6CH 5A PWM Dimming Actuator

Datasheet



MDP0605-HT.13

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Before using this product, please read this datasheet carefully and keep it properly!

Document Version：C

◇◆ Overview

Used with room control units, 6CH 5A PWM Dimming Actuator can be used to control the LED light which has constant voltage. It has 6 output channels, each channel has a bypass button for manual control.

Note: The pictures and illustrations provided in this instruction manual are for reference purposes only, and the actual product may differ.

Key Functions:

- Low, high, max threshold for each channel, applicable for different load
- Bypass button for manual control is available for each channel.
- Short channel and over current protection are available.
- Maximum current in each channel: 5A
- PWM constant voltage output

◇◆ Appearance

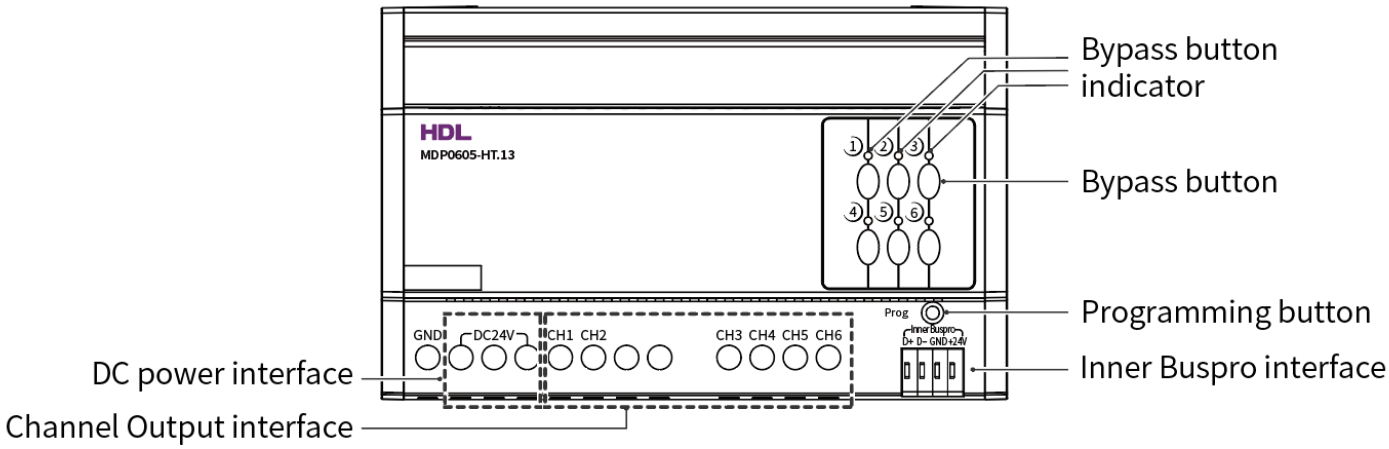


Figure 1

◇◆ Technical Data

Item	Parameter
Rated voltage	24V DC
Rated current	40mA / 24V DC
LED input voltage	12~30V DC

Communication interface	Inner Buspro
LED output channel	6CH, 5A/CH
Working temperature	-5℃ ~ 45℃
Working relative humidity	≤90%RH, non-condensed
Storage temperature	-20℃ ~ 60℃
Storage relative humidity	≤93%RH

◇◆ Specifications

Dimensions (W X H X D)	**144×90×64mm**
Net weight	351g
Housing material	Nylon, PC
Installation	35mm DIN rail mounted
IP degree (compliant with EN 60529)	IP20
Approved	CE, RoHS

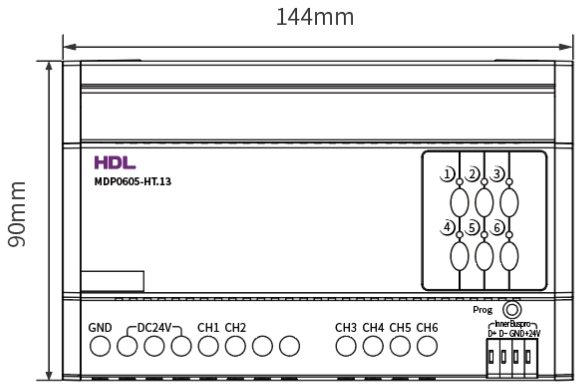


Figure 2

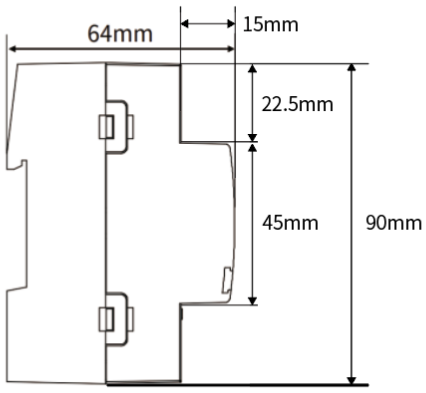


Figure 3

◇◆ Safety Precaution

Danger:

Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

Warning:

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. (hereinafter referred to as HDL) 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 datasheet.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.
- Risk of Electric Shock - More than one disconnect switch may be required to de-energize the device before servicing.
- It is not allowed to exceed the range.

