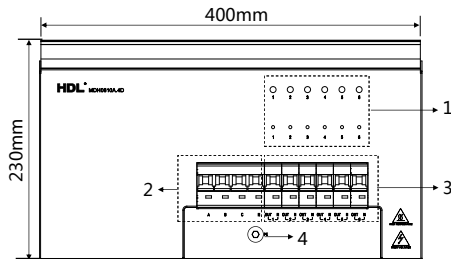
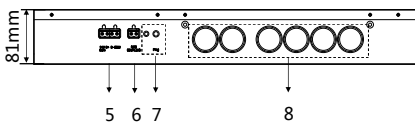
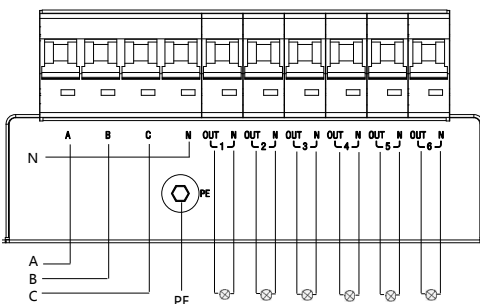


Figure 1. High Performance Dimmer
图 1. 大功率调光器Figure 2. Dimensions - Front View
图 2. 尺寸图 - 正面Figure 3. Dimensions - Side View
图 3. 尺寸图 - 侧面Figure 4. Wiring
图 4. 接线图

Overview

HDL-MDH0610A.4D 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 MOS tube 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 HDL Buspro/KNX 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

- 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.
- 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.
- Output channel switches and connection ports
There are 6 output channels: CH1-6. They can control the switch of channels and support overload protection.
- PE connection: Connects to the housing of the device.
- 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.
- Switch signal input terminal of Security Scene
- 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.
- Wiring holes for AC power cable.

Wiring - See Figure 4

Installation - See Figure 5 - 8

- Fix two mounting supports on the wall with screws.
- Pick up the device and align the gap in the back of the device with two wall mounting supports.
- 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

产品概述

HDL-MDH0610A.4D 大功率调光器(见图1)是一款基于MOSFET调光技术的调光设备。该设备拥有6个输出回路，每个回路可驱动大功率负载且具备回路电流检测功能。该设备具有手动按键及状态指示灯方便用于设备调试，自带场景序列控制，具有短路保护、过热保护、可配置的过流保护功能，适用于大功率调光区域。

功能说明

- 6 路10A MOS管后沿调光回路
- 每个回路设有手动直通按钮及LED状态指示灯
- 每回路具有低端限幅、高端限幅、最大限幅设定，内置4条调光特性曲线
- 自带场景控制器，可设置6个独立区域，每个区域可设置12个场景，区域1可设置6个有12步场景的序列
- 可设置设备启动时运行的场景。可通过外部开关信号锁定指定消防场景，此时不接受任何回路控制
- 可通过软件显示设备多种运行信息，电源信息、温度信息、回路信息等
- 具有短路保护，过热保护，接地保护及可配置的过流保护
- 可选择向HDL Buspro总线提供24V DC，120mA电流
- 采用HDL Buspro总线方式通讯，可编辑和显示设备基本信息，区域，场景，序列，设备运行信息。

注意事项

- 总线 - CAT5E或者HDL Buspro/KNX 专用电缆；
- 总线连接 - 推荐手拉手的连接方式；
- 连接检查 - 安装后检查线路连接，区分强弱电，确保三相交流电源接线无误，中性线N无缺失或错接，PE接地线无漏接，确保连接正确且接线可靠；
- 输出回路 - 每回路输出最大电流10A，总输出电流不能超过60A；
- 负载类型 - 白炽灯、低压卤素灯、可调光LED灯；
- 该调光器仅支持后沿调光模式，禁止连接感性负载；
- 保持调光器环境温度低于45度；

