

YC-IR.06A
6 CH Infrared Emitter Module

Product Manual

Release : September 22, 2023
Version : V1.2



Figure1.6 CH Infrared Emitter Module

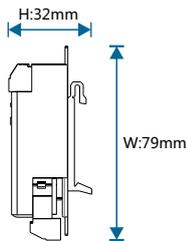
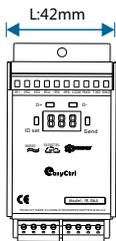


Figure 2. Dimensional Drawing - Front View Figure 3. Dimensional Drawing -Sideview

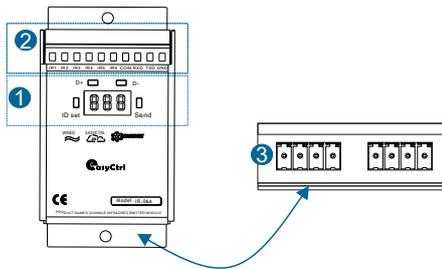


Figure 4. Product Information

Ten-digit address display : 0-6 The 1s address display : 0-9
Bus signal indicator

Example: if the module address is set to 25.
Step 1: Long press the ID Set key, the 1s address flashes, short press to adjust to 5.
Step 2: Long press the ID Set key again, the ten-digit address flashes, short press to adjust to 2.
Step 3: Long press the ID Set key to exit the setup. If the ID Set key is not long pressed, the digital tube blinks for 10s to exit the setting.
Note: The address can be set in the range 01-63(decimal).
Note: Bus signal indicator light, circle means successful registration, no circle means not registered.

Figure 5. Address setup instructions

Ten digit instruction display The 1s digit instruction display
Channel number display : - -10 -1 Send

Example: Channel 1, data set to 10
Step 1: Press +1 10 times to 10 to display 010
Step 2: Press Send to send data. The infrared code is sent to the device through channel 1
Note: If no data is stored, press Send to send no data
Note: The module channel number is 0-5, which corresponds to the software channel 1-6

Figure 6. Manually testing data sending

Product Overview

The 6 CH Infrared Emitter Module (see Figure 1) serves as a system third-party equipment control unit, typically installed in a distribution box, rail installation. Equipment that can be controlled by infrared remote control through the bus, such as: air conditioning, TV, TV box and other third party equipment.

Function Description

- Standard 35mm DIN rail installation: Occupies 2.5P module units.
- Provides 6 infrared channels, each channel can emit 99 infrared remote control function codes.
- Through the setting software can import function code or export infrared code data.
- With local and remote programming and testing functions.
- Supports online firmware updates and Bus network disconnection alarm function.
- Supports YC-BUS communication.

Precautions

- Use RVV4*0.75 four-core wire for bus wiring.
- After the infrared rod is connected, the device cannot be controlled. Check whether the infrared code is well learned and whether the infrared rod is well connected
- How to detect whether the infrared code is issued? Turn on the mobile phone camera and aim at the infrared rod. The infrared module sends the infrared code, and the camera will detect bright light, indicating that the module has stored the infrared code.

Product Information

Product Dimensions: See Figures 2 and 3
Product Wiring: See Figure 7 and 9
Product Information: See Figure 4

1. Function Keys:

- ID Set key : Address setting 01-63, setting method (see Figure 5)
- +10 key : The channel number is relatively increasing, ranging from 0 to 5.
- +1 key : The data increases by 1.
- Send key : Sends the data stored in the serial port.
- +10/+1/Send key: command test button, select the command to be tested, click send, (see Figure 6).

2. Port wiring:

- Infrared interface: IR1, IR2, IR3, IR4, IR5, IR6, COM, the port is connected to the external infrared emission rod (black and white line is connected to IR1-IR6, black line is connected to COM) (see Figure 7).
- Infrared library project download: RXD TXD GND, specific settings see the infrared module debugging manual (see Figure 8)

3. Bus interface (see Figure 9) :

- Bus interface sequence: 24V, GND, A, B

Product Installation

See Figures 10-12

- Step 1. Secure the 35mm rail with screws.
- Step 2. Hold the 6 CH Infrared Emitter Module at a 45 degree angle with both hands, and the bottom of the module is clamped against the guide rail. The whole module is pressed to the guide rail at a 90 degree angle, and the module is slid until it is in the correct position.

