

**Datasheet**

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Figure 1. 48CH DMX Scene Controller

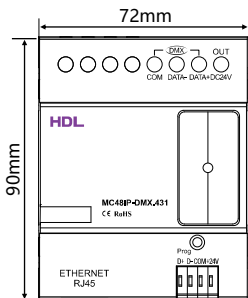


Figure 2. Dimensions - Front View

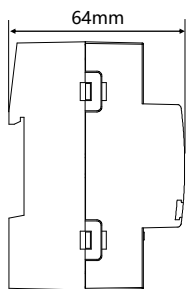


Figure 3. Dimensions - Side View

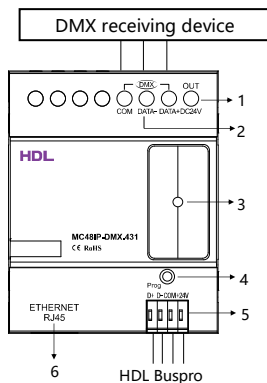


Figure 4. Wiring

## Overview

48CH DMX Scene Controller (See Figure 1) supports DMX512, Art Net, and HDL Net protocol. With 48 areas and 99 scenes in each area, the controller is designed to control RGB LED strips, RGB lights, and other DMX devices using 48 channels.

## Functions

- 48-channel, up to 48 separate areas
- 0-99 scenes, running time up to 60 minutes for each, can be set for each area
- Up to 99 sequences supported, 4 running modes (backward, forward & backward, random) available for each sequence
- DMX512 (1990 version)
- Art net / HDL Net DMX protocol supported
- Low threshold, high threshold, maximum threshold available for each channel for different devices
- Gateway between HDL Buspro and Ethernet

## Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand recommended).
- DMX cable - Shielded twisted cable, less than 200 meters.
- DMX load - Less than 32 devices recommended.

## Product Information

**Dimensions - See Figure 2 - 3**

**Wiring - See Figure 4**

1. 24V DC output, supply 24V DC voltage from Buspro.
2. DMX signal output, 1990 version
3. Data indicator
4. Programming button and indicator: The indicator flashes in green when the module is working properly. Keep pressing the button for 10s, it turns to red, the module will be restored default factory setting.

Default setting parameters:

IP: 192.168.10.250

ROUTER IP: 192.168.10.1

Port: 6000

5. HDL Buspro interface
6. RJ45 interface: UDP/IP interface

**Network Parameter Setting:**

1. 48CH DMX Scene Controller default IP: 192.168.10.250, port 6000. Please modify the IP address of user PC into the same IP segment in the following steps:
  - a) Modify the IP address of user PC into 192.168.10.\*\* (\*\* may be any value).
  - b) Search the device in HDL Buspro Setup Tool and modify the IP address into the same IP segment of user PC, then press "save". (Subnet mask, router IP and MAC can be modified in this step)
  - c) Change the user PC IP to the original one.
  - d) Turn off the device and the new IP address will be available after restart.

**Installation - See Figure 5 - 7**

- Step 1. Fix the DIN rail with screws.
- Step 2. Buckle the bottom cap of the 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 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-MC48IP-DMX.431\*1 / Buspro connector\*1 / Label\*5 / Datasheet\*1



Figure 5

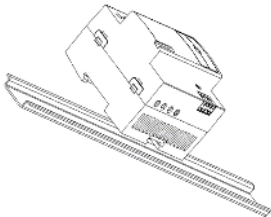


Figure 6

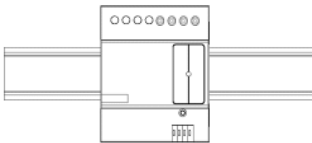


Figure 7

Figure 5 – 7. Installation

## Technical Data

### Basic Parameters

Working voltage	12~30V DC
Working current	40mA/24V DC
Communication	HDL Buspro
RJ45 connection	RJ45-TCP/IP network interface

### 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	142g
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.

## HDL Buspro Cable Guide

HDL 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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