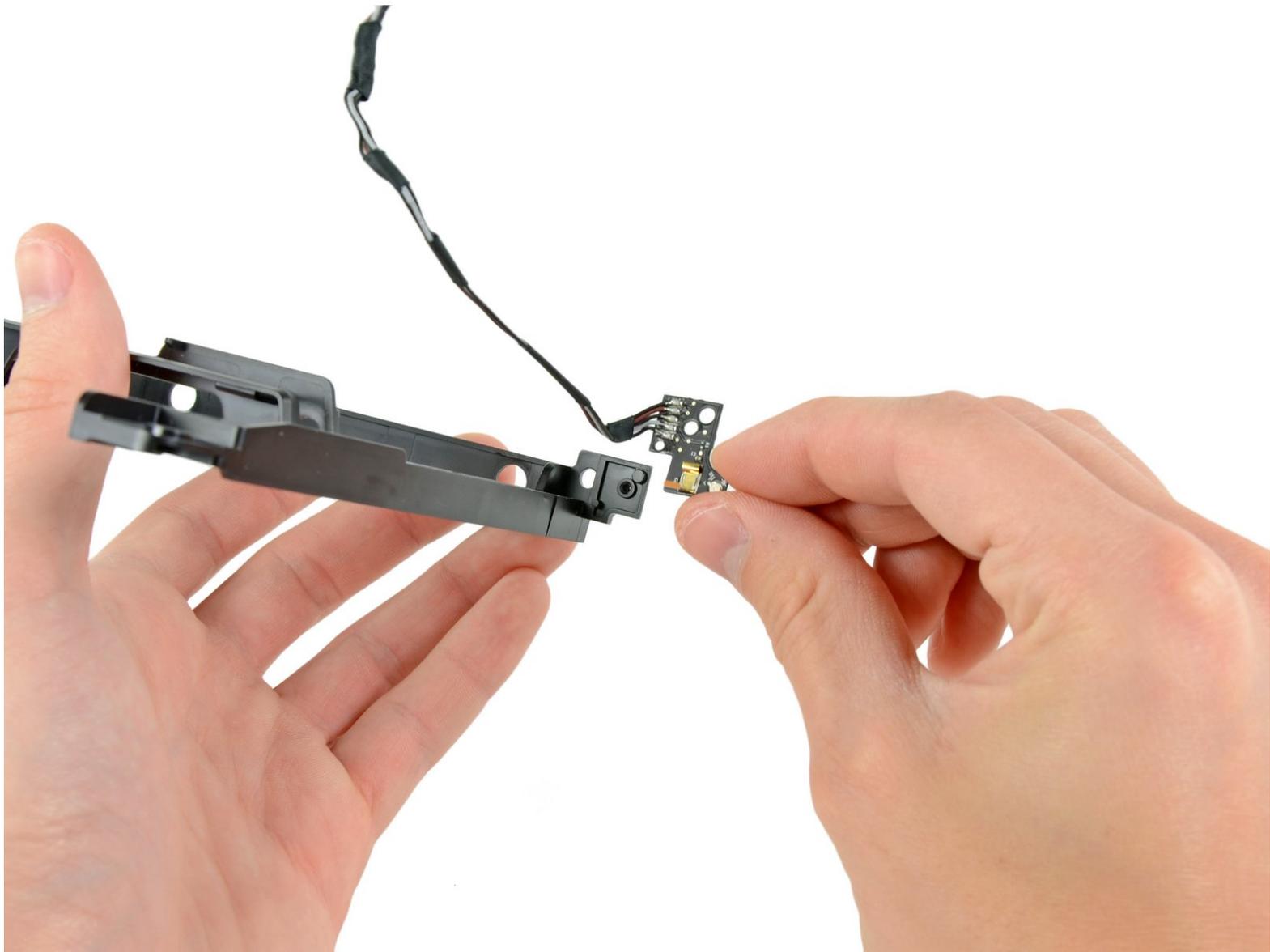# Mac mini Late 2012 IR Sensor Replacement

Replace a broken IR sensor/sleep LED.

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INTRODUCTION

Use this guide to replace your mini's IR sensor/sleep LED assembly. Replacing this component requires removal of the logic board and most other components in your mini.

