Specification

Product series: **Low-mounting microwave motion sensor (KNX version)**

Product model: **MSA056K 99**

Product version: **V1.0**

Version	Release/ change Date	Publishing
V1.0	2023.03.22	Jacky

【Product Description】

MSA056K 99 is a 5.8GHz microwave sensor with high antenna gain and wide sensing range. Combined with the unique software algorithm of Merrytek, it can accurately detect human movements in almost all indoor spaces to trigger smart scene application by KNX communication in smart homes, smart hotels, and smart offices.

【Product Feature】

- Merytek patent high gain 5.8GHz microwave antenna technology
- Flush mounting/86 box installation available
- Accurate human motion detection
- Daylight sensor detection available
- Support KNX communication
- KNX bus power
- 6-8m max diameter detection range based on 3m installation
- Detection area,hold time can be set by ETS or remote control
- Low RF power output. No harm to human health
- Not affected by temperature, humidity, noise, airflow, dust, light and other environments
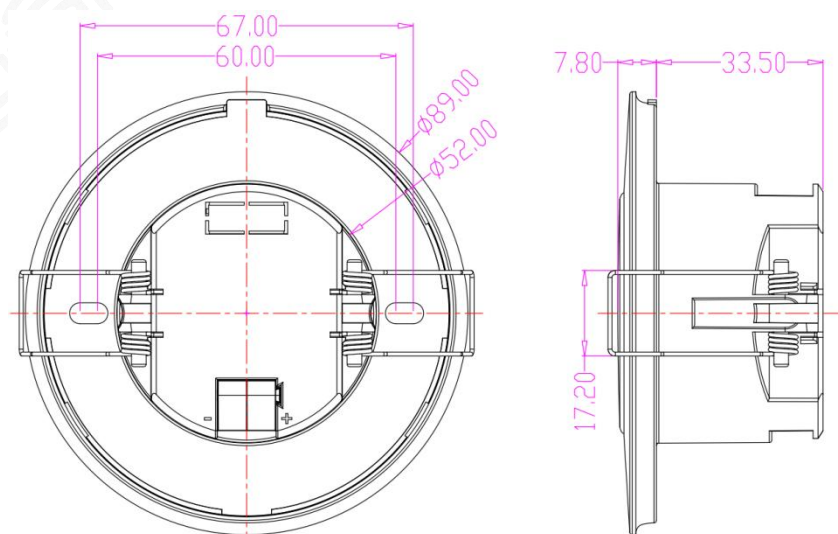
【Product dimension】

- Dimension:φ89x34mm
- Terminal: KNX BUS terminal

【Parameter】

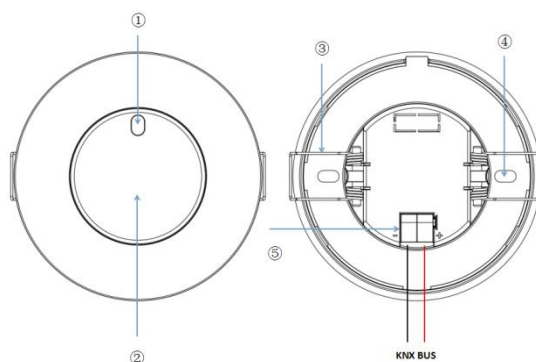| Input/Output	Input voltage	KNX bus power
	Working Current	8±1mA
	Communication	KNX bus communication
Sensor Parameter	Radar Frequency	5.8GHz±75MHz
	Radar transmit power	1mW Max
	Detection Sensitivity	ETS setting：8% 16% 24% 32% 40% 48% 56% 64% 72% 80% 88% 100%
	Hold Time	5s+1s-30min（ETS setting）
	Radius detection range(based on 100% sensitivity and 3m mounting)	4-5m
	Remote control	Available
	Mounting height	2.5-4.0m typical value:3m
	3dB beam angle	90°（horizontal）
		95°（vertical）
Application Environment	Drill hole	55-65mm
	Working Temperature	0℃…+50℃
	Storage Temperature	-40℃…80℃ humidity ≤85%
Certificate Standard	Certificate	FCC/RED
	Environmental Requirement	Compliant to RoHS
	IP Rating	IP20
Note: "N/A" means not available.		

【Dimension and Function diagram】

【function and wiring】

① Daylight sensor

② Program button

③ Flush mounting clip

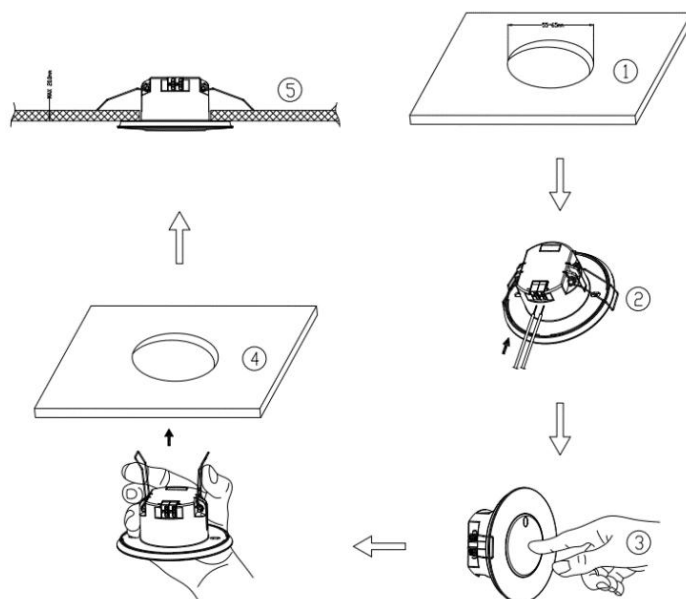④ Screw hole(for 86 box installation use)

⑤ KNX terminal

【ETS program】

(1)Connect KNX BUS terminal；

(2)Press program button and the red indicator light will lit up to enter programmable state

(3)Apply ETS to download physical address to the sensor,when red indicator light extinguish,it means successful download

(4)Apply ETS to set sensor parameter

(5)There'll be 30S interval when our sensor won't response to any motion after sensor parameter successful setting,after that our sensor can work normally.

