Atari 2600 Pause&A/V Mod
Installation Guide

This document will guide you through installing your Atari 2600 Pause&A/V Mod Kit to your Atari 2600 (4-Switch, 6-Switch, and Junior NTSC-PAL) game consoles. Installation is basically the same with varying models.

Step-by-step guide will show you the detailed instructions; please carefully follow them.

Important Note!

These old consoles do have large capacitors inside and they need to be discharged before doing any job with the electronics of them. Otherwise, you may get shocked by accidentally or unintentionally touching them. To avoid such a situation, please leave your Atari 2600 game system’s On/Off switch at the ON position for at least 5 minutes with the power plug off the electricity source. Please do not skip this stage!

Disclaimer:

Though this job is a pretty easy task, it requires that you do some soldering of some wires and connections. If you are not skilled with a soldering iron, please have this installed by someone experienced! I cannot be held responsible for any harm you do to yourself or to your Atari 2600 game console.

Tools Needed

- Soldering iron, solder, and solder braid
- X-Acto knife
- Drill with 1/4” drill bit
- Needle-nose pliers
- Philips-head and flat-head screwdrivers
- Hot glue gun and hot glue stick (optional)
Junior Model Installation - NTSC

Step 1:

Open your Atari 2600 Jr. by unscrewing five screws at the bottom. Then, you need to bend the three tabs shown below with a flat-headed object.
Step 2:
Remove the metal shield parts from the front and bottom of the motherboard. Needle-nose pliers will help you bend the tabs holding the shield in place. They are not necessary anymore; you can throw them away.

Step 3:
Remove the components from the motherboards as shown below:
Step 4:

Now, solder wires from your Pause&A/V board to the spots shown below. Push the Audio In and Video In wires through the holes while heating them at the back with your soldering iron. The wires to be soldered on the spots are labelled the same as the spots. Just match them:
Step 5:
Open two ¼" holes at the side of your case as shown below. Be careful not to break any plastic while drilling.

Step 6:
Mount the A/V jacks and tighten the nuts with your needle-nose pliers. Then, solder the \textbf{V out} wire to the center pin of yellow jack, \textbf{A out} wire to the center pin of the white jack (this jack may be supplied as red, also). Solder the \textbf{GND out} wire to the outer terminals of both jacks.
Step 7:

Open one ¼” hole at the top left corner of your case and mount the switch as shown below. Again, be careful not to break any plastic while drilling. Unscrew the nut and small washer from the switch (leave the larger washer in place). Push the threaded portion of the switch through the case from the inside, and then attach the washer, followed by the nut. Toggle switch to be supplied will have two terminals; rather than the three-terminal one shown here. So, you can rotate the switch before tightening it based on your preference for how you want the switch to operate (left/right or up/down), as well as which position is “Paused”. Tighten up the nut with your pliers. Next, you need to solder SW1 and SW2 wires to the two terminals of the switch.
Step 8:
Now, it is the time to test and adjust the mod before putting the console together. Put in a game cartridge. Hook up your system to your TV and turn on your system. If the colors look right and pause function works, go on and re-assemble the console. If colors look weird, take a flat-head screw-driver and adjust the color to your taste by turning the pot shown below clock-wise or vice versa.

Final Step:
When all is done, simply re-assemble your console and enjoy your upgraded Atari 2600 Jr.
Junior Model Installation – PAL

This installation is the same as NTSC model. Just follow it. There are some rare variants of Jr model. Components on them may be located on different places but the labellings are the same. So, follow the labellings during installation.

Junior Model Installation – PAL(UK)

Remove the components shown on the photo:

Take the signals from the spots below:
4-Switch Model Installation – NTSC

Step 1:
Open your Atari 2600 4-Switch by unscrewing four screws at the bottom using your Philips-head screwdriver.
Step 2:
Remove the metal shield parts from the front and bottom of the motherboard. Needle-nose pliers will help you bend the tabs holding the shield in place. They are not necessary anymore; you can throw them away.

