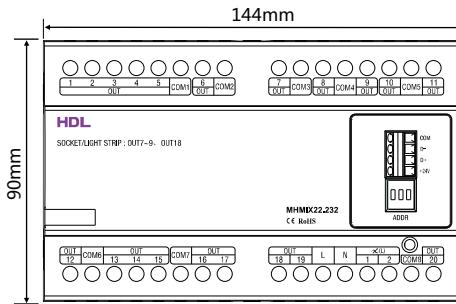
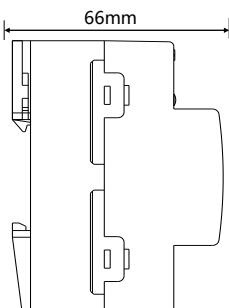
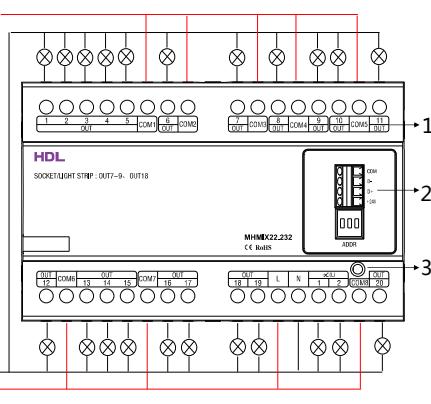


Figure 1. 22CH Mix Controller  
图 1. 22路混合模块Figure 2. Dimensions - Front View  
图 2. 尺寸图 - 正面Figure 3. Dimensions - Side View  
图 3. 尺寸图 - 侧面Figure 4. Wiring  
图 4. 接线图

## Overview

HDL-MHMIX22.232 22CH Mix Controller (See Figure 1) is a multifunction control module. It supports relay control output and MOS tube dimming output. In conjunction with the HDL hotel management control system, the mix controller can control hotel rooms, home appliances, lights (including incandescent light, dimmable LED light, low-voltage halogen light, etc.) and curtains.

## Functions

- The mix controller has 20 common relay channels and 2 MOS tube dimming channels.
- The common relay can control the switch of the connected channels.
- The MOS tube dimming channels can control lights (including incandescent light, dimmable LED light, low-voltage halogen light, etc.) for trailing dimming.
- The MOS tube dimming channels supports short circuit protection and overheat protection.
- The ID address of the mix controller can be configured easily via dial code control, it also can be freely configured via HDL hotel management software.
- Inner Bus communication is adopted. In conjunction with the HDL hotel management control system, the Mix Controller works in some more complicated scenes as a channel expansion module of HDL hotel host.

## Important Notes

- Inner Bus cable - CAT5E, HDL Bus/KNX cable and 0.8mm single-core copper wire;
- Inner Bus connection - Series connection (hand-in-hand);
- Check and ensure all connections are correct after installation;
- The current of each channel must not exceed the prescribed 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 temperature 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 : When the module works properly , the indicator flashes. Keep pressing the programming button for 1s, the indicator turns red, then the channel original address can be read and modified via the hotel management software.  
Note : The 22CH Mix Controller shall be used in conjunction with the hotel room host controller.

### Installation - See Figure 5 - 8

- Step 1. Fix the din rail with screws.
- Step 2. Buckle the bottom cap of the 22CH Mix Controller 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 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-MHMIX22.232\*1 / Label\*5 / Datasheet\*1

## 产品概述

HDL-MHMIX22.232 22路混合模块(见图1)是一款多功能控制模块。它具有继电器开关控制输出、MOS管调光输出功能。配合HDL酒店管理控制系统可实现对酒店客房、家居电器、灯具(白炽灯、可调LED灯、低压卤素灯等)及窗帘等设备控制。

## 功能说明

- 具有20路普通继电器回路和2路MOS管调光回路。
- 普通继电器回路，可对接入的回路进行智能开关控制。
- MOS管调光回路，可对可调灯具(白炽灯、可调LED灯、低压卤素灯等)进行后沿调光。
- MOS管调光回路具有短路保护和过热保护功能。
- 模块ID地址可使用拨码方式简单配置，亦可通过HDL酒店管理软件任意配置。
- 此设备采用HDL Inner Bus总线通讯方式，作为HDL酒店主机的回路扩展模块，配合HDL酒店管理控制系统，可用在较复杂的场景。

