



BlackMagic ATEM Television Studio Quiet Fan Upgrade

The BlackMagic ATEM Television Studio Switcher has a terribly bad design with a loud fan. This procedure will help you upgrade your device.

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INTRODUCTION

The BlackMagic ATEM Television Studio Switcher has a terribly bad design with a loud fan. This procedure will help you upgrade your device to make is quiet.

WARNING - THIS WILL VOID YOUR WARRANTY!

[video: <https://youtu.be/tCo3eqLtveE>]



TOOLS:

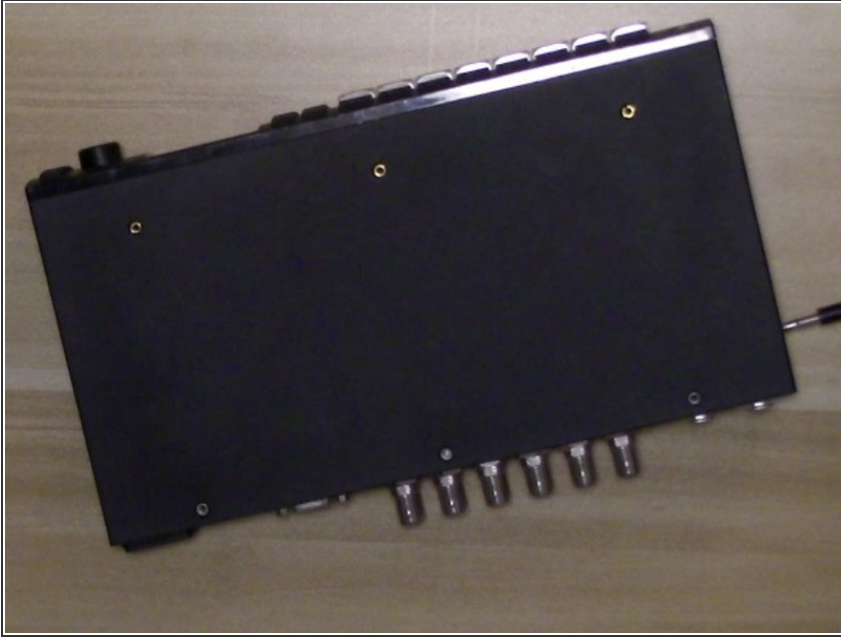
- [Soldering Workstation](#) (1)
- [Heat Gun](#) (1)
- [Small Round Nose Pliers](#) (1)
- [Phillips #1 Screwdriver](#) (1)



PARTS:

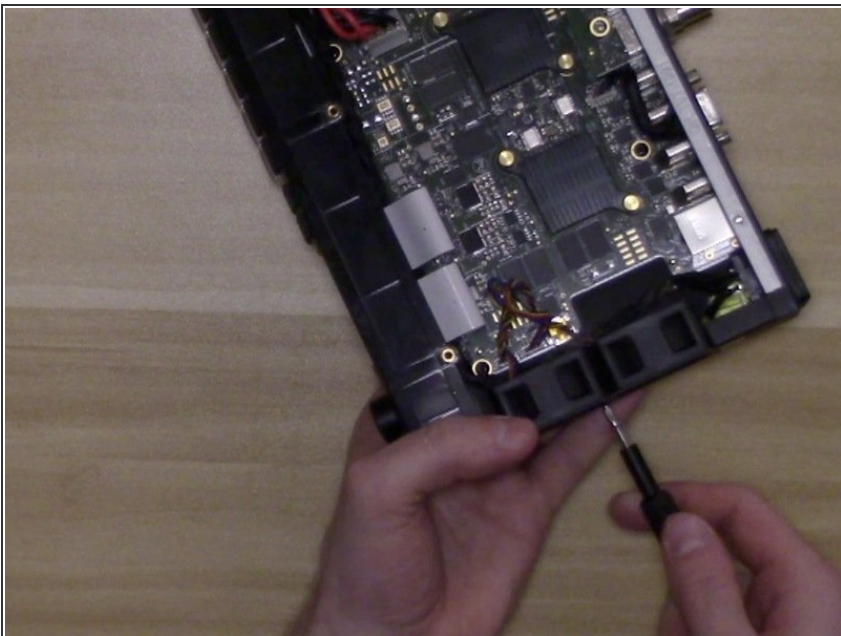
- [Heat Shrink Tubing Assortment](#) (1)
- [Noctua NF-A4x20 PWM Premium-Quality Quiet 40mm Fan](#) (2)
- [Solder](#) (1)

