HDL-MPDA04-RF.28

4CH Wireless 0~10V Dimming Actuator

buspro WIRELESS

Datasheet

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Figure 1. 4CH Wireless 0~10V Dimming Actuator

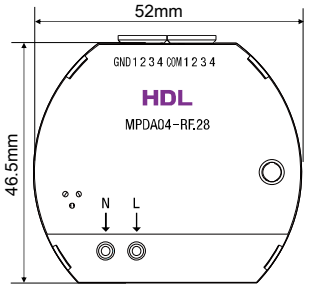


Figure 2. Dimensions - Front View

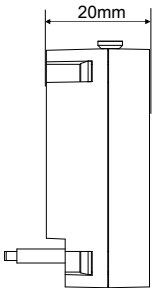


Figure 3. Dimensions - Side View

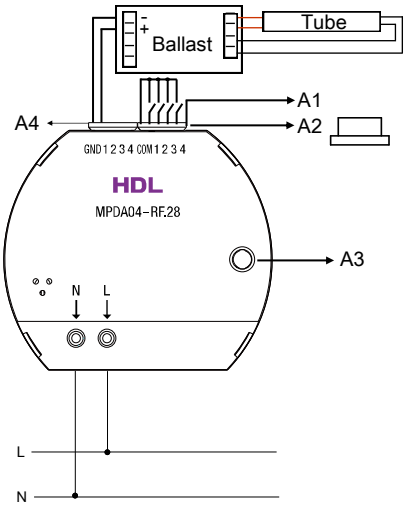


Figure 4. Wiring

Overview

4CH Wireless 0~10V Dimming Actuator (See Figure 1) contains 4-channel 0-10V DC dimming outputs and 4-channel dry contact. With connection to electronic ballasts, the actuator can be used for LED dimming. Working with wireless gateway, the actuator can be used for controlling different targets.

Functions

- Supports 4CH dry contact inputs and 4CH 0-10VDC dimming outputs.
- 0-10V DC output. Available with 4 default dimming curves – 1.0, 1.5, 2.0 and 3.0. Users can also customize the dimming curves.
- Switching modes supported by dry contact: Mechanical switch, Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, Multi-function, Parallel switch.
- Control targets: Scene, Sequence, Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Curtain switch, GPRS control switch, Panel control, Music control.
- Compliant with IEEE.802.15.4 standard.
- Supports online upgrade.
- Supports easy programming via HDL ON APP.

Important Notes

- The subnet ID, frequency band, channel and password of the actuator should be the same as the wireless gateway.
- The current of each dimming output is 0-30mA.
- The actuator should be installed in wall box and the back of the panel should be thinner than 20mm.
- Please use the actuator according to technical data.

Product Information

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

A1: Dry contact

A2: Silica gel stopper

A3: Programming button

A4: 0-10V DC output

Programming button: when the device works properly, the green LED flashes. Press the programming button for three times continuously, the green LED flashes quickly, then the device will enter frequency configuration mode. (The wireless gateway should be set to the frequency configuration mode manually, and the 4CH Wireless 0~10V Dimming Actuator will automatically configure the same communication parameters as that of the gateway. After configuration succeeds, the actuator will automatically exit the frequency configuration mode. The parameters should be set in HDL Buspro Setup Tool.

Silica gel for stopper: used for preventing short circuit caused by contact between power cable or load cable and dry contact. When the device is shipped from factory, the silica gel stopper is installed in the slot. Remove the stopper before wiring. Otherwise keep the stopper in the slot.

Installation - See Figure 5 - 7

Step 1. Install the wall box in the wall.

Step 2. Secure the actuator into the wall box after wiring.

Step 3. Install the panel on the wall box with screws. The back of panel should be thinner than 20mm.

Safety Precautions

- 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-MPDA04-RF.28*1 / Datasheet*1 / Cable (15cm)*2

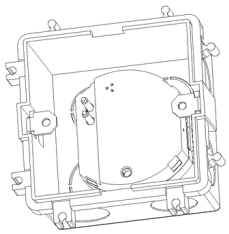


Figure 5

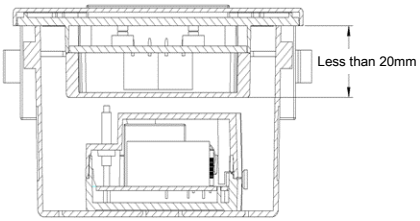


Figure 6

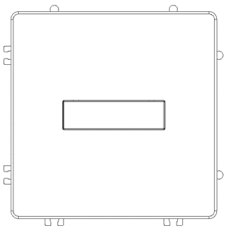


Figure 7

Figure 5 - 7. Installation

Technical Data

Basic Parameters	
Input voltage	AC100-240V (50/60Hz)
Power consumption	2.7W max.
Current of each 0-10VDC output channel	0-30mA
Communication	Buspro Wireless
Wireless transmission power	+10dbm
Wireless sensitivity	-90dbm
Indoor communication distance	≤30m
RSSI (Received Signal Strength Indication)	>-80dbm
Frequency Allocation	
WPAN (China)	780 to 786MHz
SRD (Europe)	864 to 870MHz
ISM (North America)	904 to 928MHz
Default PSK	HDL-SecurityKey0
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	52x46.5x20 (mm)
Net weight	33g
Housing material	PC, ABS
Installation	Wall box (See Figure 5 - 7)
Protection rating (Compliant with EN60529)	IP20
Fire and neutral wire	1.5mm² (the module provides 15cm wire)
Load cable	1.5mm² (the module provides 15cm wire)
Stripping length	5~7mm

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	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

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 “×” 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.

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