## 注意事项

- 总线 - CAT5E或者HDL Bus/KNX 专用电缆, 0.8mm单芯铜线；
- 总线连接 - 推荐手拉手的连接方式；
- 连接检查 - 安装后，检查所有的连接是否正确连接；
- 输出回路 - 每回路的电流不能超过规定电流；
- 负载类型 - 白炽灯、卤素灯、低压卤素灯、LED灯等；
- 感性负载禁止使用后沿调光模式工作；
- 保持调光器环境温度低于45度；
- 每个继电器回路需要接入适当的MCB或保险丝。

## 产品信息

### 产品尺寸 - 见图 2 - 3

### 产品接线 - 见图 4

1. 回路接负载端
2. Inner Buspro : HDL 内部总线，与酒店主机连接

拨码开关000 : 回路起始地址由软件配置

拨码开关001 : 回路地址为1

拨码开关010 : 回路地址为11

拨码开关011 : 回路地址为21

拨码开关100 : 回路地址为31

拨码开关101 : 回路地址为41

拨码开关110 : 回路地址为41

拨码开关111 : 回路地址为41

3. 小按键 & 指示灯 : 正常工作时绿灯闪烁，按该键约1秒红灯亮，则可以在酒店管理软件读取及配置起始回路地址。

注：22路混合控制模块必须与酒店客房控制主机配合使用。

### 设备的安装 - 见图 5 - 8

步骤1. 用螺丝固定丁导轨。

步骤2. 将22路混合模块底盖的一端扣上导轨的边上。

步骤3. 将整个模块压到导轨上，并滑动模块直至调整到合适的位置则固定下来。

## 安全警告

- 本设备的安装及调试工作必须由我司或我司指派的机构进行。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。
- 该产品需以丁轨安装方式，安装在电箱里，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-MHMIX22.232\*1 / 标签纸\*5 / 说明书\*1

EN

ZH

### Technical Data

#### Electrical Parameters

Working voltage	15~30V DC
Static power consumption	18mA/24V DC
Dynamic power consumption	180mA/24V DC
	16CH/5A/100~240V AC
Channel control	Common relay (CH1~6, CH10~17, CH19~20)
	4CH/10A/100~240V AC
	Common relay (CH7~9, CH18)
	2CH/0.5A MOS tube dimming (CH21~22)
MOS tube voltage input	100~240V AC 50/60Hz
MOS tube dimming mode	Trailing edge
MOS tube 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	144mm×90mm×66mm
Net weight	572g
Housing material	Nylon, PC
Installation	35mm DIN rail installation (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.

### 技术参数

#### 电气参数

工作电压	15~30V DC
静态耗电	18mA/24V DC
动态耗电	180mA/24V DC
	16CH/5A/100~240V AC
控制回路	普通继电器 (CH1~6, CH10~17, CH19~20)
	16CH/5A/100~240V AC
	普通继电器 (CH1~6, CH10~17, CH19~20)
	4CH/10A/100~240V AC
	普通继电器 (CH7~9, CH18)
	2CH/0.5A MOS管调光 (CH21~22)

MOS管电压输入 100~240V AC 50/60Hz

MOS管调光方式 后沿调光

MOS管调光曲线 线性

#### 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	144mm×90mm×66mm
净重	572g
外壳材料	尼龙, PC
安装方式	35mm 丁导轨安装 (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	-	-	
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	x	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。

#### Inner Buspro Cable Guide

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

#### Inner Buspro 总线定义

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

Figure 5 / 图 5

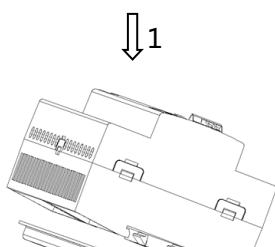


Figure 6 / 图 6

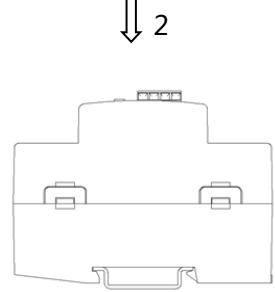


Figure 5~8. Installation  
图 5~8. 安装图

#### 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@hdlchina.com.cn](mailto:support@hdlchina.com.cn)

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

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