Safety Warning

- Tightening torque should not exceed 0.4 Nm.
- Installation location: Distribution box.
- Do not connect the YC-BUS interface incorrectly, as it may damage the equipment.
- The YC-BUS interface must not be connected to AC power; otherwise, it will damage all devices on the bus.
- Ensure a good ventilation environment.
- Do not expose to rain, contact with other liquids, or corrosive gases.

Packing List

- YC-IR.06A*1/User Manual*1/Certificate of Conformity*1

Technical Parameters

Basic Parameters

Operating Voltage	24VDC±10%
Rated Consumption	≤0.4W
Infrared Channel	infrared channel*6
Data Store	single channel *99 infrared codes
Program Download	infrared library download *1
Bus Interface	bus interface*2
Display Interface	4*light touch function key; 3*digital tube LED light
Protection	NONE

External Environment

Operating Temperature	-5°C~45°C
Operating Relative Humidity	≤90%
Storage Temperature	-20°C~60°C
Storage Relative Humidity	≤93%

Product Specifications

Dimensions (L*W*H)	42 mm*76 mm*32 mm
Net Weight	≤112 g/pcs
Enclosure Material	brushed aluminum shell technology
Installation Method	standard 35mm DIN rail mounting (see Figure 10-12)
Protection Level	NONE

System Diagram

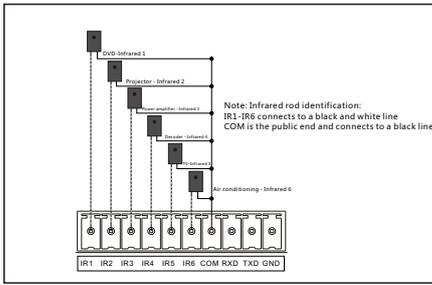
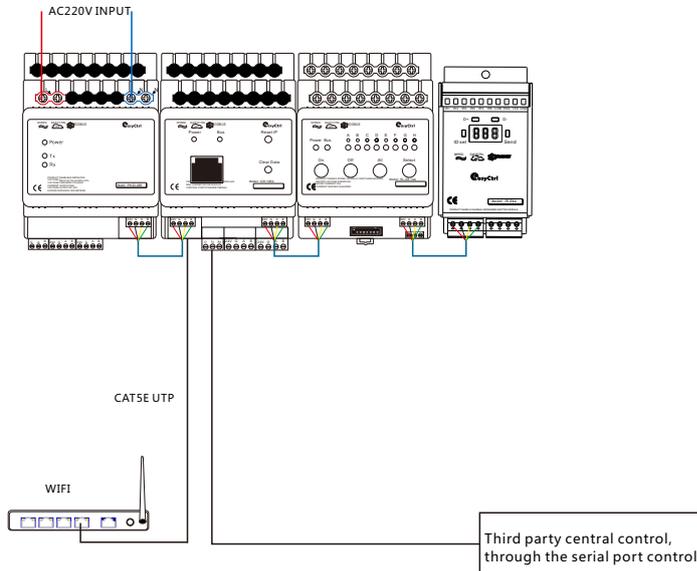


Figure 7. Infrared rod wiring

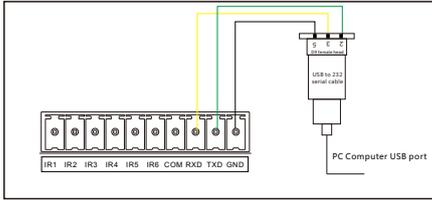


Figure 8. Infrared library download wiring

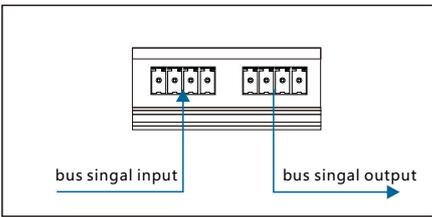


Figure 9. Bus interface wiring instructions



Figure 10

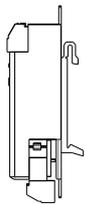


Figure 11

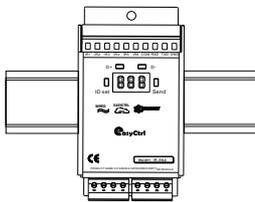


Figure 12

Technical support

Service Hotline: 86-18029750069

working hours: 9:00-12:00,13:00-18:00,From Monday to Friday)

Email:ceshi@easyctrlg.com

website: http://www.easyctrlg.com



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