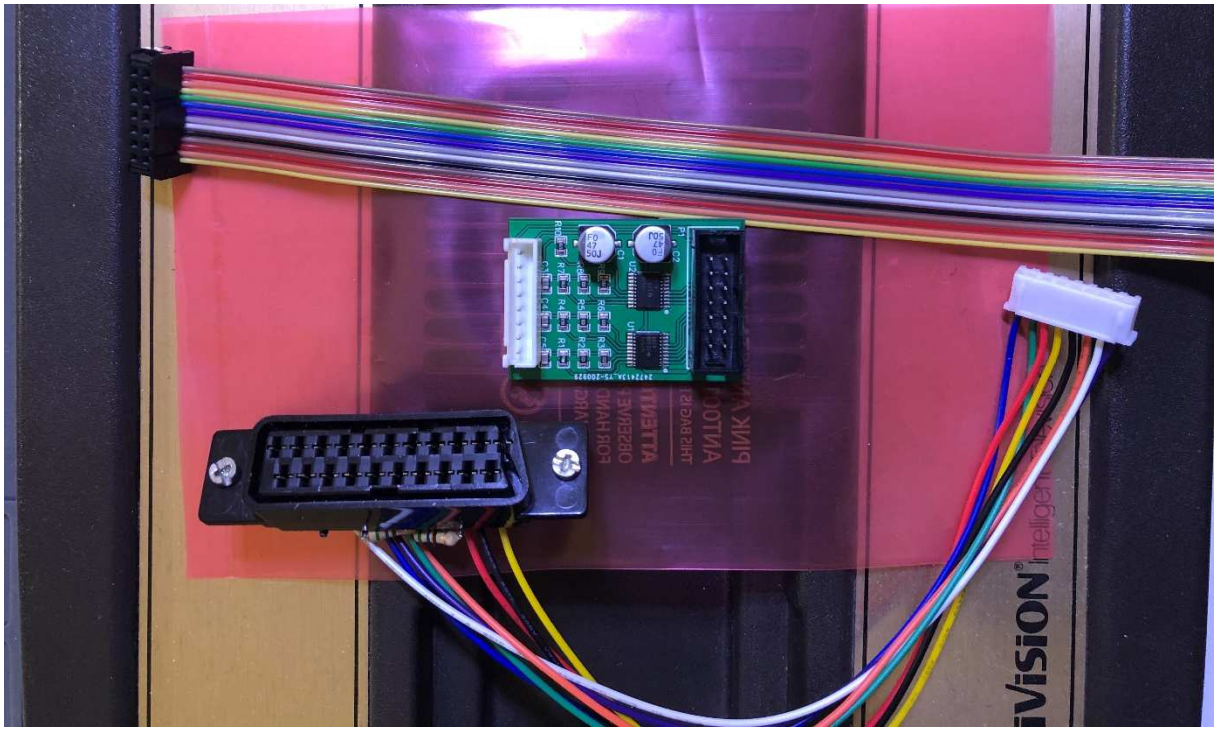
Mod content:



