### Description

SB-WL-D0610 high performance intelligent dimmer, a silicon controlled rectifier power output device with 6 output channels, is developed by HDL, Communication adopts 485-Bus mode. With scene controller provided and fire protection mode control output. Otherwise it can be added the load test function according to the user's requirement. It is professional with advanced performance and complete function. It boasts a wide application rank including intelligent lighting and switch control, etc.

# Features

- . 10Bit Dimming accuracy
- . 6channel dimming output
- . LED Status
- . With scene control
- . Maximum 6 separate zone, Each Zone have 99 scenes and Maximum 60Minutes running time to each Zone
- . Up to 99 show sequences, 99 steps for each sequence, and 0.1s to 60 minutes interval between each step. Each show sequence has 4 running mode of "Forward", "Backward", "Bounce", "Random"
- . Low threshold, high threshold and maximum threshold are available to suit different loads of each channel.
- . Emergency bypass switch and debugging bypass switch in each channel

- . Remark information provided in each scene, area, sequence and channel
- \* Current load testing in each channel
- \* MCB status testing in each channel
- \* MCB tripping warning
- \* Bad light alarm
- . 485 Bus communication
- . Be able to provide the BUS with 400mA current(DC24V).
- . With emergency fire protection switch.
- . Short circuit and overload protection, grounded protection
- . Remote program and management is allowable
- . Device can be restored to previous scene or designated scene

Note: functions with \* are optional, not provided in standard products

### Performance parameters

Input Voltage

Wire : three phase and 5 wires

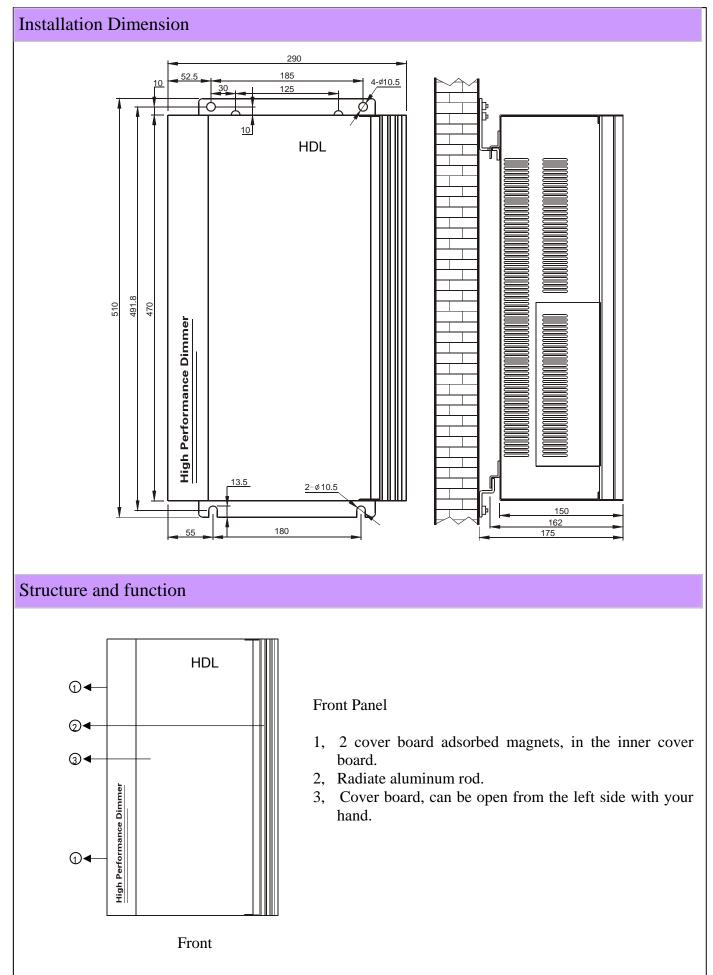
Voltage : AC220 V±10%

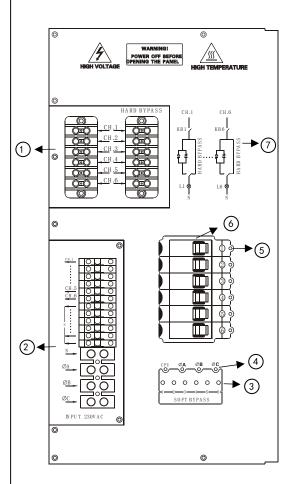
Frequency :  $50Hz\pm2\%$ 

- . Power consumption without Load : less than 10 W
- . Output channel : 6channels

- Output current in each channel: maximum12A, total current in 6 channels is less than 60A
- . Installation: Wall mounting
- . Dimension: 470mm×290mm×162mm.
- . Weight: 15kg

# HDL Smart-Bus Installation manual for SB-WL-D0610





Side panel

① Cover board of jumper wiring. There is a marking picture on it and must open the cover board when wiring.

② Cover board of power input and load wiring.

There is a marking picture on it and must open the cover board when wiring.

(3) Channel control keystroke.

Totality is 6 and they control the on or off of the channel 1 -6 separately.

(4) Status indicator LED

Form the left they are in turn:

CPU indicator LED flickering on work while extinguishing out of work.

A phase of power indicator LED enlightening on work while extinguishing out of work.

B phase of power indicator LED enlightening on work while extinguishing out of work.

C phase of power indicator LED enlightening on work while extinguishing out of work.

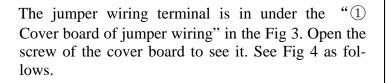
(5) Channel output signal indicator LED

The totality is 6 and from top to bottom they are channel 1 -6 separately.

