BACK DECK

Motion Sensing Coach Lights

Items	Models
008812	PF-4150-SV
066300	PF-4150-PB
066494	PF-4150-BK
066565	PF-4160-AB
066579	PF-4162-PB
066580	PF-4170-PB
297078	PF-4170-SV
314224	PF-4170-BK

ENERGY STAR

Questions or problems? Before returning to your retailer, refer to the troubleshooting guide in this manual or call our technical service department at 1-800-858-8501 (English speaking only), 7:30 am to 4:30 pm, CST, Monday – Friday.

Features

- Light comes on when motion is detected.
- Automatically turns light off.
- Photocell keeps the light off during daylight hours.

Package Contents

- Lantern
- Easy to use Universal Mounting Bracket
- Mounting Hardware
- Wire Connectors
- Some Models Include an Optional Decorative Tail Assembly

Before installation, record the model number from back of fixture below. Attach receipt in case of possible warranty issues.

Requirements

- The light control requires 120 volts AC.
- If you want to use Manual Mode, the control must be wired through a switch.
- **Some electrical codes require installation by a qualified electrician.**

OPERATION

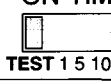
Mode:	On-Time	Works: Day	Night
Test	5 Seconds	x	x
Auto	1, 5, or 10 Min		x
Manual	To Dawn*		x

* resets to Auto Mode at dawn.

Note: When first turned on wait about 1 1/2 minutes for the circuitry to calibrate.

TEST

Set the ON-TIME switch on the bottom of the cover plate to **TEST.**



AUTO

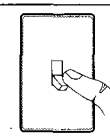
Set ON-TIME switch to 1, 5, or 10 minutes.

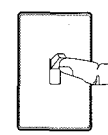
MANUAL MODE

Manual mode only works at night because daylight returns the sensor to AUTO.

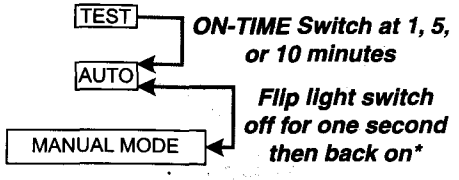
Flip the light switch off for one second then back on to toggle between AUTO and MANUAL MODE.

Manual mode works only with the ON-TIME switch in the 1, 5, or 10 position.


1 Second OFF *then...*


... back on.

Mode Switching Summary



* If you get confused while switching modes, turn the power off for one minute, then back on. After the calibration time the control will be in the AUTO mode.

INSTALLATION

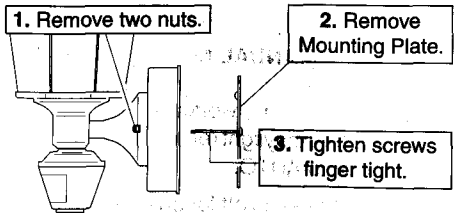
Estimated Installation Time: 30 minutes

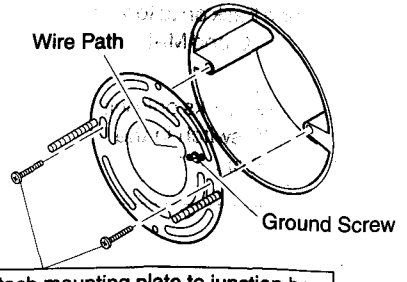
Items needed for installation (not included):

- Phillips and flathead screwdrivers
- Pliers
- Wire strippers/cutters
- Safety glasses
- Light bulb
- Silicone caulk

For best performance, mount the fixture about 6 feet (1.8 m) above the ground.

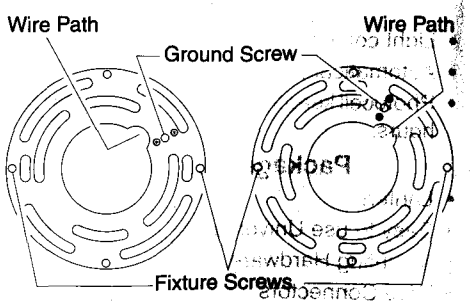
⚠ WARNING: Turn power off at circuit breaker or fuse.





This fixture comes with a universal mounting bracket. It is pre-assembled on the fixture to fit the majority of junction box applications. However, if the slots on the mounting plate do not line up with the junction box screw holes:

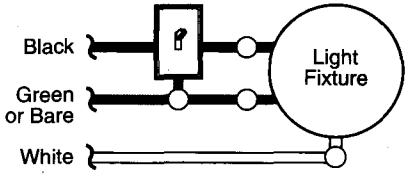
1. Remove the fixture mounting screws from the mounting plate. *Note:* Do not remove the ground screw.
2. Attach ground wire "pigtail" to ground screw on mounting plate (See *Recommended Grounding Method* for additional information).
3. Flip the mounting plate over.
4. Rotate the mounting plate so the wire path is on the upper right. *Note:* The wire path on the mounting plate must be located as shown below to allow the wires on the back of the fixture to pass through.
5. Reinstall the fixture mounting screws and attach the mounting plate to the junction box as shown.



