eMACROS

Indoor/Outdoor Wireless Motion Sensor and Driveway Alarm for Home Security System

User's Guide MODEL:HS-003



Thank you for purchasing this eMACROS product. This user manual will help you to familiarize yourself with all the features of your newly purchased product.

Overview

eMACROS HS-003 is a motion sensor and driveway alarm home security system for indoor and outdoor use.

Wide Range of Uses - Motion detection is an essential part of any home security solution. The waterproof sensors in this system uses a Pyroelectric infrared (PIR) motion sensor to detect heat and movement so you can quickly be alerted to movement on your driveway, front porch, gate, shed, walkway, or even swimming pool (for when kids get too close). Great for homes, businesses and offices.

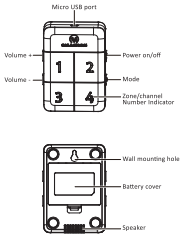
Long Distance Wireless - Communication range up to 500FT (150 Meters) from each sensor to the receiver. Cars, people and animals can be detected within 24 FT/8 Meters of each sensor's angled eye. Think of this system as your long-range doorbell.

Easy to Install & DIY - This system is fully-expandable, with plug-and-play sensors that can be set up within minutes. Pair each receiver with up to 16 sensors for full coverage of your property. The sensors can be mounted to walls, fence posts, trees, or any other surface, providing extra layers of security and home safety.

IC STATEMENT
This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

1.Base station



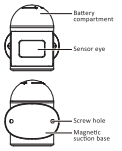
Power on/off
Press and hold the Power button for 3S to turn on/off.

Mode
Press and hold the Mode button for 3s to enter the pairing mode and short press to select the zone number.

Volume +
Press the Volume + buttom to increase the volume level of the base station.

Volume -
Press the Volume - buttom to reduce the volume level of the base station.

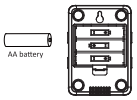
2. Motion Sensor



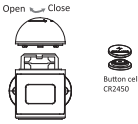
Start setting up your product

1. Install the battery

a. First remove the battery cover of the base station and insert 3pcs AA batteries (Not included) in the reference direction.



b. Rotate clockwise to remove the battery cover of the motion sensor and insert 2pcs CR2450 button cell (Included) according to the polarity direction painted below. Rotate counterclockwise to lock the battery cover.



Operating instructions

1. Turn on/off the base station

The base station will power on automatically when USB is plugged in or battery powered.
On Mode: Press and hold the Power button for 3seconds to turn on the base station.
OFF Mode: Press and hold the Power button for 3seconds to turn off the base station.



2. Pairing (Add Sensor)

If you want to add additional motion sensors that you need to pair the motion sensors with the base station. Please refer to the following steps.
a. The base station will enter the pairing mode automatically when the USB is plug in or the battery is inserted that you can also press and hold the Mode button for 3 seconds to enter the pairing mode and the blue indicator with Zone 1 flashes quickly for 30 seconds and waiting for pairing.



b. Wave your hand in the front of the sensor eye to trigger the motion sensor that you can see a red light flashes once in the sensor eye.



c. The base station will produce a unique tone to indicate that the pairing has been successful. The zone/channel number will be increased automatically.

d. You can also specify this zone/channel number manually that press and hold the Mode for 3S to enter the pairing mode and then short press the Mode button to change the zone/channel number your favorite channel, then wave your hand to trigger the motion sensor.

Note: You need to pair the motion sensor with the base station when you use it first time.

3. Adjust the volume level of the base station

Volume +
Press the Volume + buttom to increase the volume level of the base station.



Volume -
Press the Volume - buttom to reduce the volume level of the base station.



4. Low Battery Prompt

a. If the battery of the base station is low, it will prompt base power low. Please replace the battery in time.
b. If the battery of the motion sensor is low, the base station will prompt the Channel X power low (The X is stands for channel number). Please replace the battery in time.

5. Clear pairing records from the base station

Press and hold the Mode button on the base station and then plug in the USB power or insert the AA battery until the four digital indicators turn off in turn, the pairing records are clear.



Installation the Motion Sensor

1. Installation environment con-firmation

The motion sensor uses a Pyroelectric infrared sensor to detect the infrared radiation temperature change of a moving object.

