

Keene Electronics

MS13E X10 INDOOR MOTION DETECTOR

Overview

The MS13E Motion Detector sends Wireless Radio Frequency (RF) signals to an X10 Transceiver (TM11/TM12) or any X10 security system base receiver. The receiver then passes the signals onto your house wiring to turn on any X10 controllable lights (or appliances) around your home. The MS13E can also be used with the CM11U Two-Way Computer Interface to initiate macros (routines), eg a "coming home" routine which is initiated by the Motion Detector as soon as it "sees" you.

Battery Installation

ON the front of the unit above the X10 logo there is a small clear plastic strip that looks a little like an LED. Remove this with some tweezers or fine pliers to reveal a small Philips screw. Remove the screw, unclip the battery cover and install 2 x AAA alkaline batteries, (leave the cover off for now). The default settings are Housecode "A" and Unit Code "1", and it defaults to see motion all the time – (day and night).

Testing

To test the unit plug in an X10 RF Transceiver (TM11 or TM12U) and set it to Housecode A. Plug a lamp into an X10 Lamp Module and set it to Housecode A and Unit Code 1. Plug the module into any AC outlet. To test the MS13E press the House button once. The MS13E transmits the "device ON" RF signal and the red LED flashes. Press the Unit button once. The MS13E transmits the "device OFF" RF signal and the red LED flashes. Replace the battery cover. And place the MS13E on a shelf or mount it on a wall at least 2 metres above the ground. Let it settle for a minute and then walk past it. The lamp connected to any X10 Module set to A1 should turn on and then off again after approx. 1 minute as long as no further motion has been detected.

Location notes

For wall mounting, remove the batteries, screw the MS13E to a wall and replace the batteries.

Note that care should be taken therefore to place the MS13E where it sees plenty of sunlight during the day (such as near a window). If you place it in a dark corner it might not be able to tell the difference between day or night. Care should also be taken not to place the MS13E too near the light it is controlling, otherwise when the light turns on it might "fool" the MS13E into thinking it's daytime!

Changing the House and Unit Codes:

To change the Unit Code

Press and hold the Unit/Off button (under the battery compartment lid) the red LED flashes first and then blinks the current setting.

Release and immediately press the button the desired number of times for the Unit Code you want to set and hold the button on the last press. 3 seconds after the last press (while holding the button) the red LED blinks back the number of times for the code you set.

Release the button.

To change the House Code

Press and hold the House/On button (under the battery compartment lid) the red LED flashes first and then blinks the current setting

(once for A, twice for B, etc.). Release and immediately press the button the desired number of times for the House Code you want to set (once for A, twice for B, etc.) and hold the button on the last press. 3 seconds after the last press (while holding the button) the red LED blinks back the number of times for the code you set. Release the button.

Changing the Night/Day settings

To set whether you want the MS13E to transmit EVERY time it sees motion or only at night:

Press the Unit/Off button once. The red LED flashes. Then press and hold the House/On button. The green LED turns on. 3 seconds later the MS13E reports its dusk/dawn setting as follows:

The red LED blinks once if the MS13E is set to detect motion at all times.

The red LED blinks twice if the MS13E is set to detect motion only when it's dark.

To change this, press the Unit/Off button once. The red LED flashes. Then press and hold the House/On button. The green LED turns on. 3 seconds later the MS13E reports its dusk/dawn setting. Release and immediately press the House/On button once for operation at all times, or twice for operation only at night. Hold the button for 3 seconds on your last press. The red LED then reports the setting with one or two blinks.

Changing the delay settings

To change the delay after motion is detected before an OFF code is transmitted press the House/On button once. The red LED flashes. Press and hold the Unit/Off button. The green LED turns on. 3 seconds later the red LED reports its delay setting as follows:

1 blink for 1 minute, 2 blinks for 2 minutes, 3 blinks for 4 minutes, 4 blinks for 8 minutes, 5 blinks for 16 minutes, 6 blinks for 32 minutes, 7 blinks for 64 minutes, 8 blinks for 128 minutes, 9 blinks for 256 minutes.

To change this press the House/On button once. The red LED flashes. Press and hold the Unit/Off button. The green LED turns on. 3 seconds later the red LED reports its delay setting. Release and immediately press the Unit/Off button the number of times for the delay you want. Hold the button pressed for 3 seconds on the last press. The red LED then reports the setting with the appropriate number of blinks as above. Release the button.

General notes

After replacing batteries, you need to wait 30 seconds before the MS13E will see any motion.

After a transmission, you need to wait 10 seconds before the MS13E will see you.

The default House and Unit Code transmitted when motion is detected is A 1-ON.

The default for motion detection is detect at all times (day and night).

The default time out after which (default) A 1-OFF is sent is 1 minute.

The default House and Unit Code transmitted when dusk/dawn is sensed is A 2-ON at dusk, A 2 -OFF at dawn.

