

# Smart Task

Motion Activated Task Light

## Installation Manual

**STASK24**



**STASK21**



**STASK12**



Turn-closet;  
cubicle and  
kitchen lights on  
when you need  
them, off when  
you don't

**RAB**  
LIGHTING

## **SENSOR SPECIFICATIONS:**

### **Voltage:**

120 Volts AC, 60Hz

### **UL Listing:**

For Indoor applications



### **Time Adjustment:**

5 seconds to 15 minutes

### **Sensor Construction:**

Precision molded poly carbonate

### **Detection Zone:**

180 degrees by 30'

### **Vandal Resistant Lens:**

Hard lens resists vandalism

### **Housing:**

Formed sheet metal with  
translucent styrene lens

### **Housing Finish:**

Bright white epoxy powder coating

### **Sockets:**

Miniature bi-pin, G5

### **Lamps:**

T5, min Bi-pin, G5

### **Replacement Lamps:**

12 watts: LFT13 / 8 watts: LFT8

24" – 2 x 8W

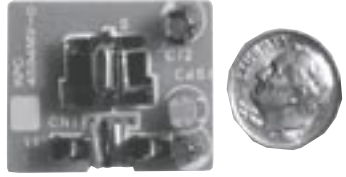
21" – 1 x 13W

12" – 1 x 8W

# WHY RAB SENSORS ARE THE BEST FOR YOU

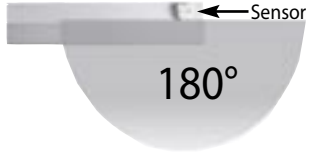
## Smaller is Better!

Smart Task uses state-of-the-art surface mount technology (SMT), just like cellular phones and beepers. SMT gives you more reliability, greater RF immunity, and a compact sensor that can fit neatly where others cannot.



## Wider is better!

The wide view detects movement within its 180° area with only one compact sensor, detecting people as they exit or enter.



**Molded is better!** No leaky gaskets or bug hotels with Smart Task. The hard lens is molded as part of the case. It's absolutely sealed!

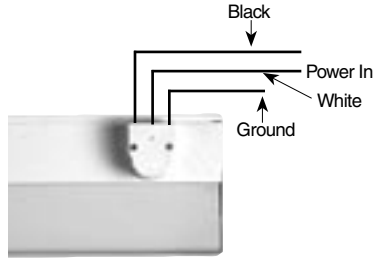
## CAUTIONS

- All wiring **MUST** comply with local electrical codes and should be installed by a qualified electrician.
- Read entire Installation Manual before proceeding.

**TURN OFF POWER BY REMOVING POWER FUSE OR TURNING OFF CIRCUIT BREAKER BEFORE INSTALLATION.**

- Line Carrier Remote Control Systems such as X-10, Leviton or Radio Shack are incompatible with sensors and cause false activations.
- Do not install on circuits feeding motor loads such as kitchen appliances, HVAC equipment, washer/ dryer or garage door openers.
- Sensor functions best when movement is across its detection pattern, not towards the sensor.

**Note:** The Smart Task sensor time control is factory set for 5-8 minutes and for night only operation. For other settings, see “Aiming and Walk Testing.” It is easier to set the time control on the sensor prior to installation.



1. Attach ground wire(s) to outlet box grounding screw.
2. Strip 1/2" of insulation from all leads. Connect as shown in Wiring Diagram.
5. Twist on wire nuts. Secure with electrical tape.
6. Turn on power.
7. Adjust coverage angles of the sensor from left to right only. Tighten tilt set screw.

# HOW DOES SMART TASK WORK?

**The Smart Task** infrared sensor “sees” small temperature changes caused by the motion of people or pets within its Detection Zone and turns on lights automatically.

## How long do the lights stay on?

Lights remain on as long as there is movement within the Detection Zone. Once the zone is vacated, lights can be adjusted to remain on approximately 5 seconds up to 15 minutes.

## Will the sensor detect animals?

Smart Task may detect large animals. You can limit animal detection by placing opaque weather-proof tape on the lower part of the lens or using the bottom mask on the Lens Mask Kit provided.



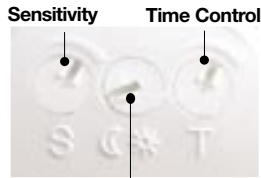
## What does Manual Override do?

Keep lights on by flipping the wall switch two times within 5 seconds. Sensor resets to auto mode at dawn. No extra wiring needed.

