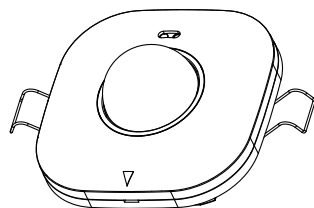


High-mounting PIR Motion Sensor(KNX version)



User's Manual

Instruction
MI250624A0

PRODUCT DESCRIPTION

MSA237K 99 IR is a high-mounting PIR motion sensor with daylight detection function. Combined with the unique software algorithm of Merrytek, it can accurately detect human movements in almost all high-mounting scenario to trigger smart scene application in warehouse, lobby, workshop etc by KNX communication.

START PROCESS

After routing the physical addresses and setting the channel parameters, follow these steps:

- (1) Connect Bus interface;
 - (2) Set KNX Bus power on ;
 - (3) Press the programming switch of the product, the LED light will turn red;
 - (4) Use the bus interface to download the physical address through the ETS software. The programming LED light is off to indicate that the physical address download is successfully completed;
 - (5) Download the application after setting the required application parameters.
 - (6) After downloading the application, the product goes into initialization. During initialization, detection function is disable. After 10s, the initialization is completed, and the product works normally;
- Note: Please use the latest version of ETS or higher version than 5.7.2 version. Please obtain the ETS engineering configuration file of this sensor from our sales staff.

ETS APPLICATION INSTRUCTIONS



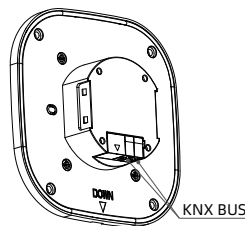
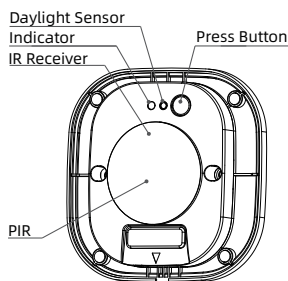
ETS Application Manual Download
<https://www.knx.org/knx-en/for-professionals/software/ets6/index.php>

ETS APPLICATION
DownloadFunction configuration
download

INITIALIZATION

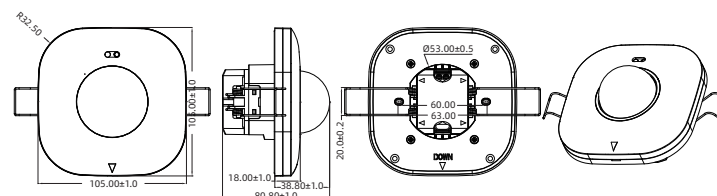
When powered on, sensor indicator will turn off after flashing for 45s. During initialization, sensor will not detect moving signal and you can use our MH18 remote to adjust detection area, hold time and daylight sensor etc parameter.

PRODUCT

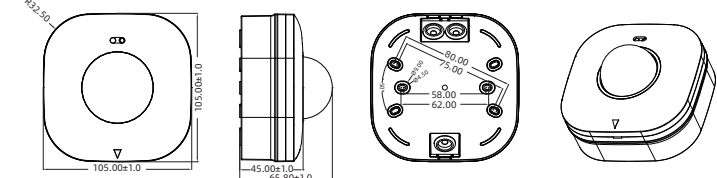


DIMENSION(mm)

Flush mounting



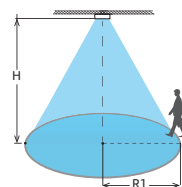
Surface mounting



SPECIFICATIONS

Model	MSA237K 99 IR
KNX Terminal Voltage	21-30V DC(KNX bus power)
KNX Terminal Current	3±1mA
Function	PIR motion detection+ daylight sensor
Sensor Parameter	Detection Area
	Hold Time
	Radius detection range(based on 100% sensitivity)
	ETS setting :3s-7200s
	5-6m@25°C based on 8m mounting height
Mounting height	2.5-10m, typical value:8m
Operating temperature	-25°C~+50°C
Storage temperature	-40°C~80°C, humidity ≤85% (non-condensing)
IP Rating	IP20(flush mounting) IP54(surface mounting)
Flush-mounted Hole Size	Φ55mm
Warranty	5 year (only for product quality problem under indoor application)

DETECTION AREA

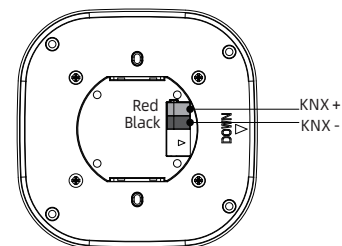


- Major motion activates: detect the human significant moving (walking) in the detection area.