Step 1 — Unscrew the Outer Case



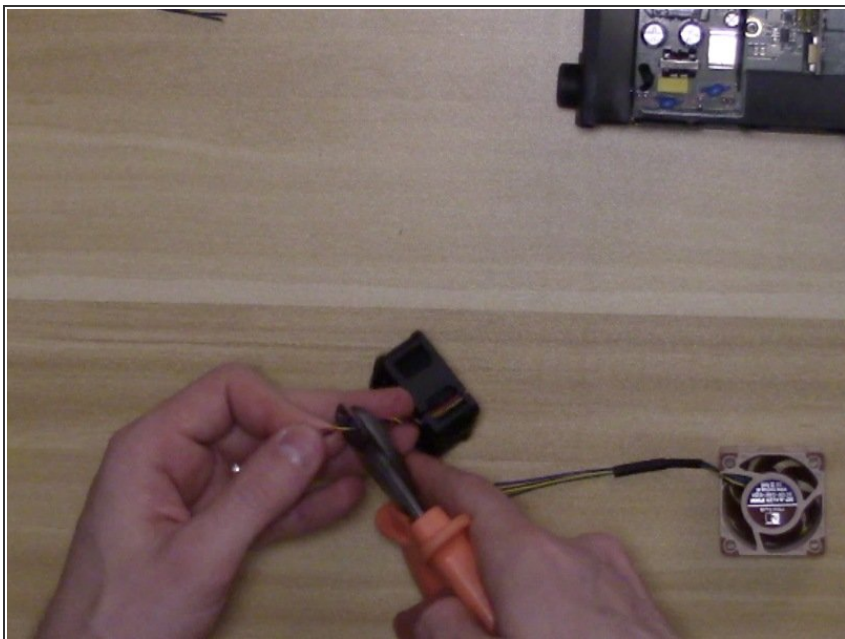
- 2 Screws on each side
- 6 Screws on top

Step 2 — Remove Fans



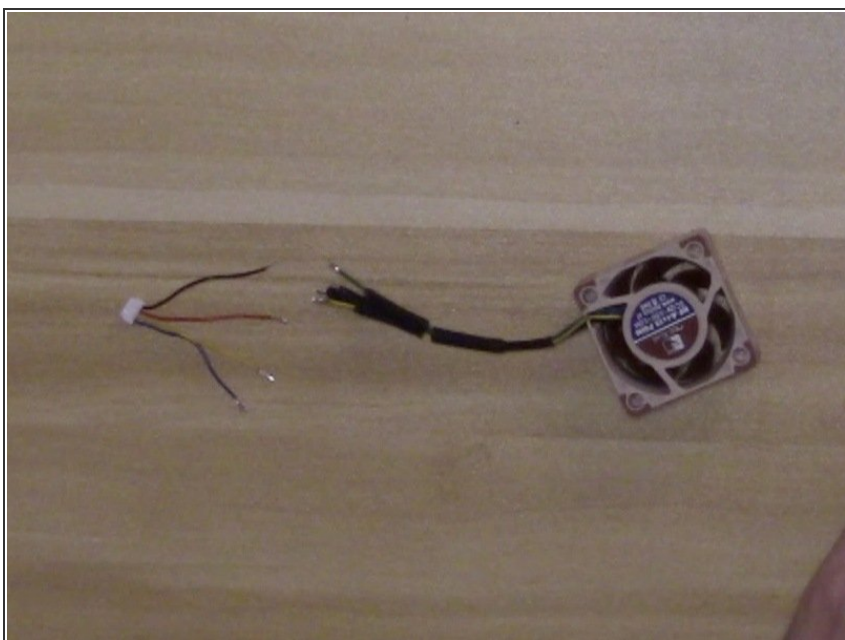
- Remove Both Fans
- 2 - Screws each
- 1 - Pull cable each