🔧 TOOLS:

- 2 mm Hex Screwdriver (1)
- Mac Mini Logic Board Removal Tool (1)
- Spudger (1)
- T6 Torx Screwdriver (1)
- T8 Torx Screwdriver (1)

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Step 1 — Bottom Cover

- Place your thumbs in the depressions cut into the bottom cover.

- Rotate the bottom cover counter-clockwise until the white dot painted on the bottom cover is aligned with the ring inscribed on the outer case.

  (i) You do not need to apply much downward pressure while turning.

Step 2

- Tilt the mini enough to allow the bottom cover to fall away from the outer case.

- Remove the bottom cover and set it aside.

Step 3 — Fan

- Remove the two 11.3 mm T6 Torx screws securing the fan to the logic board near the antenna plate.

Step 4

- Lift the ear of the fan nearest the RAM up off the standoff secured to the outer case.

- (i) Removing the standoff screw is not necessary to remove the fan. You need only raise the fan enough to lift it off the standoff screw.

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Step 5

- Lift the fan out of the mini for enough clearance to access its connector.

- Grab all the wires at once and gently pull straight up to disconnect the fan from the logic board.

  ⚠ Do **not** pry at the socket, or you may rip it from the logic board.

- Remove the fan.

Step 6 — Cowling

- Remove the single 3.5 mm T6 Torx screw securing the cowling to the heat sink.
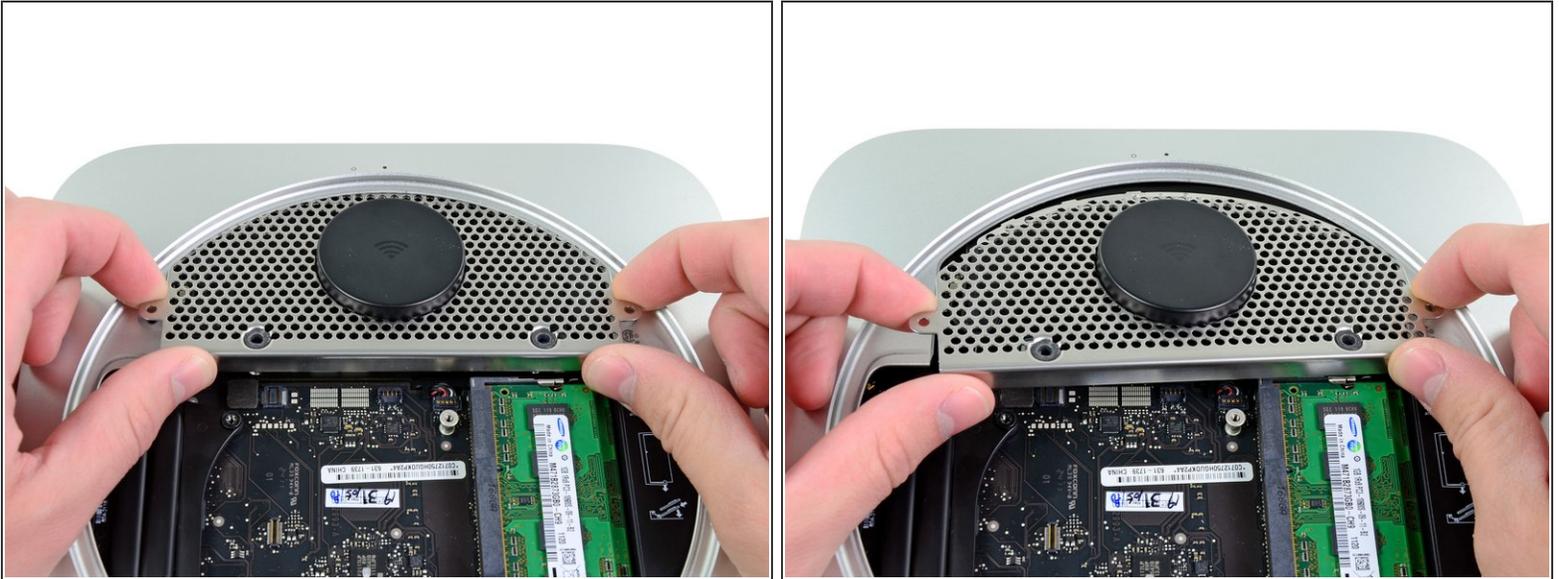
Step 7

- Lift the cowling from the end nearest the antenna plate.

