M/IRAC.1

KNX Infrared Emitter

Hardware Version: B

Datasheet

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Figure 1. KNX Infrared Emitter

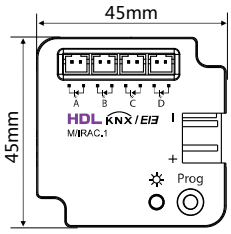


Figure 2. Dimensions-Front View

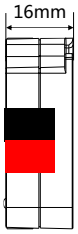


Figure 3. Dimensions-Side View

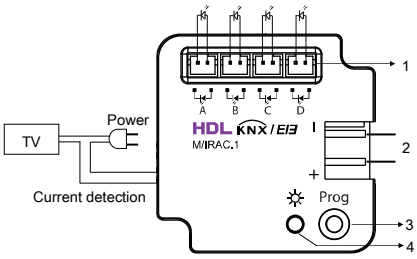


Figure 4. Wiring

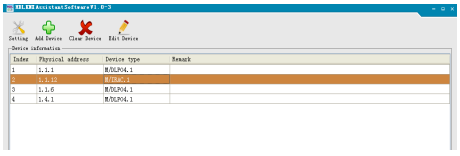


Figure 5. HDL KNX Assistant Software



Figure 6. IR Learner (HDL-MIR01L.01)



Figure 7. IR emission tube

Overview

KNX Infrared Emitter (See Figure 1) is one of HDL KNX/EIB series products. The module can store up to 960 infrared codes. The first 150 infrared codes are used for general control, for example TV, DVD and other infrared receiving devices, and the latter 810 infrared codes are used for controlling AC of any brand.

Functions

- Various control modes: Single control, Repeated control, Sequence control, Air conditioning control
- AC control types: ON/OFF control, Temperature control, Cooling/ Heating, Fan speed control, Swing control
- Supports current detection with current up to 2A
- After learned, obtained and downloaded the infrared codes through infrared learning page of KNX Assistant Software and IR Learner, the Infrared Emitter can control TV, DVD, air conditioner etc.
- After current detection function setting, the module can confirm the ON/OFF status of the device. This function mainly aims at the circumstance that one IR code control the ON/OFF status of the device.

Important Notes

- Programming - This device is compliant with the KNX standard and can only be programmed by ETS software.
- KNX Bus voltage - 21~30V DC, no AC power supply allowed.
- When using the current detection function, the emitter should be installed close to the power switch. Please be careful during installation.
- The IR emission tube should be used close to the emitter.

Product Information

Dimensions - See Figure 2 and 3

Wiring - See Figure 4

1. IR emission channels
2. KNX interface
3. Programming button
4. LED indicator of programming button

HDL KNX Assistant Software - See Figure 5

IR Learner - See Figure 6

IR emission tube - See Figure 7

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.
- 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.

Package Contents

M/IRAC.1*1 / IR emission tube*1 / Datasheet*1

Technical Data

Basic Parameters	
Working voltage	21~30V DC
Working current	5mA/30V DC
Transmitting carrier wave frequency	38kHz
Emission distance	7m
Current detection	<2A
Communication	KNX/EIB
Cable diameter of KNX terminal	0.6 - 0.8mm
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	45mm×45mm×16mm
Net weight	60g
Housing material	ABS
Installation	Screw installation
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.

KNX Cable Guide

KNX	KNX Cable
+	Red
-	Black

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