Connectors pinout

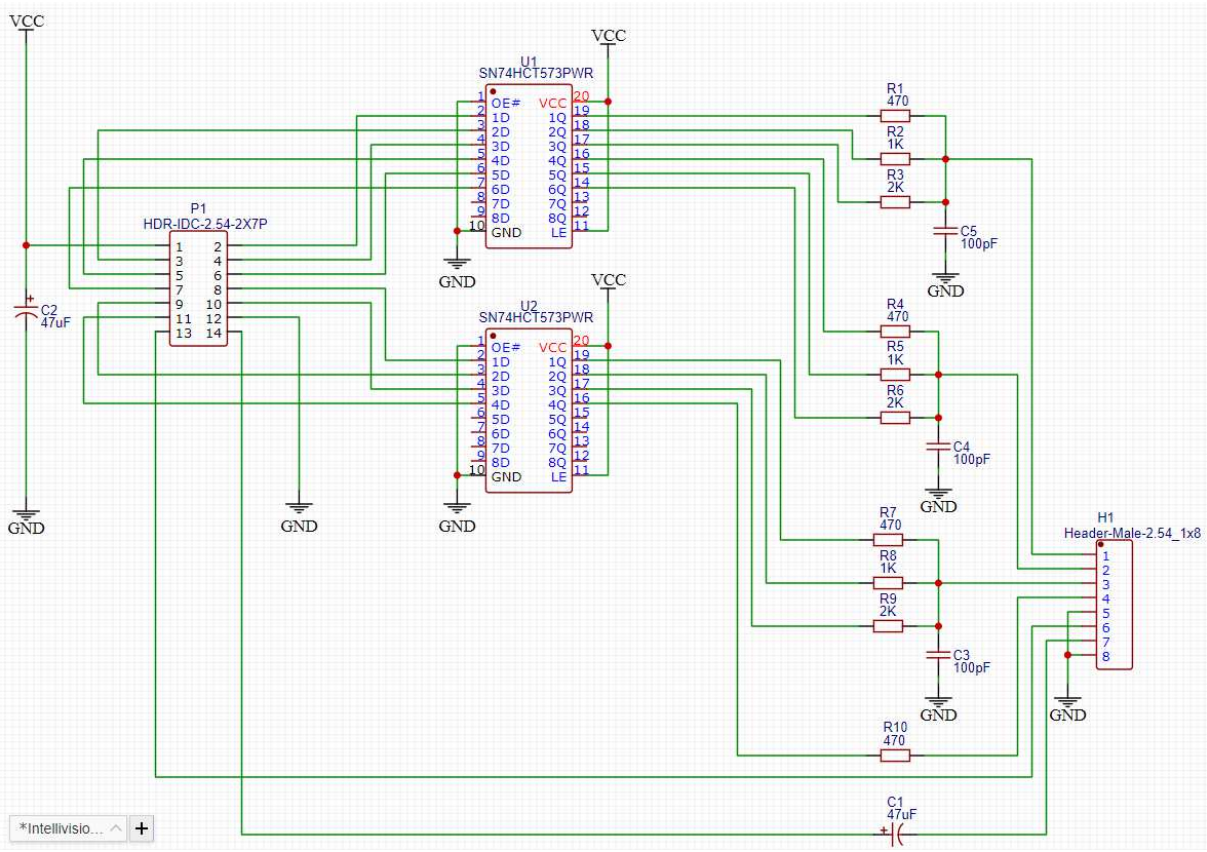
Input (IDC) connector

PIN #	Function
1	+5V
2	B2
3	B1
4	B0
5	G2
6	G1
7	G0
8	R2
9	R1
10	R0
11	C-SYNC
12	GND
13	+12V
14	AUDIO

Output (header) connector

PIN #	Function
1	Analog BLUE
2	Analog GREEN
3	Analog RED
4	C-SYNC
5	GND
6	+12V
7	AUDIO
8	GND