- Rotate the cowling away from the outer case and remove it from the mini.

Step 8 — Antenna Plate

- Remove the following screws securing the antenna plate to the mini:
  - Two 6.6 mm T8 Torx screws
  - Two 5.0 mm T8 Torx or 2.0 mm Hex screws (either screwdriver will work)

- When putting back together:

- (i) It can be difficult to get the hard drive seated correctly such that the antenna plate fits in place correctly. If the screw holes don't line up with those on the hard drive, make sure that the two pins that are in the back of the hard drive are properly seated in the holes at the back of the case, above the housing for the second hard drive.

- 📌 The antenna attaches directly to the hard drive (red markers), therefore attaching the antenna can move the hard drive around and loosen the connection of the hard drive cable to the logic board.

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Step 9

- Slightly lift the antenna plate from the end closest to the RAM.

- Carefully pull the antenna plate away from the circular rim of the outer case.

⚠️ Do not remove the antenna plate yet. It is still attached to the AirPort/ Bluetooth board.

Step 10

- Use the tip of a spudger to carefully pry the antenna connector up from its socket on the AirPort/Bluetooth board.

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Step 11

- Remove the antenna plate from the mini.

Step 12 — Logic Board

- Use the flat end of a spudger to pry the hard drive connector up from its socket on the logic board.

Step 13

- Use the tip of a spudger to lift the IR sensor connector up and out of its socket on the logic board.

- ⚠️ Make sure to pry up from beneath the wires and not underneath the socket.

Step 14

- Remove the following three screws:
  - One 5.0 mm T8 Torx or 2.0 mm Hex screw (either screwdriver will work)
  - One 16.2 mm T6 Torx screw
  - One 26 mm T6 Torx standoff

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Step 15

⚠️ To remove the logic board, the two cylindrical rods of the Mac mini Logic Board Removal Tool must be inserted into the holes highlighted in red. Inserting instruments into any logic board holes other than the ones highlighted in red may destroy the logic board.

- Insert the [Mac mini Logic Board Removal Tool](#) into the two holes highlighted in red. Be sure it makes contact with the top side of outer case below the logic board before proceeding.

- Carefully pull the tool toward the I/O board. The logic board and I/O board assembly should slightly slide out of the outer case.

ⓘ Cease prying when the I/O board is visibly separated from the outer case.

- Remove the Mac mini Logic Board Removal tool.

Step 16

- Pull the I/O board/logic board assembly out of the outer case enough to access the power connector.

- Use your fingers to disconnect the DC-In cable from the logic board.

- Pull the power cable connector toward the front side of the mini.

Step 17

- Carefully slide the logic board assembly out of the mini, minding any cables that may get caught.

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Step 18 — Hard Drive

- Pull the hard drive away from the front edge of the mini and remove it from the outer case.

- (i) During reassembly, there are two pins on the inside edge of the hard drive that fit into the case. The holes have rubber grommets around them, so it may be difficult to tell when you have seated the hard drive correctly.

  - (i) There are two pairs of holes in the case. Insert the pins into the holes closest to the bottom of the case.

Step 19 — Power Supply

- Remove the 7.9 mm T6 Torx screw securing the power supply and hard drive tray to the outer case.

- During reassembly, ensure the cables that run alongside the hard drive are tucked under the power supply. This will ensure the hard drive is properly seated. In addition, the antenna screw holes will not line up if there are cables in the way.

Step 20

- Pull the silver metal AC-In socket retainer away from the side of the outer case and remove it from the mini.

- During reassembly, notice that the silver clip hugs either side of the lower beveled edge of the AC connector. When sliding the clip back in it will hit a stop, but not *click* into place. You will know that you did it correctly because it will not easily move out of position.

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Step 21

- Rotate the AC-In connector 90 degrees counter-clockwise.

Step 22

- Slide the power supply out of the mini, minding any cables that may get caught.

