

## Parameters

### Electrical Parameters:

Buspro power supply	DC12-30V
Buspro power consumption	30mA/DC24V
Sending carrier wave frequency	38KHz
IR control distance	6m (The IR emission tube is usually connected to the air conditioner receiver.)

### Environmental Conditions:

Working temperature	-5°C~45°C
Working relative humidity	Up to 90%
Storage temperature	-20°C~+60°C
Storage relative humidity	Up to 93%

### Approved

CE  
RoHS

### Product Information:

Dimensions	45×45×16 (mm)
Net weight	58(g)
Housing material	Flame retardant ABS
Installation	86×86 wall box, screw install
Protection rating	IP20
HDL Buspro/KNX	0.75~0.85mm (Copper Wire Diameter)
Load wire	1mm <sup>2</sup> copper cable

## HDL Buspro Cable Guide

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
Brown/ Orange	DC24V	Red
Brown white/ Orange white	COM	Black
Blue white/ Green white	DATA-	White
Blue/ Green	DATA+	Yellow

## Important Notes

- **Bus cable** – Use either HDL Buspro/KNX cable or CAT5E cable. If using CAT5E cable connect the module to the Bus terminal.
- **Buspro Connection** – Series connection (hand-in-hand).
- **Installation**— 86\*86 wall box installation or fixed with screws
- **IR code sending** - Use the IR emitter, it has pole difference, to be installed near the IR device.
- **Current detection** - let the detected device connect with the IR emitter in series, and the device current should not exceed 2A.
- IR codes 1-4 are only used for the HDL AC panel.

## Overview



The HDL-MIRC04.40 4 Channels IR Emitter is able to download codes saved in the Buspro Programming Software, or codes uploaded to the IR Code Learner. The HDL-MIRC04.40 can then transmit the IR codes to control IR devices, such as air conditioner, TV, fan, projector, Set-Top Box, DVD etc. It also supports current detection for devices.

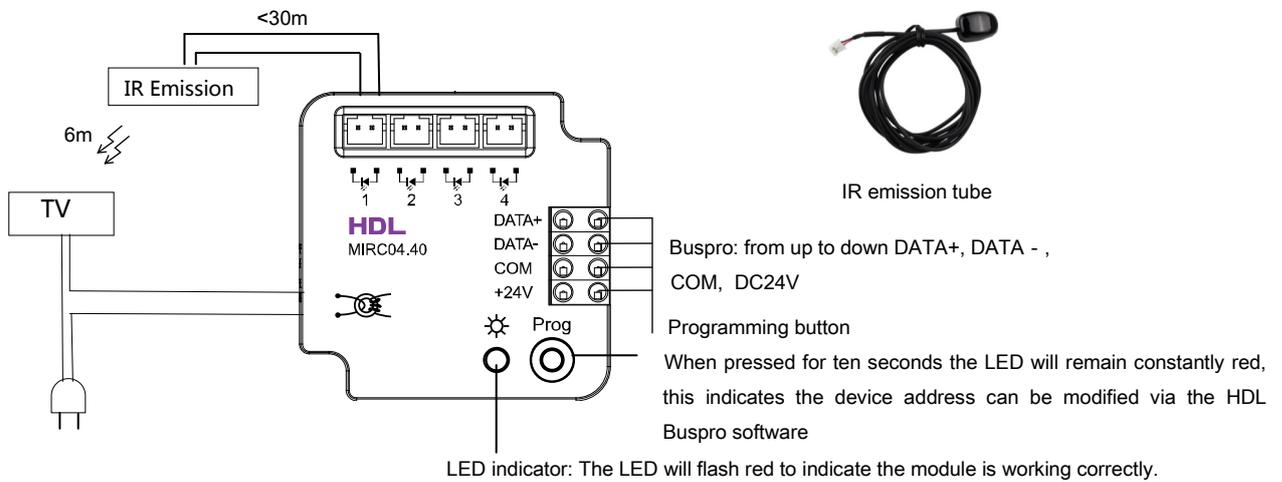
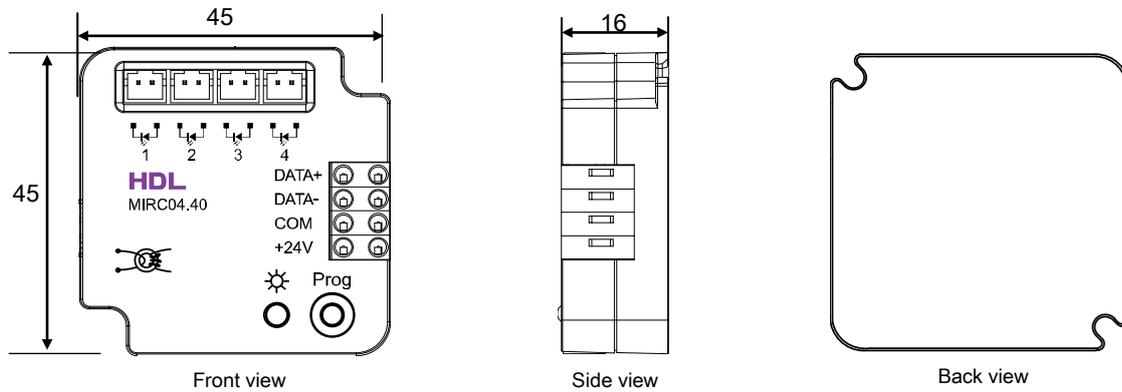
## Functions

- Current detection: Detect if the device is turned on or off.
- Drive the transmitting tube directly
- 4 IR emission channels
- Supports 24 devices and 100 IR codes
- Inbuilt IR code library holds IR codes from common appliance manufactures
- Codes which are not present in the IR library can be uploaded via the IR learner
- Sequence function, to call the sequence by universal switch, the UV switch number is 201-208
- Supports up to 99 UV switches
- Supports easy programming
- Supports firmware updates via HDL Buspro software

## Installation Steps

- Ensure that the power is off before installing the module.
- Connect IR transmission tube to the device.
- Connect the load to be detected current, ensuring there are no short circuits or loose connections.
- Connect Buspro cable paying particular attention that the Buspro cable color is compliant to the device's port colors.
- Check all connections, ensure they are connected correctly.

## Dimensions and Wiring



Note: the IR emitter is capable of sending an IR beam up to six meters. Included as standard with the IR emitter is a cable of 1.5 meters. An additional cable of up to 30 meters can be used in conjunction with the IR emitter.

Current detection: as shown in the diagram above the television power cable is connected in series to the HDL-MIRC04.40. When the television is turned on or off, the HDL Buspro software will detect the current value. The average value can be input to the software, so that when the television is turned on, HDL-MIRC04.40 will determine the television status, then emit right IR cods.

## Safety Precautions

- Do not make wrong connection to the HDL Buspro interface.
- Do not make wrong connection to the IR emission tube.
- Do not get AC power into HDL Buspro interface and the terminal of IR emission tube.
- Do not let the module come into contact with liquids and corrosive gases.
- Any device connected to the HDL-MIRC04.40 module should not exceed 2A.

## Package Contents

- HDL-MIRC04.40\*1/ Datasheet\*1/IR emission tubes (1.5m)\*4 / Bus terminal \*1