

HDL-MPWPID03L.18(16)-A

3CH Wireless Dimming Power Interface EU(US) (L Type)

**buspro**  
WIRELESS

**Datasheet**

Issued: August 26, 2019

Edition: V1.0.0



Figure 1. HDL-MPWPID03L.18-A



Figure 2. HDL-MPWPID03L.16-A

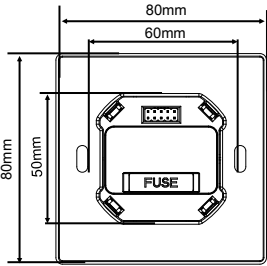


Figure 3. Dimensions - Front View

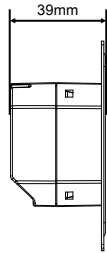


Figure 4. Dimensions - Side View

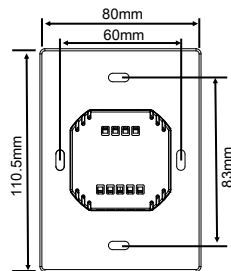


Figure 5. Dimensions - Back View

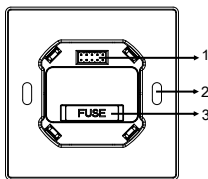


Figure 6. Components - Front View

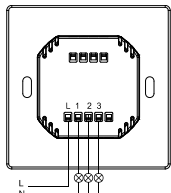


Figure 7. Wiring (1)

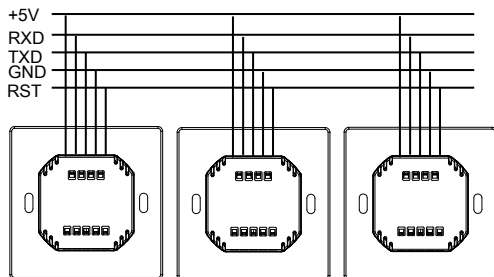


Figure 8. Wiring (2)

## Overview

3CH Wireless Dimming Power Interface EU(US)(L Type) (See Figure 1 - 2) is used in conjunction with the wireless panel and provides working voltage for wireless panel. The power interface supports dimming and switch control and can be divided into two specifications: European standard and American standard.

## Functions

- Provides DC 5V working voltage for wireless panels
- 3CH wireless dimming control (L Type): 1st channel is for MOSFET dimming, 2nd and 3rd channel are for TRIAC dimming/switch.
- Short circuit protection
- Overheat protection

## Important Notes

- The wireless power interface can work without a neutral line.
- The wireless power interface must work in conjunction with wireless panel.
- 3CH wireless dimming control (L Type): Maximum current of 1st channel: 1.2A, maximum total current of 2nd and 3rd channel: 2A.
- The first channel cannot be connected to inductive loads such as transformers, fans, motors, inductive ballasts and fluorescent lamps, etc.
- It is not guaranteed to dim all the lamps, but it is guaranteed to be able to switch control.
- It is recommended to use the first channel control: electronic transformer, LED driver, etc., which can effectively reduce noise in the dimming mode.
- The newly replaced fuse of the 3CH Wireless Dimming Power Interface must be the same type as that of 6A quick fuse (aR type).
- The device is in-built with an anti-radio interference coil that has a slight sound when the dimmer switch is controlled.
- The temperature rise inside the wireless power interface may affect the accuracy of the panel temperature sensor measurement. Please pay attention.

## Product Information

**Dimensions - See Figure 3 - 5**

**Components - See Figure 6**

1. **Interface** : Connects to the panel
2. **Hole for fixing screw**
3. **Fuse**

**Wiring - See Figure 7 - 8**

**Note:** The wiring diagram takes the 3CH Wireless Dimming Power Interface (EU) as an example. As shown in Figure 8, multiple wireless power interfaces can be connected in parallel and all channels are controlled by a multi-button panel, such as DLP panel. The terminals must be connected correctly.

**FAQ**

■ Lights flash when dimming, please try following operations:

1. Brightness setting too high. Normally, if the load is a bulb, the maximum brightness level setting should not exceed 80%; if the load is LED, the maximum brightness level setting must be lowered, otherwise the LED light will flash due to excessive power supply, and it will even cause the wireless power interface to restart.
2. If the load is LED light and less than 30w, you need to connect the constant current source module in parallel with the lamp to provide enough working current to the panel. Then, the maximum brightness level can be increased and the LED will not flash in the off state.

■ The wireless power interface cannot supply power and the panel cannot work properly, please try following operations:

1. Separate the panel and wireless power interface, and install again, then check.
2. If the panel cannot work properly, check the fuse.
3. Use multimeter to measure the voltage of the wireless power interface and panel. If the voltage is not DC5V (±1V), the wireless power interface is damaged.

**Installation - See Figure 9**

- Step 1. Install the wall box in the wall.
- Step 2. Fix the power interface onto the wall box with screws.
- Step 3. Hold the edge of the panel, and insert the panel in the slots of power interface vertically.

## Safety Precautions

- This device does not completely shut down the lights and other loads, so the power input to the device must be completely disconnected when servicing or replacing the lights and fuse.
- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- The device should be installed in wall box. HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this document.
- Please do not privately disassemble the device or change components, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.

## Package Contents

HDL-MPWPID03L.18(16)-A\*1 / Datasheet\*1 / Screw\*4 (Long screw\*2 and short screw\*2)

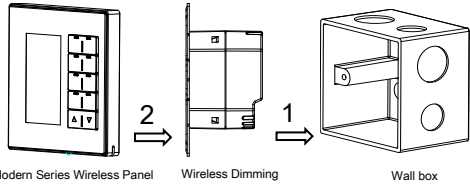


Figure 9. Installation

## Technical Data

### Basic Parameters

Input voltage	AC100-240V (50/60Hz)
Output channel	3 channels
Output current	1st channel $\leq 1.2A$ Total current of 2nd and 3rd channel $\leq 2A$
Fuse	6A, aR type

### External Environment

Working temperature	-5°C~45°C
Working relative humidity	$\leq 90\%$
Storage temperature	-20°C~60°C
Storage relative humidity	$\leq 93\%$

### Specifications

Dimensions	80×80×39 (mm) (EU) 80×110.5×39 (mm) (US)
Net weight	128g (EU) 138g (US)
Housing material	Flame-retardant nylon, iron
Installation	Wall box (See Figure 9) (The depth of the wall box is not less than 45mm.)
Protection rating (Compliant with EN60529)	IP20
Fire and neutral wire	2.5mm <sup>2</sup> copper cable
Load wire	2.5mm <sup>2</sup> copper cable

### Name and Content of Hazardous Substances in Products

Components	Hazardous substances						
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)	
Plastic	o	o	o	o	o	o	
Hardware	o	o	o	o	-	-	
Screw	o	o	o	x	-	-	
Solder	x	o	o	o	-	-	
PCB	x	o	o	o	o	o	
IC	o	o	o	o	x	x	

The symbol "-" indicates that the hazardous substance is not contained.

The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.

The symbol "x" indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

#### Technical support

E-mail: [hdtickets@hdlautomation.com](mailto:hdtickets@hdlautomation.com)

Website: <https://www.hdlautomation.com>