

Battery Charger kit

Technical Manual Rev 1r0



The e-Gizmo Battery Charger kit is **for Ni-MH (Nickel-Metal Hydride) Rechargeable battery cell ONLY**. Use this for charging your battery in just a minutes. On its pre-settable number of battery cells and current setting. It displays the charged voltage of your rechargeable battery to monitor the voltage is up.

FEATURES:

- With Thermistor sensor
- With Serial TTL pin connections.
- **With 12V Adaptor**

GENERAL SPECIFICATION:

- **Supply Input:** 12V DC
- **On board IC:** ATmega168 MCU
- **Display:** 4 digits 7 segments
- **PCB Dimension:** 60 mm x 64 mm

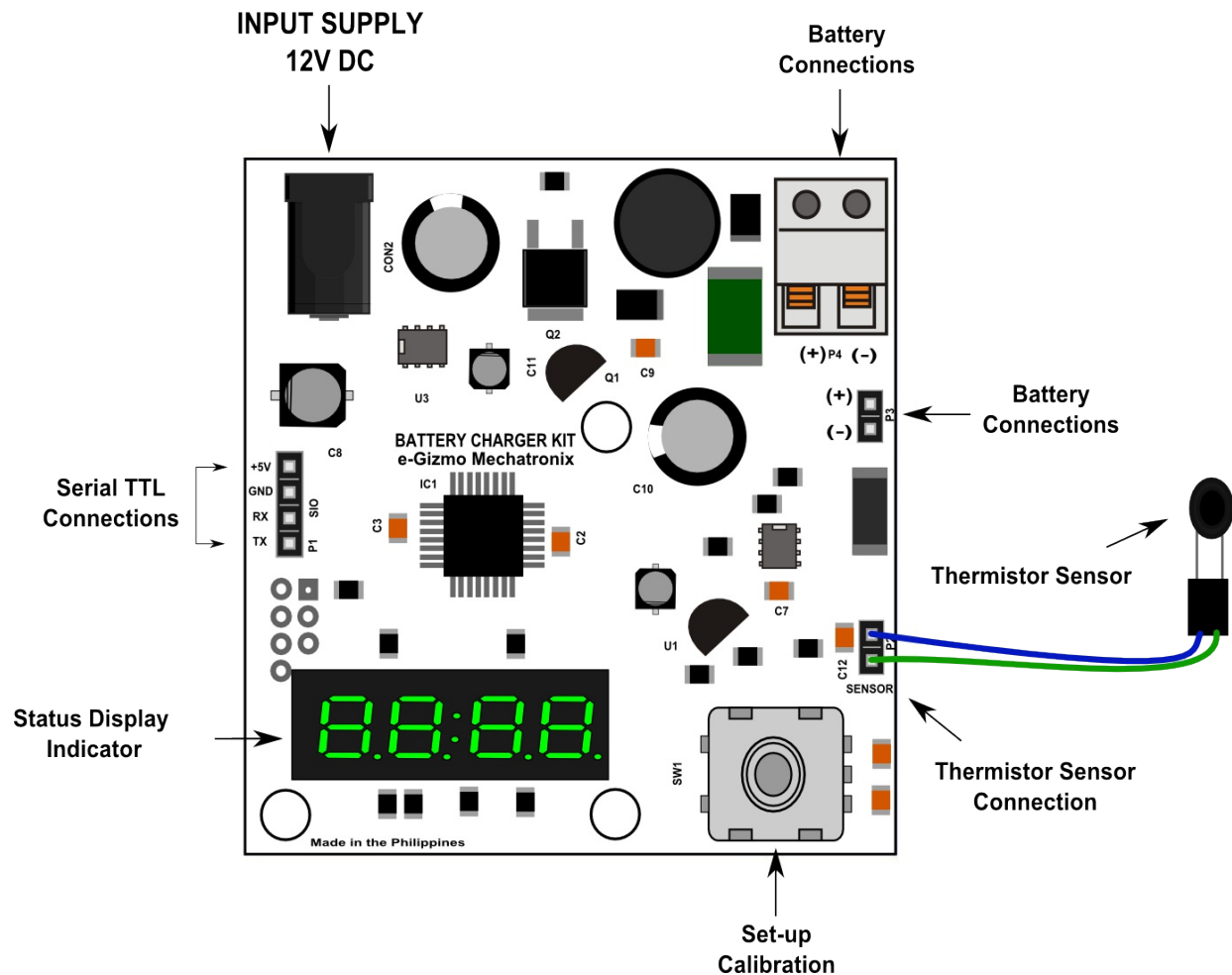


Figure 1. Major parts presentation of e-Gizmo Battery Charger kit

Table 1. P1 connections and descriptions

PIN Name	Descriptions
+5V	+ 5V DC Supply Input
GND	Ground connection
RX	Received
TX	Transmit

