



## HLMSW Instruction Manual

### Wall Mounted Motion Sensor

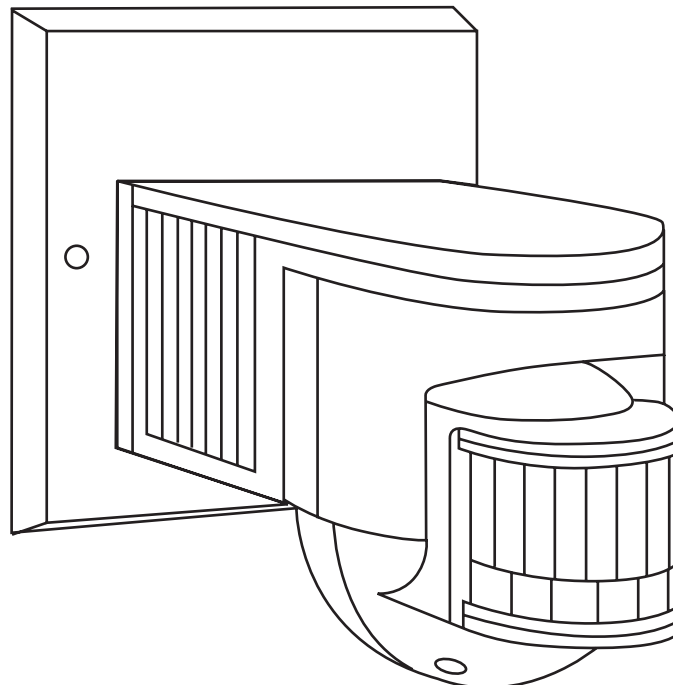


#### **WARNING: Risk of Electric Shock**

- If you are not experienced with proper wiring practices, consult a qualified electrician.
- All wiring must comply with local and national electrical codes.
- Before wiring ensure power is turned off at the fuse box or circuit breaker panel.

#### **Technical Specifications**

Housing Size (H x W x D)	3 1/2" X 2 4/5" X 4 1/2"
Supply Voltage	120 V / 60Hz
Switching Capacity	Maximum 600 Watts
Detection Angle of Sensor	140° Horizontal / Plane A (10 zones)
Sneak-by Guard	90° Horizontal / Plane B (6 zones) 8° Vertical
Swiveling range of sensor	130° Horizontal, 65° Vertical
Range over which detection is adjustable	270° Horizontal
"On" time:	10 seconds to 15 Minutes, adjustable
Sensor Range	Minimum 40' in front, 23 Feet at sides (based on 10' mounting height)
Type of enclosure	Rain tight



## **Features/Principle of Operation**

The Intermatic Motion Sensors, by Steinel use a pyroelectric infrared technology to detect invisible heat radiation emitted by pedestrians or cars. The thermal radiation detected is converted electronically to switch the lights on. By using high speed circuitry with surface mount technology, this is the most accurate and dependable sensor system available.

## **Distance & Coverage of Detection Zone**

This Technology allows you maximum coverage and automatically adjusts to temperature changes once you set the unit.

- All motion sensors are affected by temperature changes.
- The colder the temperature the longer the range of the detection zoned

The accuracy of the system is not affected by this temperature changed. It will automatically adjust to the changes in temperature and assess the environment correctly every time. Therefore, the Intermatic controls do not have:

- Sensitivity Control
- Range Control
- Seasonal Adjustment for Accuracy

The width of the zone is not affected by temperature. Intermatic products work in temperature ranges from -40° F to 120° F.

## **Mounting Height**

The range of the detection zone is affected by the mounting height of the unit. To achieve a range of forty feet it is recommended that the unit be mounted no greater than ten feet high. For higher mounting applications, the sensor head of the unit should be turned down several degrees.

## **Built-in Surge Protection**

This Intermatic Motion sensor contains built in surge protection. This feature will re-set the unit automatically and instantaneously after:

- Power Surges
- Power outages
- Power Shortages

## **Wall Mount – Recessed Junction Box or Surface Mounted Weatherproof Box Installation**

*It is recommended that a two-gang weatherproof box be use for surface mount applications. In this installation, the X-bar is not used and the back plate is secured directly to the junction box.*

1. Remove back plate by removing one Phillips screw from bottom of motion Sensor.
2. Install enclosed X-bar to junction box using two 3/4" chrome color screws. (The X-Bar may not be required for certain installations.)
3. Adjust the X-bar to a horizontal position that lines up the pre-drilled holes in the back plate. Tighten the center screw on the X-bar to lock into position.
4. Install rubber grommet on center hole of back plate and feed the sensor wires through the hole.
5. Properly connect the wires from the sensor to the corresponding wires in the junction box.
6. Fasten back plate to X-bar using the remaining 3/4" screws. Tighten to ensure back plate is firmly in place.
7. Line up unit over the back plate and fasten from the bottom front of the sensor using one Phillips screws.
8. Apply a bead of silicone sealant where the back plate sits against the wall or junction box to ensure rain tight installation.

