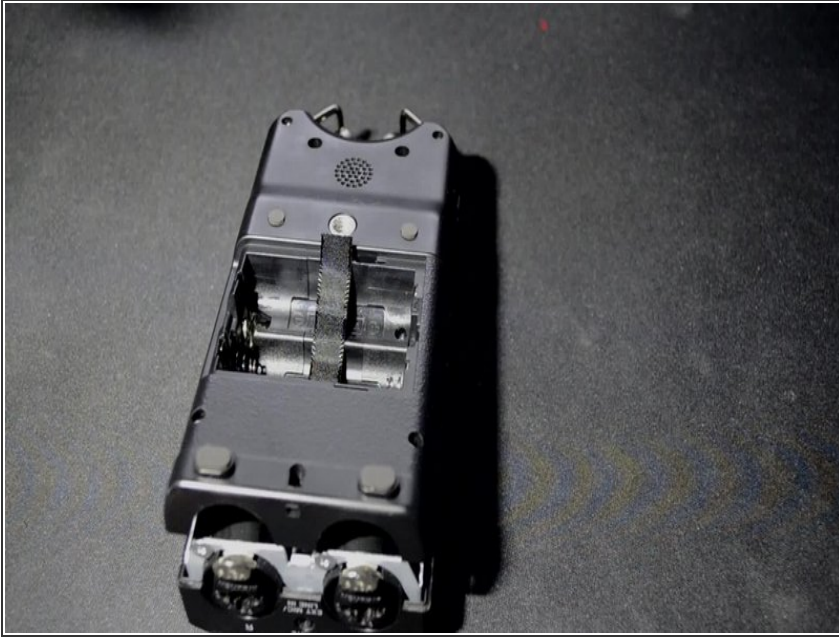
- Gently pull up on the rear housing to separate it.
 - Two battery contacts will separate from the case as you pull up on the housing as shown in the video.
- ⚠ Do not use force to remove the housing. You could easily rip the two soldered battery contacts from the main board under it, causing damage to it.

Step 7 — Opening the Rear Housing



- Use a flathead screwdriver to gently pry the negative battery contact away from the casing if it gets stuck on the plastic nub.
 - Once the casing is free gently lift it up until the two battery contacts are free from the rear housing.
- ⚠ Be careful when removing the rear housing as there are two soldered wires connecting the speaker to the sound board. (See pictures)

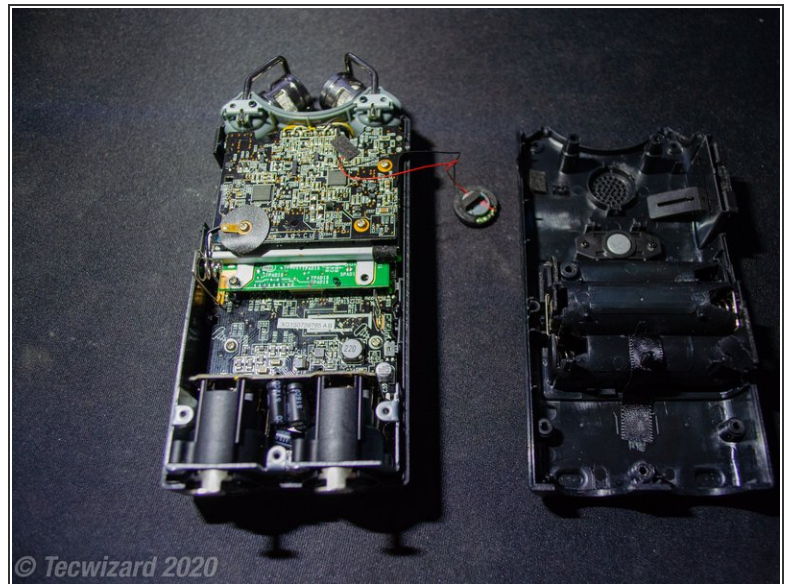
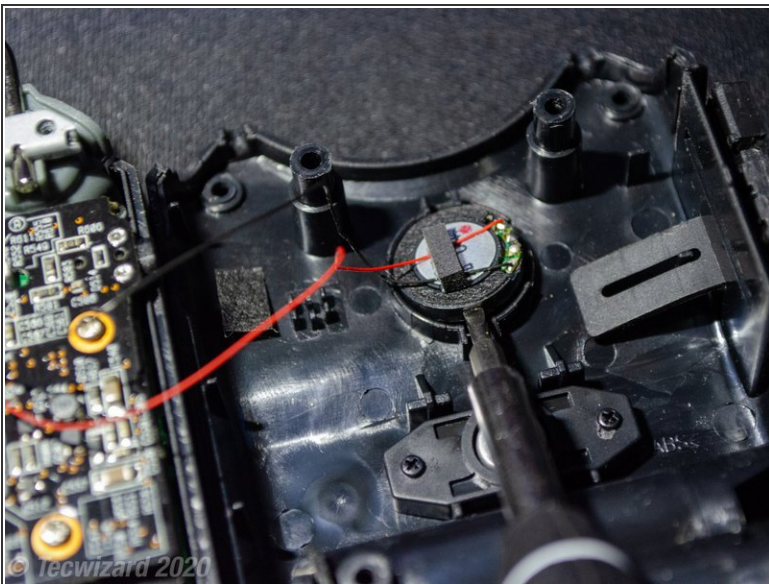
Step 8 — Opening the Rear Housing



