LightAlert!®

Important!

TEST PERIOD LASTS FOR 5 MINUTES AFTER POWER IS TURNED ON.

■ The Luminator has a 5 minute test period to allow a walk test during daylight. During this five minute period the unit will turn lights on for only 5 seconds each time it detects an object in its Detection Zone.

■ After the 5 minute test period, the Luminator will reset itself to *night only* operation.

■ For an additional 5 minute test period, turn power off for 10 seconds, then back on.

■ During darkness, lights will remain on, after motion ceases, for the delay period set on the time control dial.

LUMINATOR™

R A B

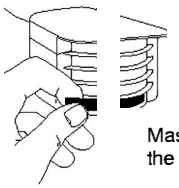
How Does Luminator Work?

Luminator's infrared sensor "sees" small temperature changes caused by the motion of people or cars within its detection zone and turns on lights automatically. It welcomes visitors and may deter intruders.

How long do the lights stay on?
Lights turn off a short time after motion in the detection zone stops. You can adjust this time from 5 seconds up to 10 minutes. Since the lights are only on when needed, Luminator is extremely energy efficient.

Can outdoor lights still be turned on with the light switch?
Yes. Luminator can be controlled by a conventional indoor switch or circuit breaker. Lights can be turned on or off manually at night only.
■ Manual Override Mode (to keep lights on): Flip the switch "off" then "on" again two times (off-on-off-on) within 2 seconds.
■ To Resume Automatic Mode: Flip the switch once (off-on) within 2 seconds, sensor will reset to Automatic Mode.

Will Luminator detect animals?
Luminator may detect large animals. Having animals trigger Luminator can help give property a "lived-in" look. You limit animal detection by turning down the sensitivity knob or by placing electrical tape on the lower part of the lens, or both.



Masking the lens

How are Time and Sensitivity set?
Time and Sensitivity adjustments are located on the underside of the sensor. To adjust, turn the knob with your fingers.
■ Time: sets the time from 5 seconds to 10 minutes that lights will remain on after protection zone is vacated.
■ Sensitivity: increases or decreases the responsiveness of the sensor and its range.

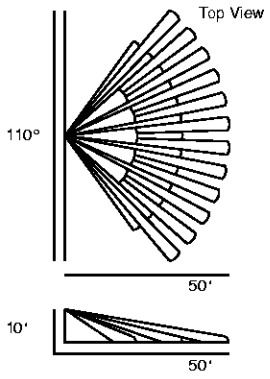
Specifications:

Catalog #:	LS300 or LU300
Switching Capacity:	300 watts 5 Amps
Voltage:	120 volts
Protection Pattern:	50' x 110°
Time Adjustment:	5 seconds to 10 minutes
Lampholders	Maximum one 150 watt Par38 lamp per lampholder Misc. Fixtures Suitable for Wet Locations

Luminator Lens Patterns

How large an area does Luminator protect?
The detection pattern extends out 50 feet and is 110° wide. The sensor may be swiveled to cover the area desired. To reduce coverage aim the sensor towards the ground.

Detection Pattern



Assembly and Wiring

Caution:

■ TURN OFF ALL POWER BY REMOVING POWER FUSE OR TURNING OFF CIRCUIT BREAKER.

■ Read entire Owner's Manual before proceeding.

■ All wiring should comply with local electrical codes and may require a qualified electrician.

■ The total lighting load connected to the Luminator must not exceed 300 watts. The lampholders each take up to 150 watt Par38 lamps.

■ If you are replacing an existing outdoor light, turn off the power, disconnect and remove the old fixture. If there is no power, a licensed electrician should install the wiring required.

LU300

The LU300 is factory-wired and assembled for easy installation.

1. Remove existing fixture.

2. Connect black Luminator wire to black supply wire and white Luminator wire to white supply wire as shown in the wiring diagram. Twist on wire nuts. Secure with electrical tape. No ground is required for the Luminator. Attach any ground wire to junction box.

