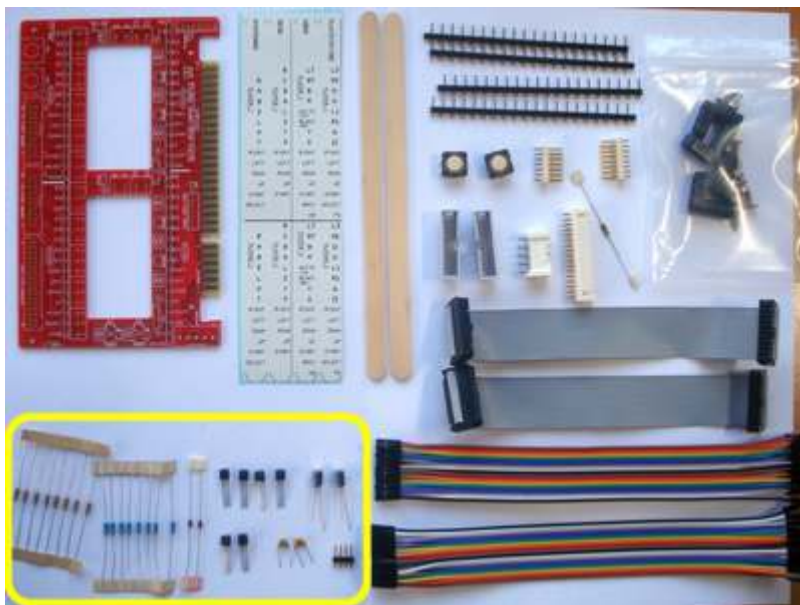


# Guide to assembling the JAMMA-Prog kit

## Tools and materials required:

- Soldering iron and solder wire.
- Pliers, cutters, screwdriver.
- Sharp knife and cutting board.

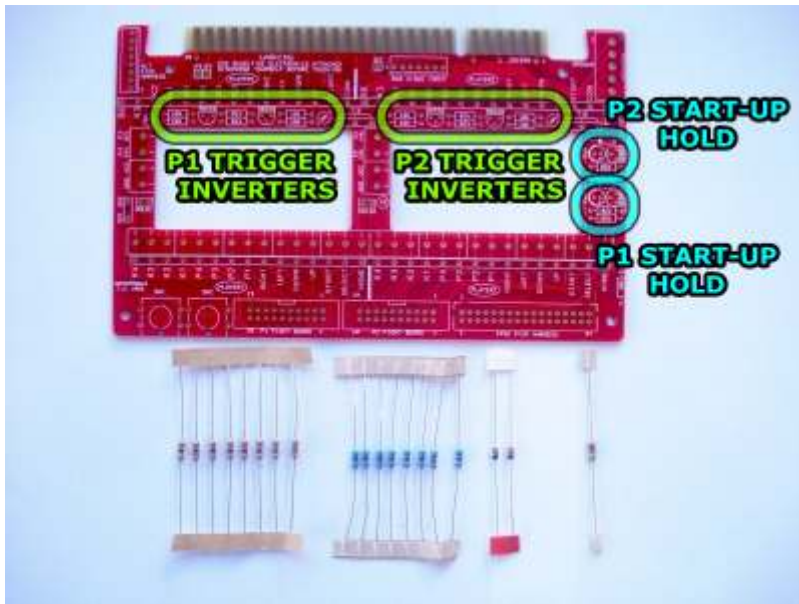


The kit contains the following parts.

- 1 of JAMMA-Prog board
- 2 of controller function list sticker
- 2 of wooden stick
- 4 of pin strip, 20 pin, 5.08mm pitch
- 2 of Omron B3F-4000 pushbutton switch
- 1 of KF2510 header, 7 pin, 2.54mm pitch
- 1 of KF2510 header, 8 pin, 2.54mm pitch
- 2 of IDC box header, 20 pin
- 1 of JST VH header, 5 pin, 3.96mm pitch
- 1 of Hirose DF1B header, 34 pin, 2.5mm pitch
- 1 of 10k resistor (brown body)
- 1 packet of feet, containing
  - 4 of black plastic PCB foot, 20mm height
  - 4 of fine thread screw
  - 4 of wood screw
- 2 of IDC ribbon cable, 20 pin, 150mm length
- 20 of 1p-1p female jumper wire, 200mm length

These parts, packaged separately, are for the trigger inverter and start-up hold circuits.