- Open the rear cover like a book as shown in the video.

⚠ Be careful with the two wires that connect the rear speaker to the sound board. They are small and can be easily damaged.

Step 9 — Speaker Removal

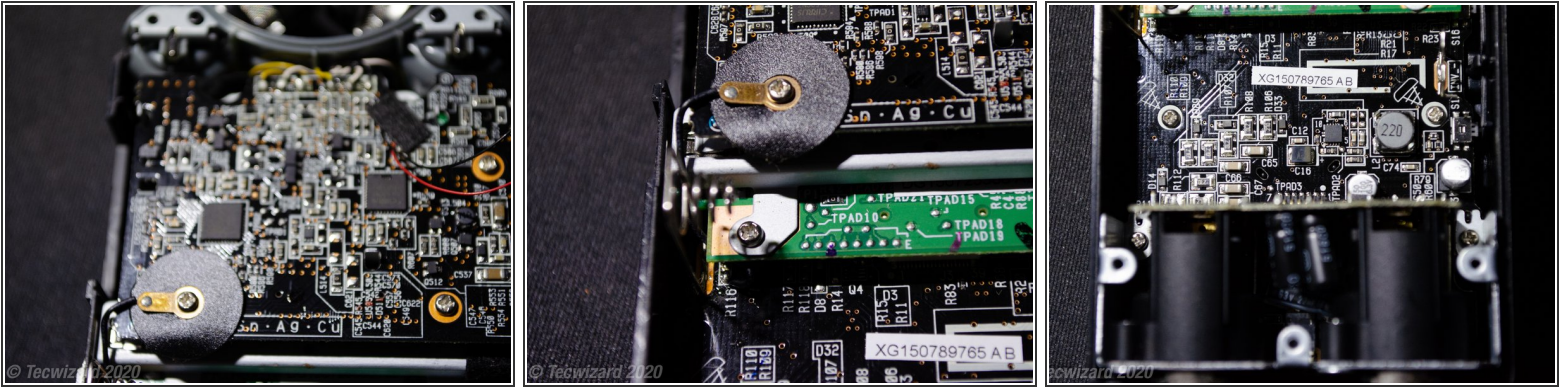


- Use a flathead screwdriver to gently pry up on the rear speaker. The speaker is glued into place with double-sided tape so take your time.
- Once the speaker is removed the rear housing can be set aside.

⚠ Be careful not to damage the speaker or the wires when removing it.

