

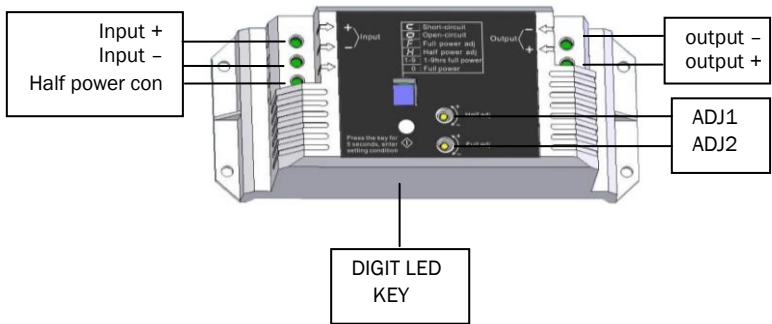
Power LED Driver Module

User Manual

Features:

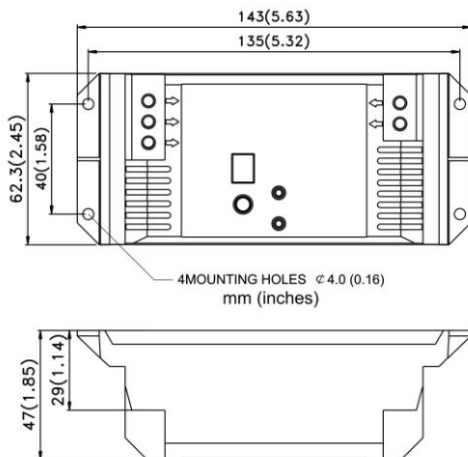
- Wide running voltage rang:
 - DC11.0V—DC16V for 12V system;
 - DC20.0V—DC32V for 24V system;
- High precision Constant current control $< \pm 2\%$
- Adopt advanced two phase boost circuit, high efficiency and reliability.
Efficiency $> 88\%$ for below 50W, $> 92\%$ for below 100W
- High power density design with small size, easy installation
- Wide operating temperature; Industrial standard; Working temperature is $- 30\text{ }^{\circ}\text{C} \text{ — } + 65\text{ }^{\circ}\text{C}$
- Low temperature, self-cooling, no extra heat sink
- Adjustable output current
- Half-power function control and auto control is option
- Full self-protection. Input polarity reverse protection; Output short circuit protection; Output open circuit protection;

Terminal definition



Installation and using:

1. Module size



2. Terminal

Electrical Characteristics : max 10A, 4mm² Wire

3. Cable: The cable should be as short as possible. And the density of the current for copper cable is less than 3A/mm². The cable should be easy to

know the polarity, red "+", black "-"

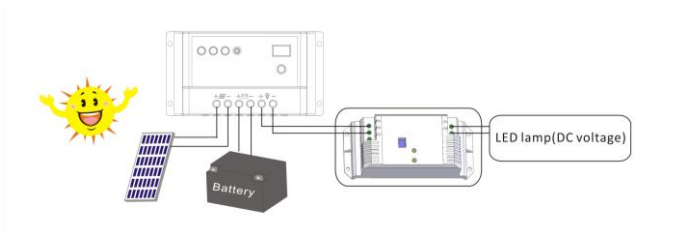
4. LED connection

Please connect the "input" of the LED to the output of the LED driver .and pay attention to "+" and "-"



5. Power supply connection:

Please connect the wire of power supply to the "input" of the LED driver. And pay attention to "+" and "-". Please make sure that the voltage of the power supply is accordance with that of LED driver.

6. The connection of LED driver and solar controller shows as following



7. Working power adjust:

press the key for 5 seconds, the number starts to flash, choose  until it is still. use the - type Screwdriver to adjust the knob of "half power adjust", the output current will be adjusted to half power as you need. Or if you choose ,adjust the "full power adjust" the output current will adjusted as the full power you want.

8. Setting of half power work time (* option unit - T)

Press the key for 5 seconds or more, the digit LED will get in to flashing. In this case, press the key modify the digit value, until the needed digit value displayed, stop pressing key, the digit LED will stop flashing after 10 seconds. The digit LED value from 0 – 9, the correspondent letter represents different working time.

Number display.....working mode



full power working all the time



1 hour full power working, then into half power working.



2 hour full power working, then into half power working.



3 hour full power working, then into half power working.



4 hour full power working, then into half power working.



5 hour full power working, then into half power working.



6 hour full power working, then into half power working.



7 hour full power working, then into half power working.



8 hour full power working, then into half power working.



9 hour full power working, then into half power working.



load short-circuit.



load open circuit.

8. Output current adjusting

On the module's Panel, there are two small adjustable knobs, use the – type Screwdriver to adjust the knob, the output current will changed. ADJ1 for half power adjust, and ADJ2 for full power adjust. If need the module work in full power and half power output, normally, the half power should be adjusted by open the input – pole and half power con terminal. After the half power ADJ1 adjusting work finished, then short the input – pole and half power con terminal, adjust the ADJ2 knob, change the output current to your need.

9. Technical parameters

Model	DCCP100U-T(50W,12V)	DCCP100U-T(100W,24V)
Rated input	12	24
Working	10 — 15	20 — 32
Input power	10 — 50	10 — 100
Input current	0.5 — 5	0.5 — 5.5
Output voltage	15 — 40	30 — 40

Output	0.3 — 2	0.3 — 4
Output	< 2%	< 2%
Efficiency	90-93%	
Half power	Available	Available
Operating	-30°C — +65°C	

Note: with -T Suffix, the self auto half power control unit selected.