HDL-MSPU03.4C

Ceiling Mount Ultrasonic Sensor

buspro

Datasheet

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Figure 1. Ceiling Mount Ultrasonic Sensor

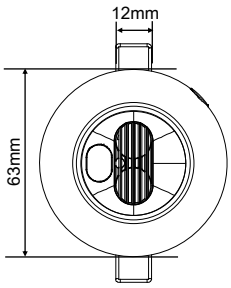


Figure 2. Dimensions - Front View

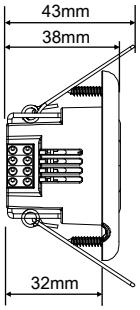


Figure 3. Dimensions - Side View

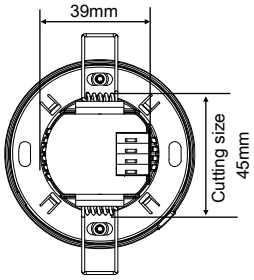


Figure 4. Dimensions - Back View

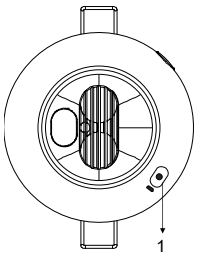


Figure 5. Components - Interior View

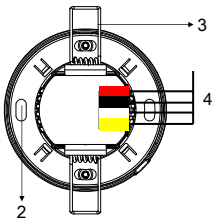
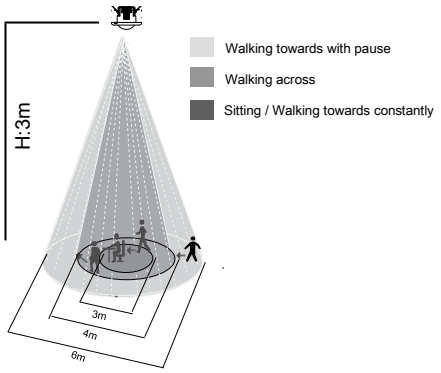


Figure 6. Components - Back View



Detection Range (At 25℃)

Mounting height	Sitting / Walking towards constantly	Walking across	Walking towards with pause
3m	3m	4m	6m

Figure 7. Detection Range

Overview

Ceiling Mount Ultrasonic Sensor (See Figure 1) includes ultrasonic sensor and LUX sensor. The logic block can combine all conditions (ultrasonic sensor, LUX sensor, universal switch and logic block) for different application.

Functions

- Equipped with LUX sensor, ultrasonic sensor and universal switch, which can be used as logic conditions
- With two logic relationship: OR, AND
- Adjustable ultrasonic sensitivity, Sensitivity range:1-10
- 24 logic blocks in total, each logic block has 20 output targets
- Universal Switch 201 - 248 can be used as logic inputs, two Universal Switches for each logic and they has auto-off option too (from 1 - 3600 seconds)
- A Logic can trigger some targets when it is true, and trigger other targets when it is false
- Security function, to be used with the security module
- Supports update via HDL Buspro Setup Tool

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand recommended).
- Installation position - Ceiling mount
- Check the connection, avoid any mistake
- Installation position: Indoor, keep it away from AC outlet and heat source.

Product Information

Dimensions - See Figure 2 - 4

Components - See Figure 5 - 6

1. **Module indicator:** Keep pressing the button for 3 seconds, then the address of the module can be read and modified in the HDL Buspro Setup Tool.

Indication: The indicator can be set to indicate the LED or not. If yes, when detecting some movement, the LED will turn on during this process. If not, whether there is movement or not, it always keeps off.

2. Screw hole

3. Spring bracket

4. HDL Buspro connector: From top to bottom: +DC24V, COM, DATA-, DATA+

Detection range - See Figure 7

Installation

Ceiling-mounted - See Figure 8 - 10

Step 1. When installing the sensor in the thin ceiling, produce an opening of diameter 45mm in the ceiling.

Step 2. Fix the sensor into position with the assistance of the spring clips after wiring.

Flush-mounted - See Figure 11 - 14

Step 1. When installing the sensor in the thick wall , produce an opening of diameter 45mm and depth of 35mm in the wall.

Step 2. Remove the spring clips and pry apart the cover and the senor.

Step 3. Fix the sensor in the wall with screws.

Step 4. Attach the cover to the sensor.

Safety Precautions

- The installation and testing for the product must be carried out by HDL Automation Co., ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- 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 operating instruction.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Please contact our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

Package Contents

HDL-MSPU03.4C*1 / Buspro connector*1 / Datasheet*1

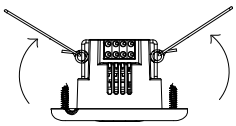


Figure 8

⇩1

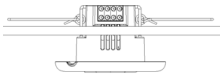


Figure 9

⇩2



Figure 10

Figure 8 - 10. Installation – Ceiling-mounted

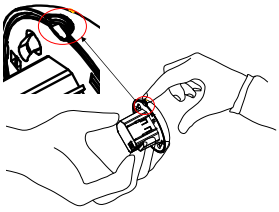


Figure 11

⇩1



Figure 12

⇩2

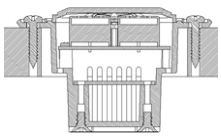


Figure 13

⇩3



Figure 14

Figure 11 - 14. Installation – Flush-mounted

Technical Data

Basic Parameters

Working voltage	18~30V DC
Working current	30mA/24V DC
Detection range	Φ6m (Installation height: 3m)
Illumination sensing range	0-500lux

External Environment

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

Specifications

Dimensions	63(Diameter)×38(mm)
Net weight	91g
Housing material	ABS, Infrared lens
Installation	Ceiling-mounted/Flush-mounted (See Figure 8 -10/Figure 11 -14)
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.

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

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