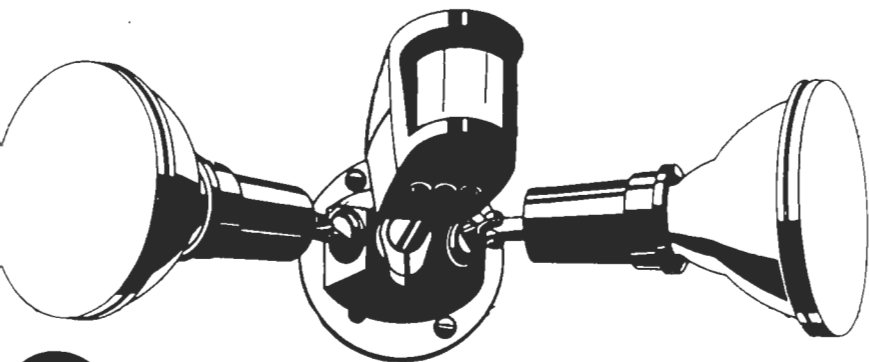


READ AND SAVE THESE INSTRUCTIONS

SECURITY INFRARED MOTION SENSOR AND OUTDOOR LIGHT CONTROL



LIGHT BULBS NOT INCLUDED

INSTRUCTION MANUAL

HOW IT WORKS

Congratulations on the purchase of your security switch with infrared detector. The motion detector operates continuously and turns on the lights after sensing moving heat sources in the target area. From dusk-to-dawn, or even in daylight if you want, lights will turn on instantly after motion is detected and stay on as long as motion is detected.

- Use as a security light for any protected side or corner of your house. Lights will be activated as the intruder passes thru the target area of the sensor.
- Install as a sensing device to turn on lights as people approach the entrance to your home greeting visitors or your family returning home.
- Functions as a welcome light in your driveway. The heat of your moving car will activate the lights as you enter the driveway

THIS UNIT MAY BE USED INDOORS

If power to the security light is connected to either an indoor or an outdoor wall switch the security sensor can be activated or deactivated from the switch without having to adjust the knobs on the control module itself. See operation and set-up section of this manual.

PHOTOELECTRIC SENSOR OPERATION

This fixture is equipped with a photo sensor that prevents the lights from operation during the daytime, unless you desire. The sensitivity of the photo sensor can be adjusted using the "Daylight" control on the control module to permit the lights to operate continuously (day and night) or to various degrees of outside light.

MANUAL OVERRIDE - If you have installed a normal wall switch to control the power to the security light you may enable or disable the light from the wall switch

To disable the light sensing device - turn the wall switch off and then on again immediately (in less than 2 seconds.) The photo sensor is now disabled and the lights will stay on continuously.

To engage the light sensing device - turn the wall switch off for more than 3 seconds and then on again. The sensor is now operational.

INSTALLATION

CAUTION

Before beginning installation disconnect power to the location where the light will be installed by shutting off circuit breaker or removing fuse at fuse box. Shutting off a wall switch that controls the light is not sufficient to prevent electrical shock.

GENERAL

1. For ideal operation and maximum coverage of area the unit should be mounted 8'5" above the ground under a house overhang or on the outside wall of the house. The unit may also be mounted indoors and should be wall mounted. If mounting the unit at 8'5" is impractical, the unit may be mounted either higher or lower however the effective "target area" may vary from the specifications stated in this manual. See figures 5 and 6.
2. The unit works by sensing a moving heat source in the target area (such as body heat) and activates lights immediately. The unit should be located away from air conditioners, barbecue grills, and other lights which the control module may sense. The unit should be aimed away from the street as it will sense passing cars. Do not aim toward a smooth-white wall or water fall.
3. To avoid damage to the unit do not point the control module unit toward the sun. The control module is adjustable and should be pointed slightly downward for best operation.
4. The light bulbs should be located above and aimed away from the control module to prevent the heat from the bulbs activating the unit.
5. If you are unfamiliar with electrical wiring it is recommended you secure the services of a qualified electrician who can insure the installation meets national and local electrical codes.
6. Outdoor wall fixtures must be caulked with suitable RTV or Silicone compound around the top and sides of the coverplate to reduce the chance of water intruding into the splicing area. Leave the bottom clear to allow moisture a means of escape.

