



Figure 1. High Performance Dimmer

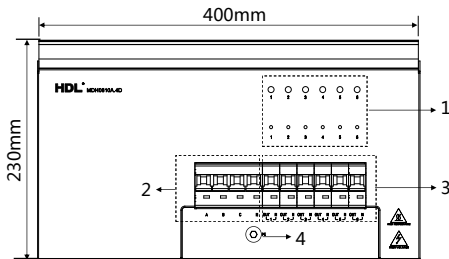


Figure 2. Dimensions - Front View

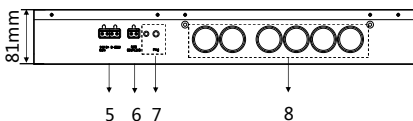


Figure 3. Dimensions - Side View

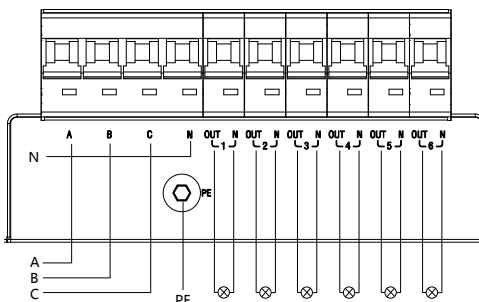


Figure 4. Wiring

Overview

High Performance Dimmer (See Figure 1) is a dimmer based on MOSFET dimming technology. The dimmer has 6 output channels, which can drive high-power load and detect the current of each channel. Manual buttons and status indicators are available for debugging device. With scene and sequence controller, the dimmer supports short-circuit protection, overheat protection, configurable over-current protection. It is applicable to high performance dimming fields.

Functions

- 6CH 10A MOSFET trailing dimming outputs.
- Manual Bypass button and LED status indicator of each channel are available.
- Low Threshold, High Threshold, Maximum Threshold are all available for each channel. Built-in 4 dimming curves.
- With a scene controller, 6 separate zones can be set, 12 scenes can be set for each zone, and 6 sequences with 12-step scene can be set for Zone1.
- The running scene can be set when the device starts. The specified security scene can be locked through an external switch signal, which is not subject to any channel control at this time.
- A variety of device operation information can be displayed via software, for example power information, temperature information, channel information, etc.
- Support short-circuit protection, overheat protection, grounding protection and configurable over-current protection.
- Optional power supply of 24V DC, 120mA current to the HDL Buspro interface.
- HDL Buspro communication is adopted. Device's basic information, zone, scene, sequence and the device operation information can be displayed and edited.

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand connection).
- Check connection - Check cable connection after installation, separate high and low voltage power cable. Ensure the three phase AC power cable, neutral line and PE cable are connected correctly.
- Output channels - The current of each channel should not exceed 10A, and the total output current should not exceed 60A.
- The recommended types of load are incandescent light, low-voltage halogen light, dimmable LED light , etc.
- The dimmer only supports trailing edge mode. It is not allowed to connect inductive loads.
- Make sure the working temperature of the dimmer does not exceed 45°C.
- The 24V output power interface should not exceed the rated current of 120mA.

Product Information

Dimensions - See Figure 2 - 3

1. Bypass buttons and LED indicators
Short press the buttons to switch the channels, long press the buttons to dim; The LED indicators shows the current status of the channels.
2. Power switches and connection ports: There are three phases of AC power: Phase A, Phase B, Phase C, Neutral line N
Phase A: It provides drive power to CH1, CH2, and also provide power to the weak electricity system.
Phase B: It provides drive power to CH3, CH4.
Phase C: It provides drive power to CH5, CH6.
3. Output channel switches and connection ports
There are 6 output channels: CH1-6. They can control the switch of channels and support overload protection.
4. PE connection: Connects to the housing of the device.
5. HDL Buspro interface
The 24V DC power interface does not need to connect to other device, when it is no need to provide power to the Buspro device.
6. Switch signal input terminal of Security Scene
7. Programming button and module indicator: When the module works properly, the indicator flashes. Press the programming button for 3 seconds, the address of the module can be modified via HDL Buspro Setup Tool.
8. Wiring holes for AC power cable.

Wiring - See Figure 4

Installation - See Figure 5 - 8

- Step 1. Fix two mounting supports on the wall with screws.
- Step 2. Pick up the device and align the gap in the back of the device with two wall mounting supports.
- Step 3. Hang the device on the wall hanging parts and fix it.

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 wall mounted. 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 replace parts, 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.
- It is not allowed to exceed the range.

Package Contents

HDL-MDH0610A.4D *1 / Mounting support*2 / Screw*4 / Screw washer*4 / Datasheet*1

Technical Data

Basic Parameters

Input voltage	AC100~240V(50/60Hz)
Power consumption without load	Less than 4W
Output channel	6 channels
Maximum output current of each channel	10A
Maximum total output current of channels	60A
Communication	HDL Buspro
Connection	Three-phase four-wire system
Dimming mode	Trailing edge
Dimming curves	Linear, 1.5 exponent, 2.0 exponent, 3.0 exponent

External Environment

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

Specifications

Dimensions	400×230×81 (mm)
Net weight	5.5kg
Housing material	Iron
Installation	Wall mounted (See Figure 5 - 8)
Protection rating (Compliant with EN 60529)	IP20

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 "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.

HDL Buspro Cable Guide

HDL Buspro	HDL Buspro Cable	CAT5/CAT5E
DATA+	Yellow	Blue/Green
DATA-	White	Blue white/Green white
COM	Black	Brown white/Orange white
24V DC	Red	Brown/Orange

Technical support

E-mail: support@hdlautomation.com

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

©Copyright by HDL Automation Co., Ltd. All rights reserved.
Specifications subject to change without notice.



Figure 5

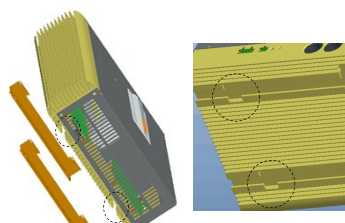


Figure 6

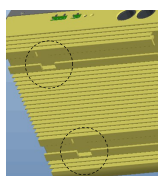


Figure 7

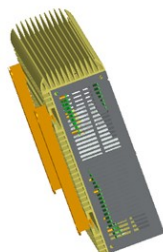


Figure 8

Figure 5 - 8. Installation