# MP3450I Battery Bank Instruction (V1.0)

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#### General

First of all, thanks for your buy this product MP3450l.

Please read this instruction before operate the product, and keep this booklet well.

You can use this rechargeable battery bank, to provide power for industry devices that is fixed voltage output, such as Medical devices; industry instrument ... It can extend their working time and exchange power offer from battery source effectively when AC power shut don . The function is same as UPS (Uninterrupted power system).

This product is embedded safe Li-polymer cells with high capacity (60W), light weight. And the cell is durable when stock in  $80^{\circ}$ C surroundings . The DC IN Charge input voltage is from 15V to 24V.The product will alarm as soon as the capacity below  $3\%\sim5\%$ .

This product can be discharge between -10 $^{\circ}$ C to 60 $^{\circ}$ C and charge between 0 $^{\circ}$ C to 45 $^{\circ}$ C Please DO NOT use this product beyond this temperature range in order to avoid damaging the product.

# Unpacking

#### Accessories as follows:

1. Rechargeable battery



2 .AC power adapter (19V/3A)



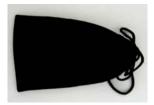
3. Power output cord



7. 5pcs output adapter tips



4. Punching bag



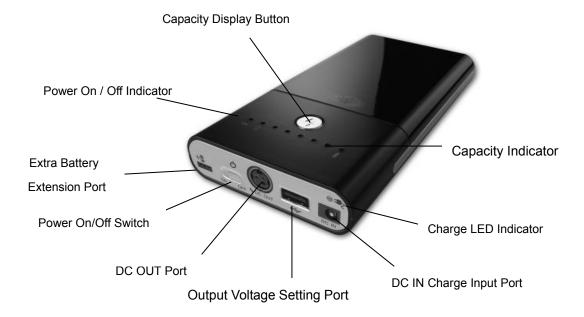
5. User guide



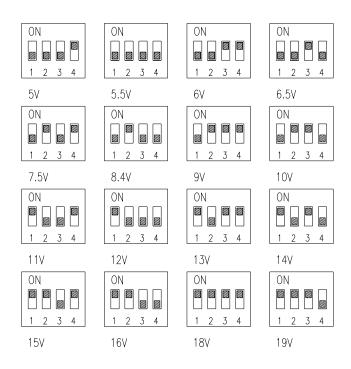
6. Leather case



#### **Function Illustration**



- A. DC OUT Port: Voltage output for Instrument.
  Voltage Range: 5V 19V( adjust by the Dip Switch of Output Voltage Setting Port )
- B. Output Voltage Setting Port: setting the fixing output voltage by the Dip Switch of the port. There are16scale ,as:5V,5.5V,6V,6.5V,7.5V,8.4V,9V,10V,11V,12V,13V,14V,15V, 16V, 18V, 19V. And the adjust method as the below list:



Once the output voltage have fixed setting, it's not will be change even if the Power ON/OFF.

- C. DC IN Charge Input Port: connect original AC power adapter(19V/3A) into the DC IN Charge Input Port, It can provide the power pass through charging loading and MP3450I at the same time.
- D. Extra Battery Extension Port: It can be connected with extra battery MP3460 to double the capacity, or connect it with solar panel to charge MP3450I.
- E. Power On / Off Indicator: The Indicator will be light when turn on the Power On/Off Switch
- F. Capacity Display Button: The LEDs indicate the capacity status when pressing this button
- G. Capacity Indicator: Show battery capacity status by 7 pcs LED
- H. Charge LED indicator: This indicator also will be turn on when AC power adapter to Plug in DC in charge input Port.

Red indicator shows the battery is being charged Green indicator shows the battery is fully charged

# **Charging Instruction**

This product must be charged for 4~5 hours before you operate MP3450I for the first time,. You can charge it by the original AC power adapter.

- 1. Put the output DC plug of the original AC power adapter into the **DC IN** charge input port of MP3450L
- 2. If AC power adapter isn't the original one, you must select one with the output voltage from 15V to 24V and ensure that output voltage and current of AC power adapter is higher than the power consumption demand of connected instrument.



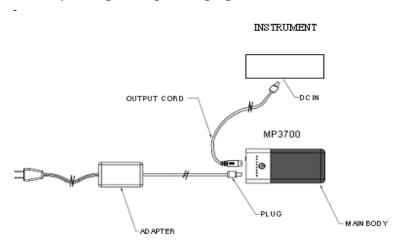
3. MP3450I will be charged fully in 4 hours or so, while the charge LED indicator turns green. (If you want to know the capacity status, please press Capacity Display Button, the LEDs will indicate the accurate capacity status. It indicated fully charged when all the LEDs are light.)



4. The MP3450I will be charged doesn't matter the Power in On/Off status. And Charging current will be shut off automatically when the MP3450I is fully charged, so it won't be damaged even if the charging plug isn't taken off.

# **Operation Guide**

#### Connection for passing through charging function:



According to the way of the connection, the product can offer power to instrument and charge MP3450I at the same time. When the AC power is shut down, that's to say, the output voltage of AC power adapter is 20% lower than normal, the MP3450I will be exchange the battery power to the connected instrument. So it's same as the UPS function(uninterrupted power system).

#### **Low Capacity Alarming Function:**

When the battery capacity is below 3%—5%, it will alarm for 3~5min, which depends on the value of the loading current.