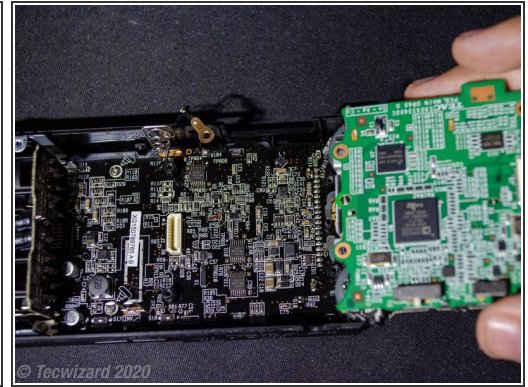
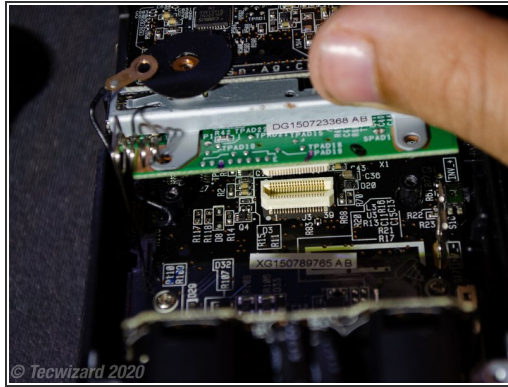
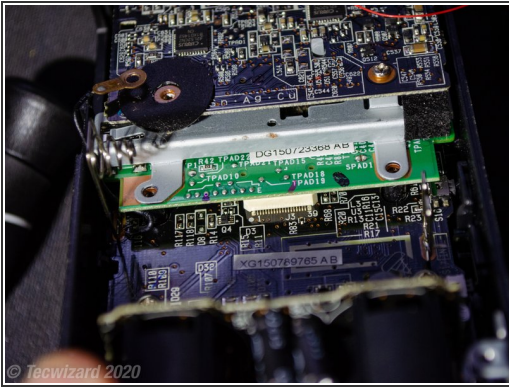
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Step 10 — Identifying the Screws (Again)



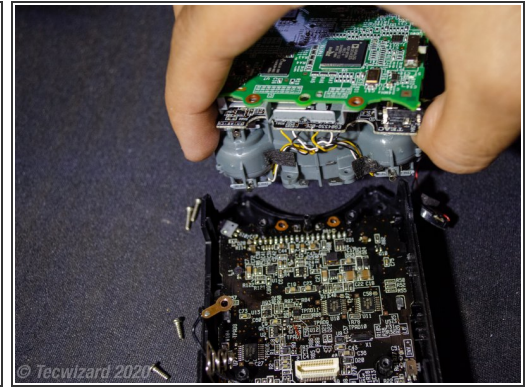
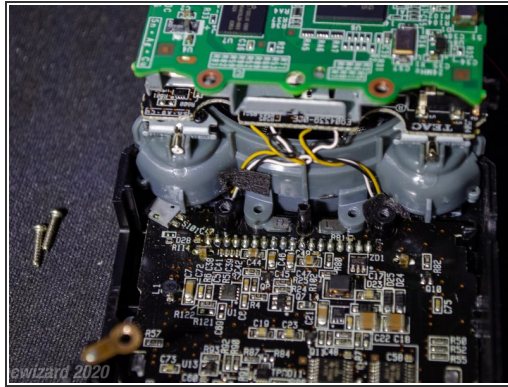
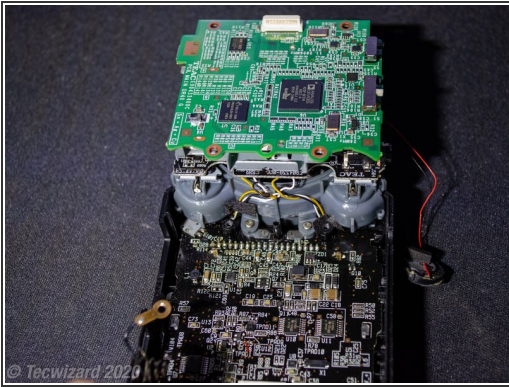
- There are 7 Screws holding down the three different circuit boards. On the top you have the three screws holding down the sound board to the logic board with the screw on the left holding a grounding cable that's soldered to the main board.
 - On the Logic board there is a single screw that's holding it to the front housing.
 - Finally at the bottom you have 4 screws holding down the XLR Jacks and the main board to the front housing.
- i** All these screws are the same length and thread.

