HDL®

HDL-MHMIX10.231

10CH Hotel Room Mix Control Module

buspro

Datasheet

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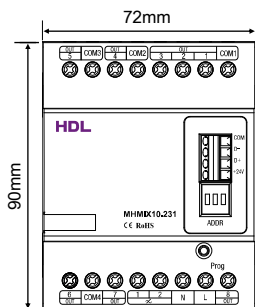Figure 1. 10CH Hotel Room Mix Control Module

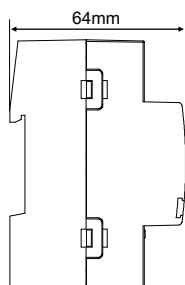Figure 2. Dimensions - Front View
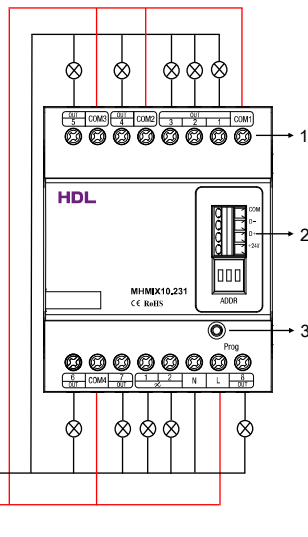

Figure 3. Dimensions - Side View

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℃.
- 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.

Note: The 10CH Mix Controller shall be used in conjunction with the hotel room host controller.

Safety Precautions ⚠ WARNING

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- The device should be installed with DIN rail in DB box. HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this operating instruction.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Please contact our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

Package Contents

HDL-MHMIX10.231*1 / Datasheet*1 / Label*5

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℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
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

Approved

CE

RoHS

Figure 5

Figure 6

Figure 7

Figure 5 - 7. Installation

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

Installation

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.

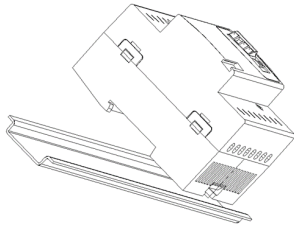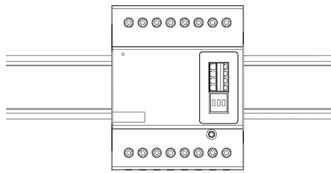Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted.