

Quick Start Guide

*HMSM4050
Wireless
Motion Sensor*



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Introduction

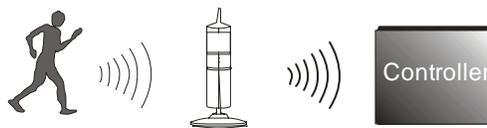
Congratulations on your purchase of the Motorola Wireless Motion Sensor (WMS). Your sensor uses a heat/motion detector to scan a field 90 degrees wide up to a range of approximately 20 feet. This enables you to secure an area, regardless of day or night, rain or shine. This Quick Start Guide describes how to set up and troubleshoot your Wireless Motion Sensor.

Using Your Motion Sensor

The WMS can report detected events or interact with other system devices when motion is detected to record the event. Positioning is critical in the mounting of your WMS, particularly if used in conjunction with a Motorola *homesight*TM Video Camera to record triggered events. Using your computer and the Wireless System Controller, you locally manage your home environment from your PC with the Motorola *homesight*TM software. When configured, the system can notify you of any new events by sending you an e-mail. An event is defined as movement in the field covered by the heat /motion sensor.

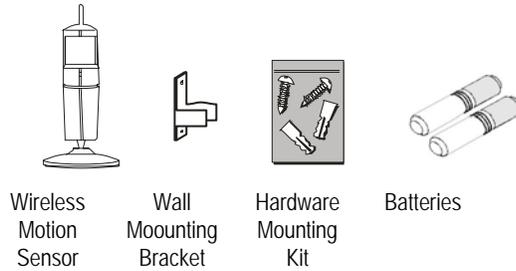
How It Works

The Wireless Motion Sensor can communicate with the Wireless System Controller to a distance of up to 60 feet indoors, and 200 feet outdoors. It can detect heat/motion within a field of 90 degrees horizontally. If armed, heat/motion triggers an event that is communicated wirelessly back to the Wireless System Controller, which in turn sends event information back to your PC.



Installation Overview

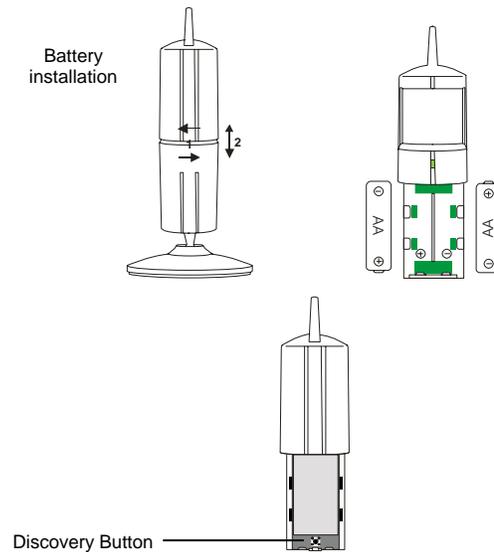
Your package contains the following:



Installing your sensor is a simple process.

- 1 Twist the WMS clockwise at the seam in the middle and pull the two halves apart.
- 2 Insert batteries.
- 3 Register your sensor with your Wireless System Controller using a process called Discovery. Refer to your *homesight* Software User Guide for instructions on how to discover your Wireless Motion Sensor.
- 4 Reassemble the halves tightening counterclockwise until it clicks. Line up the vertical seams so the wall mounting bracket (if used) will attach correctly.
- 5 Mount the sensor.

Feature Locator



Installation Hints

Please consider the following points when mounting the sensor:

- The sensor must be aimed so that it does not directly face the sun or any bright light; otherwise, this may cause damage to the sensor.
- The Motorola Wireless Motion Sensor is constructed of UV-resistant ABS plastic. If installing the Wireless Motion Sensor outside, it should be shielded from the elements, such as underneath a porch roof. Do not install the sensor where it is subjected directly to the elements.
- Typically, the sensor's range is 60–200 feet from the Wireless System Controller, depending on indoor or outdoor use and the number of obstacles. These can include metal framing, thick walls, and other wireless devices operating at 418 MHz. It is recommended that different positions be tried for optimal results.

Installing Your Wireless Motion Sensor

Your sensor can either be mounted on a wall or just sit on a horizontal surface.

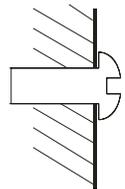
Wall Mount Your Wireless Motion Sensor

Warning: When mounting near a window, drilling too close to the glass could break the glass and possibly cause it to shatter. The window extends deeper into the frame than can be seen; therefore, ensure your screw is beyond the glass before drilling.