ASSEMBLY AND MOUNTING

1. If you already have outdoor lights in the location that you intend to mount the security light you simply disconnect and remove the old fixture. Follow steps for assembly and wiring the unit to the existing electrical outlet box. If you do not have electrical power to the location, a new outlet box and wiring must be installed. It is recommended that a qualified electrician install electrical wiring to the new location.
2. Assemble the bulb sockets to the two outside holes in the backplate. Tighten the arms using the locknuts provided with the sockets. Mount the control module to the center hole in the backplate. **DO NOT ATTEMPT TO DISASSEMBLE THE CONTROL MODULE HEAD. THERE ARE NO USER SERVICEABLE PARTS INSIDE.**

THE SYSTEM

Check the contents of the box and review the parts diagram in Figure 1. You should find the following parts.

1. Main control module.
2. Two (2) bulb sockets with adjustable arms and locknuts.
3. Backplate with two screws for mounting
4. Backplate gasket.

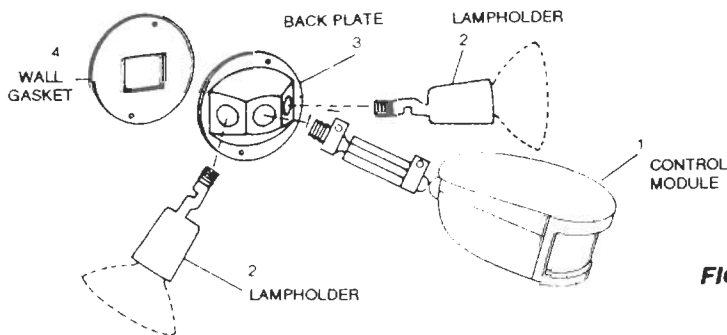


FIG 1

ELECTRICAL CONNECTIONS

1. BE SURE POWER IS OFF BEFORE BEGINNING ANY ELECTRICAL WIRING.
2. The fixture is intended to be mounted to a 2" x 4" outdoor outlet box. This box must be supported by the building structure and mounted under a partially protected location such as canopies roofed open porches and the like to avoid direct exposure to rain.
3. Refer to the diagram shown in Fig 2 and the wiring diagram shown in Fig 3 for electrical connections. Follow this step by step procedure for wiring the fixture. Wiring the unit incorrectly may damage the electronic components inside the control module and will void all warranty claims.
 - A. Connect either one of the white wires from the control module to the white wires of the bulb sockets using wire nuts provided with the unit. Be sure no loose strands of wire are present. Secure wire connectors to wires using electrical tape.
 - B. Connect the red wire from the control module to the black wires of the bulb sockets.
 - C. Connect the remaining white wire from the control module to the white wire from the supply circuit. Connect the black wire from the control module to the black wire of the supply circuit.
 - D. Spread the splices in the outlet box so the black wires are on one side of the box and the white wires are on the other side of the box.
 - E. Mount the assembled unit to the outlet box using two screws. Install the two round gaskets in bulb holders. Install light bulbs into the bulb holders. Do not exceed 300 watts total (150 for each bulb holder maximum). Flood lights are recommended. The control module is only designed to control incandescent loads of 300 watts total or less. Restore electrical power and follow steps for "set up".

ELECTRICAL CONNECTION SECURITY MOTION PROTECTOR LIGHT

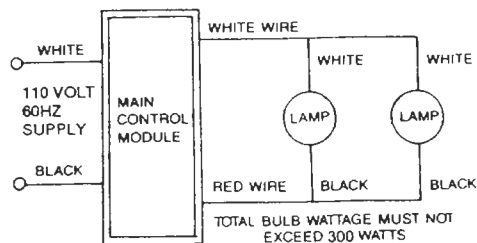


FIG 2

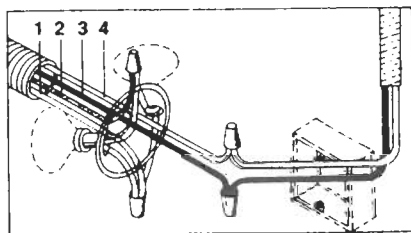


FIG 3

UNDERSTANDING THE CONTROL MODULE ADJUSTMENT

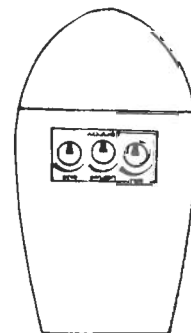


FIG 4

GENERAL

1. The control module should be located below the bulbs to prevent the heat from the bulbs activating the control module sensing device.
2. The control module has three (3) control knobs on the bottom. The function of each is explained below. Refer to Fig 4. Final adjustment of the knobs is explained in the "set up" portion of this manual.