3. Align gasket to insure proper seal. Fasten cover and fixtures to box. Use silicone sealant around the coverplate and all threaded holes for weatherproofing.

4. Screw in light bulbs (not supplied). Turn on power.

LS300 Sensor Only

1. Screw the threaded arm of the sensor into the center hole of a round or rectangular mounting plate (not supplied).

2. Screw the threaded arms of each floodlight into the mounting plate.

3. Bring power leads and light fixture sensor leads into box.

4. Attach ground wire(s) to box grounding screw.

5. Position gasket on wires.

6. Strip 1/2" of insulation from all leads. Connect as shown in wiring diagram.

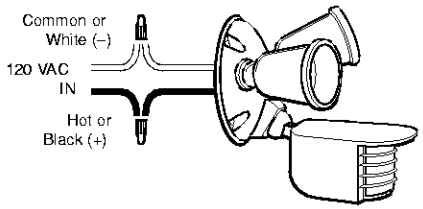
7. Twist on wire nuts. Secure with electrical tape.

8. Align gasket to insure proper seal. Fasten cover and fixtures to box. Use silicone sealant around all openings.

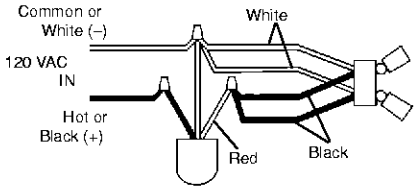
9. Screw in light bulbs (not supplied). Turn on power.

Wiring and Mounting Diagrams

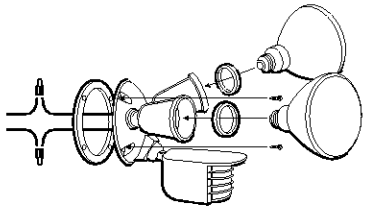
Basic Wiring Diagram
(LU300)



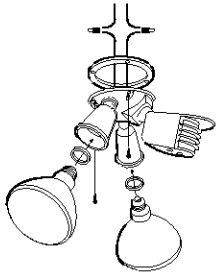
Basic Wiring Diagram
(LS300)



Standard Wall Mounting



Under Eave Mounting



Aiming And Adjustment

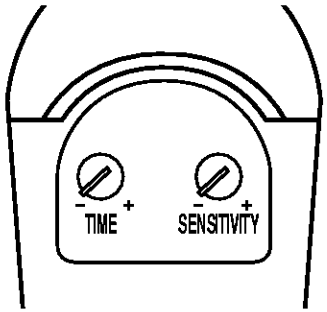
The purpose of the Walk Test is to check and adjust the coverage pattern of Luminator. The Luminator has a 5 minute Test Period which allows the sensor to be aimed and adjusted during day or night. If you require 5 more minutes of Test Time, turn the power off for at least 10 seconds and back on again. During the Test Period the sensor will keep lights on for 5 seconds each time it detects an object in its Protection Zone. Sensor will change to Automatic Mode after 5 minutes of testing.

■ To enter Test Mode:
Turn power off for at least 10 seconds and back on.

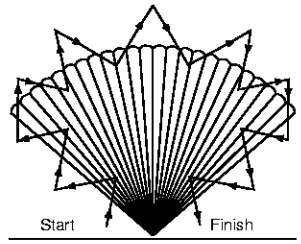
Walk Test

1. Aim the sensor across the traffic pattern you want to protect.
2. Start outside the pattern and walk across the pattern until the lights go on.
3. Adjust the sensor aiming as necessary to improve coverage.
4. To adjust the sensitivity turn knob gently. Less sensitivity may be desired if you wish to protect a limited area (or if the sensor is being activated by wind, foliage or animals.) More sensitivity will help cover a larger area.
5. Repeat steps #2 thru #4 until you are satisfied with the coverage.
6. Set the “Time” control. The minimum setting is 5 seconds, the maximum 10 minutes. This period starts after the movement in the protection pattern ceases.