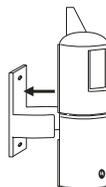
- 1** Using the holes on the drilling template found later in this guide, mark the position of the holes to be drilled.

For drywall or other composite surfaces use a 7/32" drill bit. Drill a hole for each of the mounting screws and insert a plastic wall anchor into each hole.

For other solid surfaces, use a 1/16" drill bit. Drill a pilot hole for each of the mounting screws.



- 2** Ensure that fresh batteries have been installed.
- 3** Position the sensor to survey the desired area. Please keep in mind that the field of view is 90 degrees and motion sensor distance works up to 20 feet .



- 4** Using the screws provided, secure the mounting bracket to the wall. Be sure to mount the sensor in the manner pictured above so that the unit has free motion for optimum aiming.

Wall Mount Drilling Template

Mounting tools: Screwdriver, electric drill or awl. On hard surfaces, Motorola recommends that you pre-drill ½-inch deep pilot holes with a drill bit slightly smaller than the bracket mounting screws before securing the bracket to the surface. When mounting a sensor on soft surfaces like sheetrock, use an awl to punch holes in the material slightly smaller than the plastic anchors included in the hardware mounting kit.

The illustration is drawn to a one-to-one scale, which means that it provides the exact dimensions required to mount the unit.

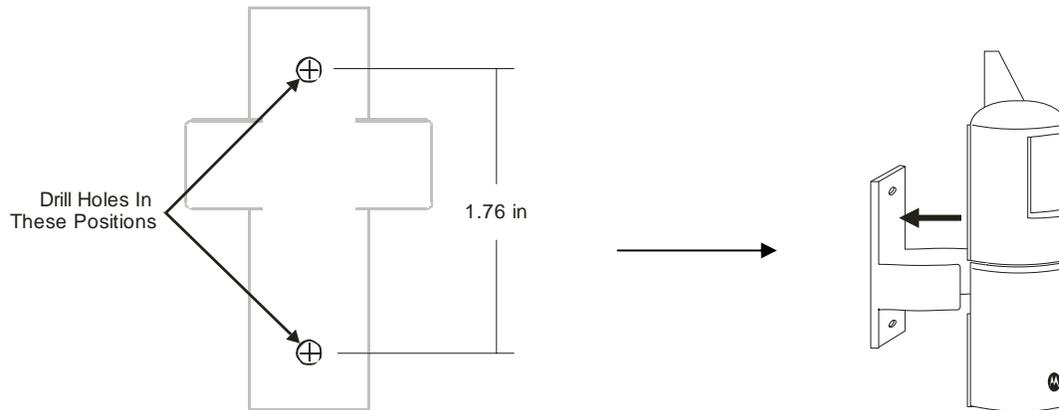
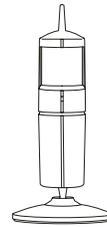


Table Mount Your Wireless Motion Sensor

The sensor can be placed on any horizontal surface.

- 1** Locate the sensor on a horizontal surface.
- 2** Ensure that fresh batteries have been installed.
- 3** Make adjustments to the sensor coverage angle by tilting and panning the unit with your hand.



Troubleshooting

Problem	Solution
Sensor will not register with the Wireless System Controller	<ul style="list-style-type: none">• Ensure that the sensor has fresh batteries.• Ensure that the Wireless System Controller is powered and online.• Ensure that you are pressing the Discovery button.• Reposition the sensor closer to the Wireless System Controller.• Try another location.
Motion events are not triggered	<ul style="list-style-type: none">• Ensure that the sensor is not positioned behind glass. The motion sensor is triggered by changes in heat. Any material such as glass that "insulates" keeps the camera from detecting heat changes (movement).• Ensure that the sensor is positioned properly, avoiding obstacles that can interfere.• Consider adding a Motorola Wireless Signal Repeater (HMAC9100) to increase device signal communication range.

FAQ

How far away can the sensor "see?"

The motion sensor is capable of detecting objects up to 20 feet away with a field of view of 90 degrees.

How can I most effectively use my Wireless Motion Sensor with my *homesight* System's video camera?

The WMS can act as a trigger to your system's wired or wireless video camera. By positioning it in area ahead of the motion sensor built into the video camera, the Wireless Motion Sensor can trigger an event ahead of time to have the video recorder capture the event in its entirety. Keep in mind that the survey field of the WMS is 90 degrees when you position it in relation to your video camera. Try not to have the WMS aimed directly in front of where the events will typically take place, but rather, to the side or angled so as to include as much of the area in its sweep as possible.

