MIDISTOMP SIX

BUILDING GUIDE

Hi, Thanks for purchasing a midistomp six kit.
Let the construction begin!

Box Contents

Your midistomp six DIY kit arrives with the following items:

- x1 Printed Circuit Board
- x1 Aluminium Enclosure
- x5 3PDT Footswitches with bi-color LED ring
- x1 SPST Momentary Footswitch
- x1 5mm LED bezel
- x1 5mm LED
- x1 USB Panel Mont Connector
- x1 SPST Momentary Button Switch
- x11 220 Ohm Resistors
- x1 Teensy 2.0 Board
- x2 Header pin strips
- x6 Lengths of wire 24AWG (x4 short and x2 long)
- x1 USB Cable

PLEASE NOTE: If you are planning to add TRS jacks for expression and/or TRS MIDI – please visit www.midistomp.com/resources and read the changes you will need to make to this build guide so that you can incorporate the instructions to your build.

1. Soldering the Circuit Board

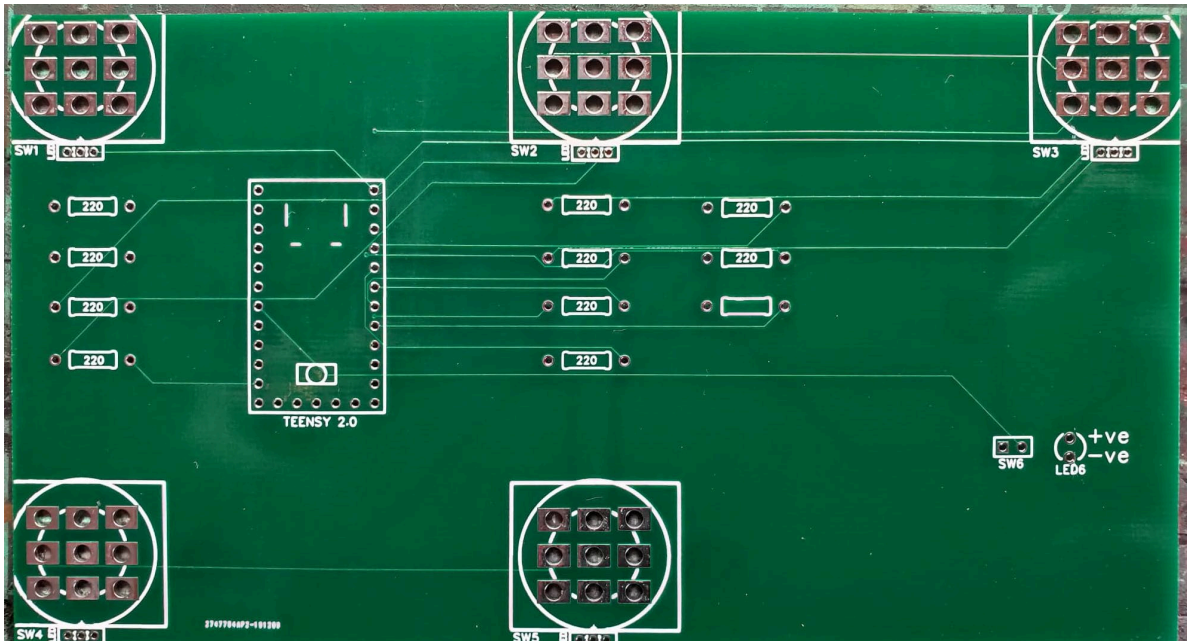


Figure 1

The printed circuit board (PCB) has white lines showing where different components should be soldered. The resistors (x11) should all be the same, it doesn't matter which way they are soldered in (they don't have a backwards/forwards direction).

Now the teensy. Place the header pins in the PCB, then place the teensy on top. Be careful not to solder anything until the teensy, the pins, and the PCB are joined, otherwise they will be out of alignment. It should look a bit like fig 4. Now solder the top of the teensy onto the pins, and then flip the PCB over and solder the bottom of the pins to the PCB.

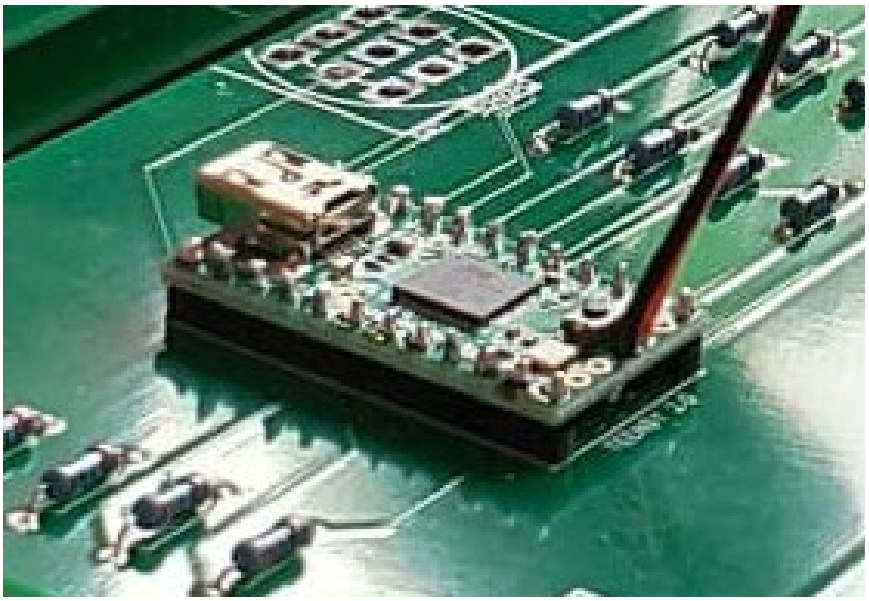
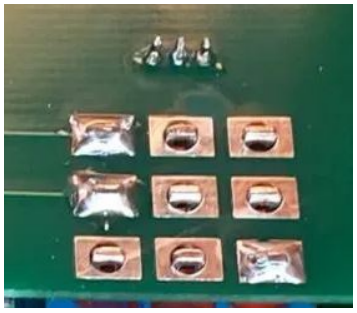


Figure 2

The 5 footswitches with LEDs all slot in with a little bit of manipulation. You won't need to force them – just a wiggle. But don't solder those yet. First, you need to remove the nut and the washers/light disperser. Remove the metal washer and discard it. Then pop each white light disperser into the 17mm holes on the enclosure. You may need to remove some paint from the inner diameter of the hole before they will fit properly.

Then you need to place the entire PCB into the enclosure and make sure that the 5 switches are lined up with the holes. Screw the nuts on top to make sure it all fits, then whilst it is all assembled like this, solder the 3 large pins and the 3 smaller LED pins as shown in the photo



Unscrew the nuts and remove the PCB from the enclosure again.

Now you are ready to solder the remaining items.

Cut the pins of the led in half – making sure to keep the longer one long (that is the positive side of the LED and needs to be attached to the red wire)

Add some solder to the pins of the remaining footswitch, the reset button, and the LED. Then re-melt the solder to add wires to the led and the footswitch. Color does not matter on the switch, but make sure the LED is wired as described above. Follow up by soldering the switch and the LED to the PCB

Now add a little solder to the two pin holes behind the reset button on the teensy board as show in figure 5.

Figure 3

Attach the two longer wires to these two holes and they will be attached later to the reset button.

Now all soldering except the reset button is done.

2. Assembling the Midistomp Six

Firstly, add the LED bezel and dab a small amount of PVA or similar glue around the outer edge (from the inside of the enclosure). Don't use CA or Superglue as it may cause a white frosting to leak out onto the black paint exterior.

Now, plug in the USB panel mount connector to the Teensy board.

Next, remove the washer and nut from the reset button. Discard the washer. Insert the reset button into its hole and tighten the nut on the inside. Try and keep the pins in a convenient location for soldering the wires on.

(grab the reset wires on the teensy and hook them over the side of the PCB where you will be able to get them to the reset switch)

Remove the top nut from the momentary footswitch and insert it into its hole. Adjust height as necessary. Then insert the LED from the inside of the enclosure into the bezel. Make sure you can still reach the reset wires.

Screw the nuts on all the remaining footswitches.

Now solder the reset wires on the button's pins.

3. Check

Check you now have:

- A completed circuit board
- 6 switches soldered and screwed into the chassis
- 1 LED soldered and glued into the chassis
- 1 USB connector screwed to the chassis and connected to the Teensy
- 1 reset button wired and soldered to the Teensy

You can now screw your midistomp six together and visit www.midistomp.com/setup to load profiles and get started!