ColecoVision Complete NTSC AV Composite Mod Kit Installation Guide

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Product overview

The Lundy Electronics **Complete NTSC AV Composite Mod Kit** offers everything you need to add a professional factory-looking AV composite connection to your NTSC ColecoVision console. It is designed to install perfectly in the small space between the upper RF tin and lower rear housing. This document does not explain how to disassemble or reassemble the ColecoVision console which can be found easily online.

What's included

- Populated AV composite PCB
- Wiring harness with pre-crimped 4-pin connector
- Drilling template sticker for perfectly centered results
- 3D-printed spacer bracket
- Mounting hardware
- Cable tie

Tools required

- Drill
- #3 Philip screwdriver
- 3/16" nut driver
- 7/64" drill bit
- 7/16" step drill bit
- Flush cutting pliers
- Tin snips
- Wire strippers

Please read these instructions in their entirety before performing this installation.

Installation instructions

Note: Your Complete NTSC AV Composite Mod Kit has been tested carefully by Lundy Electronics which includes visual inspection under a microscope, full testing in a ColecoVision console, heat stress testing, and tap/vibration testing to insure no faulty solder joints or issues. We guarantee that this product is fully operational, and Lundy Electronics is not responsible for damages caused by static discharge, improper handling, incorrect installation, or damage caused by soldering.

With the ColecoVision PCB and RF tins completely removed from the case, perform the following steps.

Step One

Find the enclosed drill template sticker in the kit. Bend the template at the bend line before peeling and placing template to rear lower console housing. The template MUST be positioned just between the two inside tabs and the bend fold line rest squarely to the top of the lower console housing for correct positioning. See **Figure 1a**. Note: Tab positions are indicated by red arrows.

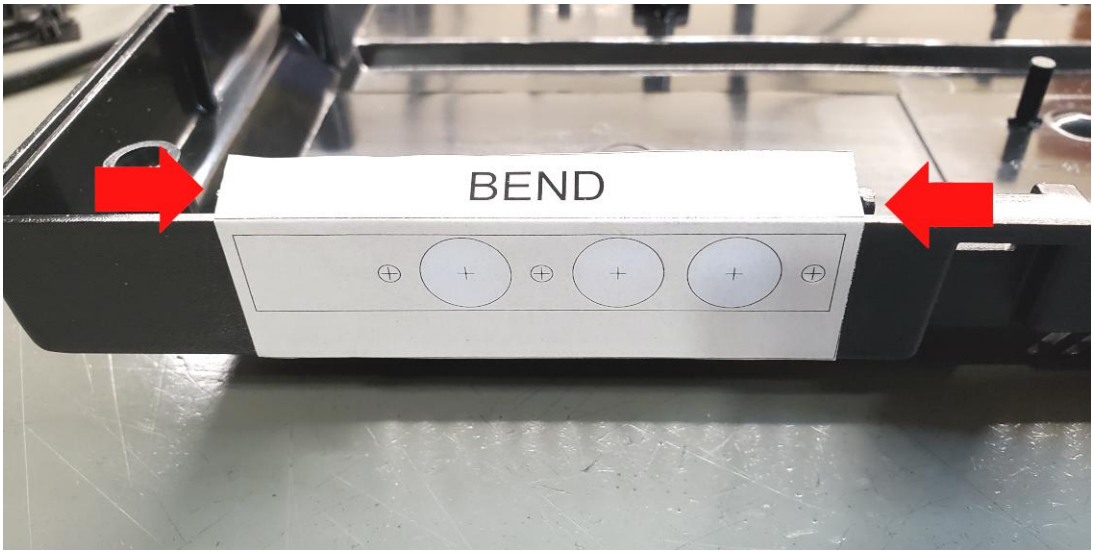


Figure 1a

Once the template is stuck in place, use a 7/64” drill bit to carefully drill the six small crosshatch positions. See **Figure 1b**.

Figure 1b

Important: A step bit is necessary for a clean cut. Do not use a regular 7/16” drill bit.

Using a 7/16” step bit, carefully drill out the three larger holes to the 7/16” position of the step bit. Take your time to make the best quality cut as possible. See **Figure 1c**.

