



HDI -MRCU 433

Home Control Unit

# buspro

#### Datasheet

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Figure 1. Home Control Unit

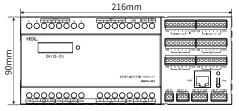


Figure 2. Dimensions - Front View

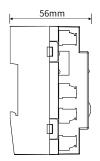


Figure 3. Dimensions - Side View

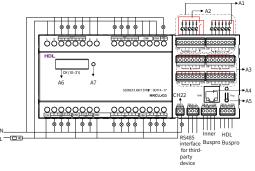


Figure 4. Wiring

### Overview

Home Control Unit (See Figure 1) supports the functions of gateway, mix controller, dry contact, and LED output. The Home Control Unit has 22 channel outputs, 24-channel dry contacts and 11-channel LED outputs.

#### Mix control functions

- 22 zones can be set, and each zone includes 0-12 scenes.
- Channel 1 to 13 are relay outputs, and each channel outputs 5A current. The load types are recommended to be incandescent lamp, halogen lamp, low voltage halogen lamp.
- Channel 14 to 17 are relay outputs, and each channel outputs 10A current. The load types are recommended to be incandescent lamp, halogen lamp, low voltage halogen lamp.
- Channel 18 to 21 are dimming outputs, each channel outputs 0.8A current. It has short circuit protection with replaceable fuse. When the fuse is burned, the fuse indicator will flash.
- Channel 22 is 1A relay output channel.

#### Dry contact

24-channel dry contact inputs.

#### LED output function

■ 11-channel switch indicator outputs.

#### RS485 function

■ 1CH external RS485 Bus data receiving and sending, internally converted into HDL Buspro protocol commands.

## Internet function

Local connection control or remote connection configuration.

## **Components and Operation**

### Dimensions - See Figure 2 - 3

#### Wiring - See Figure 4

A1: The CH1-11 LED lamp corresponds to the dry contact CH1-11 respectively. Resistor of  $1k\Omega$  -5k $\Omega$  recommended, which depends on the working voltage of the LED lamp.

A2: Doorbell control

A3: 24CH dry contacts

A4: RJ45 port

A5: Button and indicator: The indicator flickers in green when the module is working properly. Keep pressing for 2s to read and set the start channel, when the indicator turns red. Keep pressing for 10s, it will turn red, the module will be reset to factory settings.

Default setting parameters:

IP: 192.168.10.250

Router IP: 192.168.10.1

Port: 6000

The network segment of the module should be same as the PC.

A6: Fuse socket

A7: Indicator of fuse

## **Important Notes**

- Buspro cable CAT5E or dedicated HDL Buspro cable.
- The fuse must be aR type.
- Device must be powered off when replacing fuse.

## Safety Precautions

- 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-MRCU.433\*1 / Datasheet\*1



Figure 5



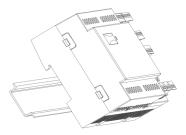


Figure 6





Figure 7

Figure 5 - 7. Installation

Technical Data  Basic Parameters		
Working current	300mA/24V DC	
Input voltage	AC100~240V, 50/60Hz	
Communication interface	HDL Buspro, RJ45	
RJ45 interface	UDP/IP network interface	
TRIAC	16A TRIAC, minimum load is 30W	
Cable diameter of Buspro terminal	0.6-0.8mm	
Relay output	5A/10A	
External Environment		
Working temperature	-5°C~45°C	
Working relative humidity	≤90%	
Storage temperature	-20°C~60°C	
Storage relative humidity	≤93%	
Specifications		
Dimensions	216mm×90mm×56mm	
Net weight	725g	
Housing material	Nylon	
Installation	35mm DIN rail installation (See Figure 5 - 7)	
Protection rating (Compliant with EN 60529)	IP20	
Approved		
CE		

RoHS

# **HDL Buspro Cable Guide**

HDL Buspro	HDL Buspro Cable	CAT5/CAT5E
DATA+	Yellow	Blue/Green
DATA-	White	Blue white/Green white
СОМ	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 Home Control Unit 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.

## Technical support

E-mail: hdltickets@hdlautomation.com Website: https://www.hdlautomation.com

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