- 8 of 10k resistor (brown body)
- 8 of 82k resistor (blue body)
- 2 of 1N4148 diode
- 4 of SS8550 PNP transistor
- 2 of SS8050 NPN transistor
- 2 of 100n MLC capacitor (orange body)
- 2 of 4.7u electrolytic capacitor
- 1 of pin strip, 4 pin, 2.54mm pitch

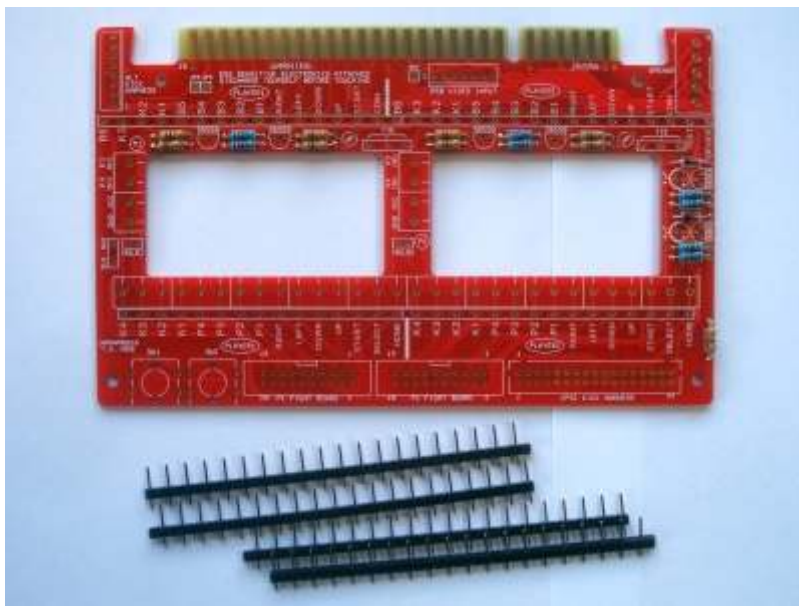


It's easiest to start with the components which have the lowest height. Fit the resistors and diodes. The diodes are polarised (installed a particular way around). Match black anode stripe on the glass body with the stripe marked silkscreen legend.

The trigger inverter circuits are for game pad hacks to game pads with analog triggers.

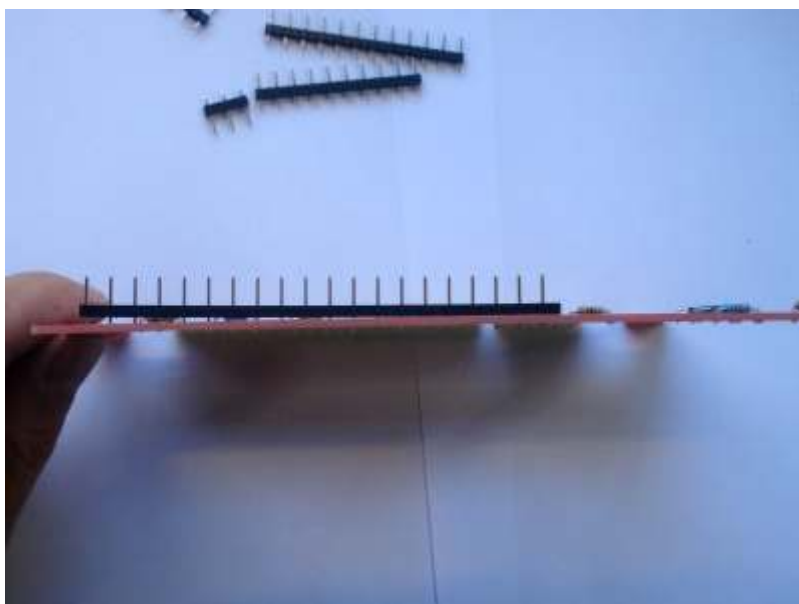
The start-up hold circuits are for fighter board controller boards such as the Brook & PS360 boards which have different modes which are set by holding a button down during start-up.