Step 11 — Removing the Logic and Sound Boards



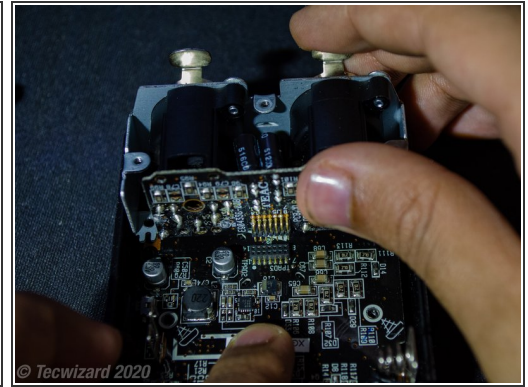
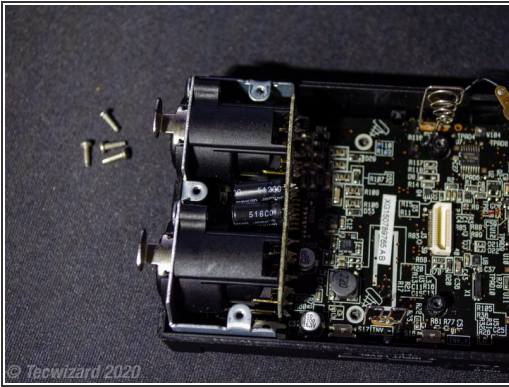
- Remove the screw holding down the logic board to the front housing followed by the screw connecting the grounding cable to the sound board.
 - Once the screws are removed the only thing keeping the two boards in place is the white connector at the bottom of the logic board.
 - Gently pry up on the logic board to disconnect it from the main board.
 - Once the two boards are free, fold it over the microphone assembly to gain access to two additional screws.
- ⚠ Be careful with the 6 soldered wires connecting the microphones to the soundboard.

Step 12 — Removing the Microphone Assembly



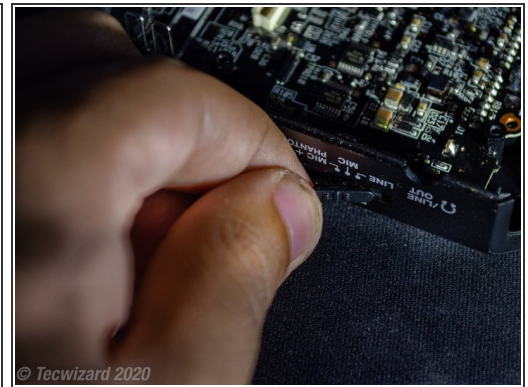
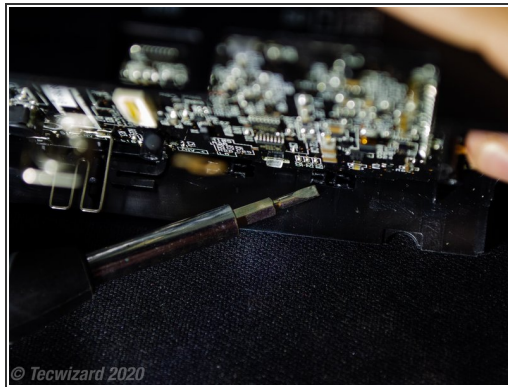
- Use a Phillips #0 Screwdriver to remove the two screws holding the microphone assembly to the front housing.
- Once the two screws are removed, gently lift up on the assembly. It should come out as one piece with the logic and sound boards attached.
- ⓘ If you haven't already, remove the front two screws first as those two screws also hold the microphone assembly in to the front housing.

Step 13 — Removing the XLR Jack Assembly



- Remove the 2 screws holding down the XLR Assembly to the front housing. (Here I also removed the two screws holding down the main board. You don't have to do this.)
- Use a flat head screwdriver to unclip the front housing from the XLR Jack assembly. Not much force is needed here.
- Gently lift up on the assembly until the the pins come out from the connector on the main board. Once removed the assembly can be set aside.

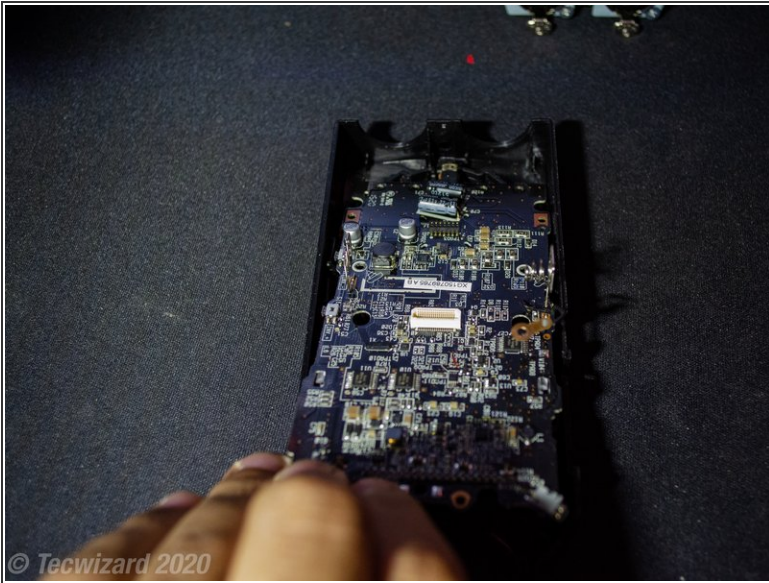
Step 14 — Removing the Main Board (Prep)