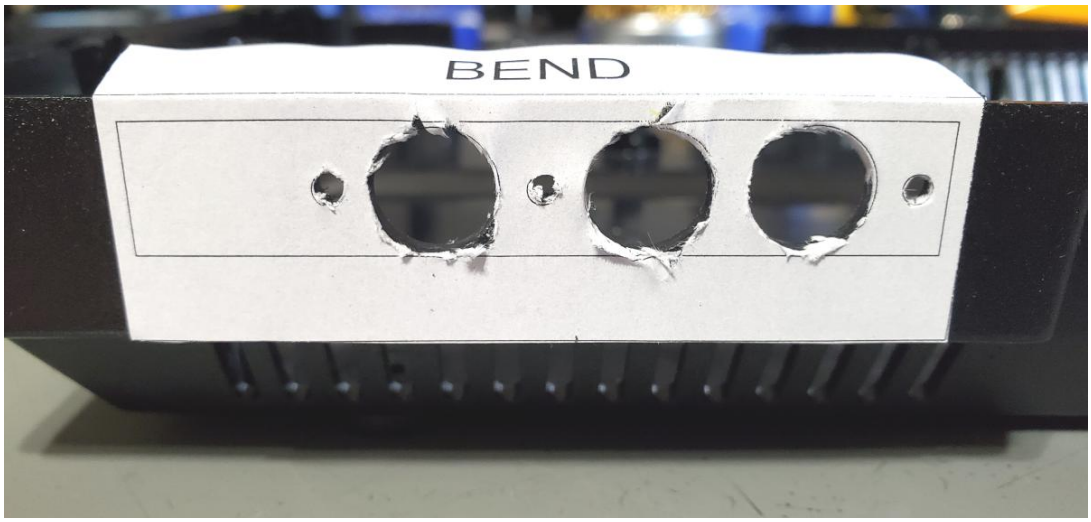


Figure 1c

Remove the drill template and clean off any sticker residue. See **Figure 1d**.

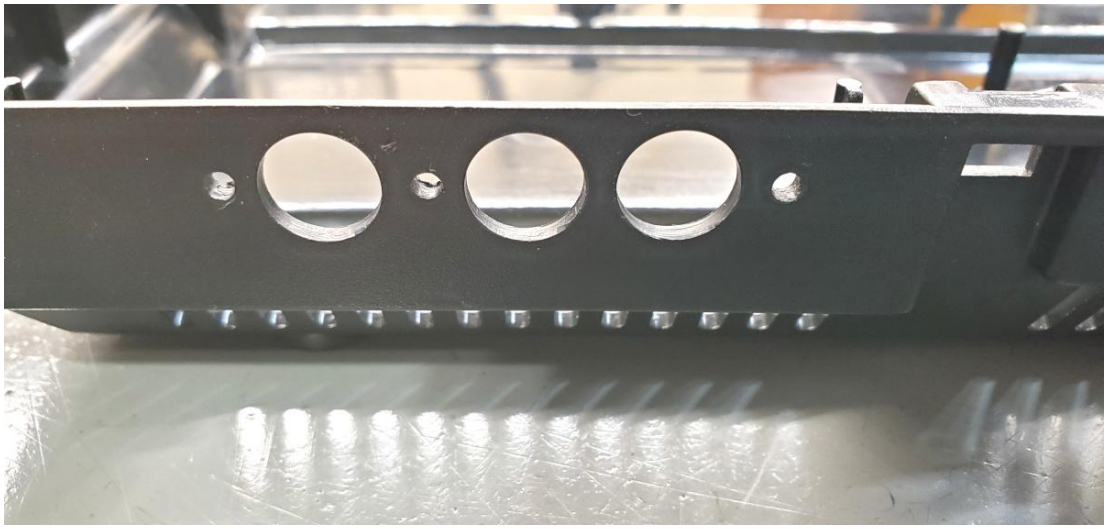


Figure 1d

Step Two

Find the enclosed four-pin wiring harness and cable tie in the kit. With the ColecoVision PCB upside down on a safe work environment, solder the harness wires as shown in **Figure 2a**. It helps to start with the furthest full-length yellow wire as a reference if you choose to cut the

remaining wires for a cleaner look to their prospective solder connections. This approach is only for looks, and it is fine to leave all the wires at full length if you so choose. See **Figure 2b** for reference and proper cable tie positioning. Do not install the ColecoVision PCB at this time.

