DC-DC USB POWER ADAPTER

6A 4Ports   SKU: UPA64

UPA64 is a high-efficiency, DC/DC synchronous buck regulator that works with 7~26Vdc Input. The device is capable of supplying 0~6A of output current with an output voltage 5.3Vdc, compatible with any USB based device. It can support wide power sources, such as any AC-DC power adapters(voltage range 7~26V), 2~6Cells Li-poly battery, Auto cigar-lighter slot, etc.

Features

- Synchronous buck regulator
- 2 USB ports support IOS devices with 2.4A,
  2 USB ports support Android & other devices
- Input voltage cut-off setting & alarm for LiPo
- 12V Auto battery voltage indicator & alarm
- DC 5.5*2.1 Input socket & Input pads
- Multiple protection functions,
  Cycle-by-cycle current limit (8A)
  Output over-voltage protection (5.7V)
  Short-circuit protection
  Thermal shutdown (120°C)

Specifications

- Input voltage range: 7~26V DC
- Output: USB 5.3V, 0~6A, Max.8A
- Efficiency: up to 95%
- Standby current: 10mA
- LiPo voltage cut-off setting: 3.4~3.7V/cell
- Size & weight: 59x59x17mm, 45g

How to Use

⚠ If the Input voltage is not in the range of 7~26V, no Output & all LEDs OFF with continued Beep.
Input voltage >28V DC. the UPA64 will be hurt.

1. Connect the UPA64 to the proper power sources (AC-DC power adapters, 2~6Cells Li-poly battery, Auto cigar-lighter slot, etc.)
2. If the input voltage is in the proper range, UPA64 is ready for use & turn on 4 blue LED, Beep once.
3. Connect a target device to the UPA64.
   - 4 USB ports share 0~6A of output current,
   - USB Port A & B support IOS devices with Max. 2.4A of output current.
   - USB Port C & D support Android, WinPhone, IOS, and other USB devices.
4. No output as follows (Blue LEDs go out)
   - Over-load, Remove the devices & re-energize UPA64
   - Short-circuit protection, Check the output cables & re-energize it.
   - Thermal shutdown of DC/DC chip. Wait for the cooling & re-energize it.
   - Output over-voltage protection (5.7V) .
   - Input voltage is not in the proper range.

Configuration

Input Pads
DC 5.5*2.1
Button

D 3.7V 14-16V
C 3.6V 12-14V
B 3.5V 12-13V
A 3.4V 10-12V
Voltage LED
Mode LED

Connections

AC-DC power adapters,
2~6Cells Li-poly battery,
Auto cigar-lighter slot

Phone, Tablet PC,
Power Bank, mp4, etc.

Modes & Settings

ℹ Hold the button 2 seconds to enter the setting, and UPA64 remind "BeBeBe". Then press button to set the Modes.
The Mode will be saved & exit if no action within 3 seconds. Beep once & the choosed mode will be valid.

Mode 1. AC-DC Power Source   🟩 ● ● ● ●

- Mode LED: Green ON, Voltage LEDs: Red OFF
- This mode is used for the AC-DC power adapter, such as 12V, 19V, 24V AC-DC adapters.

Mode 2. LiPo battery Power Source   🟩 🔴 🔴 🔴 🔴

- Mode LED: Green ON, Voltage LEDs: Red ON
- This Mode is special for the input source of LiPo battery.   When the LiPo total voltage is below "threshold * cells". UPA64 will cut the output current & remind "Be..Be..Be..Be..Be", All Blue LEDs go out & Red LED blink. No current will be drawn from the LiPo battery again..
- Press button to set the cut-off value between 3.4V(A), 3.5V(B), 3.6V(C), 3.7V(D). The value will be saved real-time.
- If the LiPo voltage is in the range of following, The UPA64 will detect the cell numbers automatically when the LiPo battery is connected.
  7.4~8.6V: 2cells LiPo   11.1~12.9V: 3cells LiPo   14.8~17.2V: 4cells LiPo   18.5~21.5V: 5cells LiPo   22.2~25.8V: 6cells LiPo
- If the LiPo voltage is out of the above range. The UPA64 will alarm "Be..Be..Be..Be" & 4 Red LEDs ON. Pls check if the battery total voltage is below 3.7V*cells.
- ▪ Tips: Hold the button & energize the UPA64. The Beep will be OFF in this Mode. The cut-off function is still valid.
- ▪ Tips: The twin input pads can be used for connection of Cables & LiPo.

Mode 3. Auto cigar-lighter Power Source (12V Lead-Acid Battery)   🔴 ● ● ● ●

- Mode LED: Green OFF, Voltage LEDs: Red ON
- It is special for the input source of Auto cigar-lighter slot. The UPA64 can show the voltage of the 12V Lead-Acid battery.
- ▪ Tips: Maybe there is considerable voltage drop in the input cables when heavy load on the USB. It will effect the voltage indicator.
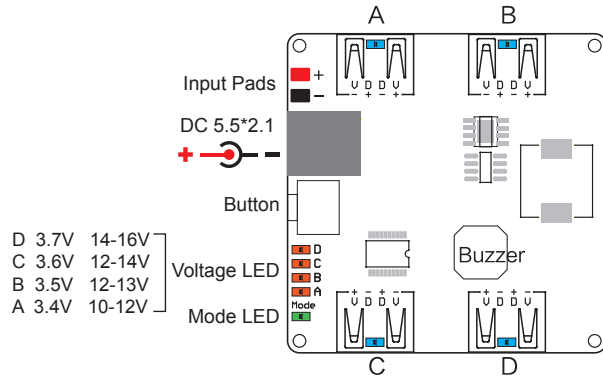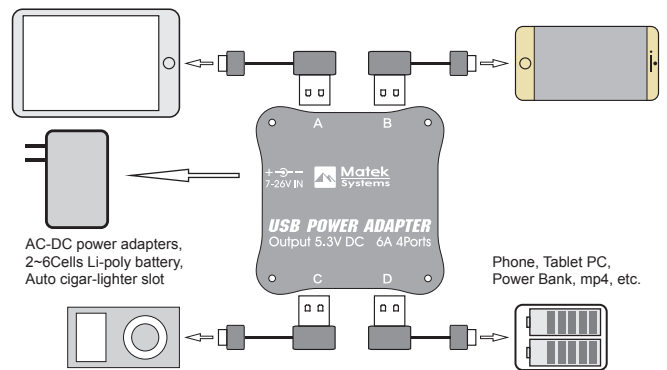
	Engine	Voltage	LED	Beep	USB Power	Suggestions
>14.8V	ON	High	D blink	Be..Be..Be..Cont.	OFF	Maybe the Lead-Acid battery will be hurt under this voltage.
13.5-14.8V	ON	Normal	C or D ON		ON	
13.0-13.5V	ON	Very Low	C ON		ON	
12.0-13.0V	OFF	Normal	B ON		ON	
11.0-12.0V	OFF	Low	A ON		ON	Difficult start. Please switch off the device to avoid overdischarge
<11.0V	OFF	Very Low	A blink	Be....Be....Be....Cont.	OFF	The engine can't be started, The battery should be renewed