

## WS-2109

### Features and Rating:

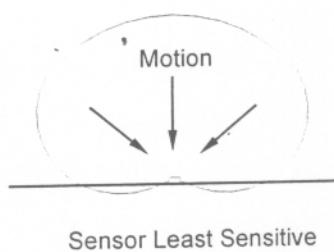
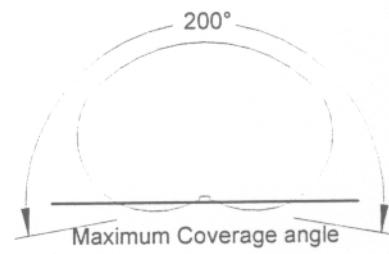
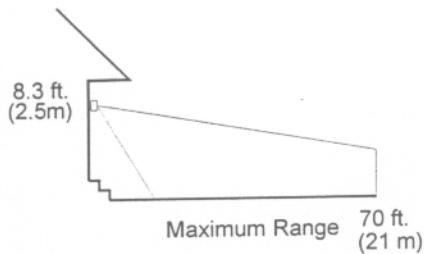
- Maximum load rating up to 300W for halogen/incandescent (150W per lamp-holder).
- Minimum wiring required. Easy installation.
- Up to 60 feet sensing range, 180° Coverage.
- "ON" Timer selectable (slide switch) Test (5 sec.), 1, 5, and 12 minutes.
- Adjustable sensitivity (from 100% to 30%) to prefer detection zone.
- Sensor head provides pan and tilt adjustment mechanism.
- Auto Day/Night detection and communication to Receiver(s).
- Wall or Eave mount (for optimum performance, mount at 2.5m height).
- Scanning LEDs (red) to deter the intruder that the house is installed with security system and also to act as status indicator (ie: when light is on, LEDs are off; during standby, LEDs are scanning; Motion detection at Day, LEDS speed-up blink).
- 3 Functions available:
  - Test Mode: slide the PIR's on time button to "Test". Unit can operate and detect on Day & Night condition. This enable the end-user to test the unit and adjust the detection pattern of PIR to desired range during installation or re-adjustment. Upon detection, the light will stay on for appx. 5 sec.
  - Auto Mode: set the on time button to 1,5 or 12 minutes. Upon detection, the unit's light will stay on according to the pre-set time setting of 1 or 5 or 12 minutes.
  - PMO mode: In Auto Mode and at night, flip the power switch once within 1 sec. to get into PMO mode. This function allows the user to manually switch on the PAR 38 permanently during the night as a normal lighting use. When the light is cut off (photocell detects dawn), the unit will back to Auto Mode. It is also possible to cancel the PMO mode and get back to Auto Mode by flipping the power switch once.
- Photocell function with preset lux level: Light will only switch on at night if there is detection in Auto Mode; photocell will automatically switch off the light when it detects dawn.
- Temperature Compensated Sensitivity to remain range detection over environment (summer over winter).
- Water-tight (UL/cUL certified).
- Work with Chime Receiver(s) and or Lighting range receiver(s) item 6, 7, 8, 9, and 10.

### IMPORTANT:

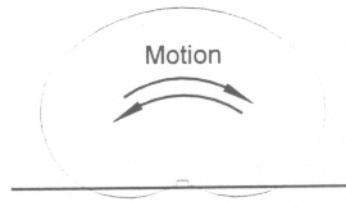
- Sensor must mount with On time button, VR knob and CDS window at the bottom.
- Avoid installing the sensor on a circuit that feeds motor loads such as HVAC equipment, washer/dryer or garage door opener.
- Warning- Risk of fire. Do not aim the lamps at a combustible surface within 3ft.(1m.)
- Caution: Keep Lamp holders 30° below horizontal to keep away the water & prevent electrical shock. DO not exceed the maximum load limits listed.
- Avoid the lights reflect into photocell and lights should not shine directly to photocell. This is to prevent the sensor's photocell being 'tricked" by its own lighting.
- Sensor position should below and as far as possible from its lights. Heat from the lights could false trigger the sensor.

### Selecting a location:

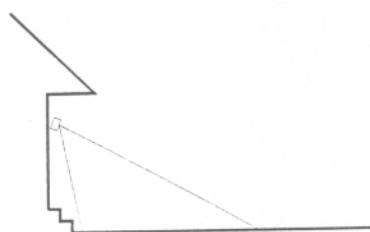
- The unit utilizes infrared sensor to detect temperature changes caused by movement of human bodies or cars within its detection zone.
- The sensor is more sensitive to movement ACROSS its detection pattern, not towards the sensor. The best all-around coverage is achieved with the unit mounted at the optimum height of 2.5m.
- Avoid the unit mounted or aimed at reflective surfaces like pools of water or area with temperature changes like waving branches, road with passing cars and air-conditioners or heater.



