

# USB POWER SUPPLY

**PRODUCT CODE:** M00270021

**DESCRIPTION:** This small equipment is to simulate the USB power in the computer such that all the equipment originally needs to plug into the computer can be used without computer.

**READ BEFORE INSTALLATION:**

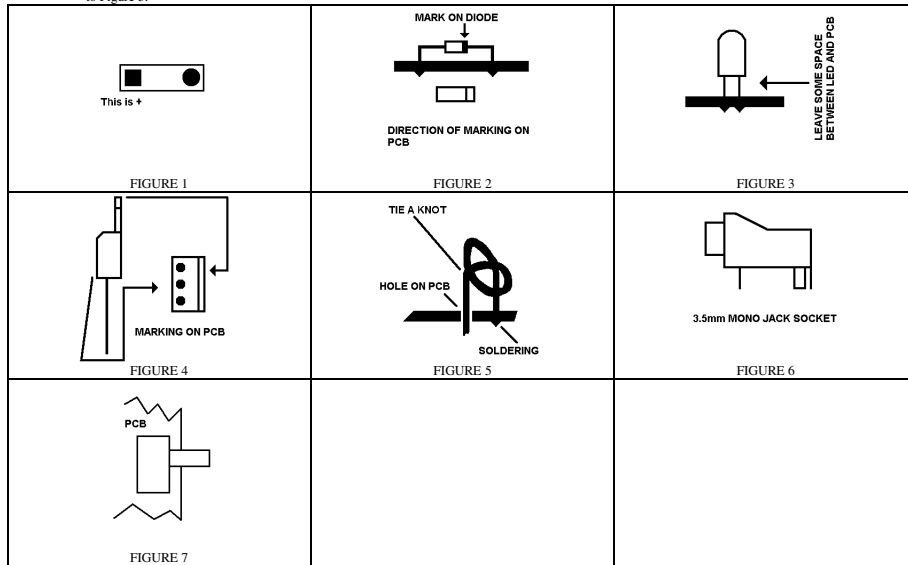
- Put the component on the side of screen printing and solder on the back of PCB without printing.
- Placing direction of component
- 1. On component, longer leg is "+".
- 2. On PCB marking, square pad as Figure 1 is always "+"
- 3. For diode, please install as Figure 2.
- 4. For Voltage Regulator, please place the component as Figure 4.
- Do not put the LED to very bottom, just install as Figure 3.
- For 9v Battery Adaptor, Red is B+ and Black is B-. Also, please tie a knot after the red and black wire has passed the neighbors hole before soldering. This is similar to Figure 5.

**INSTALLATION:**

Just install the component to the PCB M00260037 according to below table.

ITEM	SYMBOL ON PCB	DESCRIPTION	OUTLOOK	DIRECTION IS IMPORTANT?
1	R1	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
2	D1	DIODE, 1N4001	FIGURE 2	FIGURE 2
3	C1	CAPACITOR, 0.1uF	MARK WITH 0.1uF OR SAME MEANING OF VALUE	YES
4	C2	CAPACITOR, 0.33uF	MARK WITH 0.33uF OR SAME MEANING OF VALUE	YES
5	L1	LED	ONE LONG LEG AND ONE SHORT LEG	YES
6	VRE	VOLTAGE REGULATOR, LM7805	FIGURE 4	FIGURE 4
7	USB	USB RECEPTACLE	GUESS YOURSELF	YES
8	SWITCH	SLIDE SWITCH	SIX LEGS	FIGURE 7
9	DCJACK	3.5mm MONO JACK SOCKET	FIGURE 6	YES
10	B+, B-	9v BATTERY ADAPTOR	RED WIRE, BLACK WIRE	YES

- If you want to use external DC adaptor as power supply, the output power must be at least 5W with the voltage around 8V to 25V.



**CIRCUIT EXPLANATION:**

- Please read the below together with the circuit diagram in Figure 8.
- The function of D1 is to prevent reverse power supply.
  - Part 1 is a voltage regulating circuit that gives out stable 5V as standard USB.
  - Part 2 is a LED to show up the equipment is on.
  - Part 3 is the output of USB.

**CIRCUIT DIAGRAM:**