Fitting either the trigger inverter or start-up hold circuits is optional. You would generally want one or the other or neither. I am fitting both in this guide, to show where the components go, but it's not useful to have both.

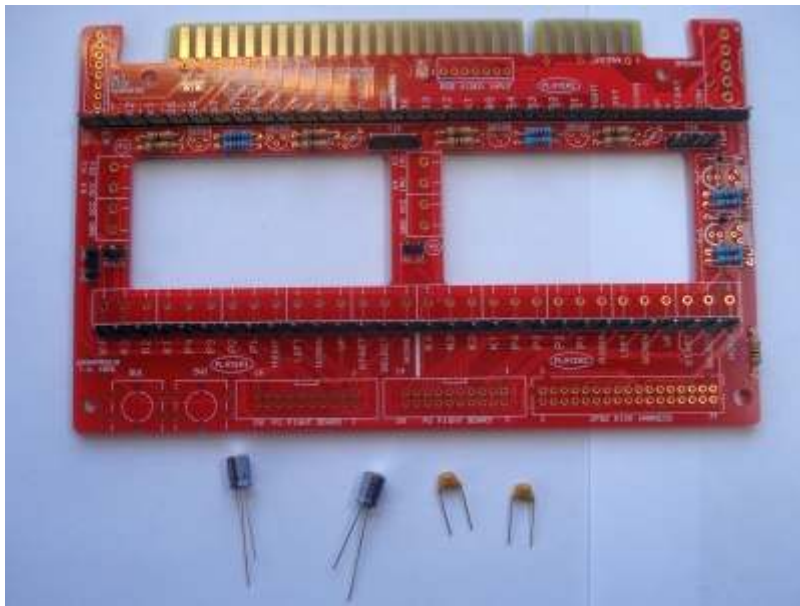


It's time to install the pin strips. There are 4 strips of 20 pins each. Use two strips whole. Break one 12 pins long, the other 10 pins long. From the remainder break a couple of strips of 3 pins for the tie points and one strip of 2 pins for the switches (SW1, SW2).

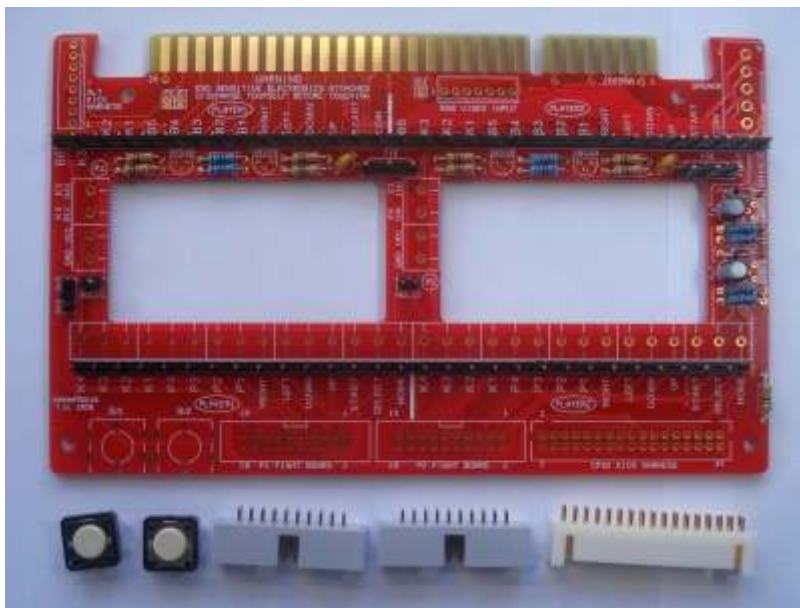
If you bought the extra parts, cut the 4 pin, 2.54mm pitch strip into two pieces of 2 pins each. Then fit them into HOLD1 and HOLD2 positions.