#### **Connection Step**

- 1. Select the suitable output voltage of MP3450I by Dip Switch; according to the DC IN Voltage of connected instrument; and the adjusting methods of Dip Switch are follow as above.
- 2. Plug the output of the AC Power Adapter into the DC IN Charge input port of MP3450I.
- 3. Choose a suitable DC output tip to fit the DC IN Jack's dimension of connected instrument.
- 4. Connect the suitable output tip with the power output cord, and another terminal of power output cord to connect with the DC output port of MP3450I by the Din connector.
- 5. Turn on the MP3450I and make sure that the power ON/OFF LED lights.
- 6. Measure the DC output voltage of output adapter tip by multi-meter and make sure that it goes with the voltage you selected.
- 7. Plug the output adapter tip of the power output cord into the DC in Jack of the connected instrument after checking.
- 8. Turn on the instrument and make sure whether it can work normally.
- 9. If you only provide power for the instrument outdoors application, just ignore the step 2 operate.
- 10. Please turn off the Power of MP3450I to avoid self-discharge, when it is not work.

#### Note:

This product is only available for the center positive of instrument's **DC IN** jack (the polarity symbol as: ————). Please check the polarity of connected instrument first in order to avoid potential damage.

### **Extra Battery Illustration**

#### a. Extra battery MP3460 introduction

The extra battery of MP3450I is named MP3460

#### MP3460 Function Illustration



**Extension Battery Port** 

Press the button on the top cover of MP3460, and the LEDs will indicate the capacity status.

#### b. MP3450I with MP3460 assembly diagram



MP3450I Capacity extension method: put MP3450I on the top of MP3460, then cover LED side with the front connecting cradle and another side with the back connecting cradle.



**MP3450I Extension Illustration** 

The charge and discharge time will be double when MP3450I is connected with MP3460 whose function is the same as MP3450I.

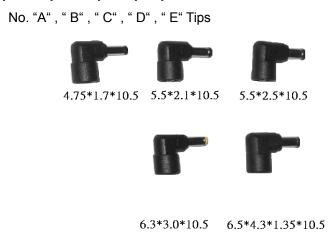
#### **Function Instruction**

- Fixed voltage output: 5V~19V/ 4A Max
- Work under high temperature
- Alarm device (the capacity below 3%--5%)
- Similar to the functions of UPS
- extend capacity by adding 1~2pcs extra batteries

#### Accessory

The adapter tips can be fit for the mostly devices. If none of these tips fits power jack for your instrument, please contact with the distributor or shop to determine which optional adapter tip you need.

#### • 5 pcs output adapter tips specification:



#### **Troubleshooting**

# If MP3450I can not power the portable device or charge internal battery, take the steps as below:

- 1. If "Charge LED Indicator" doesn't light when MP3450I is charging your device, it means that the product MP3450I has malfunction.
- 2. Check the maximum voltage and current that marked on the instrument first, if it is higher than 19V/4A, MP3450I cannot be on or power / charge your instrument.
- 3. This product is only applicable for the devices whose MAX power is under 90W.
- 4. Press "Capacity Display Button " to view the remaining capacity. Please charge this product in time if only 1# LED indicator lights. Once it alarms, please charge this product too.
- 5. Check if the power output cord is connected well. Check if the adapter tip fits for the power pack of your portable device, if not, try another adapter.

# Storage

The product must be turned off when it is not used. In general situation, a battery will discharge slowly by itself and the capacity will decrease slowly. And the charge / discharge cycle is finite. Once you find the battery can't be fully charged, maybe this battery reaches the end of its life. You should change a new one.

The best storage environment for this product is 10~30°C with dry surroundings. Chemical reaction will gradually increase once the temperature rises. Meanwhile, battery life will decrease. All chemical reactions are affected by extreme heat/coldness and excessive moisture. Extreme coldness can damage internal chemical material, and extreme heat can cause battery dilated risk.

## How to Extend Battery life

You can extend battery life as long as you comply with following suggestions and keep it well.

- Please keep it in dry & cold environment, the recommended temperature is 10~30°C. High temperature may accelerate battery's self-discharge and shorten its life.
- Room temperature (20~30°C) is the most appropriate aspect for battery. High or low temperature will shorten battery life.
- Do recycle or properly dispose of the used battery according to local rules.
- Keep battery away from fire or other sources of extreme heat. Do not put it into fire. Exposure of battery to extreme heat may result in an explosion.
- Never attempt to disassemble, reassemble this product, as it may cause short-circuit.
- MP3450I may be damaged due to its self-discharge excessively, please charge the battery every 3 months at least.
- Do not plug/unplug AC power adapter continually, this is the best method to extend battery life
- This battery provides 300 discharge/charge cycles at least. Excessive charge/discharge will shorten its life.

## Warranty Instruction

The product enclosed herein is warranted to be free of operational defects for a period of one year from the date of purchase. Please replace a new one from franchiser if it has defect within 7 days from the date of purchase. The owner shall return all products contents including AC power adapter, leather jacket, user guide, adapter tips, warranty card and etc. The limited warranty will be considered void in the event of the following actions:

- 1. Fault, damage, scratch, dirtiness caused by owner's improper use,
- 2. Any lack of shipment record, invoice, fittings, packaging.
- 3. Without warranty card of ACON or franchiser.
- 4. Serial number is removed, changed or indecipherable.

Please contact with franchiser to repair it for free if exceeding 7 days but within 1 year. The limited warranty will be considered void in the event of the following actions:

- 1. The damage caused by operator's negligence, private assembling or disassembling.
- 2. The damage caused by drop, knock, abnormal test, private repair.
- 3. The damage caused by not be charged with original AC power adapter
- 4. Fittings and gifts except special instruction.

ACON will be responsible for the expenses caused by replacement, and will charge some fees if it is needed to repair or replace components after the warranty period.