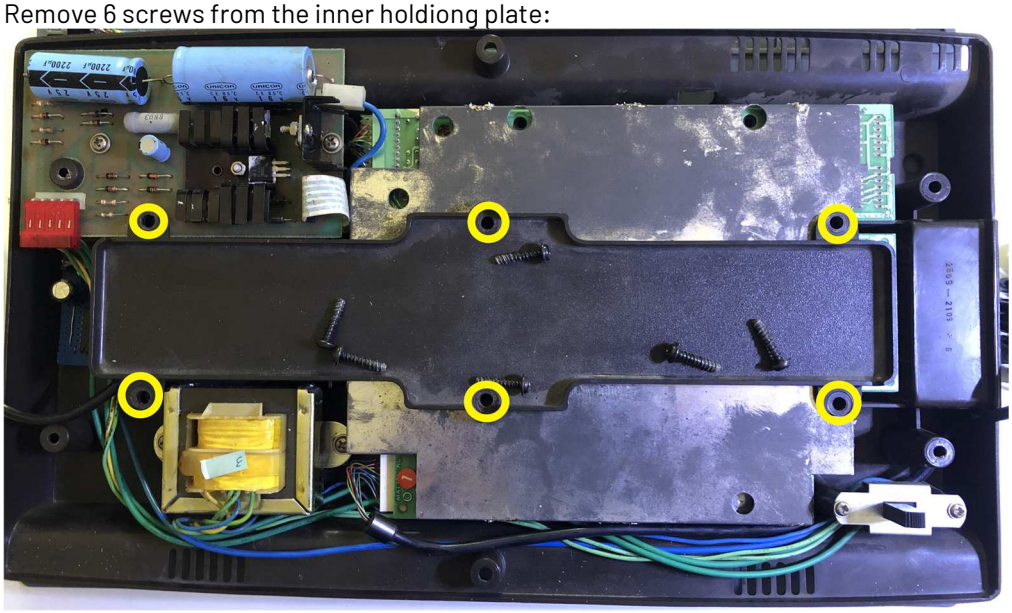
Schematic



Installation in Intellivision (only for models, having a LM1886N onboard)

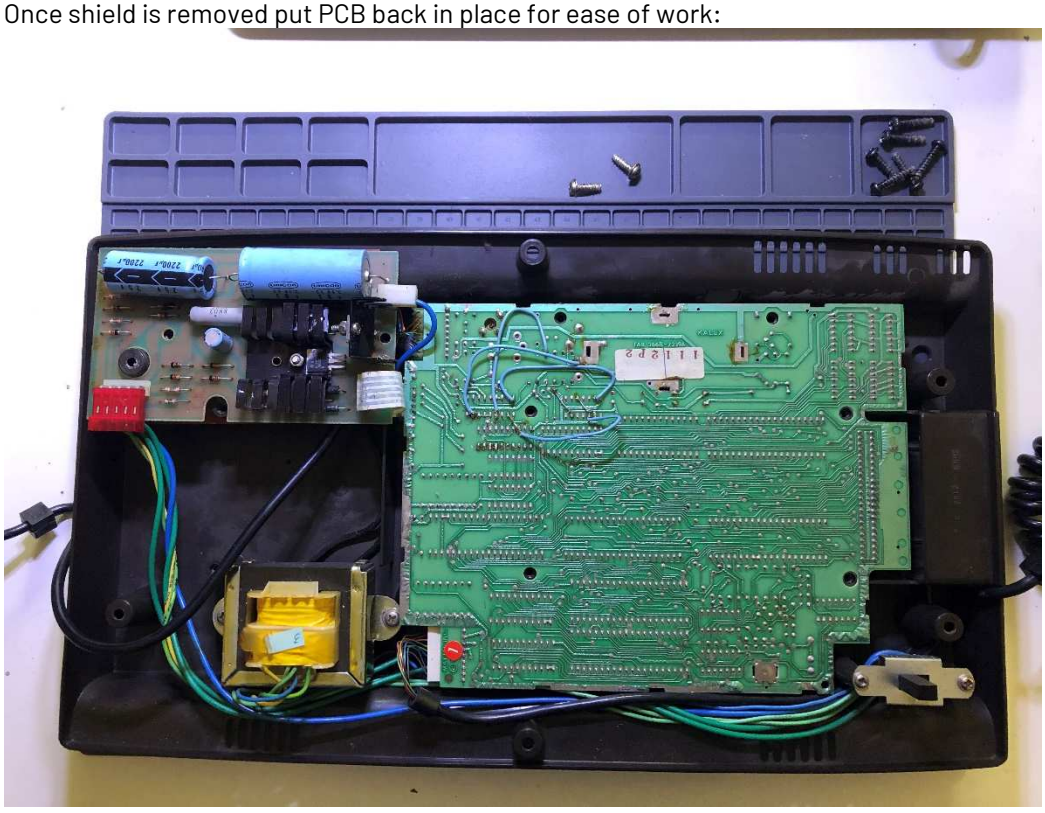
1. The intellivision must be openned and main PCB must be taken out (shielding must be removed also)
    a. Remove 6 screws from outside:

    b. Take care of the ON/OFF button that will fell of when you open the console
    c. Pass controllers throught the holes of the top part
    d. Remove 6 screws from the inner holdiong plate:

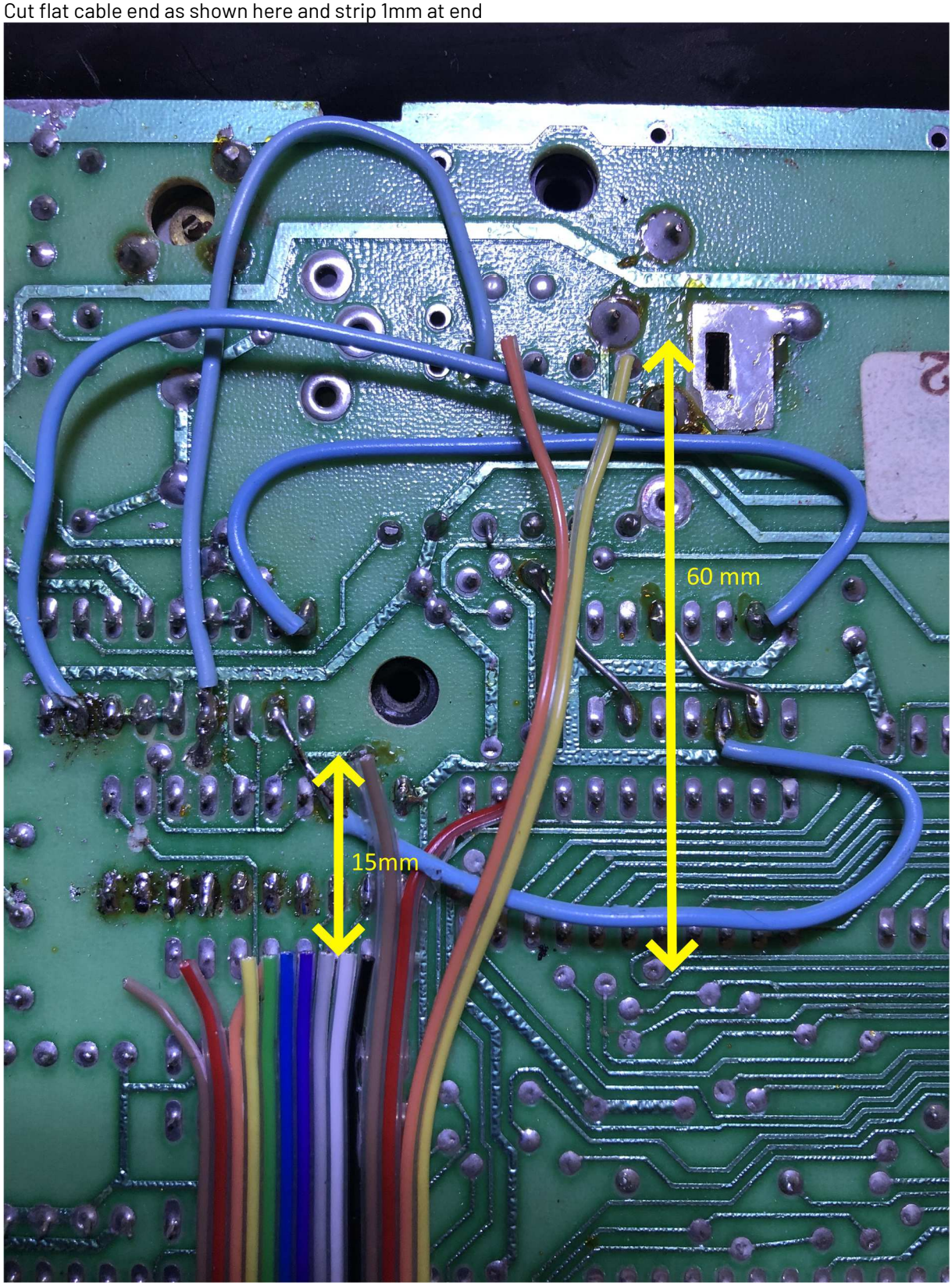


e. Remove PCB with shielding and remove solder spots attaching the shield:

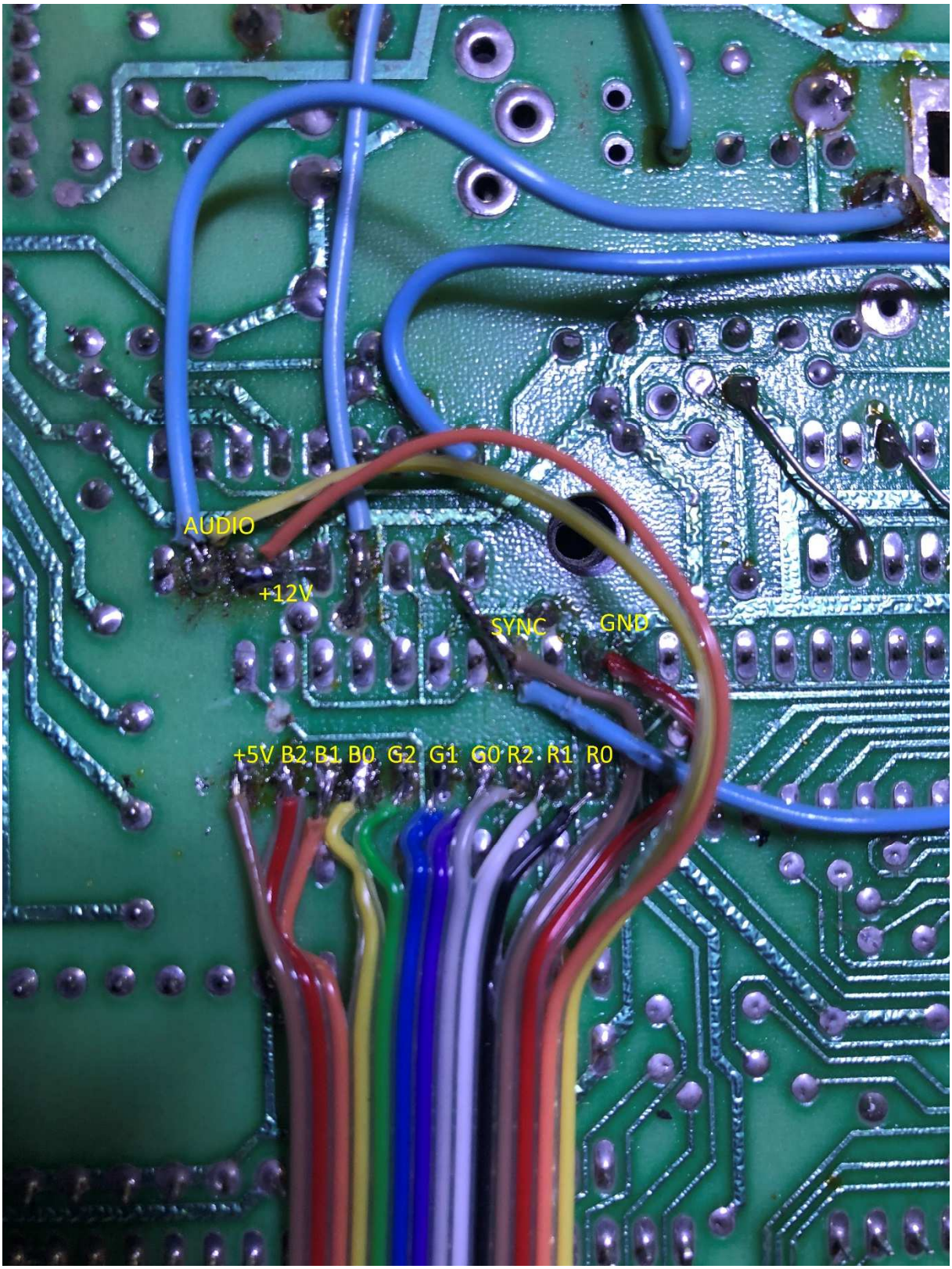
f. Once shield is removed put PCB back in place for ease of work:



2. Cut flat cable end as shown here and strip 1mm at end

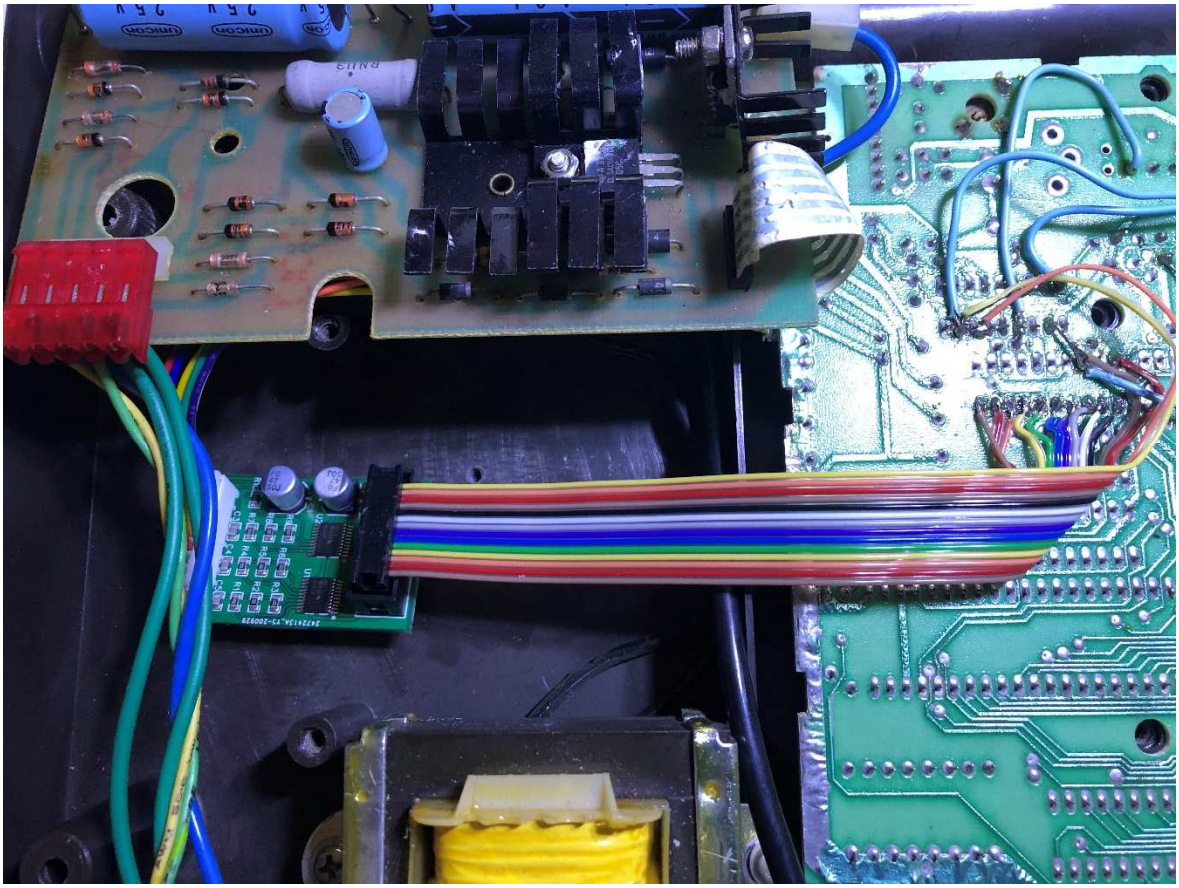


3. End of flat cable must be soldered to upper PCB side on following spot (upper right corner of PCB when installed in console):

