



Dimmer HT 1500W 2-outputs manual – USER MANUAL

WARNING AND CAUTION

This manual contains important information about the installation and operation of Dimmer HT 1500W 2-outputs manual.

Please pay close attention to the important safety information shown throughout this instruction manual. Before using it for the first time, please read the instructions carefully, and keep them for further reference.

	 WARNINGS - SHOCK HAZARD
	<ul style="list-style-type: none">• Hazard voltage: May result in serious injury or death. Before installation process, turn circuit breaker to OFF position or remove fuse(s) and test that power is OFF.• Never wire any electrical device with power turned ON.• Installation must be carried out by a licensed and authorized person.• A faulty device should be returned to the distributor.

TECHNICAL SPECIFICATIONS

Input Power	180–264Vac (50/60Hz)
Rated Power	1500W
Input Current	8.5A Max 220Vac 10A Max 110Vac
Safety	Anti 6KV Lightning Surge The light brightness dims to 0%, live wire is disconnected by relay
Performance	Harmonic Current Inhibition
Optimal Brightness Level	0–100%
Five Protections	① SCP (Short Circuit Protection) ② OCP (Over Current Protection) ③ OVP (Over Voltage Protection) ④ OPP (Over Power Protection) ⑤ OTP (Over Temperature Protection)
Permitted Ambient Temperature	-20°C ~ 50°C
Storage Temperature	-30°C ~ 80°C
Waterproof Grade	IP54
External Control	0–10V Signal; RS-485
Conformity with Standard	EN 60669-2-1



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DIMENSION AND USER INTERFACE



No	Name	Description
1	LCD	Display information of this dimmer
2	Indicator Light	Indicator light for Brightness / Power / Voltage / Current / Temperature (Select by pressing Enter)
3	Manual Control	Press the button to manually control the brightness using the Rotary Switch
4	External Control	Press the button to enable external 0–10V signal control
5	Rotary Switch (Enter)	Rotate to change brightness; Enter for selection
6	AC Input Terminal	Connect L (Live Wire), N (Neutral Wire), and GND (Ground Wire)
7	AC Output Terminal	Connect to the lights
8	Dry-contact Port	<ul style="list-style-type: none"> - REL0: Works with light (Port NO/NC contact for light ON/OFF) - REL1: Works with alarm (Port NC/NO contact for OVP, UVP, OTP, OCP, OPP alarms) - REL2: Connects to drinker system, starting 30s in advance
9	0–10V Port	0–10V signal input for external control
10	RS-485 Port	Connects to remote communication network, customized communication protocols of RS-485, reserved function

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MINIMUM BRIGHTNESS SETTING

If 1% brightness of the lamp cannot meet production needs, the user can adjust the optimal minimum brightness. The operation method is as follows:

- Step 1: Adjust the manual brightness to 1%
- Step 2: Press and hold the "Manual Control" button for 5s until the indicator light of "External Control" and "Manual Control" ON together, and then release it
- Step 3: Rotate the "Enter" knob to adjust the optimal brightness. Then press the "Enter" button to complete the setup.

Remarks: The minimum brightness adjustment coefficient range is 20–1520, the larger the number, the brighter the brightness at 1%.

SITUATION FOR ALARM OCCUR

When an error occurs, an alarm code will appear on the dimmer LCD display.

The dimmer protection function is activated and the light turns off

Once the error is resolved, the dimmers and lights can be restarted within 1 min, or by manually turning the AC power on/off.

Alarm Code	Fault Cause	Shutdown Load (Output Channels)	Alarm Indication	Action
Er01	Power supply > 267Vac	YES	Green Voltage light ON and Blinking	Make sure the voltage is within the range of 180–264Vac
Er02	Power supply < 83Vac	YES		
Er03	Short-circuit to load output terminal or current > 9.27A	YES	Green Current light ON and Blinking	Check if the dimmer output is overloaded or short-circuited
Er04	Load exceeds >1050W, 110Vac >1575W, 220Vac	YES	Green Power light ON and Blinking	
Er05	Temperature inside controller >110°C or excessive ambient temperature	YES	Green Temperature light ON and Blinking	Ensure proper cooling. Alternatively, reduce the load connected to the dimmer output

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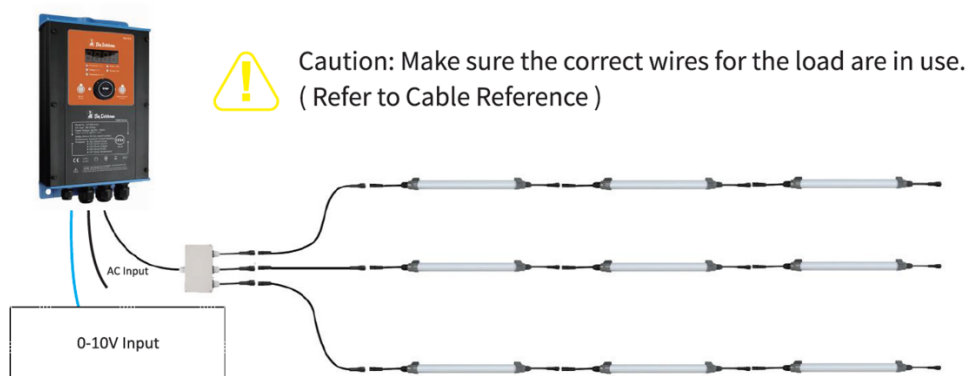
CABLE REFERENCE

Cable Size	Rated AMP	Max. AMP	Suggested Power Loaded
2 × 0.75 mm ²	3.2 A	3.7 A	640 W
2 × 1.0 mm ²	5.2 A	5.9 A	1040 W
2 × 1.5 mm ²	8.2 A	9.4 A	1640 W

DIMMER CAPACITY LOAD REFERENCE

Wattage Max Load	≤ 15W LED Bulb	≤ 20W LED Tube Light	≤ 25W LED Tube Light	Other Brand Lights (Leading Edge)
@ 220Vac	1300W max	1350W max	1500W max	900W max
@ 120Vac	780W max	810W max	900W max	600W max

LIGHTING DIAGRAM



Installation Notes

- LED dimmers should be installed exposed to allow for heat dissipation.
- If the LED dimmer is installed in a closed distribution box, please install a wind control system for heat dissipation
- To avoid direct sunlight, it is not recommended to install the distribution box outdoors. If it is necessary, build a canopy.
- It is recommended that the ambient temperature of the dimmer does not exceed 40 degrees.