Table 2. P2 connections and descriptions

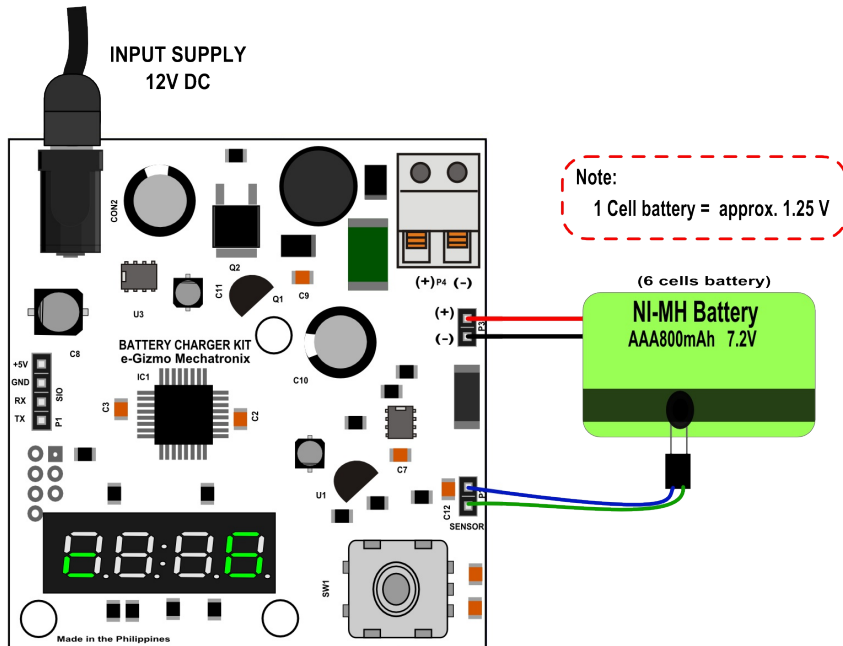
PIN Name	Descriptions
SENSOR	Thermistor Sensor Pin Connection

Table 3. P3 and P4 connections and descriptions

PIN Name	Descriptions
(+)	Anode battery Pin Connection
(-)	Cathode battery Pin Connection

Table 4. SW1 connections and descriptions

PIN Name	Descriptions
SW1	Switch for Calibration



In Figure 2, When power is ON, the display shows "c 6". It means that the Battery charger kit sets on 6 battery cells. Then connect the Ni-MH rechargeable battery to P3 or P4. You may adjust the number of cells by *turning/rotate the SW1*. Once you set the cell number of battery. *Push/press the SW1*.

Note that the
1 cell Battery = AAA = approx. 1.25V

Figure 2. Setting-up Battery Charger Cell Illustration

Next In Figure 3, current setting as shown in battery charger kit display "i0.67". It means that current sets in 670mA. You may adjust the current you want. The higher the current the faster it will charged.

Also dont forget to **place the Thermistor sensor with Ni-MH rechargeable battery**. Then *Press/Press the SW1* to begin charging.