- In order to remove the main board from the housing you must remove the EXT IN slider as it is in the way and holding the board down.
- Gently press on the tabs with a flathead screwdriver to pop the slider out of the housing.

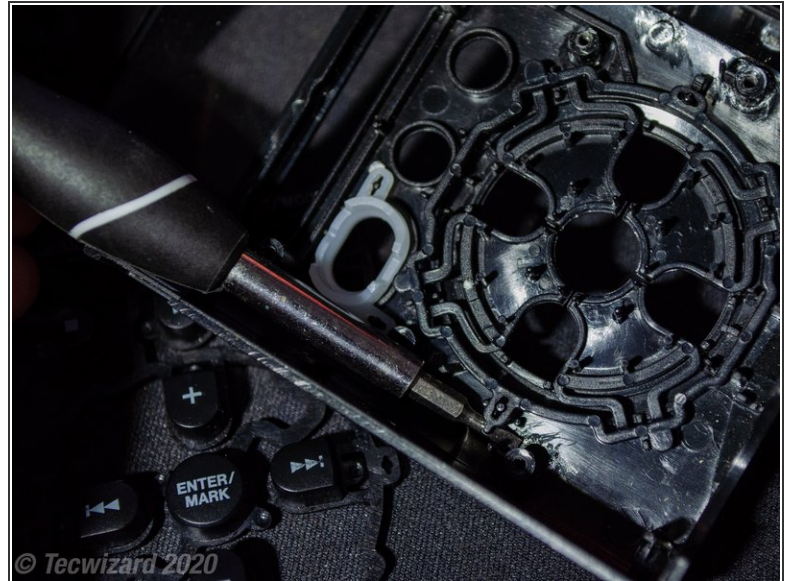
⚠ The tabs on the plastic slider are fragile and can easily break. Take extra precaution when removing the slider.

Step 15 — Removing the Main Board



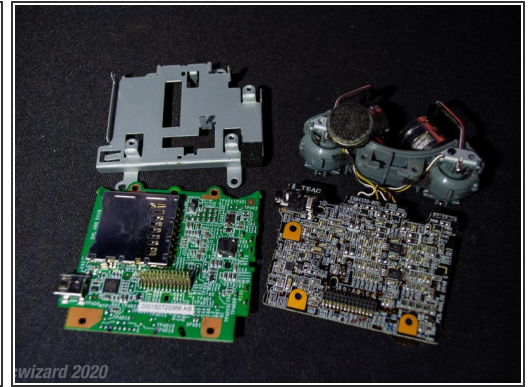
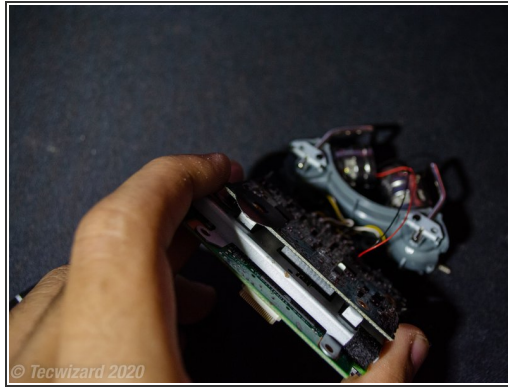
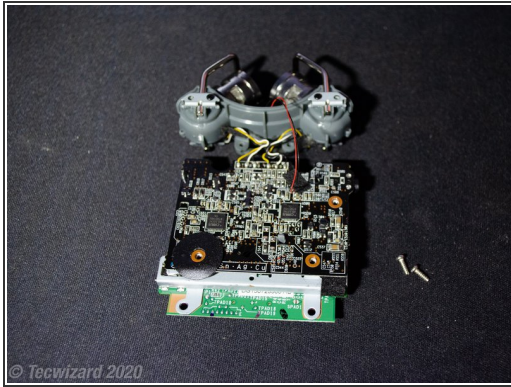
- Once the slider is removed, gently lift up from the top of the board and pull out to disconnect the Remote Jack from the bottom of the casing.
- The board should easily come out and can be set aside once removed.