Time & Sensitivity
Adjustments



Walk Test



Troubleshooting:
If Lights Do Not Turn Off

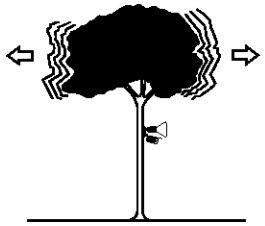
1. Make sure that the sensor is not in Manual Override Mode. Turn power OFF for 10 seconds, then ON. Unit will be in Test Mode for 5 minutes. After 5 minutes, the sensor will be in Auto Mode with lights off and ready to detect movement.

2. Check that the Time Control on the sensor bottom is set at minimum.

3. Keep all people completely out of the protection pattern to make sure the sensor is not detecting them.

4. Make sure sensor is not mounted on an unstable object such as a tree or pole that will move in the wind.

Problem: Movement of tree triggers sensor.

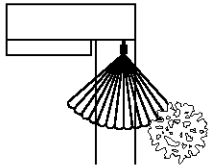


Solution: Mount on stable surface.

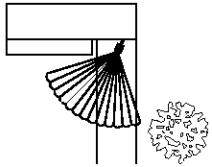
5. Make sure sensor and lights are mounted firmly and do not move even slightly when touched.

6. Make sure sensor is not aimed at something that would cause a temperature change such as trees, water, air conditioners or heating vents.

Problem: Motion of tree triggers sensor.

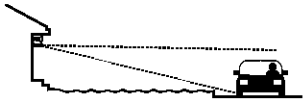


Solution: Aim sensor away from movement or mask lens.



7. Make sure sensor is not aimed within 20 feet of a road.

Problem: Passing cars activate sensor.



Solution: A 20′ safety zone is recommended to avoid activation from passing cars.

Troubleshooting:
If Lights Turn On and Off

1. Make sure there is no electrical "noise" on the circuit. Install the unit on its own dedicated circuit tree of devices such as air conditioners, water pumps, freezers, garage door openers, microwaves or bathroom fans.

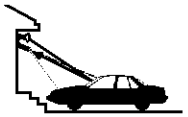
2. It is not recommended to wire sensors in parallel.

3. Keep all people completely out of the protection pattern to make sure the sensor is not detecting them.

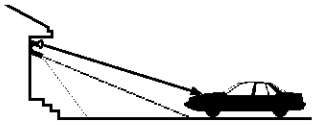
4. Make sure sensor is located below and in front of its lights.

5. Make sure lights are not reflecting back into sensor. Check for white or reflective surfaces close to the sensor.

Problem: Sensor is triggered by reflections of its own lights.



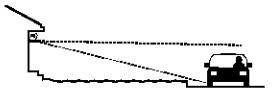
Solution: Aim sensor away from reflective objects, or move the objects.



6. Make sure sensor is not aimed within 20 feet of a road.

Problem: Passing cars activate sensor.

Solution: A 20′ safety zone is recommended to avoid activation from passing cars.



7. Check Solutions #4 - 6 under "If Lights Do Not Turn Off".

Troubleshooting:
If Lights Do Not Turn On

1. Check that lamps and fixtures work. Compare wiring to the wiring diagram in this manual. Check that the power is on.

2. If installing during daylight, remember that the sensor will provide 5 minutes of Test Time after power is turned on. After 5 minutes, the sensor will switch to Automatic Mode and will not work during daylight.

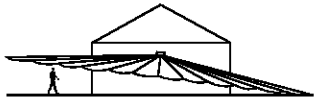
If you require 5 more minutes of Test Time, turn the power off for at least 10 seconds and back on again.

3. Check that lights from another source, such as adjacent porch, lights, garden lights or street lights are not in the sensor's view. The sensor's photocell will detect the light and deactivate the sensor because it has detected daylight.

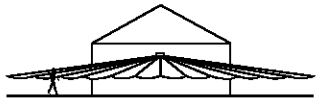
Troubleshooting:
If Range Appears Limited

1. Check that sensor is level from side to side and pointed at the area you desire. If unit is tilted, part of the protection zone may be high in the air over people's heads.