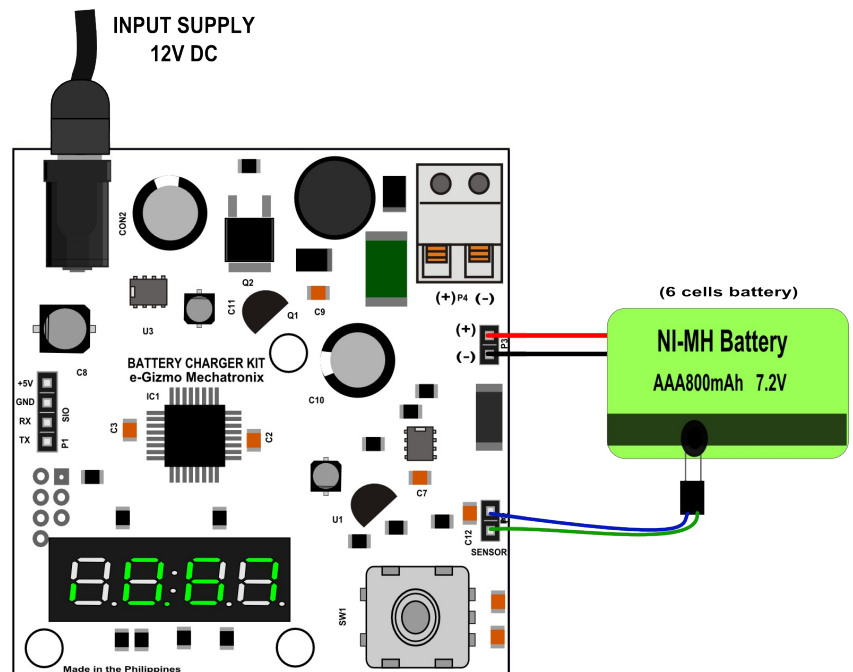


Figure 3. Setting-up amount of current (I) on battery charger Illustration

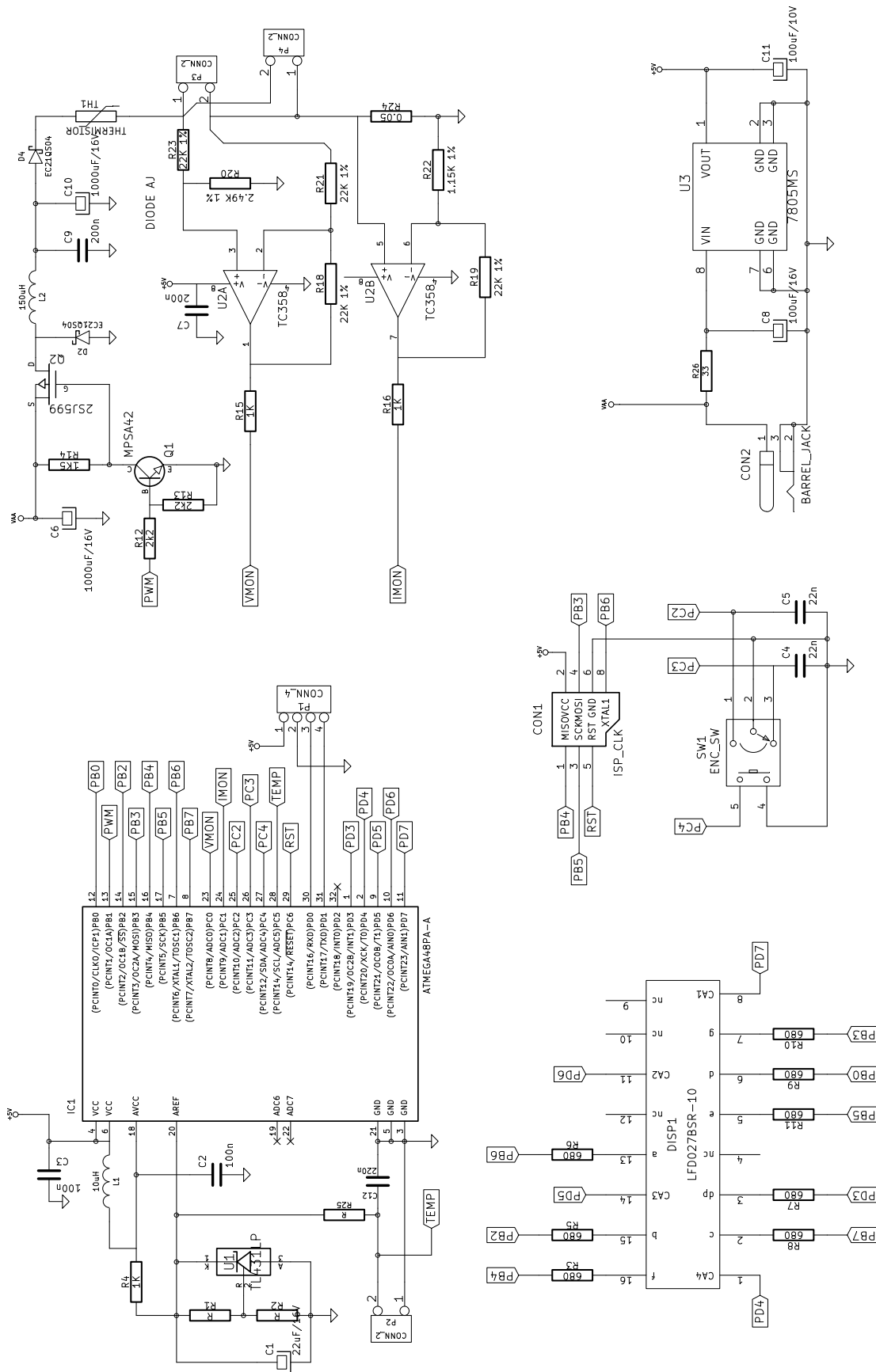


Figure 4. Schematic Diagram of e-Gizmo Battery Charger Kit