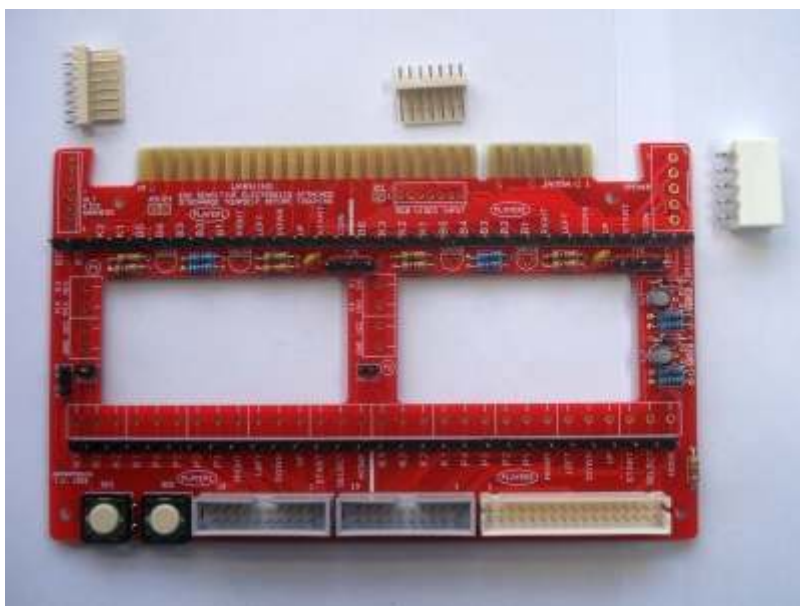
The long pin strips don't want to stay flush against the board sometimes. The trick is to solder only the two pins on each strip, one on each end. This make it easy to adjust when crooked. Once everything is flush and aligned solder all the remaining pins.



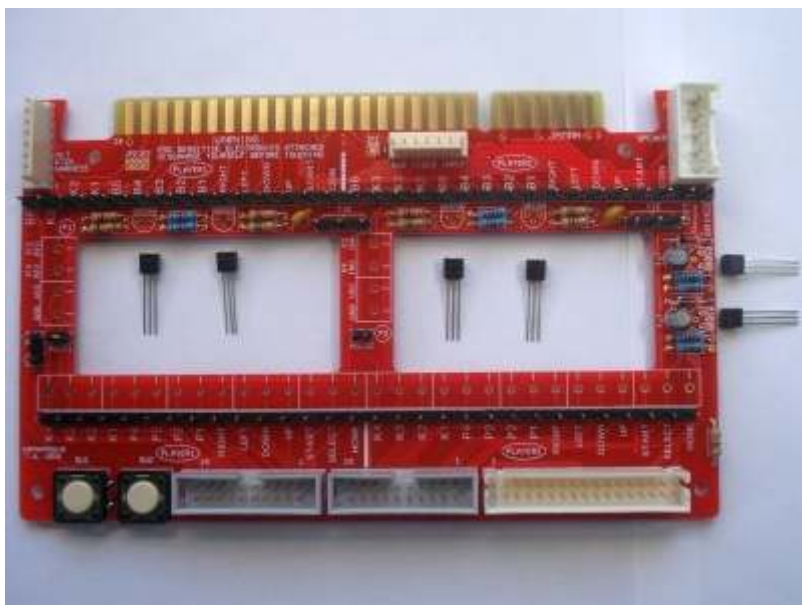
Fit the two 100n MLC capacitors and the two 4.7u electrolytic capacitors. The electrolytic caps are polarised. Match the white stripe of the capacitor with bold semicircle on the silkscreen legend.