Features and Specifications

- Device signal communication
- LED in sensor illuminates when activity occurs
- 90 degree field of view for motion
- Weather resistant
- All hardware for either wall or ceiling mounting included
- Two AA alkaline battery operation (batteries included)

View:	90° field of view
Surveillance range:	Up to 20 feet
Communication frequency:	418 MHz
Typical range open air (line of sight):	200 feet (60 m)
Typical range indoors:	60 feet (18 m)
Overall size:	6.38"L x 3.00"W x 2.01"H (162mm x 76mm x 51mm)
Operational temperature/ humidity:	32° to 104° F with 10% to 80% humidity with all components operating within manufacturer thermal limits
Storage temperature:	-25° C to 75° C

Regulatory Information

CAUTION: Changes or modifications not expressly approved by Motorola for compliance could void the user's authority to operate the equipment.

FCC Compliance Class B Digital Device

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 environment. 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 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.

FCC Declaration of Conformity

Motorola, Inc., Broadband Communications Sector, 101 Tournament Drive, Horsham, PA 19044, 1-215-323-1000, declares under sole responsibility that the HMVC3075 complies with 47 CFR Parts 2 and 15 of the FCC Rules as Class B digital devices.

Restrictions on Use of Wireless Devices

In some situations or environments, the use of wireless devices may be restricted by the proprietor of the building or responsible representatives of the organization. If you are uncertain of the applicable policy for the use of wireless equipment in a specific organization or environment, you are encouraged to ask for authorization to use the device prior to turning on the equipment.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this product, or the substitution or attachment of connecting cables and equipment other than specified by the manufacturer. Correction of interference caused by such unauthorized modification, substitution, or attachment is the responsibility of the user.

FCC Certification

This product contains a radio transmitter and accordingly has been certified as compliant with 47 CFR Part 15 of the FCC Rules for intentional radiators. Products that contain a radio transmitter are labeled with FCC ID and the FCC logo.

This device complies with Part 15 of FCC Rules. Operation of the device is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

Limited Warranty

Wireless Motion Sensor

Motorola, Inc., Broadband Communications Sector ("Motorola")

Limited Warranty. Motorola warrants to you, the original end user customer, that (A) the Product, excluding Software, will be materially free from defects in materials and workmanship under normal use, and (B) with respect to Software, (i) the media on which the Software is provided will be free from defects in material and workmanship under normal use, and (ii) the Software will perform materially as described in its documentation. This Limited Warranty to you, the original end user customer, continues (A) for Software and the media upon which it is provided, for a period of ninety (90) days from the date of purchase from Motorola or an authorized Motorola reseller, and (B) for the Product (excluding Software), for a period of one (1) year from the date of purchase from Motorola or from an authorized Motorola reseller. To take advantage of this Limited Warranty or to obtain technical support, you must call the Motorola toll-free phone number (below). Motorola's sole and exclusive obligation under this Limited Warranty for retail sales shall be to repair or replace any Product or Software that does not meet this Limited Warranty. All warranty claims must be made within the applicable Warranty Period.

General Information. The warranties described in this Section shall not apply: (i) to any Product subjected to accident, misuse, neglect, alteration, Acts of God, improper handling, improper transport, improper storage, improper use or application, improper installation, improper testing or unauthorized repair; or (ii) to cosmetic problems or defects which result from normal wear and tear under ordinary use, and do not affect the performance or use of the Product. Motorola's warranties apply only to a Product that is manufactured by Motorola and identified by Motorola owned trademark, trade name or product identification logos affixed to the Product. Motorola does not warrant to you, the end user, or to anyone else that the Software will perform error free or without bugs. MOTOROLA IS NOT RESPONSIBLE FOR, AND PROVIDES "AS IS" ANY SOFTWARE SUPPLIED BY 3RD PARTIES. EXCEPT AS EXPRESSLY STATED IN THIS SECTION ("WARRANTY INFORMATION"), THERE ARE NO WARRANTIES OF ANY KIND RELATING TO THE PRODUCT, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THE WARRANTY AGAINST INFRINGEMENT PROVIDED IN THE UNIFORM COMMERCIAL CODE. Some states do not allow for the exclusion of implied warranties, so the above exclusion may not apply to you.

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These matters are governed by the laws of the Commonwealth of Pennsylvania, without regard to conflict of laws principles and excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods.

Please call the Motorola toll-free number, 1-877-466-8646, for technical support or warranty service.

Battery Life

For your Motorola *homesight*[™] devices that require batteries, use high-quality, non-corrosive batteries designed for use in electronic equipment. Battery life is one year with normal usage. **Do not use rechargeable batteries in any Motorola homesight[™] device.**

Registration

Register your product at:

<http://broadbandregistration.motorola.com>

Visit our website at:

<http://www.motorola.com/homemonitoring>



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