Step 3 — Cut Off Connector from both the olds and new fans



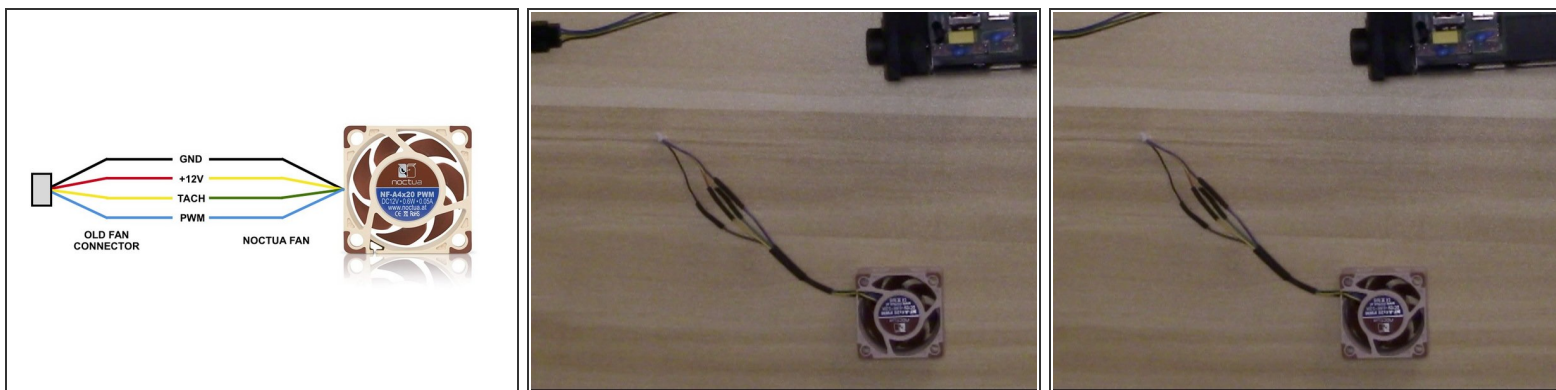
- Leave some length to solder with and to reach connector on main board.

Step 4 — Prep Fan Wires and Connector Wires



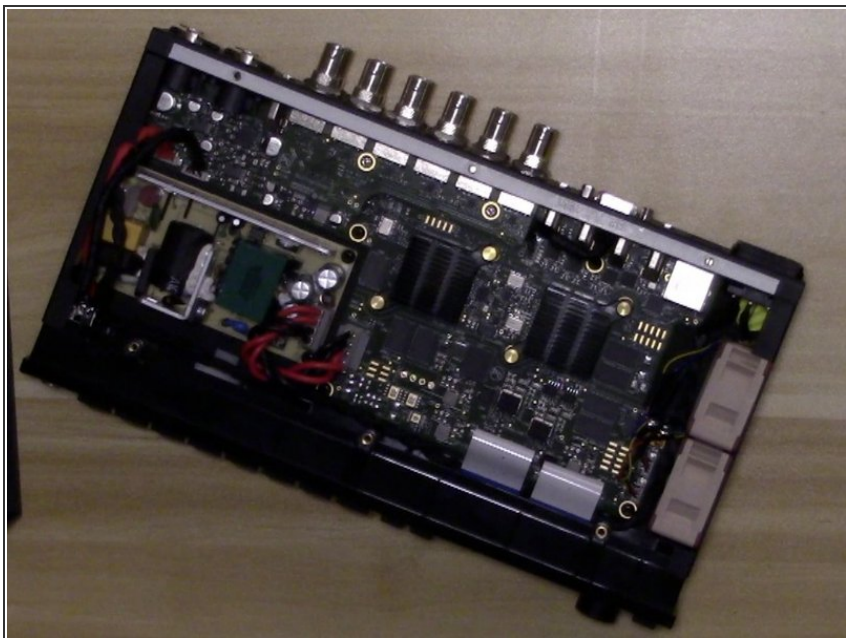
- Strip Wires, Tin Wires, and prep by adding heat shrink tubing on wires (before shrinking).

Step 5 — Solder Connector to Fan



- For Both Fans
- Solder the new fan to the old connector using the following pinout.
- Adjust heat shrink tubing so it covers the solder joints and use heat gun to shrink tubing.

Step 6 — Re-assemble fans to device with fan label facing out



- Re-assemble fans to device with fan label facing out.

Step 7 — OPTIONAL - Use Small Round Nose Pliers to break off case grill to make fan even quieter



- OPTIONAL - Use Small Round Nose Pliers to break off case grill to make fan even quieter.

Step 8 — Re-Assemble Case



- Re-Assemble Case

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