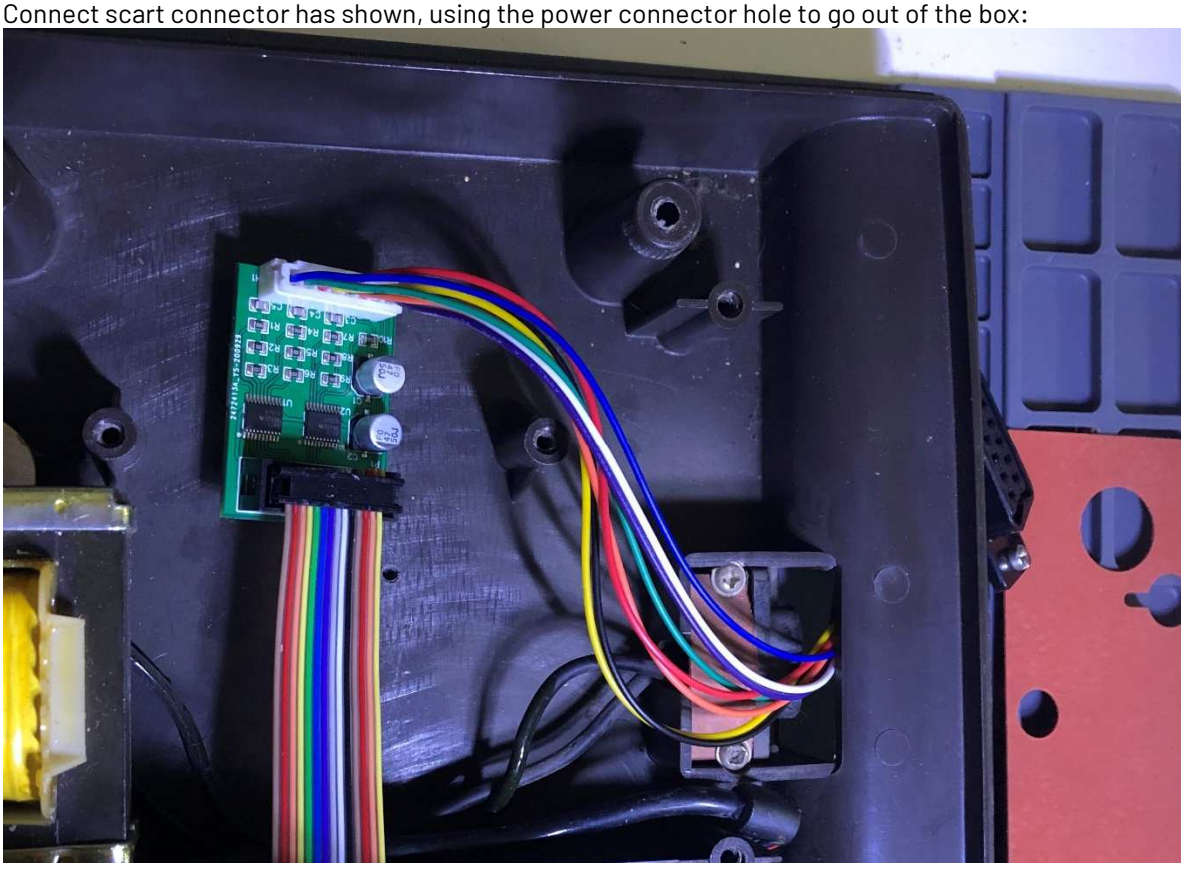


You do not have to touch at the SECAM mod (blue cables in prevous picture, cable color can change), the SECAM HF output will still work even with RGB mod present.

4. Bent flat cable as shown and connect to device:



5. Connect scart connector has shown, using the power connector hole to go out of the box:



6. You might want to secure PCB in place using a piece of double side adhesive, but once the scart is screewed and the console is closed there”s no risk without.

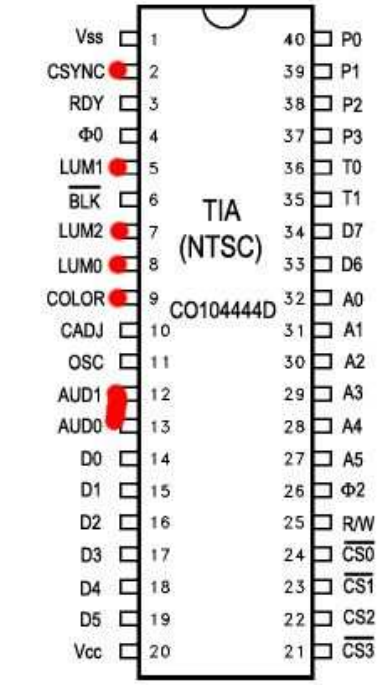
7. If you want you might put back the shield, but it is not necessary, in case you want take care of the flat cable so that is doesn't ge damaged.
8. Put back all other parts in reverse order,
9. SCART connector can be let free or screwed to the outside of the console (screws are not provided) :