## **Settings on the Intermatic HLMS**

Once installed you have two settings to adjust at the bottom of the unit.

- Time Setting – 10 seconds to 15 minutes
- Light Threshold – Full daylight to total darkness

All sensors are factory set at 10 seconds and full daylight operations

Use a slotted screwdriver to make necessary adjustments.

Note: Timer and light threshold settings are not exact. Each installation varies and you may need to make small adjustments after a few days of operations to fine tune your motion sensor to your exact needs.

## **Manual Override**

The HLMS unit can be switched to override the sensor and turn the lights on. The manual override may be activated day or night.

1. To activate the manual override, flip the wall switch Off/On and Off/On within 2 seconds.
2. The lights will now be on. (You may verify manual operation by looking at the sensor lens. A red indicator light is visible behind the upper right hand corner of the lens.)
3. Manual override will remain on for approximately 4 hours. After this period of time, the unit will return to normal sensor operation.
4. To resume sensor mode prior to 4 hours, flip the wall switch Off/On once within 2 seconds.

## **Adjustment and Pinpointing of Detection Zones**

1. The sensor may move sidewise (left to right) by 130° or up and down by 65° to best meet your requirements.
2. Clip on shrouds are provided and may be used to cover sections of the sensor to create more custom detection areas.
3. Using scissors cut desired section of shrouds and clip-on to desired area of sensor

## **Testing after Installation**

To ensure proper direction and operation of your Intermatic HLMS take the following steps:

1. Adjust the timing setting to 10 seconds (minimum time)
2. Direct the unit to the desired detection area and allow the lights to go out. (10 seconds)
3. Walk into the detection zone and note at what point the light comes on. Best detection is achieved when entering the zone at an angle.
4. Adjust the position of the sensor if necessary and repeat test.
5. Continue with adjustments until satisfied; adjust the light threshold and timer to the preferred settings.

(Light Threshold settings tell your fixture at what degree of darkness the unit will begin working. For example, you may use this to ensure the fixture does not illuminate during daylight.)

## Trouble Shooting Guide

Symptom	Cause	Action
Light does not come on.	<ul style="list-style-type: none"> <li>• Is power going to the unit?</li> <li>• Is the light bulb operational?</li> <li>• Is the wiring loose or incorrect?</li> </ul>	<ul style="list-style-type: none"> <li>• Check panel box to verify the circuit breaker has not been tripped or that fuse is not blown.</li> <li>• Verify wall switch is in "ON" position</li> <li>• Verify that power is going to unit by switching to manual override mode at the wall switch (see manual override section of installation manual)</li> <li>• Confirm light bulb is not burned out.</li> <li>• Confirm light bulb is properly installed in socket.</li> <li>• Confirm the light sensitivity positioned for the appropriate time of day.</li> <li>• Turn off power at panel box and then check for correct installation and wiring.</li> </ul>
Light does not turn off.	<ul style="list-style-type: none"> <li>• Is the unit in manual override?</li> <li>• Is the unit detecting movement outside of the desired sensing zone?</li> </ul>	<ul style="list-style-type: none"> <li>• Switch unit out of manual override per override section of manual.</li> <li>• Readjust detection zone using clip-on-shrouds if required.</li> <li>• Verify that the timer is set to desired time frame. (15 sec min to 15 min max)</li> </ul>
Light randomly turns on and off.	<ul style="list-style-type: none"> <li>• Is the wiring loose?</li> <li>• Is the unit detecting movement outside the desired sensing zone?</li> </ul>	<ul style="list-style-type: none"> <li>• Turn off power at panel box and then check for correct installation and wiring.</li> <li>• Readjust detection zone using clip-on-shrouds if required.</li> </ul>

### LIMITED ONE YEAR WARRANTY

If within one (1) year from the date of purchase, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

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This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid to the authorized service center listed below. This warranty is made by: Intermatic Incorporated/After Sales Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698/815-675-7000 <http://www.intermatic.com> Please be sure to wrap the product securely to avoid shipping damage.