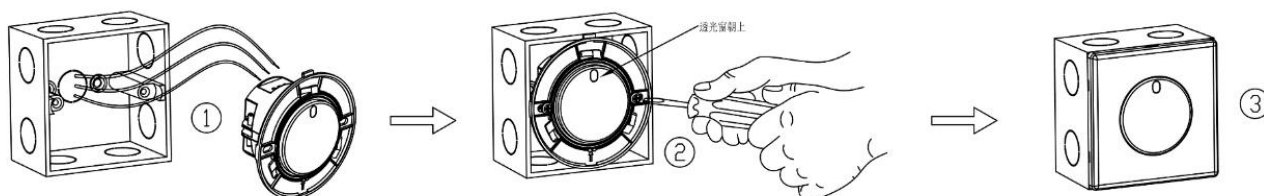**Remark: Pleas apply 5.7.2 or higher version ETS**

【Installation】

● Flush mounting

(1) Trepanning a 55-65mm hole

(2) Securely wire cable into the terminal

(3) Press program button

(4) Put the spring clip into the hole and fasten it

well

(5)Ensure the sensor is firmly installed

● 86 box installation

（1）Securely connect the cable into terminal

（2）Fix our sensor in the 86 box by screw (carefully ensure daylight sensor is outward)

（3）Buckle up surface panel to fasten the sensor
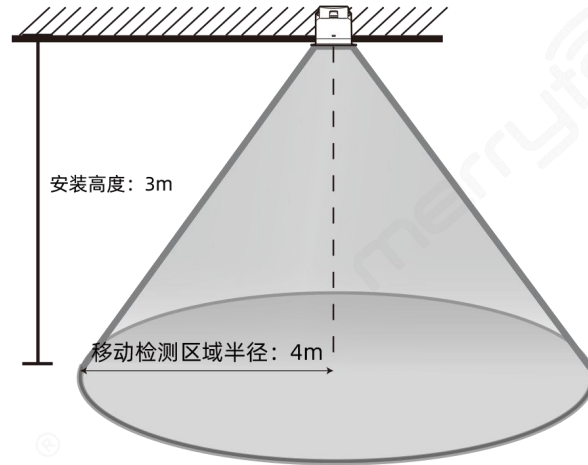
【Factory setting】

Detection Sensitivity : 100%   Hold Time : 5S

【Detection radiation】

MSA056K 99 is highly recommended flush mounting and its detection radiation is as below shows:
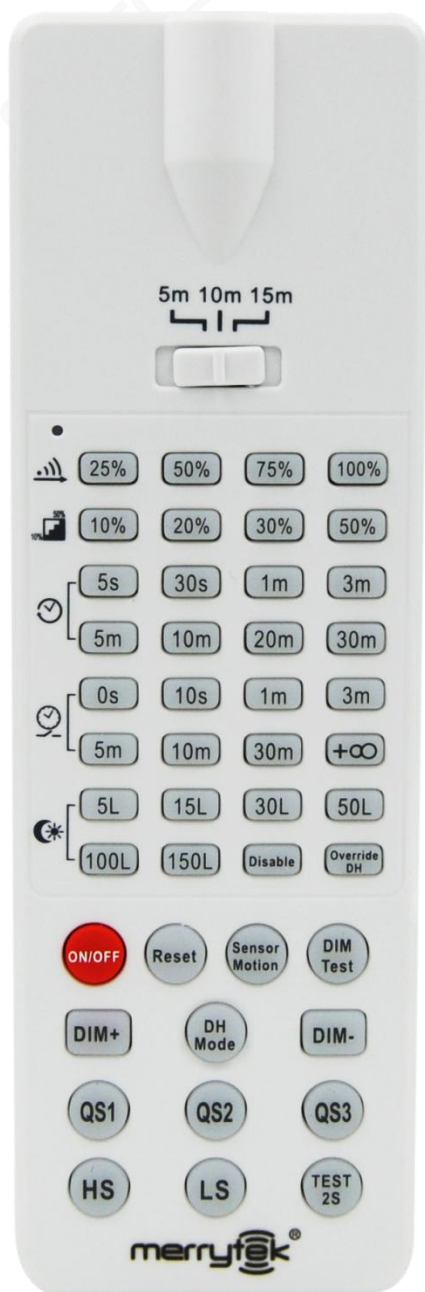
安装高度：3m

移动检测区域半径：4m

【Detection Signal】

The product detects human moving signals and below is a description of the moving signals:

● **Moving signal:** detect the human significant moving (walking) in the detection area.

5m 10m 15m

Detection range: 25%/50%/75%/100%

Hold time: 5s/30s/1min/3min/5min/10min/20min/30min

Daylightthreshold: 5lux/15lux/30lux/50lux/100lux/150lux/Disable

ON/OFF: disable sense function
Sensor motion: enable sense function
Reset: all parameter back as factory setting

QS1/QS2/QS3: High/Medium/Low sensitivity setting
HS: turn on indicator
LS: turn off indicator

【Disclaimer】

Due to the complexity of product technology and differences in application environment, it is difficult to guarantee a completely accurate or complete description, so this specification is only for user reference.

We will reserve the right to make changes to the product specifications without notifying the user, and do not make any commitments and guarantees in the legal sense.

At the same time, our company encourages users to supplement or modify the contents of our specifications after using our products.