HDL®

HDL-MIR01F.20
Smart IR Transmitter with Current Detection

buspro

Datasheet
Issued: July 19, 2019
Edition: V1.0.0

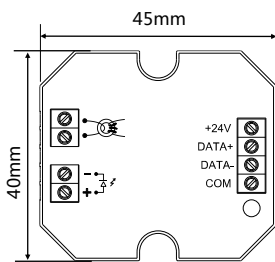Figure 1. Smart IR Transmitter with Current Detection
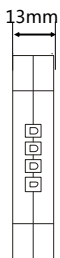

Figure 2. Dimensions - Front View
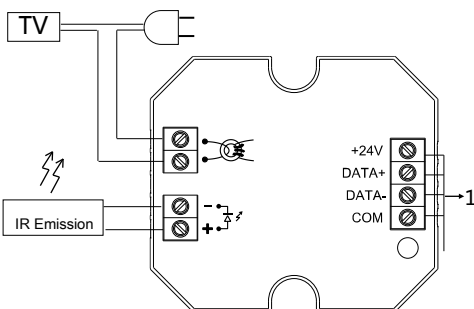

Figure 3. Dimensions - Side View

Figure 4. Wiring

Overview

Smart IR Transmitter with Current Detection (See Figure 1) is the IR code sending device which can store 200 infrared codes. With HDL IR learner (another device), this device can learn the IR codes from the normal remote, and download them into it. Afterwards through software IR devices, for example, TV, DVD, AC, amplifier and satellite signal receiver, etc. can be controlled.

Functions

- Device power on/off detection through current detection.
- Maximum store capacity of IR Codes: 200
- Send IR codes through IR LED
- Supports upgrade via HDL Buspro.

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable
- Buspro Connection - Series connection (hand-in-hand recommended).
- Installation - 86*86 wall box installation or fixed with screws
- IR code sending - Equipped with infrared emission LED, the emission LED has positive and negative pole, to be installed near the IR device.
- Current detection - The working current of the device cannot exceed 2A.

Product Information

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

1. HDL Buspro: from top to bottom, +24V DC, DATA+, DATA - , COM,

Note: Take connection with TV as an example (See Figure 4). Connect the power supply cable to the current detection port in series. When the TV is turned on or off, the system will detect the status. And the system will read the current when turn on or turn off the TV. Use the average current of the two values and write it down in HDL Buspro Setup Tool, "The standby current threshold", after setting, the system can detect the power status of TV, then emit correct IR codes.

Installation - See Figure 5 - 6
Secure the module to the wall box or the desired position with screws.

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.
- HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this specification.
- 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

HDL-MIR01F.20*1 / IR emission tube*1 / Datasheet*1

Technical Data

Basic Parameters

Working voltage	12~30V DC
Working current	15mA/24V DC
IR codes storage	Maximum 200 IR codes
Sending carrier wave frequency	38kHz
Distance for IR Control	6m

External Environment

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

Specifications

Dimensions	45mm×40mm×13mm
Net weight	58g
Housing material	ABS
Installation	86×86 wall box, fixed with screws (See Figure 5 - 6)
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.

Figure 5

Figure 6

Figure 5 - 6. Installation

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