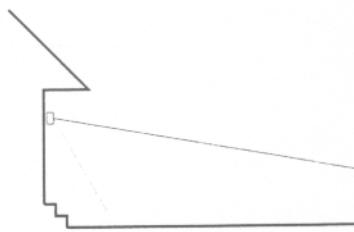
Sensor Least Sensitive



Sensor Most Sensitive



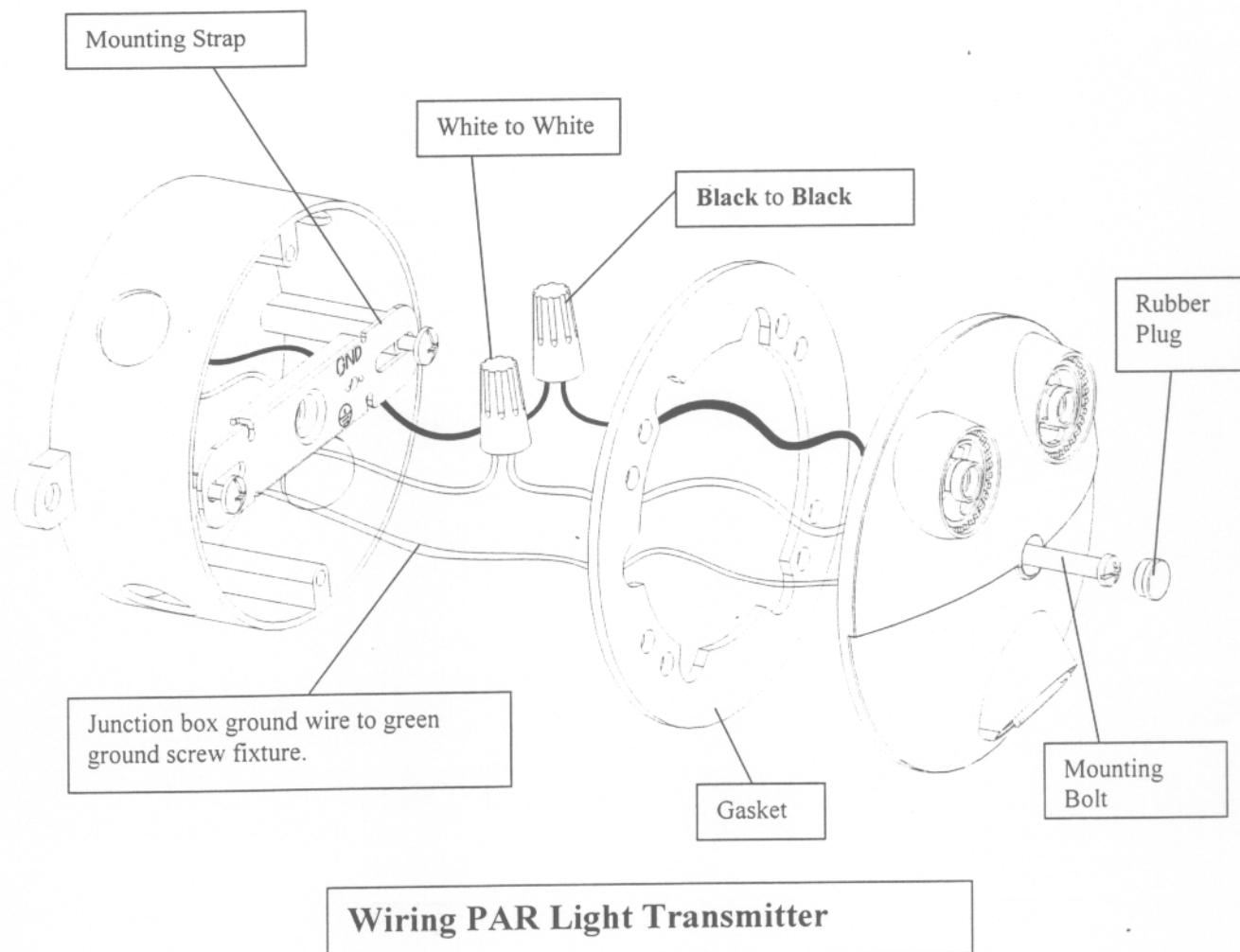
Aim Sensor Down for Short Coverage



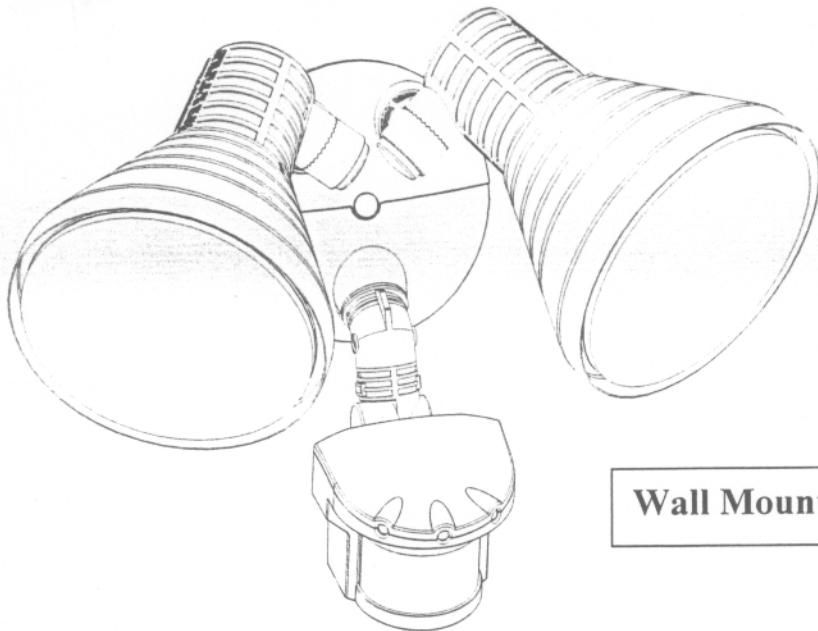
Aim Sensor Higher for Long Coverage

Installation:

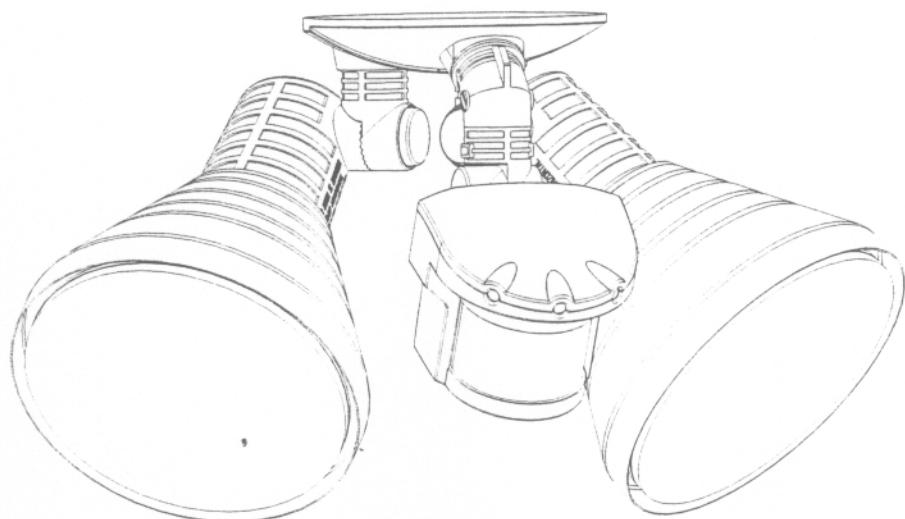
1. Turn off all power by removing power fuse or turning off circuit breaker.
2. Remove the unit from the box.
3. Adjust the lighting and PIR position to Wall Mount or Eave Mount accordingly.
4. Screw the Cross-Bar onto your junction box with screws provided in accessory pack.
5. Place "I" hook onto the cross bar opening. This allows the unit to be hanged and user can concentrate on wiring.
6. Twist the junction box wires and fixtures wires together, (white to white: neutral; black to black: live). Secure with UL approved wire connectors (included in accessories pack).
7. Connect ground wire to canopy earth terminal
8. Align the wall plate and gasket to ensure proper seal. Secure the unit to the junction box with mounting bolt at the center.
9. Push the screw cover firmly into place.
10. If mount at wet location, caulk the wall plate mounting surface with silicone sealant
11. Screw in 2 bulbs (each must not exceed 150W) into the lampholder.
12. Select TEST mode, turn on the power and adjust the lighting fixture & the PIR sensor head to the required range.



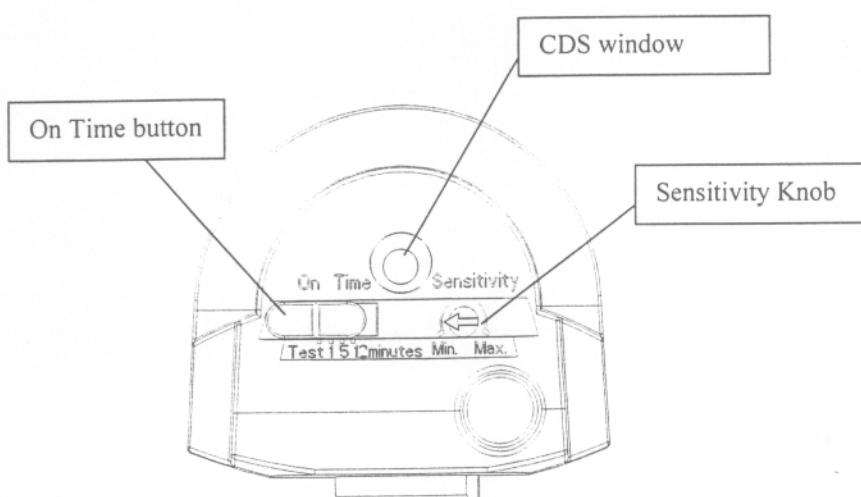
**Warning – Risk of fire. Do not aim the lamps at a combustible surface within 3 ft. ( 1 m ).**



Wall Mount position



Eave Mount position



*Notice :*

*(1) For FCC*

*Caution:*

*The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*

*(2) For Industry Canada*

*"Operation is subjects to the following two conditions:(1)this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."*