6 Load channel switch (16A)

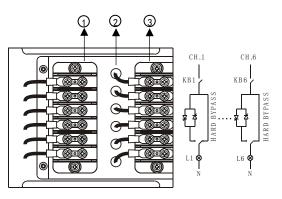
The totality is 6 and from top to bottom they are channel 1 -6 separately. The rated current is 16A. It will be closed in a moment when over current to the load circuit to protect it.

 $\bigcirc$  The connection schematic, It can be connected with tow forms: one is bypass and the other is silicon controlled rectifier. And the original form is bypass.

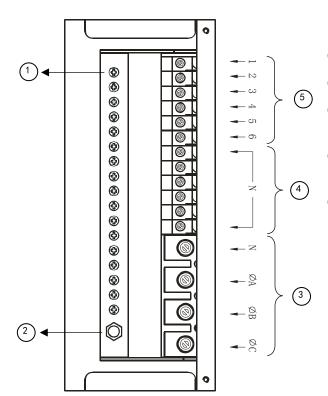


There are 6 terminals, and from top to bottom they are in turn channel 1(CH1), channel 2(CH2),..., and channel 6(CH6).

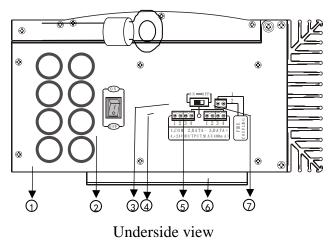
- Jumper terminal of the silicon controlled rectifier channel
- ② Output connection terminal.
- ③ Jumper terminal of bypass.



Jumper wiring terminal



Power input and load wiring terminal



- (5) +24V output indicator LED ( enlightening when inputting +24V)
- 6 Fixed bracket
- Terminal socket of fire protection: connected to fire control

# Power input and load wiring terminal

- 1 Load ground wiring terminal
- ② Equipment Ground terminal.
- ③ Power input socket: from top to bottom they are in turn: N, A phase, B phase, C phase.
- ④ Null line of channel 1-6 wiring terminal (common terminal)
- (5) Live line of channel 1-6 wiring terminal: from top to bottom they are in turn channel 1-6. the relationship of the channel and input 3 phases power is channel 1 and channel 4 correspond to A phase, channel 2 and channel 5 correspond to B phase and channel 3 and channel 6 correspond to C phase.

# Underside view

- ① Wiring hole
- ② The switch of working power of this equipment (Note: this switch has nothing to do with the +24V power output)
- ③ +24V power output switch (+24V output is used in the 485 BUS)
- (4) 485 BUS wiring terminal (both in two sides)
  - Wiring terminal number definition:
  - 1 COM (common port)
  - 2 DATA- (signal –)
  - 3 DATA + (signal +)
  - 4 DC24V (can input the max current 400mA)

The corresponding relation between 485 bus (Cat5e) and signal:

COM — brown white, orange white DATA - — blue white, green white DATA + — blue, green

DC 24V — brown, orange

IDL Smart-Bus Installation manual for SB-WL-L	00610 www.hdlchina.com
Installation Requirement	Wire specification
<ol> <li>Select an appropriate patch bay system according to the total load</li> <li>Installation space should be well ventilated and be damp proof, quakeproof and dustproof.</li> <li>Fire protection wiring: 18AWG dual-core wire</li> </ol>	Power cable: Phase A yellow 6mm <sup>2</sup> copper wire Phase B green 6mm <sup>2</sup> copper wire Phase C red 6mm <sup>2</sup> copper wire Null line: light blue 6mm <sup>2</sup> copper wire Equipment Ground line: yellow, green dual- color 6mm <sup>2</sup> copper wire Ground line: 2.5mm <sup>2</sup> copper wire 485 Bus linking cable: Cat5e Fire protection wiring: 18AWG dual-core wire
Criterion requirement of multi-branch copper wire terminal	
	ed by a screw. It requires that the terminal e lug, which must be connected with the spe-

cial equipment. See the following picture.

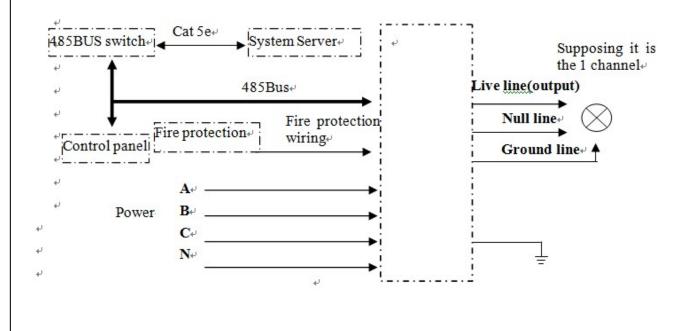
# 2 ) Other wiring terminal

The terminals such as power input, the live line and null line of the load output must adopt the appropriate sheaths which will be connected with the special equipment. See the following picture.



## Typical system connection

It can realize the function such as lighting dimming control, on/off control, fire protection control, system management and the connection with other control system etc. via linking with control panel (with infrared remote controller), system management server and fire protection management system.



### Safety and Maintenance

Read All Instructions in detail before use Make sure good Ventilation Environment Pay Attention to Water-proof, shake-proof and dust-proof when using Non-Rain, Non-Contact with other liquids or corrosive gases Should be dried in time if invaded by water or liquid Contact Professional maintenance staff or HDL company when Product has problem