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Step 23 — Hard Drive Tray

● Remove the 7.9 mm T6 Torx screw securing the hard drive tray to the outer case.
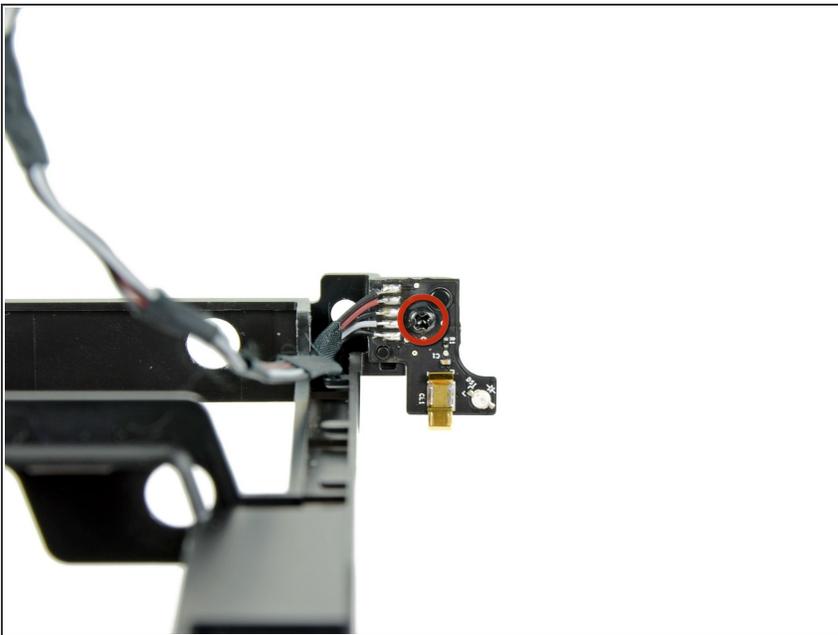
Step 24

● Remove the hard drive tray from the outer case.
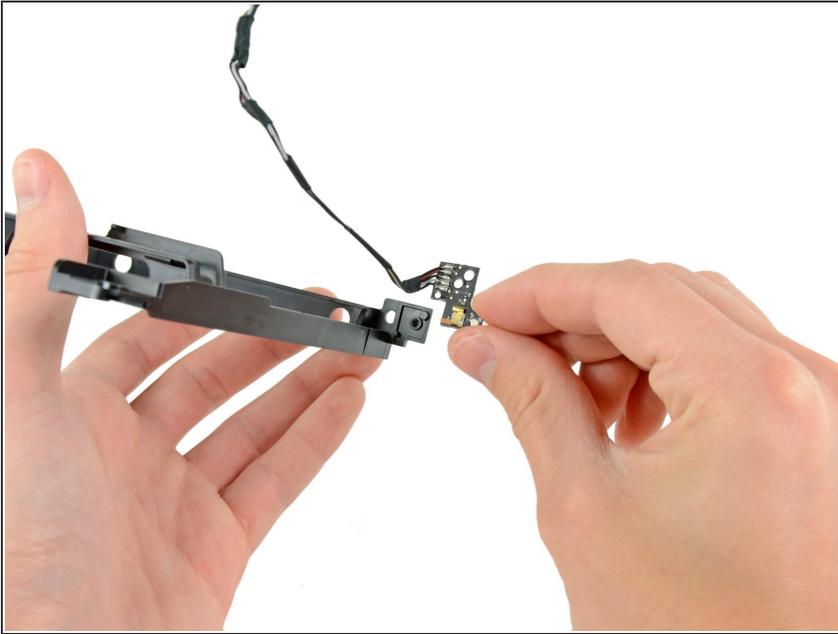
Step 25 — IR Sensor

- Carefully de-route the IR sensor cables from the channel in the hard drive tray.

Step 26

- Remove the 5 mm Phillips screw securing the IR board to the hard drive tray.

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Step 27

- Remove the IR sensor from the hard drive tray.

- ⚠ Be careful when removing the IR board from the hard drive tray, as the lower plastic positioning pin has the tendency to get caught on the delicate IR board.

To reassemble your device, follow these instructions in reverse order.