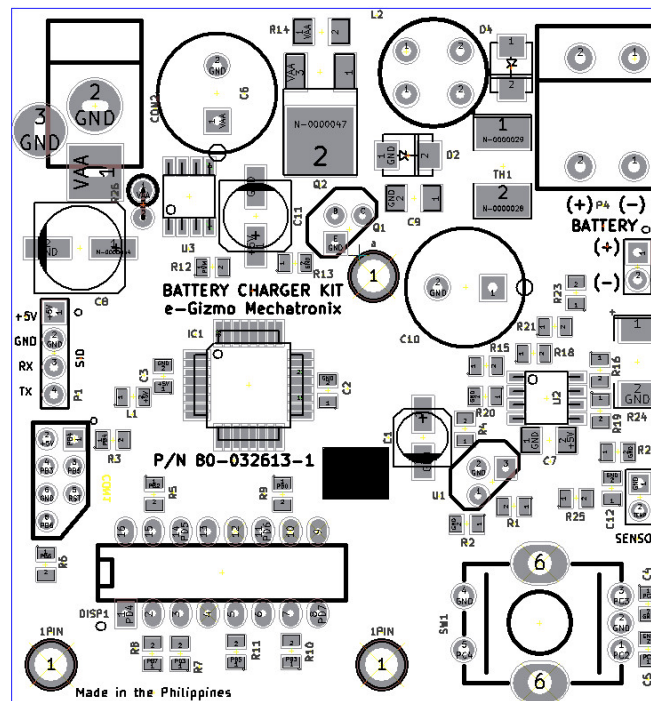


Figure 5. Parts Placement

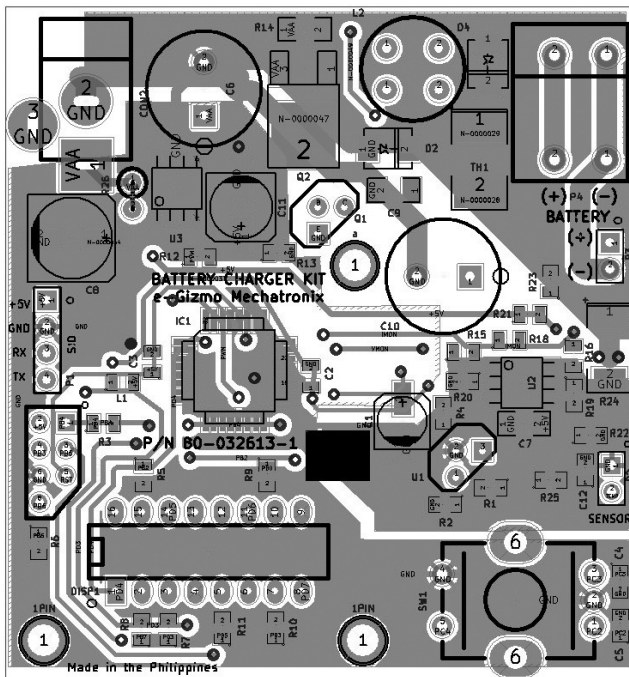


Figure 6. BottomPCBGuide

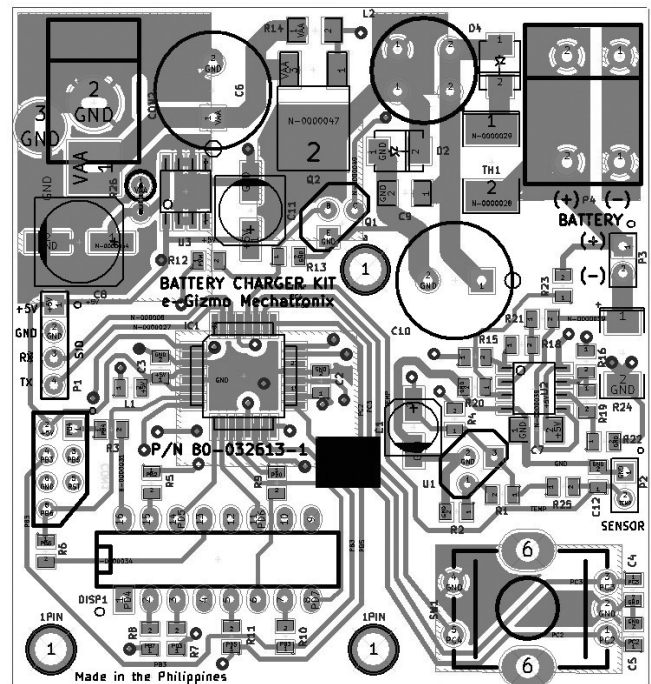


Figure 7. TopPCBGuide