Step 16 — Removing the Buttons



- The buttons can be removed as one piece just by pushing them out from the front of the casing.
- The MODE, QUICK, PB CONT, and MIXER buttons are held in place by plastic pegs and can be removed simply by just prying up on it with a flathead screwdriver.

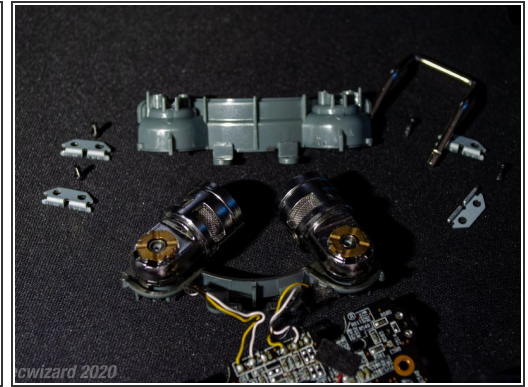
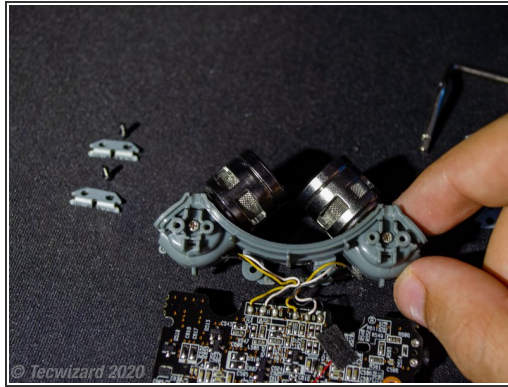
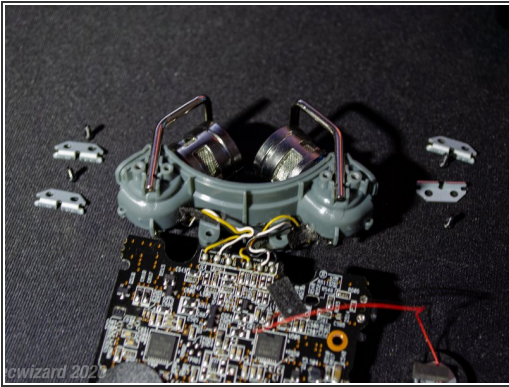
Step 17 — Sepreating the Logic and Sound Boards



- Separating the two boards is easy. First remove the two remaining screws holding it together.
- Next, gently lift up at the board until the black connector is disconnected. Once disconnected the Logic Board will come loose from the Sound Board.
- The metal shielding on the logic board is not held down by anything and can be simply lifted off the logic board.

⚠ Be careful with the wires connecting the microphone assembly to the sound board as these can easily break.

Step 18 — Disassembling the Microphone Assembly



- Disassembling the microphone assembly is easy. Unscrew and remove the 4 brackets holding down the microphone guards.
- Remove the guards by lifting up on them and sliding them out on both sides. This will reveal two screws holding the two plastic housings together.
- Remove the two screws and gently separate the two halves of the housing.
 - ✦ The wires may be attached to the housing with foam tape. Simple lift up on the tape to peel it off the housing.
- ⓘ No further disassembly can be done past this point without desoldering the 6 wires connecting the two microphones to the sound board as the wires are routed through holes in the plastic casing.
- ⚠ Be careful with the 6 wires connecting the microphones to the soundboard as they are fragile.


Step 19 — Done



- Congrats, you successfully disassembled your Tascam DR-40 Field Recorder.
- Overall the parts are pretty accessible and swapping parts out seem easy enough.
- However, more complicated repairs like repairing the screen or replacing the speaker/microphones will require more advanced tools such as a good soldering iron that can easily reach the small pads on the circuit boards.
- To reassemble the Tascam DR-40, follow this teardown in reverse then jump to Step 20.
- ⓘ Be sure to wipe off any fingerprints you may have left behind on the LCD Display or the inside of the plastic display protector before reassembly.

Step 20 — After Reassembly



-  After reassembling the Tascam DR-40, make sure to reinstall your batteries and SD Card. Then test the device and all it's functions to make sure it's fully operational.