Quick Start Guide for Low Voltage Uninterruptable Power Supply (L-UPS)

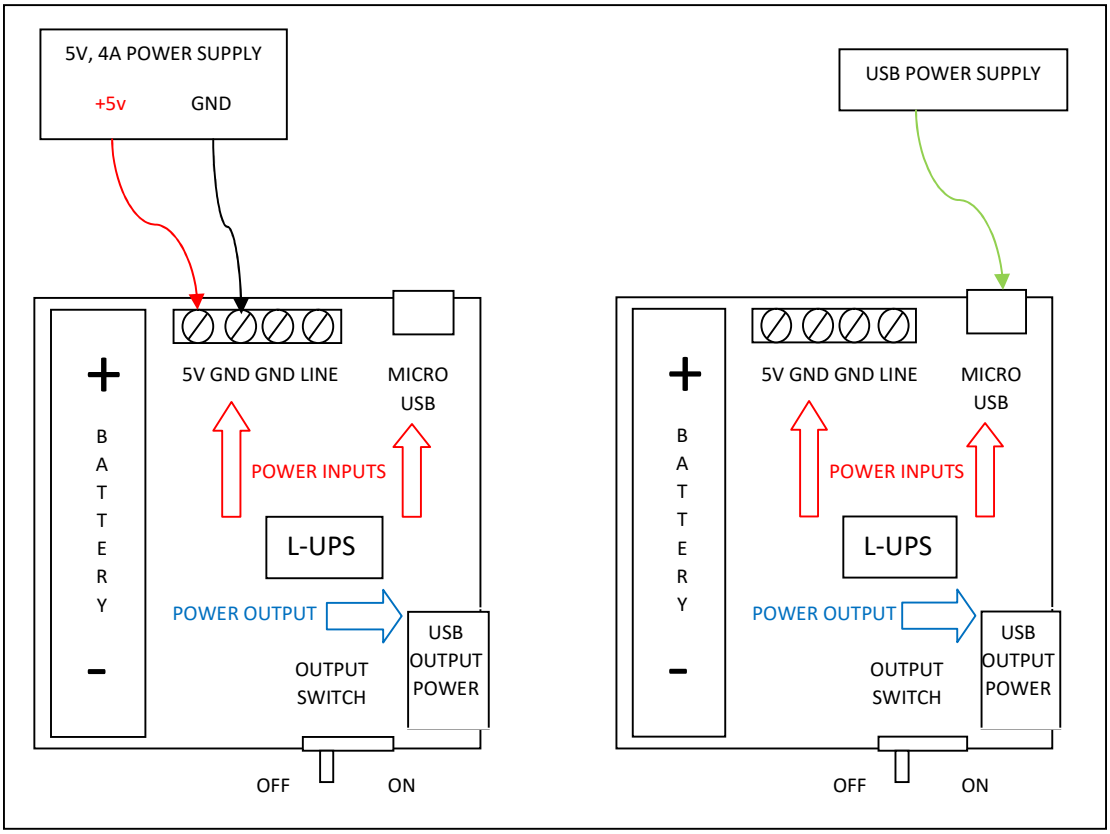

Figure 1. Two options of connecting input power to the L-UPS

*****Important note****** Please use only one of the input power connection options at a time shown in figure 1. Please only use the micro USB input power option for load currents of less than 1.5 amperes.

Please follow these few steps to get setup quickly:

1) Insert a 18650 Battery into the battery holder. Pay close attention to the polarity of the battery as it should only be inserted as shown in figure 1. Reversing the battery polarity could cause permanent damage to the L-UPS board.
2) There are 2 ways of connecting power to the L-UPS board as shown in figure 1. Please only use one input power method at a time. A 5 volt, 4 ampere power supply is recommended but typically the power supply should be rated 1 ampere above your expected load current. As an example, if you are going to power a load requiring 2 amperes of current then you should select a power supply capable of delivering 3 amperes of current. Please connect the power supply option of your choice as shown in figure 1.

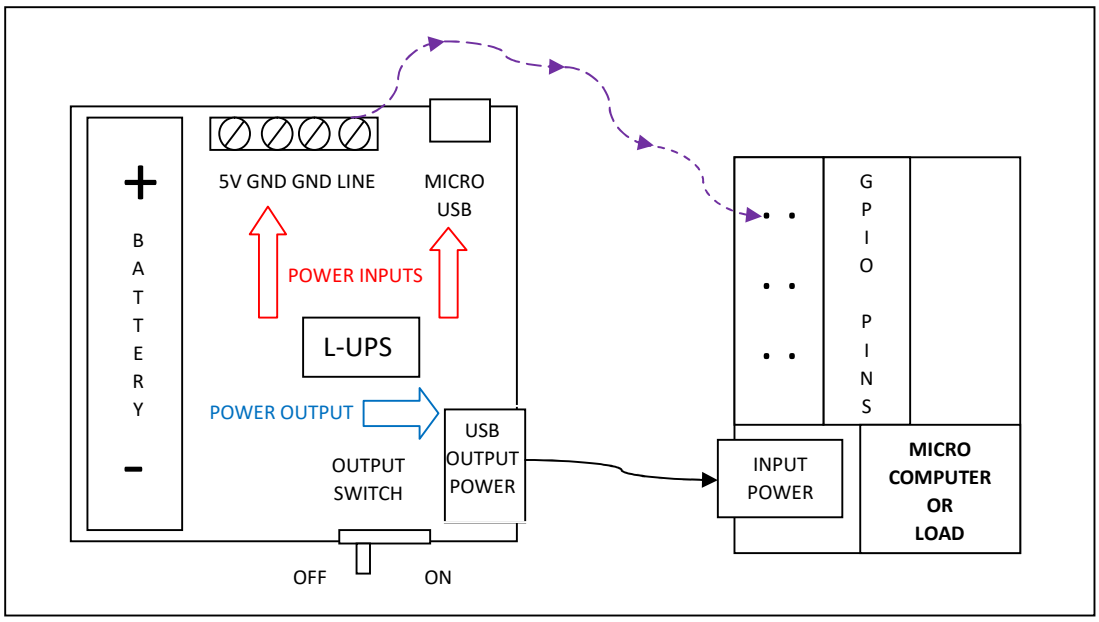

Figure 2. Output Power Connections (Connecting L-UPS to a Load)

3) Please use a short (max 1 ft or 30mm) USB power cable to connect from the USB output power connector of the L-UPS to the input power connector of the load as shown in figure 2.
4) This step is optional. If powering a micro computer like a raspberry pi etc… and it is desirable to automatically shut down the micro computer when the L-UPS battery is close to being depleted, please connect the line output terminal from the L-UPS to one of the GPIO pins of the micro computer as shown in figure 1. The line output terminal is open collector and a pull up resistor configuration will be required on the specific GPIO pin that will be used. When the L-UPS senses that the battery is low, it will pull the line output low. This “low” line signal can be read by the micro computer which could then safely shut down. The L-UPS will shut down 15 seconds from the time the line output goes low.
5) Lastly be sure to turn the output switch to the on position to allow power to the load.
   Note
   The L-UPS will not turn on if a power supply has not been connected to its input.