HDL®

HDL-MD512-DMX.232
512CH DMX Scene Controller

buspro

Datasheet
Issued: March 7, 2019
Edition V1.0.0

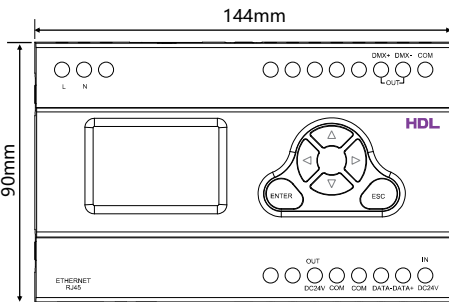Figure 1. 512CH DMX Scene Controller
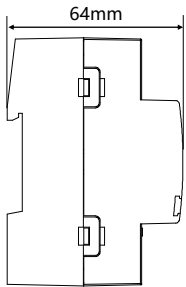

Figure 2. Dimensions - Front View
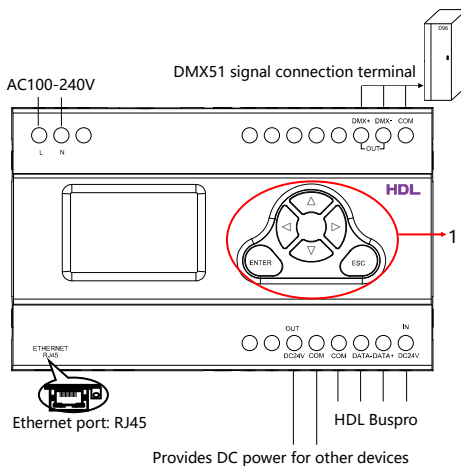

Figure 3. Dimensions - Side View

Figure 4. Wiring

Overview

512CH DMX Scene Controller (See Figure 1) supports DMX512, Art Net, and HDL Net protocols. It is designed to control RGB LED strips, RGB lights, and other DMX devices using 512 channels, with 16 areas and 1024 scenes in each area.

Functions

- 512 DMX channels control, each of which has a gradient and a mutation property.
- Up to 16 areas supported. Each area can be set 0-1024 scenes, with up to 60 minutes running time for each scene.
- Up to 99 sequences can be set. Each sequence has 255 steps with 0.1s to 60min interval time, and 4 running modes are available for each sequence: forward, backward, forward & backward, random
- DMX512 (1990 version)
- Supports Art net / HDL Net DMX protocol
- Low threshold, high threshold, maximum threshold are all available for each channel for different devices
- Each channel has light protection delay time (0-25 seconds)
- Each channel has protection delay time for power on after power off (0-60 minutes)
- Exchange intelligent data, reduce data throughput
- Soft reset supported
- Gateway: data exchange 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.

Product Information

Dimensions - See Figure 2 - 3
Wiring - See Figure 4

1. Control buttons

【Enter】 Confirm button

【Esc】 Esc button

【▲】 Page up - used for modifying the setting, when you press, the value will increase

【▼】 Page down - used for modifying the setting, when you press, the value will decrease

【◂ 】 Left Move - used for selecting item and cursor location

【▸ 】 Right Move - used for selecting item and cursor location

Press the 4 direction buttons simultaneously to reset.

Installation - See Figure 5 - 7

Step 1. Fix the DIN rail with screws.

Step 2. Fix the bottom cap of the 512CH DMX Scene 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 ⚠ WARNING

- 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
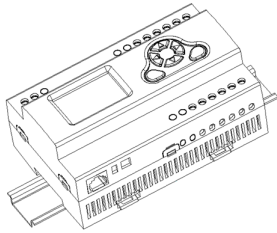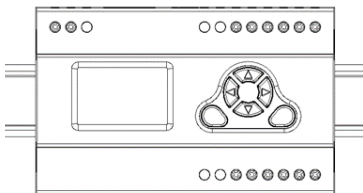
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Figure 5

⬇1

Figure 6

⬇2

Figure 7

Figure 5 - 7. Installation

Technical Data

Basic Parameters

Working voltage	12~30V DC
Working current	200mA/24V DC
Input voltage	AC100-240V(50/60Hz)
Communication	HDL Buspro
Signal type	DMX512 (Version 1990)
RJ45	RJ45-TCP/IP network interface
HMI	128x64 raster graphic LCD, 6 soft-touch buttons
Control channel	512
Ethernet network interface	10Mbps/RJ45

External Environment

Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%

Specifications

Dimensions	144mm×90mm×64mm
Net weight	429g
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	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

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 "×" 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