

Instruction Manual for Adjustable Pulse Power Supply for LED Lights OPP W -100-8 (100W Power supply)

is V: knob is turned by hand. H: adjusts using a screwdriver.

1 . Product outline

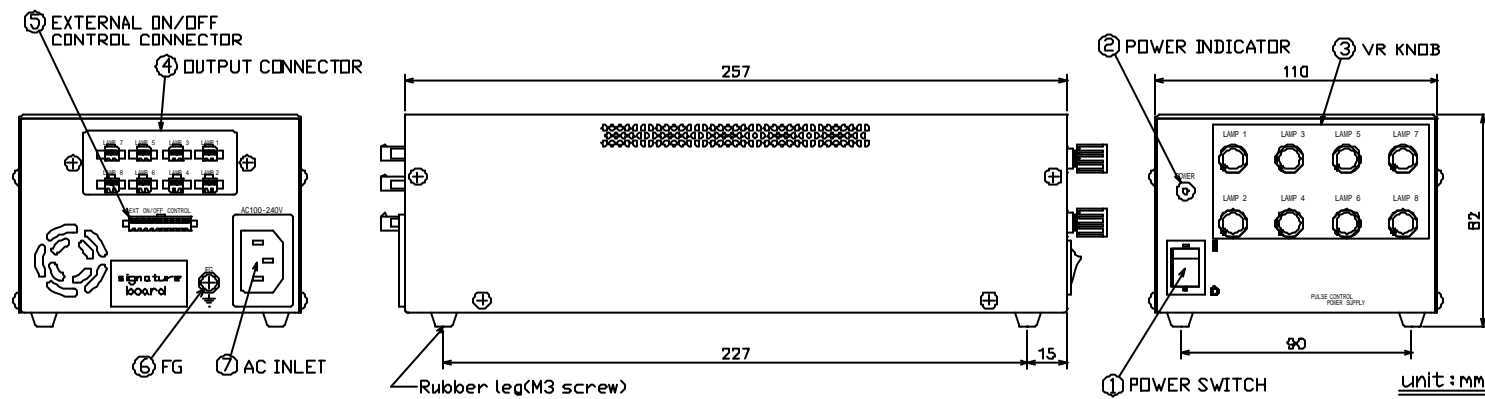
- This product is an adjustable power supply only for LED Lights. Please do not use it in addition to our company's LED Lights.
- The LED Light brightness can be adjusted by PWM. (Pulse oscillation: approx. 60KHz)
- This product operates under AC100V - 240V.
- LED Light can be turn on/off with an external control connector. (EXT CONT, 10 pin connector) .
- This is a power supply obtained CE mark.

2 . Accessories and appearance

- | | | |
|-------------|--|---------|
| Accessories | : External control connector set (10pin connector) | 1 set |
| | : Power Cable (only AC100V) | 1 piece |
| | : Instruction Manual (this sheet) | 1 piece |

Note : If you operate this product for input voltage exceeding AC100V, please prepare a suitable power cable by yourself

Appearance : OPPW -50-8V



3 . Safety

Warning	
(1)	Do not open the cover of a unit. There is a portion of high voltage inside of a power supply, and there is a possibility of receiving an electric shock in it.
(2)	Connect directly the plug of a power supply to a wall socket. There is a cause of fire when you use an extension cable.
(3)	Do not touch a power supply plug by the wet hand. There is a possibility of receiving an electric shock.
(4)	Use a power supply, grounding it. When not grounded, there is a possibility of receiving an electric shock.
(5)	When abnormalities to which a main part gets hot, a strange smell and/or smoke comes out arise, stop use immediately, shut off a power supply and pull out a power supply plug from a wall socket.
(6)	Do not look at LED Light directly, it may have bad influence on your eyes .
Cautions	
(1)	Make connection of AC input cable and a LED Light cable after turning off the switch of a power supply unit.
(2)	Do not place any objects on a power supply.
(3)	Do not expose a power supply unit to sunlight or humidity directly.
(4)	When not used for a long period of time, pull out a power supply plug from the unit.
(5)	LED Light should be used at the strength of light at least in a half, when you use the constant light always, since a life will become short if used in the environment of a high temperature.
(6)	When abnormalities happen at a power supply unit, stop use immediately and contact to our company. Do not repair by the customer. (A product cannot be guaranteed, when a customer has an inside of a power supply changed or repaired.)