The infrared changes around the installation environment have a great impact on it, so there are the following requirements for the installation environment:

1) The sensor detection range cannot have air cooler or warm fan and other interference infrared changes, it is best not to have trees;

2) Avoid direct infrared sensor eye of sunlight, car headlights, incandescent lamps, etc.;

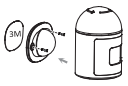
3) Between the sensor and the detection object to avoid glass and allylic and other substances difficult to pass through the far infrared;

4) The sensor cannot be used to detect a heat source that is not moving or moving at high speed.

5) Electromagnetic interference or obstacles will reduce the wireless distance. Please avoid too many trees, walls and other obstacles between the sensor and the base station, and there must be no metal obstacles.

2. Installation method

a. Use the 3M back glue to stick the magnetic suction support directly on the wall or other objects with flat surface.
b. Fix the magnetic suction support on the wall or the flat surface of other objects with the screws in the accessories.



3. Installation height for the motion sensor



Note:
1. The recommended installation height is 6 - 7 FT(1.8 - 2.1 Meters).

2. The installation angle should be adjusted according to the height and distance of the object to be measured and the detection environment.

Technical parameters and troubleshooting

1. Technical Parameters

Power Supply: USB 5V or 1.5V AA Dry Battery with 3PCS for base station; 2PCS Button cell with CR2450 for motion sensor.

Battery Life: Base station can work for about 3 months; Motion Sensor can work for about 6 months.
Note: The battery life ultimately depends on the trigger frequency of the motion sensor.
Infrared (PIR) Detection Distance: Maximum 24 FT/8 Meters (affected by the environment temperature)

Infrared (PIR) Detection Angle: 100°

Wireless Distance: 150Meters (open place)

Work Frequency: 433.92 MHz

Transmit Power: less than 10dBm

Alarm sound: 120dB

Installation height: 6 - 7 FT (1.8 - 2.1 Meters)

Work Temperature: -4°F to 140°F(-20°C to +60°C)

2. Troubleshooting

1) The motion sensor is operating correctly, but the base station does not respond.
a. Make sure the power supply of the base station is normal.
b. Make sure the motion sensor and the base station in the valid range, please try to shorten the distance between the sensor and the base station.
c. Make sure the motion sensor and the base station has been paired correctly and successfully.

2) Motion Sensor detects the movement of an object and works only part of the time.
a. Please refer to the previous installation instructions and try to adjust the installation height and angle of the motion sensor to obtain an optimal detection angle.
b. Ensure that the detected object is within the valid range of infrared detection of the motion sensor or try to shorten the distance between the sensor and the detected object.
c. If the problem cannot be solved, please contact us for more help.

3) Sometimes the system is giving some false alarm.
a. Please try to cover the detection window of the sensor with something to confirm whether there is any false alarm. In that way, the environmental interference can be eliminated first.
b. If there is no false alarm after cover the detection window, please refer to the previous installation instructions and try to adjust the installation height and angle of the motion sensor to obtain an optimal detection angle.
c. If it is still continuous go off, please contact us to replace the faulty sensor.

5) The system is not getting expected transmission range.
a. Check whether the battery of the motion sensor is in low power state. If so, please charge or replace the battery in time.
b. Ensure that all equipment is installed away from metal obstacles and other electrical equipment.

Manufacturer: Shenzhen Macross Automation technology Co., LTD.
Address of Manufacturer: Room 301-3, #5 Building, Jianghao Technical Park, Bantian St, Longgang District, Shenzhen

We declare that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

Our product does not contain an AC/DC adapter. You need to purchase the AC 5V/1A in compliance with the directive 2014/30/EU.
The adapter shall be installed near the equipment and shall be easily accessible.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

FCC SATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: -- Reorient or relocate the receiving antenna. -- Increase the separation between the equipment and receiver. -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -- Consult the dealer or an experienced radio/TV technician for help. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

– This radio is designed for and classified as "General Population/ Uncontrolled Use".
– DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio, and the antenna gain shall not exceed 2dBi by the manufacturer declared.
– DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.
– During operation, the separation distance between user and the antenna shall be at least 20cm. this separation distance will ensure that there is sufficient distance from a properly installed external mounted antenna to satisfy the RF exposure requirements
– During transmissions, your radio generates RF energy that can possibly cause interferences with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Our vision is to be a global leader in home security solutions and products. We design and engineer intelligent home solutions. Our company is founded on the philosophy of serving our client's need.
We wish you happiness and hope you enjoy our products. Please contact us if any problems occur in your product or it is damage in delivery and we will offer a replacement to you.

If you have any query, please contact our support team at
macross.service@outlook.com