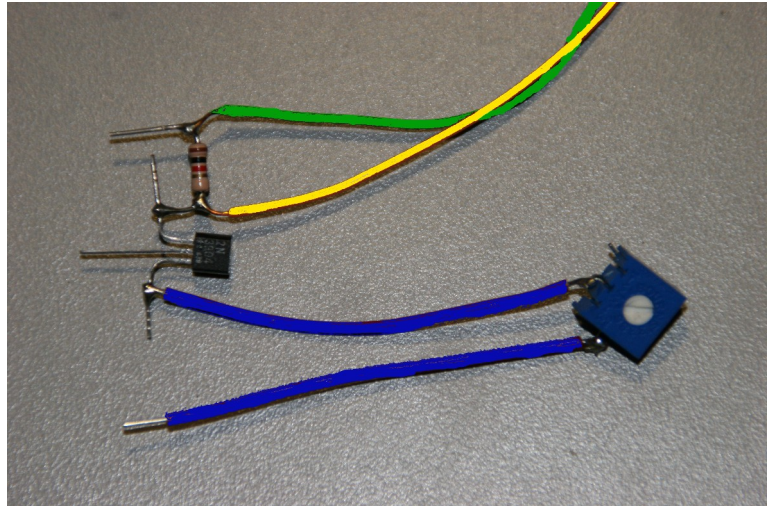


Composite Video Output for ColecoVision

Here's a very simple yet effective way to modify your ColecoVision for composite video and audio. This is your typical yellow, white, and red RCA connectors. This circuit is essentially the same as the one that Ben Heckendorn showed on his website a number of years back. I've just refined the method of building/installing it, for my own purposes. I've built over 30 of these, and it gives very good bang-for-the-buck. By the way, this is compatible with the Atari Expansion module, too. Also, you should be able to zoom the pictures much more than 100% to see the detail.

I start by making this circuit. The resistor is 1 Kohm (1000 ohms). The transistor is a basic 2N3904 NPN transistor, or equivalent. The potentiometer is 1 Kohm (anything between 500 ohms and 2 Kohms should be fine). The transistor has its flat side up. Make connection to the wiper and CW pins of the potentiometer. If you have a multimeter, you should be able to obtain values between 0 and 1000 ohms when turning the potentiometer. In almost all cases, I have the potentiometer set to zero ohms, so you could actually try the circuit without the potentiometer, and “shorting” that part of the circuit. The wires leaving the top of the picture should be at least 8” long. You can cut them shorter later, if required. You'll also need an 8” red wire.

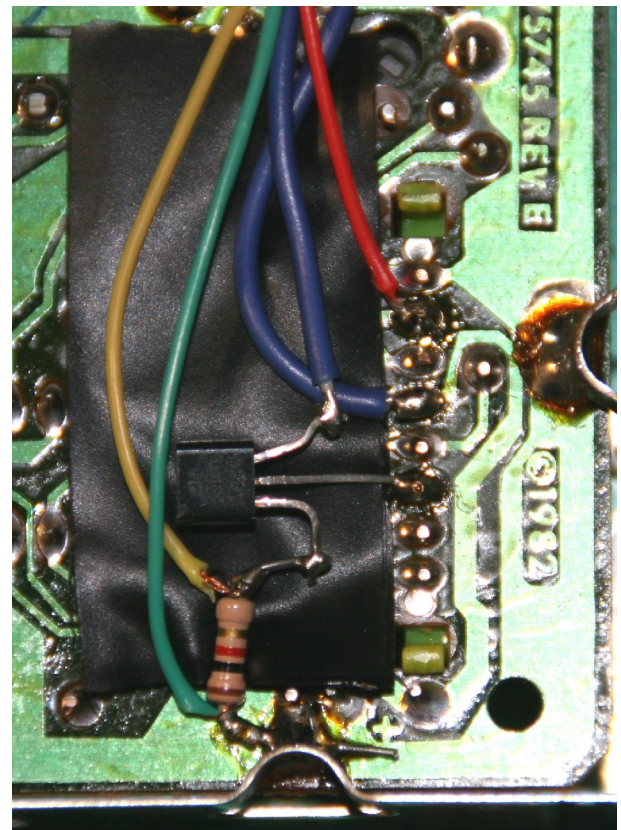


Note: sorry about the bad “photoshop” above. I didn't have a circuit lying around with the same colours as is shown to the right, so I quickly modified the picture with somewhat similar colours.

After the circuit is made, trim the excess leads from the two side pins of the transistor. Open up the RF modulator, and find the area shown to the right. Lay 2-3 layers of tape as shown. Desolder the 3 pins that we will connect to. These are pins 2, 4, and 6.

Connect the red wire, which wasn't built as part of the circuit above, to pin 2. Connect the blue wire to pin 4, and the centre pin of the transistor to pin 6. the open end of the resistor goes to the ground “ring” around the side of the modulator casing.

The red wire is the audio output. The yellow wire is the video output, and the green wire is the ground for both of those signals.



I've cut an opening for the wires to go through the back of the RF modulator box. If there are any sharp edges afterward, cover them with a layer or two of tape.. I've also opened a part of the RF modulator lid, as shown on the right of the picture. If you like, the potentiometer can slide in front of the channel selector switch, which won't be required anymore anyway. Choose your own method of mounting output RCA or other connector. Make sure the connector(s) don't get shorted out with either the top or bottom shield. Also make sure no wires get pinched by any shielding or casing. Put it all together, and give it a try. If you don't get a picture, turn up the potentiometer all the way (set to zero ohms across the two connected leads).