Detection sensitivity	100%	70%	50%	20%
Radius detection range based on 2.5m height	7.0-8.0m	6.0-7.0m	4.0-5.0m	4.0-4.5m
Radius detection range based on 8m height	5.0-6.0m	4.0-5.0m	4.0m	0.0m

Tips: Above data is based on 1.6m height people radial moving towards sensor by 0.3m/s velocity in 81 m² open area for reference. If any variate changes, the detection range might be different.

WIRING INSTRUCTION

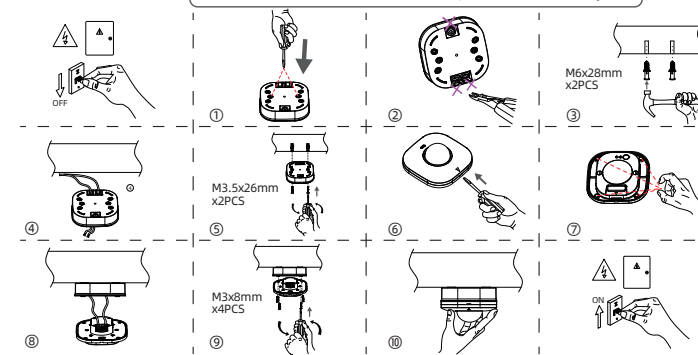


WIRING LAYOUT SUGGESTION :

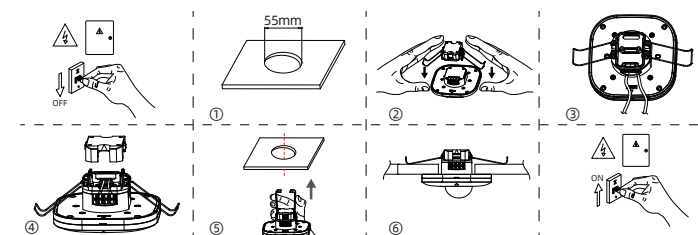
1. KNX bus wiring suggestion hand in hand to the end, star or tree wiring is not recommended to ensure the stability of signal transmission.
2. KNX bus wiring wire recommends KNX standard EIB shielded wire or Category 6 network cable, the length of the bus wiring is recommended not to exceed 400 meters, and the number of sensor connected to a bus is recommended to not exceed 12.

INSTALLATION

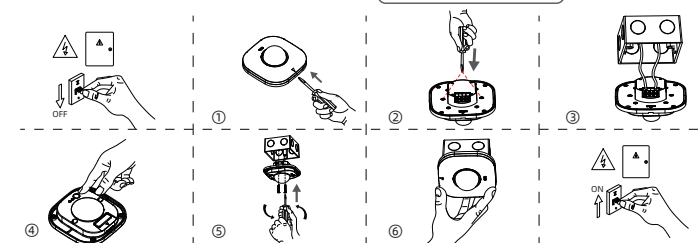
Surface mounting



Flush Mounting



Mounted with EU 86 type switch socket box



MH18 Rmote Manual

Remote Control Setting	Button	Remarks
ON/OFF		
1 2 3 4	Sensitivity	Short press to switch high/medium/low sensitivity.
5 6 7 8		
Single mode		
DM+ DM- DMH DMH Mode DMH- DMH- Mode		
NO DM Mode NC		
Sensitivity High Medium Low		
Hold time 10s 30s 60s	Hold time	Hold Time: 10s/30s/60s
Daylight sensor 15Lux 50Lux Disable		
Reset Indicator Enhance	Indicator	Indicator: Short press to open indicator, Long press to open indicator.

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