

geekÜs

Decade Resistance Kit



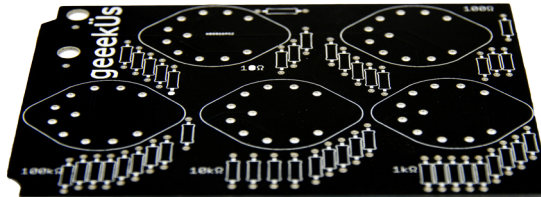
GK-KIT-002

Parts

| Qty | Part # | Description | Remarks |
|-----|----------------|---------------------------------|---|
| 5 | COM-13253 | 10 Position Rotary Switch | POS |
| 9 | R1/4-10 | 10Ω resistor ¼ watt | (Brown, Black, Black, Gold) |
| 9 | R1/4-100 | 100Ω resistor ¼ watt | (Brown, Black, Brown, Gold) |
| 9 | R1/4-1K | 1KΩ resistor ¼ watt | (Brown, Black, Red, Gold) |
| 9 | R1/4-10K | 10KΩ resistor ¼ watt | (Brown, Black, Orange, Gold) |
| 9 | R1/4-100K | 100KΩ resistor ¼ watt | (Brown, Black, Yellow, Gold) |
| 5 | 450-2070 | Blue Knob | |
| 1 | BRD-RESISTANCE | Custom PCB Board | 100 x 72 x 1.3 mm (LxWxH) |
| 1 | AG-1010R | Red Banana Socket | |
| 1 | AG-1010B | Black Banana Socket | |
| 2 | | 6 inch 22AWG Wire | Red & Black |
| | 1591T5BK | Plastic Enclosure (Optional) | 119 x 56 x 83 mm or 4.7 x 2.2 x 3.3 inch (LxHxW) |

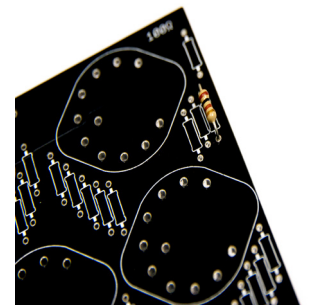
Instructions

PCB



1) Take the Custom PCB Board and clean the contacts or pads with flux remover to help the solder flow easily onto the board.

2) Read the label written on the board and place the corresponding resistors to the correct hole. We start off with 10Ω on the top left side of the PCB board. Please hold the board with the logo geekÜs facing to your left.

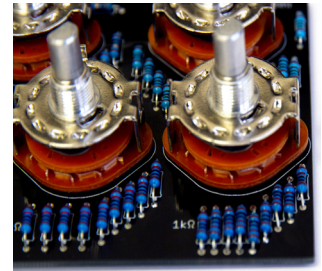


3) Place one resistor at a time and solder them in place. The resistors should be exposed on the surface with the writing called the silkscreen. The back board is the side with no writing, this is where the wire should poke out to be soldered onto the pad.

- 4) Bend one side of the lead of the resistor to a 45° after placing the unit through the hole and solder the other lead. Then solder the bent lead of the resistor into place. You may now trim the leads off with a flush cutter.



soldering temperature with iron is good at 320°C using 60 tin/40 lead solder

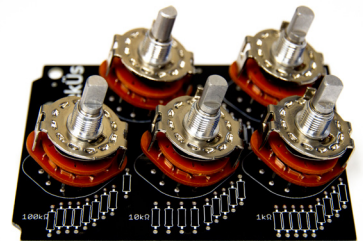


- 5) Do the same technique for all the 10Ω resistor and consult the parts list if you don't the value of the resistor.

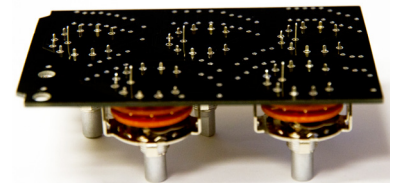
- 6) Repeat the same technique for all the other resistors from 100Ω to 100KΩ.

- 7) You may now want to get flux remover to clean the (soldermask) backside of the board over the recently soldered resistors. (recommended 4140-400G and 852)

- 8) Place the 10 POS (see parts list) into the board the component should line up with the markings.



- 9) After placing all five of the POS into the board, flip the board and place the POS and board onto an even surface. This will allow you to solder the components in place easily.

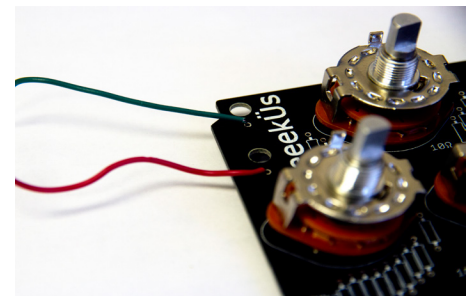


- 10) After pulling of that acrobatic maneuver, solder the switches into place.

- 11) Repeat step 7 over the POS pins.

- 12) Take one of the 2 inch awg wire and solder the lead to the board near the logo. This will act as your input and output.

- 13) Take the other end of the wire and soldered that on to the Red banana socket metal ring that has a hole for the wire to be inserted. Do not reassemble the socket yet!



- 14) Repeat the same step from 12 for the secondary pad and use the black banana socket. Using a multi-meter test the decade resistance box, by turning clockwise you increase the value. By turning it counter clockwise you decrease the value (starting position). Place all switches back to starting position when you are done.

Instructions

Case

- 1) Using the provided placement stencil, place it over the cover of the project box. You will use a drill bit or blade with adult supervision and create a hole of the specified size shown.
- 2) The metal ring that was previously left unconnected will now connect in between the washer and nut.
- 3) Place the banana plugs through the hole and screw on the end to fasten into place.
- 4) Place the potentiometers through the hole of the cover and tighten with the Blue knobs by tightening the screw on the knob inwards clockwise.
- 5) Loosen the screws if required to get the potentiometers their starting point counter clock wise. The caps will have the starting line facing downwards.
- 6) At any point if you want to place a sticker you just have to remove the caps and seat the sticker onto the top panel of the project box. (some cutting maybe required)

Schematics