## How are the Time, Sensitivity and Photocell adjusted?

- Time Control: Sets the time that lights will remain on after the Detection Zone is vacated from approximately 5 seconds to 15 minutes. Use small adjustment tool supplied to turn clockwise to increase the time.
- Factory Setting: 5-8 minutes.
- Sensitivity: Increases or decreases the responsiveness and range of the sensor.

**NOTE: Turn controls gently. Do not force past stops.**



### Photocell

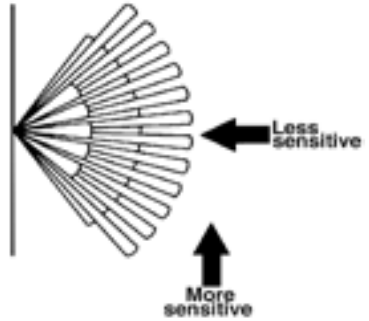
Turn to moon symbol for night only

Turn to sun symbol for 24 hour operation (lights turn on night and day)

# PICKING A LOCATION

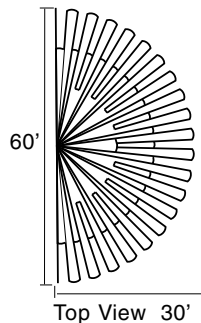
## Location Considerations:

- Choose a location from which the sensor can “see” all that will be illuminated by its lights.
- Sensor functions best when the direction of suspected movement is across its detection pattern, not towards the sensor.
- The sensor has a “Double Look Down” Lens with one “Look Out” zone and two “Look Down” zones, for excellent detection both at long and close range.



## Detection Pattern

- Detection extends out a maximum of 30 feet and is 180° wide.
- To reduce Detection Pattern width, mask the sides of the lens with the Lens Mask Kit provided or opaque weather-proof tape.
- If sensor is mounted by a doorway at the top of stairs, be aware that the elevated mounting height may extend the sensors range.



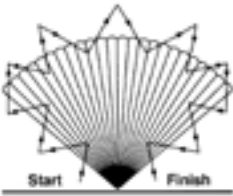
# AIMING AND WALK TESTING

## Test Period:

The sensor has a 3 minute Test Period which allows it to be aimed and walk tested day or night.

- For the first 30 seconds, the lights will be turned on. During this time, test that all fixtures and lamps function properly.
- For the next 3 minutes, the sensor will keep lights on for 5 seconds each time it detects movement in its Detection Zone. The sensor will change to Automatic Mode after the 3 minute Test Period.
- If another 3 minute Test Period is desired, turn the power off for at least 10 seconds and back on again.

**NOTE: Turn controls gently. Do not force past stops.**



## Walk Test:

The purpose of the Walk Test is to check and adjust the coverage pattern.

1. Aim the sensor, approximately, at the coverage area.

2. Start outside the Detection Zone and walk across the zone until the lights go on. As distance from the sensor increases, it will take more movement to be detected. For instance, at 10 feet, a half step will be enough. while at 30 feet, several steps will be necessary.
3. To shorten the range, use the lens masks provided or tilt the sensor down.
4. Repeat steps #2 and #3 until you are satisfied with the coverage.
5. The Time Control is factory set between 5-8 minutes. This period starts after the movement in the Detection Zone ceases. If less time is desired, turn the time control counterclockwise. For more time, turn the control clockwise.
6. The sensor is factory set for night only operation. To obtain operation in low level light, turn the Photocell Control clockwise to the sun symbol. Intermediate settings will allow the sensor to operate earlier or later at dusk.
7. Your sensor is ready for operation. See the Technical Tips if additional help is needed.



## TECHNICAL TIPS

### Lights Do Not Turn On

1. Check that lightbulbs 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 a 3 minute Test Period after power is turned on. After 3 minutes, the sensor will switch to Automatic Mode and will not work during daylight if the Photocell Control is turned to or near the night only position (fully counter clockwise to the moon symbol). If you require another 3 minute Test Period, turn the power off for at least 10 seconds and back on again.
3. Check that lights from other sources, from inside the house are not in the sensor's view. See "Lights Turn Off Too Quickly".
4. Was sensor wired hot? If so, circuitry may have been damaged.
5. If sensor is painted, make sure there is no paint on the lens and that the lens paint mask is removed.

### Lights Do Not Turn Off

1. Make sure sensor is not aimed at something that would move or change temperature such as waving curtains, air conditioners, windows or heating vents. You can test for infrared sources in the area by placing a box or bag over the sensor. Put sensor into Test Mode. After the initial 30 seconds of the lights being on, lights should stay off. Wave your hand inside the bag in front of sensor. Lights should go on and then time out. If sensor operates properly when covered, check items 2-6.