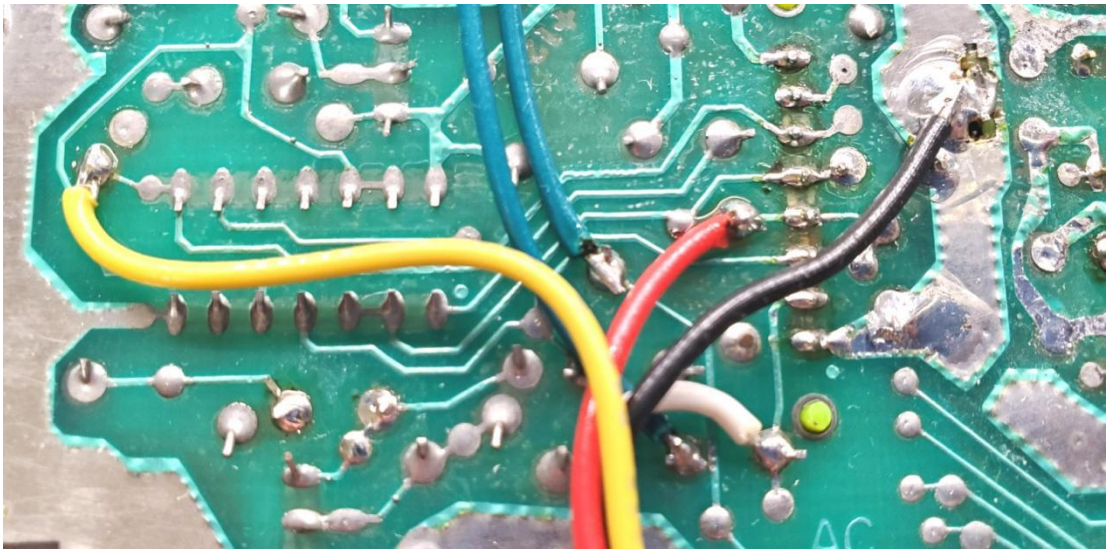


Figure 2a
Note: Greenish blue wires pictured are not part of this kit. Please ignore.

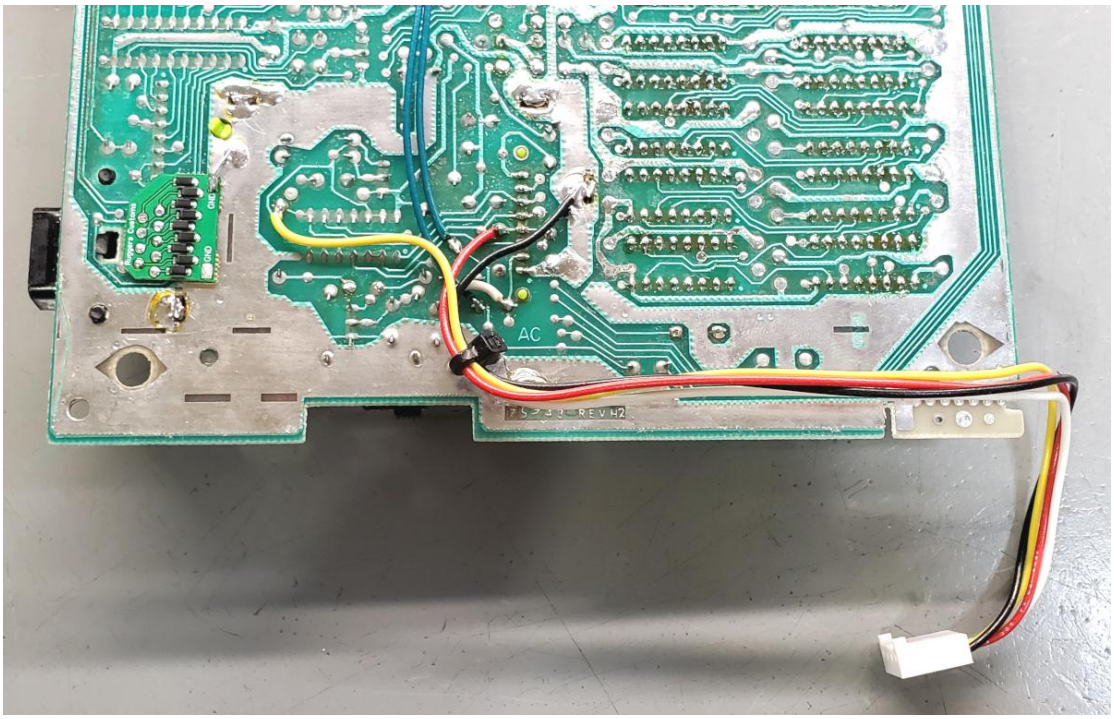


Figure 2b

The wire colors are as follows: white (audio), red (+12v), yellow (video), black (ground).