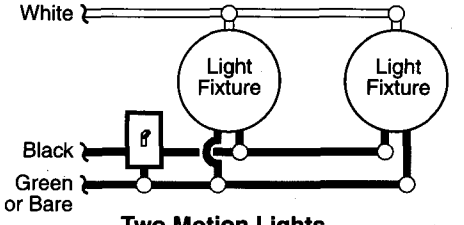
WIRING

Note: All wiring should be run in accordance with the National Electrical Code through conduit or another acceptable means. **Contact a qualified electrician if there is any question as to the suitability of the system.**

⚠ CAUTION: DO NOT connect the RED wire unless you want to control other lights from the motion sensor.



One Motion Light



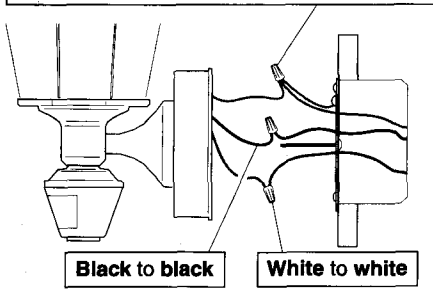
Two Motion Lights

❒ Twist the junction box wires and the fixture wires together as shown below. Secure with wire connectors. If you have a metal junction box, you may not need the green "pigtail". If you are unsure about the grounding method, consult your local building code.

Connect the fixture wires to the wires in the junction box. Twist the wires together and secure with wire connectors.

Recommended Grounding Method

Use a green ground "pigtail" (not provided) and twist one end together with the bare fixture wire and the box ground wire. Secure with a wire connector. Secure the other end of the "pigtail" with the GND screw on the mounting plate.



OPTIONAL WIRING

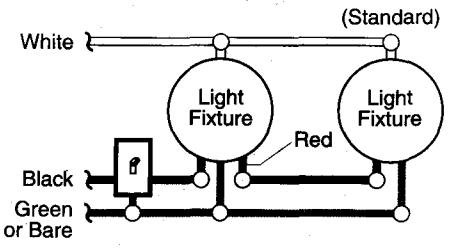
This fixture is provided with a sensor rated for 500 Watts. Since the fixture is only rated 100 Watts, 400 Watts of additional lighting may be controlled by this sensor.

When determining what a fixture is rated for, do not simply look at the rating on the lamp in the fixture. Look at the marking which specifies the maximum lamp wattage for which the fixture is suitable.

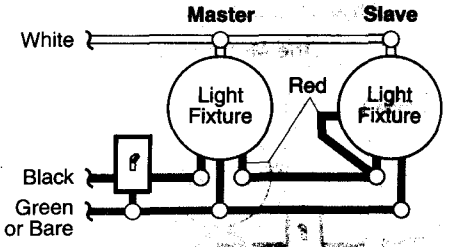
Once you have selected the fixtures to be connected and determined their maximum ratings, add these ratings up. For instance, if you have 3 fixtures rated 100 Watts, 150 Watts, and 75 Watts respectively, you have a total load of 325 Watts.

Wiring Diagram 1 – When wiring to control a standard light fixture: Strip the motion sensor's red wire and connect to the standard light's black wire. Connect all white wires together. Total fixture ratings must not exceed 500 Watts (4.1 A).

Wiring Diagram 2 – When wiring to control another motion sensing light fixture (Master / Slave): Strip the red wire in both light fixtures. Connect the red wire of the controlling (master) fixture to the red and black wires of the controlled (slave) fixture. Connect all white wires together. Total fixture ratings must not exceed 500 Watts (4.1 A).



Wiring Diagram 1

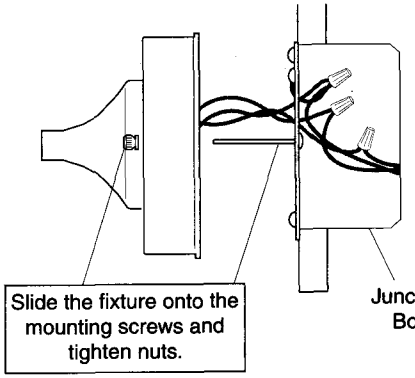


Wiring Diagram 2

It is also possible to wire two motion lights so that either fixture will turn on both lights at the same time (dual master system). It is recommended that only people with plenty of electrical experience attempt this configuration. Please call our customer service number (1-800-858-8501 - English speaking only) before attempting this wiring. **If the dual master wiring is not done correctly, it can destroy both motion sensing fixtures and void your warranty.**

COMPLETE THE INSTALLATION

❒ Stuff the wires into the junction box. Make sure the wires from the fixture go through the *wire path,* and no wires get pinched.

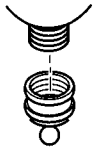


❒ **Caulk fixture mounting surface** with silicone weather sealant.