Product warranties

- 1 . If it should break down within the term of a guarantee(delivery-of-goods day for 12 months) under a customer's normal use condition based on notes, such as this handling description, or when initial [poor] accepts, We will carry out repair and exchange of a failure part gratuitously.
- 2 . However, We cannot guarantee on condition that external factors [, such as strong shock / natural disaster / water, steam oil, acid, radiation, etc.,], such as an error on use / use of the lighting equipment of those other than our company / unjust decomposition, and reconstruction / fall, etc.

4 . Specifications

- 4 - 1 Input and output voltage

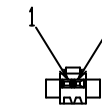
Input voltage	: AC100V - 240V 2.4A/100V 1.2A/200V (MAX)
Frequency of operation	: 47 ~ 440Hz
Rated output	: DC12V 8.3A 100W(MAX) (30W × 3ch , 25W × 4ch , 16W × 6ch , 12.5W × 8ch)
- 4 - 2 Control of brightness

Method of control	: Approx.60KHz PWM Control
System of control	: Control the brightness by the VR knob ()
Range of control	: 0 ~ 100% (At the environmental within the limits of operational condition)
Since the scale position does not correspond to the adjusted bright level, please use a scale as a reference.	
External on/off control	: EXT ON/OFF CONTROL can control ON/OFF with the open collector or the relay contact
- 4 - 3 Environment of operation

Circumferential temperature	: -10 ~ +40
Circumferential humidity	: 20 ~ 70% (Don't dew)
- 4 - 4 Connectors

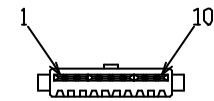
Output connector (LAMP 1 ~ 8)	: SM connector SMP-02V-BC (Made by JST)
---------------------------------	---

Pin No.	12V output type
1	Output+ (+ 12V)
2	Output -



- External on/off control connector (EXT ON/OFF CONTROL) : SM connector SMP-10V-BC (Made by JST)

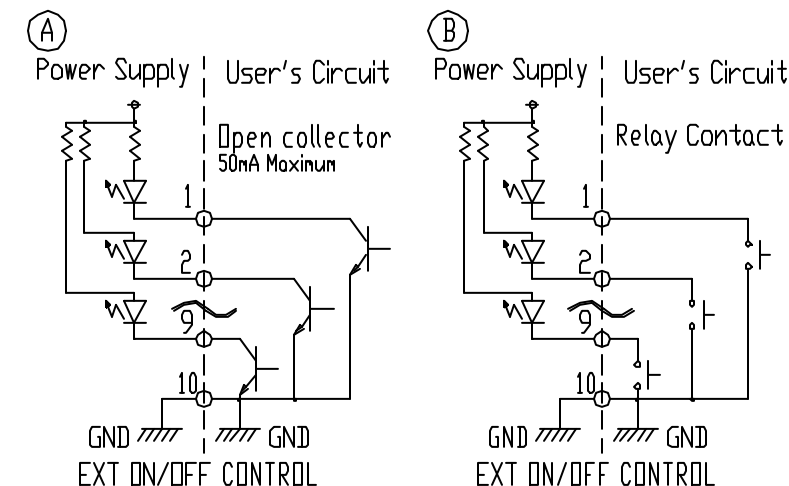
Pin No.	Signal	Color of option cable
1	LAMP 1 ON/OFF	white
2	LAMP 2 ON/OFF	yellow
3	LAMP 3 ON/OFF	brown
4	LAMP 4 ON/OFF	green
5	LAMP 5 ON/OFF	blue
6	LAMP 6 ON/OFF	gray
7	LAMP 7 ON/OFF	orange
8	LAMP 8 ON/OFF	light blue
9	External control change	red
10	GND	black



“OP-ECB8- ” (is length [m]) should be used for an option cable.

- 4 - 5 The method of external on/off control (EXT ON/OFF CONTROL)
In order to work the external control function, short pin #9 and pin #10 circuit. (LED putting out lights)
Under the above condition, when short the pin #1 and pin #10 circuit, LED Light (connected to ch1) will light on.
Furthermore, when short pin #2 and pin #10 circuit, the LED Light (connected to ch2) will light on.
(The INT/EXT control perform all channel simultaneously.)

Recommendation circuit



There are approx. 10mA current from pin#1/2...9 to pin#10.
Please see a margin and use the open collector circuit with the current capacity of about 50mA.