Installation in ATARI 2600 (SECAM)

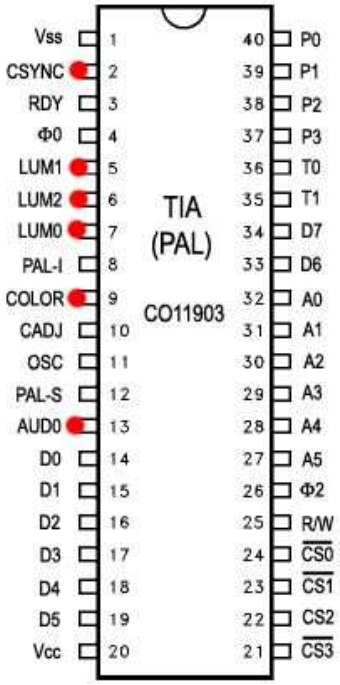
Atari 2600 has many PCB versions.

The easiest steps are :

1. Open the console and take out the PCB (remove shieding)
2. Check for the TIA IC (looking at PN on top of it)



ATARI 2600 Television Interface Adaptor (TIA)
NTSC Version



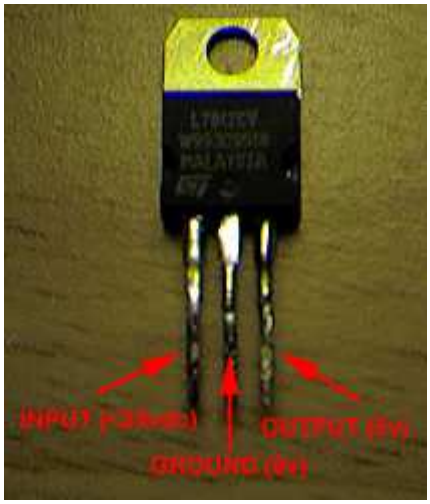
ATARI 2600 Television Interface Adaptor (TIA)
PAL Version

3. SECAM atari VCS can have either a PAL or NTSC TIA (for earlier models)
4. Solder flat cable to atari PCB on following spots (for TIA best is to solder wires on opposite side of PCB)

Flat cable	Atari PCB
1	5V regulator output
2	TIA LUM0 / BLUE
3	/
4	/
5	TIA LUM2 / GREEN
6	/
7	/
8	TIA LUM1 / RED
9	/
10	/
11	CSYNC
12	5V regulator GND
13	5V regulator Input

14	TIA AUD0 (AUD1 on NTSC is anyhow connected to AUD0 on atari PCB)

The 5V regulator is the only componenet looking like this and is usually put on a little heatsink, it is a 7805 regulator.



This mod can be installed in any Atari 2600 (NTSC/PAL or SECAM), however, doing so you will only have the ugly 8 colors palette that the SECAM version offers. Better options exists for PAL and NTSC versions keeping the original colors).

5. SCART connector can either be screewed to the outside of the console or let free, the cable can be run out of the console using the hole planned for RF output, the RF output cable can be removed as it will not be useful anymore.

Alternative cabling for a 8 grey level output (looks much better in some games):

Flat cable	**Atari PCB**
1	5V regulator output
2	TIA LUM2
3	TIA LUM1
4	TIA LUM0
5	TIA LUM2
6	TIA LUM1
7	TIA LUM0
8	TIA LUM2
9	TIA LUM1
10	TIA LUM0
11	CSYNC
12	5V regulator GND
13	5V regulator Input
14	TIA AUD0 (AUD1 on NTSC is anyhow connected to AUD0 on atari PCB)