



Figure 1. 6CH 10A 0-10V Ballast Dimming Actuator

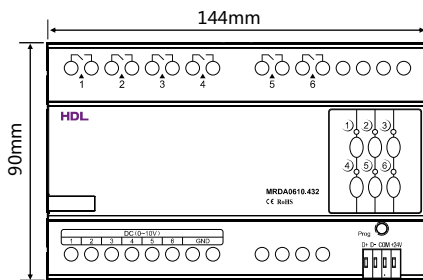


Figure 2. Dimensions - Front View

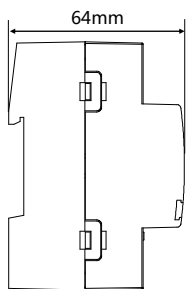
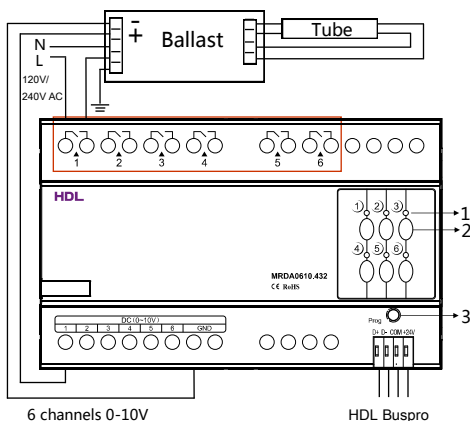


Figure 3. Dimensions - Side View



Note : Take the connection of Channel 1 as an example

Figure 4. Wiring

## Overview

6CH 10A 0-10V Ballast Dimming Actuator (See Figure 1) is a multifunction control module. It has 6-channel relay outputs and it is applicable for switch control. It has 6-channel for 0-10V analog signal outputs (supports input and output), which can control the 0-10V dimmable fluorescent tube and 0-10V LED light, etc. The module is to be used in lighting, switch control in the office and building area.

## Functions

- Up to 6 separate zones, up to 12 scenes in each zone
- Up to 6 sequences, each sequence has 12 steps, running time for each step is 60 minutes, the sequence has 4 running modes: "forward", "backward", "forward and backward", "random"
- Low, high, max threshold for each channel, applicable for different load
- Bypass button for manual control is available for each channel
- Selected scene or scene before power off can be activated automatically when the device restarts
- Supports HDL Buspro online upgrade.

## Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable
- Buspro connection - Series connection (hand-in-hand recommended)
- Load in each channel - Less than 800W dimmable fluorescent tube
- 0-10V load - The output in each channel is 50mA, total output of 6 channels is less than 100mA
- Each channel needs to connect a breaker or fuse for protection

## Product Information

**Dimensions - See Figure 2 - 3**

**Wiring - See Figure 4**

1. Channel indicator, indicates the channel status.
2. Bypass button
3. Programming button & module indicator

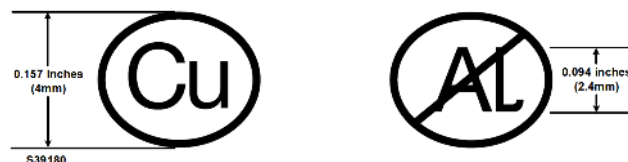
The indicator will flash when the device is in working mode. Keep pressing the button for 3 seconds, the address of the module can be read and modified via HDL Buspro Setup Tool.

**Installation - See Figure 5 - 7**

- Step 1. Fix the DIN rail with screws.
- Step 2. Buckle the bottom cap of the actuator 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.
- It is not allowed to exceed the range.
- CAUTION - Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing.
- The marking appears on the device, shown below shall be used to indicate that the device is for use with copper wire. The marking shall be legible with letters at least 2.4 mm high. "Use copper wire only", "Cu wire only" or equivalent wording, or a marking containing both the symbols as the illustrations.



## Package Contents

HDL-MRDA0610.432\*1 / Buspro connector\*1 / Label\*5 / Datasheet\*1



Figure 5

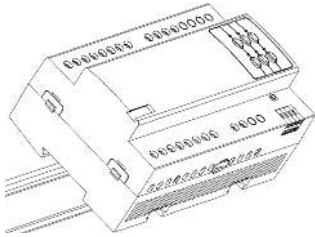


Figure 6

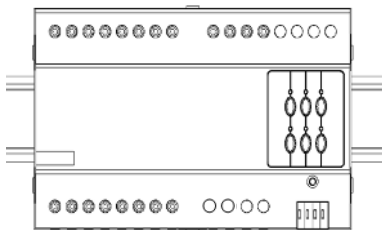


Figure 7

Figure 5 – 7. Installation

## Technical Data

Basic Parameters	
Working voltage	15~30V DC Class 2
Working current	30mA/24V DC
Input voltage	120V/240V AC (50/60Hz)
Relay output	6CH/10A
0-10V output	6CH/50mA (Total current is less than 100mA)

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×64mm
Net weight	450g
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](mailto:support@hdlautomation.com)

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

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