Step Three

Using tin snips, cut a small notch approximately 3/8” to make room for the new AV composite wiring to exit the lower RF shield. The only important thing is to locate the notch just below the rear right case standoff. See **Figure 3** for the approximate location.

Figure 3

Step Four

Find the enclosed 3D-printed AV composite mod PCB bracket, three black #2-1/2” screws, three #2 split lock washers, and three #2 nuts in the kit. Place the spacer with the flat side away from the PCB. See **Figure 4a**. Place the PCB with bracket in place through the newly drilled holes. While holding the PCB in place, insert the three black screws from the outside of the case. Insert the three split washers and then the final nuts to secure the PCB to the case. Loosely finger-tighten the nuts at this point. See **Figure 4b**. While viewing the loosely installed AV mod from the rear housing, position the RCA connectors for the best possible centered position and then fully tighten the hardware in place. See **Figure 4c**.

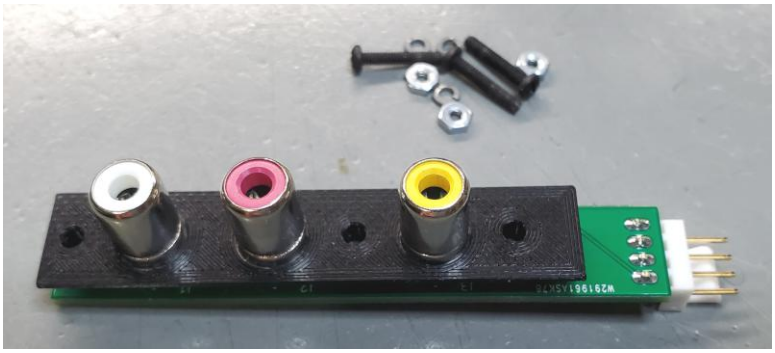
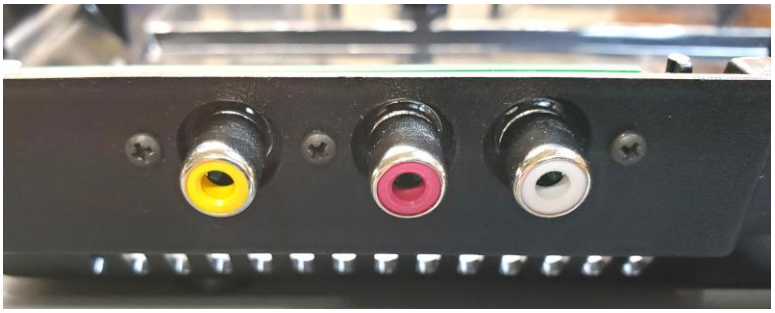


Figure 4a

Figure 4b



Step Five

Quick test

Loosely place the ColecoVision PCB in place without RF tins and attach the four-pin wiring harness connector to the new AV composite mod PCB. See **Figure 5a**. Insert AV composite cables and cartridge, connect the power supply, and power on the console for a quick test of video and audio. If video and audio are present, power down and disconnect the power supply. Disconnect the AV composite cables and four-pin wiring harness connector, remove the ColecoVision PCB, and continue the remainder of the installation procedure. If no video and/or audio is present, double-check all of your wire harness solder placements on the ColecoVision PCB in Step Two of this procedure, and repeat this step before moving forward.