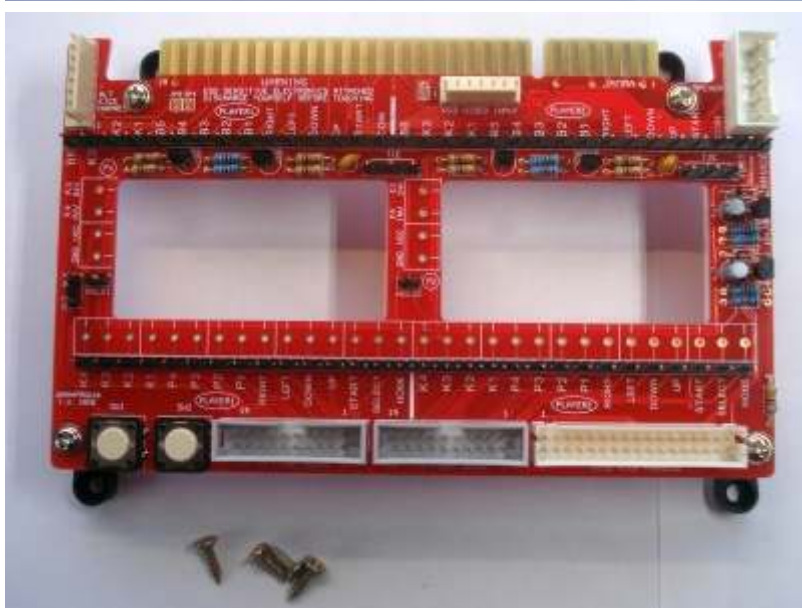
Fit the two Omron pushbutton switches, the two IDC box headers, and the CPS2 kick header. Make sure you put the headers the right way around.



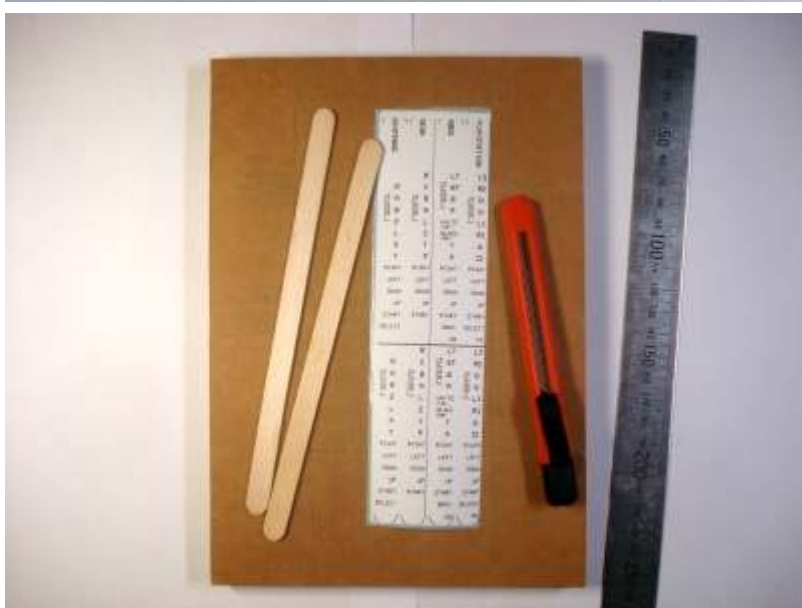
Fit the remaining headers. Make sure you put the headers the right way around.



Fit the transistors. The trigger inverter circuits have four **SS8550** transistors while the start up hold circuits have two **SS8050** transistors. Like the diodes, these are polarised. Match the transistor body shape with the silkscreen legend.



Screw on the PCB feet using the fine pitch screws.



In order to support multiple consoles, the kit comes with four different controller function labels and a pair of wooden sticks to attach them to. This makes it easy to switch the labels when a multi-console controller board is connected.

Xbox, Playstation, Sega, Nintendo labels are provided.

If you are wiring pad hacks it may be easiest to cut out the particular label you need and stick straight to the JAMMA-Prog board, under the controller side pins.