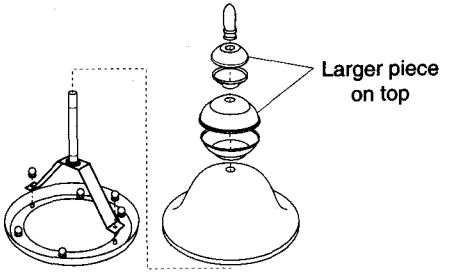
❒ Install **one 100 Watt** maximum light bulb.

❒ If so equipped, install the fixture top. Secure with decorative screws.

❒ If you will not be installing the optional tail assembly, install the decorative nut onto the bottom of the fixture now.

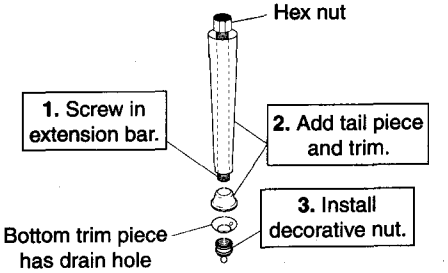


4162 Top Assembly



Optional Assembly

❒ If so equipped, you may install the decorative tail as shown below.

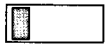


TESTING

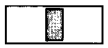
❒ **Turn on the circuit breaker and light switch.**

Note: Sensor has a 1 ½ minute warm up period before it will detect motion. When first turned on wait 1 ½ minutes.

❒ Set SENSITIVITY to mid position and ON-TIME to TEST position.



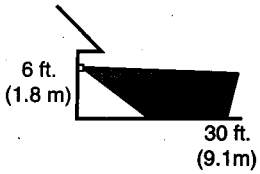
TEST 1 5 10 MIN
ON-TIME



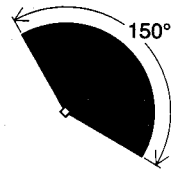
LO - M - HI
SENSITIVITY

Avoid aiming the control at:

- **Pools of water** or objects that change temperature rapidly, such as **heating vents and air conditioners.** These heat sources could cause false triggering.
- Areas where **pets or traffic** may trigger the control.
- **Nearby large, light-colored objects** reflecting daylight may trigger the shut-off feature. Do not point other lights at the sensor.

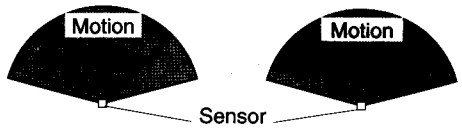


Maximum Range



Maximum Coverage Angle

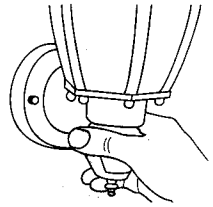
The detector is less sensitive to motion directly towards it and more sensitive to across motion.

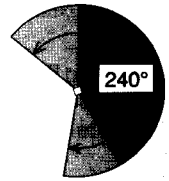


Least Sensitive *Most Sensitive*

❒ Walk through the coverage area noting where you are when the lights turn on. Move the sensor head left or right to change the coverage area.

Note: Grasp the sensor only as shown and turn the entire sensor. **Any other method may damage the sensor. Do not force it past the stops.**





Sensor Aiming Adjustment Angle

❒ Set the SENSITIVITY as needed. Too much sensitivity may increase false triggering.

❒ Set the amount of TIME you want the light to stay on after motion is detected. (1, 5, or 10 minutes).

SPECIFICATIONS

Range . . . . . Up to 30 ft. (9.1 m) [varies with surrounding temperature].
Sensing Angle . . . . Up to 150°
Electrical Load. . . . Up to 100 Watt Maximum Tungsten Incandescent
Sensor Capacity . . Up to 500 Watt (4.1 A.) Maximum Tungsten Incandescent
Power Requirements .... 120 VAC, 60 Hz
Operating Modes. . TEST, AUTO, and MANUAL MODE
Time Delay . . . . . 1, 5, 10 minutes

HeathCo LLC reserves the right to discontinue products and to change specifications at any time without incurring any obligation to incorporate new features in products previously sold.

TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE
Light will not come on.	1. Light switch is turned off. 2. Bulb is loose or burned out. 3. Fuse is blown or circuit breaker is turned off. 4. Daylight turn-off is in effect *(recheck after dark).* 5. Incorrect circuit wiring, if this is a new installation. 6. Re-aim the sensor to cover desired area.
Light comes on in daylight.	1. Light control may be installed in a relatively dark location. 2. Light control is in Test. *(Set control switch to an ON-TIME position.)*
Light comes on for no apparent reason.	1. Light control may be sensing small animals or automobile traffic *(re-aim sensor).* 2. Sensitivity is set too high. *(Reduce sensitivity.)*

SYMPTOM	POSSIBLE CAUSE
Light stays on continuously.	1. The sensor is pointed toward a heat source like an air vent, dryer vent, or brightly-painted heat-reflective surface. *(Re-aim sensor.)* 2. Light control is in Manual Mode. *(Switch to Auto.)* 3. Sensitivity is set too high. *(Reduce sensitivity.)*
Light flashes on and off.	1. Heat being reflected from other objects may be affecting the sensor. *(Re-aim sensor.)* 2. Light control is in the Test mode and warming up *(flashing is normal under these conditions).*