

Datasheet

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Figure 1. 10CH Hotel Room Mix Control Module

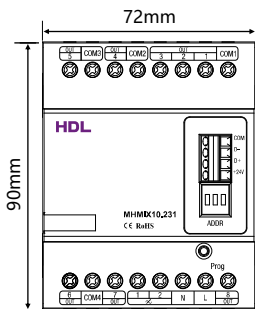


Figure 2. Dimensions - Front View

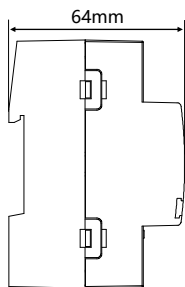


Figure 3. Dimensions - Side View

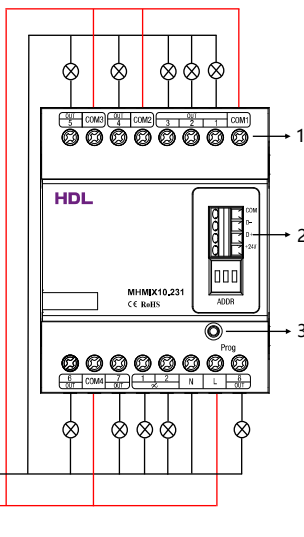


Figure 4. Wiring

Overview

HDL-MHMIX10.231 10CH Hotel Room Mix Control Module (See Figure 1) is a multifunction control module. It supports relay control output and MOSFET dimming output. In conjunction with HDL Hotel Room Management System, the module can control hotel rooms, home appliances, lights (including incandescent light, dimmable LED light, low-voltage halogen light, etc.) and curtains.

Functions

- The module has 8 relay channels and 2 MOSFET dimming channels.
- The relay channels can control the switch of the connected devices.
- The MOSFET dimming channels can control lights (including incandescent light, dimmable LED light, low-voltage halogen light, etc.) for trailing dimming.
- The MOSFET dimming channels supports short circuit and over heat protection.
- The ID address of the dimming module supports simple configuration via dial code control, or full configuration via HDL Hotel Room Management System.
- Inner Buspro communication is adopted. In conjunction with HDL Hotel Room Management System, the dimming module work in some more complicated scenes as a channel expansion module of HDL hotel host.

Important Notes

- Inner Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Inner Buspro connection - Series connection (hand-in-hand recommended)
- Check and ensure all connections are correct after installation.
- The current of each channel must not exceed the rated current.
- Load types - Incandescent lamp, halogen lamp, low-voltage halogen lamp, LED lamp, etc.
- The trailing dimming mode is not allowed to be used when the inductive load is connected.
- The dimming environment should not exceed 45°C.
- Each channel needs to connect breaker or fuse for protection.

Product Information

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

1. The channel connected to load devices
2. Inner Buspro: HDL Inner Buspro, connected to the hotel host controller.
 - Dial code 000: The original address of each channel is configured by software.
 - Dial code 001: The channel address is 1;
 - Dial code 010: The channel address is 11;
 - Dial code 011: The channel address is 21;
 - Dial code 100: The channel address is 31;
 - Dial code 101: The channel address is 41;
 - Dial code 110: The channel address is 41;
 - Dial code 111: The channel address is 41.
3. Programming button & indicator: The indicator flickers, when the relay module runs normally. Press the programming button for 1 second, the indicator turns red, then the channel original address can be read and configured via the HDL Hotel Room Management System.

Installation - See Figure 5 - 7

- Step 1. Fix the DIN rail with screws.
- Step 2. Buckle the bottom cap of the 10CH Hotel Room Mix Control Module on the edge of the DIN rail.
- Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted.

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 with DIN rail in DB 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-MHMIX10.231*1 / Datasheet*1 / Label*5



Figure 5

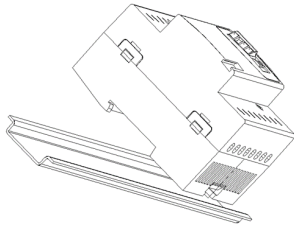


Figure 6

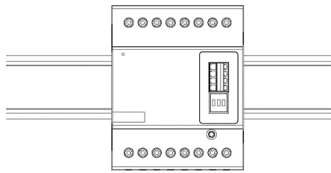


Figure 7

Figure 5 – 7. Installation

Technical Data

Basic Parameters

| | |
|-----------------|--|
| Working voltage | 15~30V DC |
| Working current | 100mA/24V DC |
| Channel control | 6CH/5A(AC100-240V 50/60Hz) Relay (CH1~4, CH6~7) |
| | 2CH/10A(AC100-240V 50/60Hz) Relay (CH5, CH8) |
| | 2CH/0.5A (AC100-240V 50/60Hz) MOSFET dimming (CH9~10) |
| Input voltage | AC100-240V (50/60Hz) |
| Dimming mode | MOSFET trailing edge |
| Dimming curves | Linear |

External Environment

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

Specifications

| | |
|---|--|
| Dimensions | 72mm×90mm×64mm |
| Net weight | 418g |
| Housing material | Nylon, PC |
| Installation | 35mm DIN rail installation (See Figure 5 - 7) |
| 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.

Inner Buspro Cable Guide

| Inner 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>

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