If want replaceable labels, read on...



Place a metal ruler or other straight edge along the printed edge of the Sega label and cut with a sharp knife.

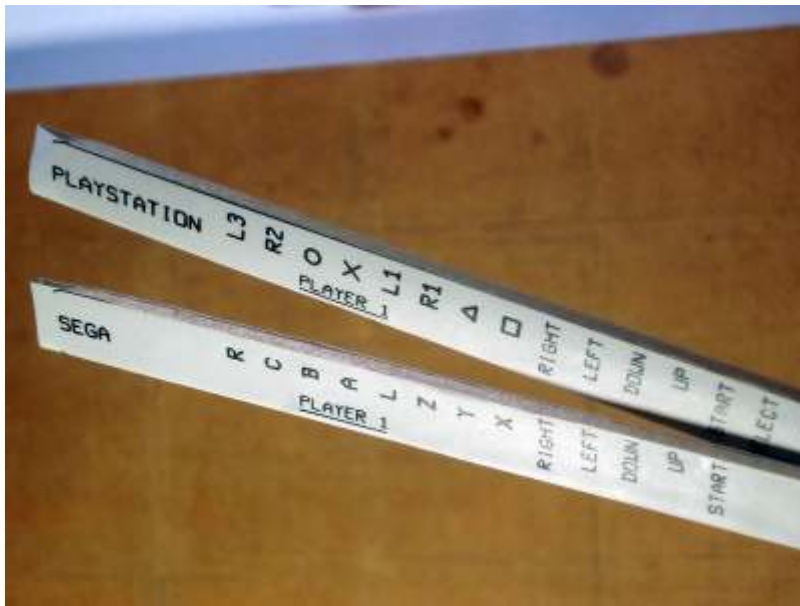


Remove the label backing paper and stick the label over one of the wooden sticks. The edge of the Sega label you just cut lines up with the edge of the stick. The stick should lie between two semicircles on each end.

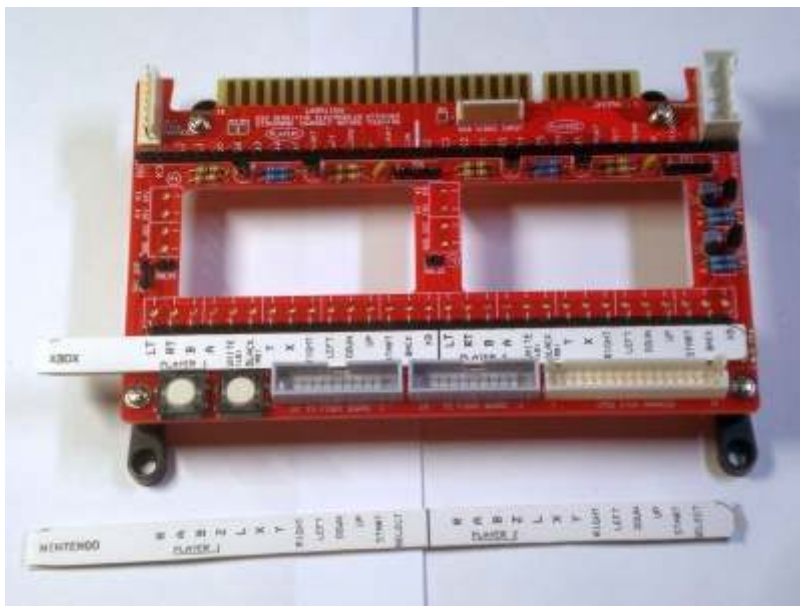


Fold the label over the stick and cut the excess label off with the knife.

Now one side of the stick has a Sega label and the other an Nintendo lable.



Do the same with the Xbox/Playstation label.



The label stick fits snugly between the controller pin strip and connectors below.

Now the JAMMA-Prog board is ready to wire up a game pad hack or plug in a multi-controller board.

[Change Log](#)

15/6/2020 - Page created.