Problem: Sensor tilted and protection pattern is too high.

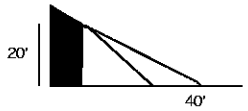


Solution: Position sensor exactly level from side to side.

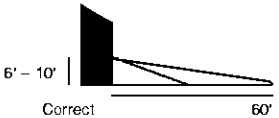


2. Check that the sensor is not mounted too high. If mounted above 20 feet, much of the usable range will be lost.

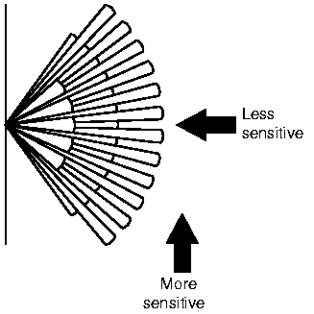
Problem: High mounting reduces range.



Solution: Mounting at 6' to 10' allows maximum range.



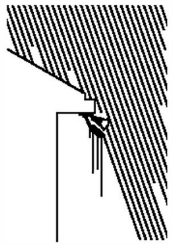
3. Check that movement is not directly towards sensor. Sensor will see movement across its pattern more quickly.



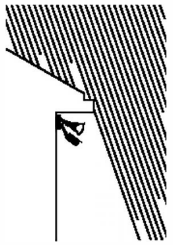
Troubleshooting:
Lights Turn On for Unknown Reasons

1. Lights may turn on during rain, snow and windstorms because the sensor will detect large changes in temperature. Do not mount sensor in unprotected area.

Problem: Sensor turns on during storms.



Solution: Mount sensor in protected area.



2. You may not be aware that animals have triggered the sensor. Check sensor aiming to reduce nuisance triggering.

3. The sensor may turn on during voltage surges. Reset by turning power off for at least 10 seconds.

4. A possible source of "mysterious" sensor activations is the sensor receiving strong local radio signals. Check for nearby CB, Ham, VHF radio transmitters or Cellular telephones, the sensor will not be permanently impaired by these signals.

5. Check all the Solutions mentioned under "Lights Turn On and Off".

Extreme weather note:

This is a passive infrared sensor that detects changes in temperature. Dramatic changes in temperature can accompany snowstorms, wind and rain storms and sudden changes in ambient temperature. Passive infrared sensors, like the Luminator, may detect these changes and activate the lights. After the severe weather has stopped the sensor will reset itself to normal operation.

Limited Warranty

Most difficulties with the Luminator can be solved with a simple adjustment. If you are having a problem with your unit, please do the following:

1. Re-read the Troubleshooting section in this manual.

2. Call our Tech Help Line, and we will offer suggestions to help you with the problem. Before you call, please have this information handy:
   a) Catalog number of your unit
   b) Wattage connected to the sensor
   c) Serial Number
   d) This Installation Manual

Your Luminator will be replaced or repaired, at our option, if it proves to be defective in workmanship or materials within three years from the date of original purchase.

For repair or replacement, return the product freight prepaid and insured to the address below. The unit should be packed carefully. Please include your sales receipt and a description of the problem.

If the unit is out of warranty or the damage is unrelated to the original manufacture, return your unit directly to us with a check for $15.00 (made out to RAB Electric). We will repair or replace your unit.

Under no circumstances shall we be liable for any incidental or consequential damages arising out of or in connection with the use or performance of this product or other indirect damages with respect to loss of property or revenue or cost of installation, removal or re-installation. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Easy Installation & Product Help

Fax Back
Faxed Tips & Specs,
24 hours/day.
888 RAB-1236

www.rabweb.com
Visit our internet site for color product photos and installation tips.

Tech Help Line
Call our friendly experts.
8AM - 5PM ET Mon. - Fri.
888 RAB-1000

e-mail
Your questions and requests will be answered promptly.
tech@rabweb.com

RAB Electric Manufacturing Inc.