SENS (SENSITIVITY)

The sensitivity control adjusts the amount of heat that will activate the control module and turn on the lights. Turning the control clockwise will make the control module more sensitive to change in heat. At approximately mid range the control will activate the lights when sensing the heat from a human body but will not sense the heat from a small dog or cat. Turning this control fully counterclockwise will deactivate the heat sensing device entirely.

DAYLIGHT

The control module has a built-in light sensing device (photo cell) that detects daylight and darkness. This feature prevents the lights from coming on during the daytime unless you desire. Rotating the daylight control fully counterclockwise defeats the light sensing photocell and the unit will remain "on" all the time, even in the daytime. This control is best adjusted for the first time at dusk so the "amount of darkness" can be seen and the control set to operate the lights at the desired level.

TIME

This control adjusts the amount of the time lights remain on after the heat source has left the target area. Fully clockwise sets the lights to stay on approximately 18 minutes. Fully counterclockwise allows the lights to stay on about 5 seconds.

SET UP

Follow these steps to set up your security light for best operation.

1. Turn power switch on wait 30 seconds for the system's circuitry to stabilize.
2. Turn the "daylight" control to the fully counterclockwise direction. This will defeat the built-in photo cell.
3. Turn the "time" knob to the fully counterclockwise position. This act minimizes the time the lights will be activated (about 5 seconds).
4. Turn the "sens" control, all the way in a counterclockwise direction.
5. Aim the control module to the desired target area. (Figure 5 and 6).
6. Have a person stand approximately in the center of the target area moving slightly. Moving arms up and down is usually sufficient.
7. Slowly rotate the "sens" knob clockwise until the lights go on. You may adjust the "sens" control either way to the desired sensitivity level.
8. Turn the "daylight" knob in a counterclockwise direction to adjust the photocell to activate the unit at the desired level of darkness (dusk, full dark, etc). This adjustment is best performed at dusk.
9. Turn the time knob clockwise to adjust how long you want the lights to stay on after the unit is activated. The maximum (full clockwise) is about 18 minutes. The minimum (full counterclockwise) is about 5 seconds.

SPECIFICATIONS

Sensor range:	80ft. x 110 degrees
Power consumption:	4 watts maximum (control module only)
Power requirement:	110 volts, 60 hz
Load rating:	300 watts maximum (incandescent only)
Delay control:	5 seconds to 18 minutes (approx)

SIDE VIEW

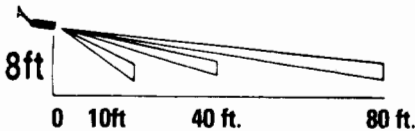


FIG 5

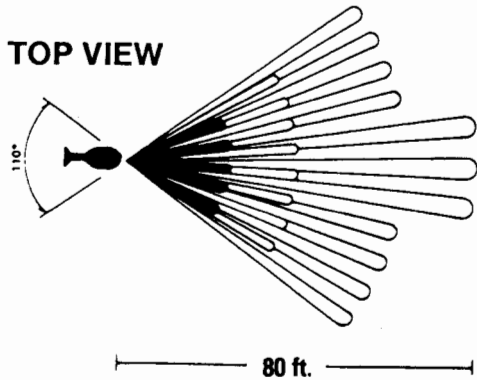


FIG 6

TROUBLESHOOTING

UNIT DOES NOT FUNCTION AT ALL

Check wiring to the unit to make sure you have 110 volts at the outlet box for the unit. Also check to make sure the wall switch (if installed) is on. Check the circuit breaker to make sure it is on. Check the wiring from the unit to the source of power to make sure you have wired the unit correctly.

BLINKING LIGHTS

Redirect unit away from heat sources such as a street or active sidewalk, barbecue grill, neighbors yard, etc. Direct the lamps away from the control module. Readjust the sens (sensitivity) control by turning it more counterclockwise.

LIGHTS WILL NOT TURN OFF

Light bulb(s) must be over 40 watts. Daylight control may be in the fully clockwise position. Light bulbs sockets may be wired directly to the power source. Recheck the wiring diagram. Wall switch may be in the "Disable" mode. Shut off the wall switch for more than 3 minutes turn on and recheck the operation. Also remember after the control module senses moving heat the light may stay on for up to 18 minutes if the "time" control is in the fully clockwise position.

PRINTED IN HONG KONG

(2131-002)