Step 3:
Cut the five pins shown and remove the RF box entirely. Removing it entirely will prevent any possible interference. Then, remove the components shown.
Removing this component enhances video quality. It is not necessary to remove, but give it a try if you want. I personally choose to remove.
Step 4:

Now, solder wires from your Pause&A/V board to the spots shown below. Push the Video In wire through the hole while heating it at the back with your soldering iron. There is not a hole for A in; just solder on resistor end. The wires to be soldered on the spots are labelled the same as the spots. Just match them:
Step 5:
Open two ¼" holes at the back of your case. Mount the A/V jacks and tighten the nuts with your needle-nose pliers.

Step 6:
Now, solder the V out wire to the center pin of yellow jack, A out wire to the center pin of the red jack (this jack may be supplied as white, also). Solder the GND out wire to the outer terminals of both jacks.
Step 7:

Open one ¼” hole at the top left corner of your case and mount the switch as shown below. Unscrew the nut and small washer from the switch (leave the larger washer in place). Push the threaded portion of the switch through the case from the inside, and then attach the washer, followed by the nut. Toggle switch to be supplied will have two terminals; rather than the three-terminal one shown here. So, you can rotate the switch before tightening it based on your preference for how you want the switch to operate (left/right or up/down), as well as which position is “Paused”. Tighten up the nut with your pliers. Next, you need to solder SW1 and SW2 wires to the two terminals of the switch.
Step 8:

Now, it is the time to test and adjust the mod before putting the console together. Put in a game cartridge. Hook up your system to your TV and turn on your system. If the colors look right and pause function works, go on and re-assemble the console. If colors look weird, take a flat-head screw-driver and adjust the color to your taste by turning the pot shown below clock-wise or vice versa.

Final Step:

When all is done, simply re-assemble your console and enjoy your upgraded Atari 2600.
4-Switch Model Installation – PAL

Remove the components shown below. Transistor to be removed may be labelled as Q201 or Q202. Remaining installation is the same as NTSC model. Just follow it.
6-Switch Model Installation – NTSC

Step 1:
Open your Atari 2600 4-Switch by unscrewing eight screws at the bottom using your Philips-head screwdriver.
Step 2:
Remove the two screws to separate the mainboard from the switchboard.
Step 3:
Cut the five pins shown and remove the RF box entirely. Removing it entirely will prevent any possible interference.

Step 4:
Now, you need to unscrew four screws at the back of the mainboard to remove the metal shielding.
Step 5:
Remove the last two screws to separate the shielding from the mainboard.

Step 6:
Remove the components shown below.
Step 7:

Now, solder wires from your Pause&A/V board to the spots shown below. Push the Audio In wire through the hole while heating it at the back with your soldering iron. The wires to be soldered on the spots are labelled the same as the spots. Just match them:
Step 5:
Open two 1/4” holes at the back of your case. Mount the A/V jacks and tighten the nuts with your needle-nose pliers.

Step 6:
Now, solder the **V out** wire to the center pin of yellow jack, **A out** wire to the center pin of the white jack (this jack may be supplied as red, also). Solder the **GND out** wire to the outer terminals of both jacks.
Step 7:

Open one ¼" hole at the top right corner of your case and mount the switch as shown below. Unscrew the nut and small washer from the switch (leave the larger washer in place). Push the threaded portion of the switch through the case from the inside, and then attach the washer, followed by the nut. Toggle switch to be supplied will have two terminals; rather than the three-terminal one shown here. So, you can rotate the switch before tightening it based on your preference for how you want the switch to operate (left/right or up/down), as well as which position is “Paused”. Tighten up the nut with your pliers. Next, you need to solder SW1 and SW2 wires to the two terminals of the switch.
Step 8:

Now, it is the time to test and adjust the mod before putting the console together. Put in a game cartridge. Hook up your system to your TV and turn on your system. If the colors look right and pause function works, go on and re-assemble the console. If colors look weird, take a flat-head screw-driver and adjust the color to your taste by turning the pot shown below clock-wise or vice versa.

Final Step:

When all is done, simply re-assemble your console and enjoy your upgraded Atari 2600.
6-Switch Model Installation – PAL

PAL installation is very similar to NTSC. Remove the parts shown below and R213 if there is one on the board. Audio In should be taken from the spot shown in the second picture. For the rest, follow the NTSC guide.
Have Good Gaming Sessions!

Please do not hesitate to contact if you have anything to share or a question to ask via m.jonturkk@hotmail.com