Caution:

- Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.
- Do not use corrosive liquid to wipe the device body, especially the interface, so to avoid damage to the device.
- Do not wipe the device with a damp cloth.
- Before performing any maintenance or cleaning procedures on the device, it is imperative to disconnect the device from all voltage sources. This precautionary measure is necessary in order to prevent electric leakage and the risk of electric shock.
- Buspro cable - CAT5E or dedicated HDL Buspro cable
- For Buspro connection, a hand-in-hand connection is recommended.
- Load type - Constant voltage LED light, need to connect extra power supply to match the voltage of LED light
- Connection checking - Check all connections after installation
- Output channel - Max current of output channel is 5A
- Load power supply: 24V DC (Input Voltage ≤ 30V DC). Due to excessive load current demand, the existing 24V bus power supply has insufficient capacity; it must not be connected. A separate, high-power 24V DC power supply must be used for powering the load.
- Connection for multi lights - Parallel connection

◇◆ Wiring

Tips:

- For Buspro connection, a hand-in-hand connection is recommended.
- After all of the cables are terminated, check for correct and good terminations.

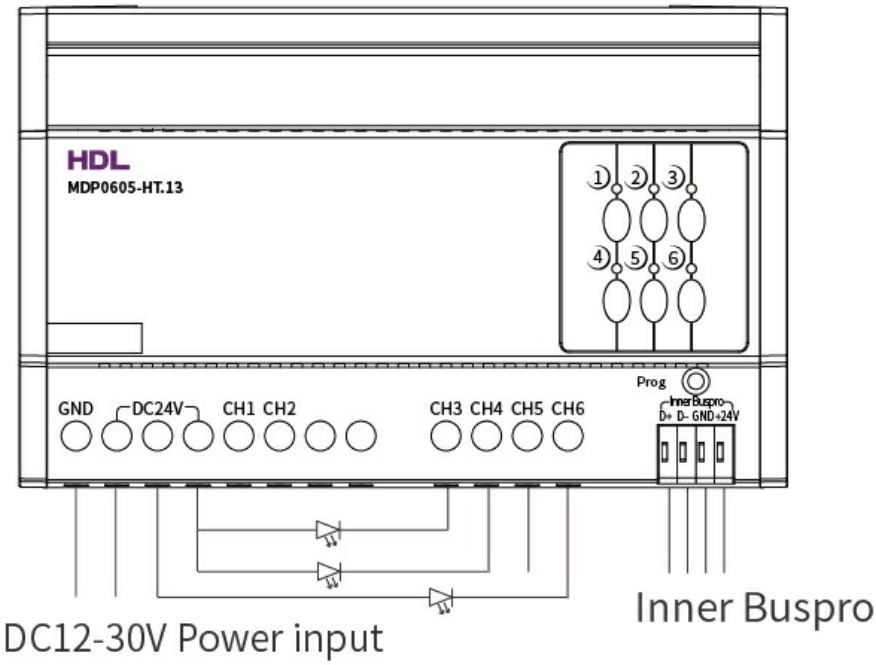


Figure 4

◇◆ Installation

Warning: Before performing any installation procedures on the device, it is crucial to disconnect the device from all voltage sources.

Step 1. Fix the DIN rail with screws.

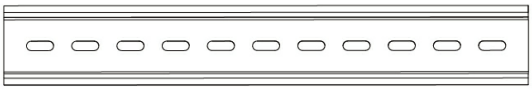


Figure 5

Step 2. Buckle the bottom cap of the 6CH 5A Intelligent LED Dimming Actuator on the edge of the DIN rail.

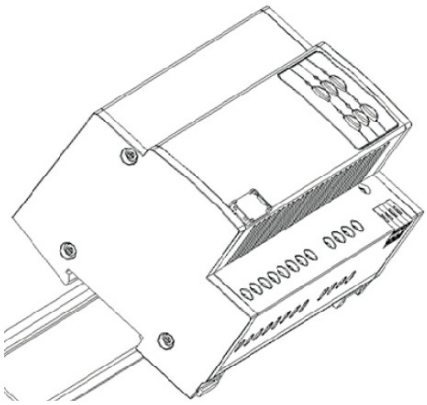


Figure 6

Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted.

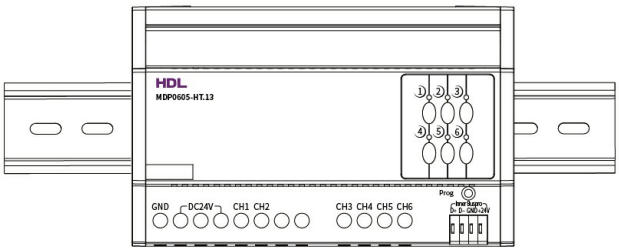


Figure 7

Note: After all of the cables are terminated, check for correct and good terminations. Before powering on, please ensure the device is tightly on the wall body.

◇◆ Operation

The device is configured with one programming button.

Operation	Result / Device Status
/	When the device runs normally, the indicator flashes.
When the device runs normally, press the programming button for about 1s.	Read or modify the device address on the room control unit configuration page in the debugging software

◇◆ Packing List

- 6CH 5A PWM Dimming Actuator*1
- Buspro connector*1

- Label*2
- PET label*2
- Screw*6

Note: After unpacking, please check if the product and the parts are complete.

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Update History：

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	June 20, 2025

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