**Problem:** Sensor is triggered by unwanted movement or heat source.

**Solution:** Mask lens in the direction of the source; move sensor or source.

### Lights Turn On For Unknown Reasons

1. Lights may turn on occasionally because the sensor is detecting changes in temperature (Air conditioning or heating duct). If this is a constant problem, mount the sensor in a more protected area.
2. Tilt the sensor lower - it may be seeing distant objects moving.

# TECHNICAL TIPS

## Lights Turn On For Unknown Reasons

(Continued from page 9)

3. House pets may trigger sensor. Check sensor aiming to reduce nuisance triggering or mask the lower part of the lens with lens masking kit provided.
4. The sensor may turn on occasionally during voltage surges.
5. A possible source of “mysterious” sensor activations are strong local radio signals. Check for nearby CB, Ham, VHF radio transmitters or Cellular telephones. The sensor may be activated, but will not be permanently impaired by these signals.
6. Check all the solutions mentioned under “ Lights Turn On and Off Incorrectly”.

## Lights Turn On and Off Incorrectly

1. Make sure the sensor is installed on its own dedicated circuit free of motor loads such as HVAC equipment, kitchen appliances or garage door openers.
2. It is not recommended to wire sensors in parallel. More than one sensor wired together makes them difficult to troubleshoot. Disconnect multiple sensors and test separately.
3. Keep all people completely out of the detection pattern to make sure the sensor is not detecting them.
4. Make sure sensor is located below and as far as possible from its lights. Heat from the lights may trigger the sensor.

**Solution:** Move sensor below and away from the lights.

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

**Solution:** Aim sensor away from lights and reflective objects or mask the lens in the direction of the light.

## TECHNICAL TIPS

### Lights Turn Off Too Quickly

1. Check if sensor is being “tricked” by reflected light. If lights shine or reflect into the photocell, (located behind the lens), the unit will go on briefly and turn off thinking it is daytime.

**Problems:** Lights reflect into photocell or lights shine directly into photocell.

**Solution:** Adjust Photocell Control slightly clockwise, toward the sun symbol. This allows the sensor to function in brighter ambient light conditions. Alternatively, move the lights or mask the lens in the direction of the lights or reflections. If the problem persists, it may be necessary to increase the length of the sun shield over the sensor using weatherproof tape or some other material.

2. Make sure sensor is mounted firmly and does not move even slightly when touched. If it moves, tighten all screws.
3. Make sure that Smart Task is not mounted on an unstable pole that will move in the wind.
4. Was sensor wired hot? If so, circuitry may have been damaged.
5. Make sure sensor is not aimed within 30 feet of a road.

## LIMITED WARRANTY

Your Smart Task will be promptly replaced or repaired, at our option, if it proves to be defective in workmanship or materials within 5 years of purchase.

For repair or replacement, please call the Tech Help Line at 888 RAB-1000 for instructions.

If the fixture/sensor is out of warranty or damage is unrelated to its original manufacture, return your unit freight prepaid to the address below. Please include a description of the problem and a check for \$30.00 (made out to RAB Electric). We will repair or replace your unit promptly.

Under no circumstances shall RAB Electric 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. Smart Task is designed to detect movement in the detection area. It should not be construed as a theft or crime prevention device. RAB does not accept responsibility for any damages resulting from intrusion or other crimes.

## TOLL FREE TECHNICAL ASSISTANCE

**If you need technical assistance, please do the following:**

**1.** Re-read the Technical Tips sections of this manual.

**2.** Call the Tech Help Line at 888 RAB-1000, 8AM to 4PM Eastern Time M-F and we will be glad to help you. Before you call, please have the following information handy:

**a)** Catalog number of your unit;

**b)** Wattage, types and locations of lights connected to the sensor;

**c)** The electrical circuit on which the sensor is installed...what else does it feed? How is the sensor power switched?

**d)** This installation manual.

Note: RAB Electric cannot give electrical wiring instructions by phone. Please consult a qualified electrician.

**THESE INSTRUCTIONS DO NOT COVER ALL DETAILS OR VARIATIONS IN EQUIPMENT, NOR DO THEY PROVIDE FOR EVERY POSSIBLE CONTINGENCY TO BE MET IN CONNECTION WITH INSTALLATION, OPERATION OR MAINTENANCE**



**RAB**  
LIGHTING

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