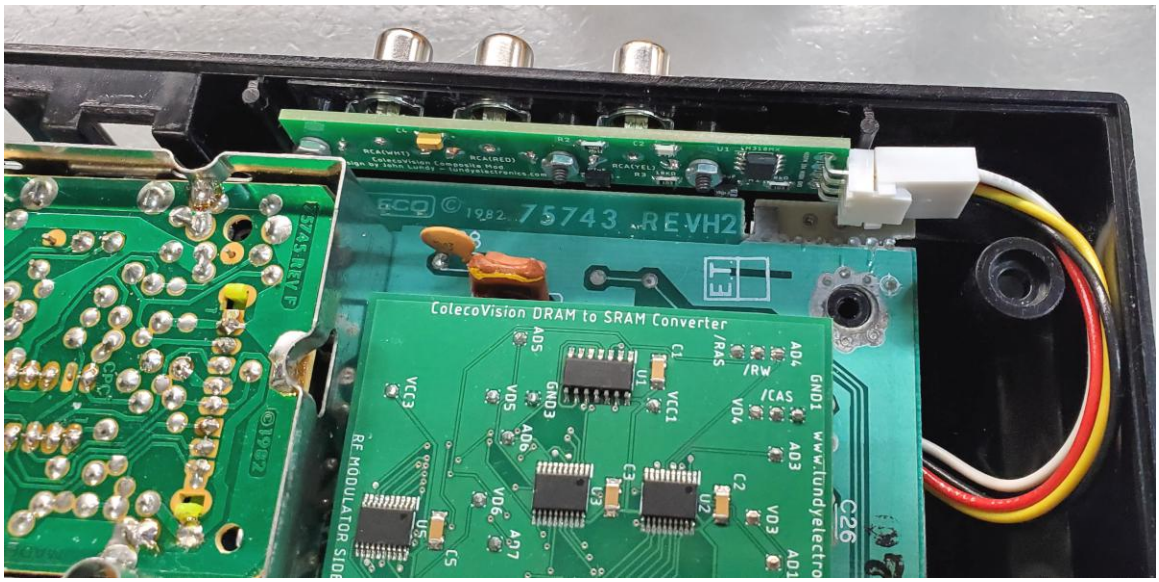


Figure 5a

Final Install

Install the lower RF tin in place. Install the ColecoVision PCB in place while also working the AV mod wiring in place to exit the RF tin notch. It will take a little maneuvering to get the PCB in place from the newly mounted AV mod PCB placement. It helps to keep the lower front right RF tin and PCB elevated a little to allow enough forward pressure of the PCB to sneak it past the newly mounted AV mod PCB and drop in place. Once in place, double-check the new AV wiring harness is correctly positioned in the new RF tin notch and reattach the four-pin wiring harness connector to the new AV composite mod PCB.

Install all required PCB and upper RF tin mounting hardware and test again as described above before fully reassembling your console. See **Figure 5b**.

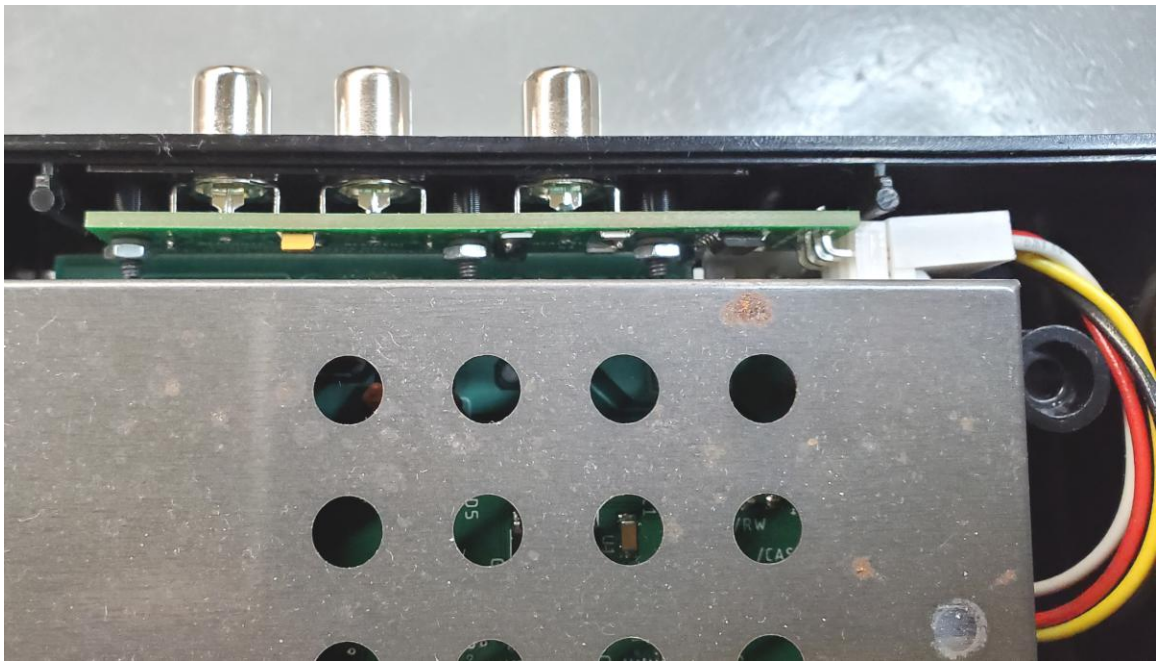


Figure 5b

Installation is now complete.

Thank you for choosing Lundy Electronics, and we hope you enjoy your ColecoVision product.