产品信息

产品尺寸 - 见图 2 - 3

- 直通按键及LED指示灯
短按按键可开关回路，长按按键可对回路调光，LED指示灯指示当前回路开关状态。
- 总电源开关及接线端口
分别对应三相交流电A相、B相、C相、中性线N。
A相为回路1，回路2提供驱动电源，同时亦为弱电系统提供电源。
B相为回路3，回路4提供驱动电源。
C相为回路5，回路6提供驱动电源。
- 输出回路开关及接线端口
分别对应1-6输出回路，可控制回路输出通断及具有过载保护作用。
- 设备接地端：接设备外壳。
- HDL Buspro总线接线端
当不需为总线设备提供电源时，24V输出端不需与其他设备相连。
- 消防场景开关信号输入端
- 编程按键和模块指示灯：当模块正常工作时，指示灯闪烁，按该键约3秒，则可以在HDL Buspro软件中修改本模块地址。
- 交流强电接线过孔

产品接线 - 见图 4

设备的安装 - 见图 5 - 8

- 步骤1. 用螺丝将两个底座板固定在墙壁上。
- 步骤2. 拿起设备，并将设备背部的挂壁缺口对准2个底座板。
- 步骤3. 将设备悬挂在底座板上并固定即可。

安全警告



- 本设备的安装及调试工作必须由我司或我司指定的机构进行。其电气安装的计划和施工，必须遵守当地相关的安全标准和法规。
- 该产品需壁挂式安装，未按照本说明书进行安装及接线方式的，所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件，否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行，本产品的保修范围不适用于因用户拆卸产品而导致的故障。
- 不得超量程使用。

装箱清单

HDL-MDH0610A.4D*1 / 底座板*2 / 螺丝*4 / 垫片*4 / 说明书*1

Technical Data

Electrical 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	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.

HDL Buspro Cable Guide

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

技术参数

电气参数

输入电压	AC100~240V(50/60Hz)
整机无负载功耗	<4W
输出回路	6路
每回路输出最大电流	10A
回路最大总输出电流	60A
通信协议	HDL Buspro
连接	三相四线制
调光方式	后沿调光
调光曲线	线性, 1.5次方, 2.0次方, 3.0次方

外部环境

工作温度	-5°C~45°C
工作相对湿度	≤90%
储存温度	-20°C~60°C
储存相对湿度	≤93%

产品规格

尺寸	400×230×81 (mm)
净重	5.5kg
外壳材料	铁
安装方式	壁挂式安装 (见图5-8)
防护级别 (符合 EN 60529)	IP20

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑胶组件	o	o	o	o	o	o
五金铜件	o	o	o	o	-	-
螺丝组件	o	o	o	x	-	-
焊锡	x	o	o	o	-	-
PCB组件	x	o	o	o	o	o
IC	o	o	o	o	x	x

- : 表示不含有该有害物质。

o : 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x : 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

总线定义

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
棕/橙	24V DC	红
蓝/绿	DATA+	黄
蓝白/绿白	DATA-	白
棕白/橙白	COM	黑



Figure 5 / 图 5

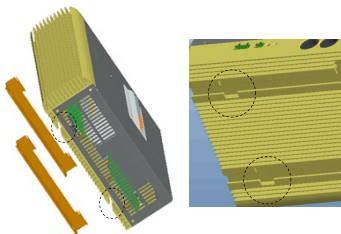


Figure 6 / 图 6

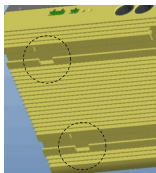


Figure 7 / 图 7

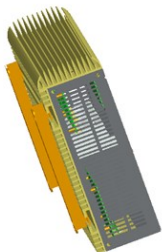


Figure 8 / 图 8

Figure 5 - 8. Installation
图 5 - 8. 安装图

技术支持

服务热线 : 020-85820195

(工作时间 : 9:00-12:00, 13:00-18:00, 星期一至星期五)

邮箱 : kfb@hdlchina.com.cn

网址 : http://www.hdlchina.com

Technical support

E-mail: support@hdlautomation.com

Website: https://www.hdlautomation.com