

Please allow a 30 second warm up period after applying power. For best calibration results, personnel should maintain at least a 6 foot distance from the device 2 minutes after the start of Auto and Manual Calibration. **NOTE:** to disable photocell or cancel calibration turn knob to SET/OFF for longer than 5 seconds (RED LED followed by YELLOW flash). When changing photocell modes or recalibrating, disable photocell and follow directions below:

**Manual Mode:** Available for both Open and Closed Loop applications to quickly configure the Daylight Design Level (DDL). Calibration should always be done when ambient light is at user's desired level.

**Procedure - Open Loop /Closed Loop**

1. Move dip switch C4 to ON (for Open Loop), or to OFF (for Closed Loop).
2. Install appropriate light pipe.
  - **Open Loop:** Install angled light pipe with the longest side facing toward the natural light source (window) - see Figure 4A.
  - **Closed Loop:** Install the flat light pipe (factory installed).
3. Turn the photocell knob (fully counterclockwise) to SET/OFF for 2 seconds (LED will be solid RED indicating the device has entered Manual Calibration mode). Then turn the knob to SETPOINT (1X) - see Figure 5.
4. Re-install sensor cover.
5. Lights are forced ON for 3 minutes, then OFF for 1 minute (Open Loop only).
6. LED blinks RED (3 minutes). **Optional** - During this time, the DDL can be adjusted by turning the knob up or down. **NOTE:** The LED blinks BLUE when the knob setting has changed.
7. When Manual Calibration is complete, the LED will resume normal operation. The device is now operating in Manual mode.

**Auto Mode:** Auto mode is available ONLY for Closed Loop applications to configure the DDL in 24 hours. The sensor will not enter Auto Calibration mode if Open Loop Daylight Harvesting is selected.

**Procedure**

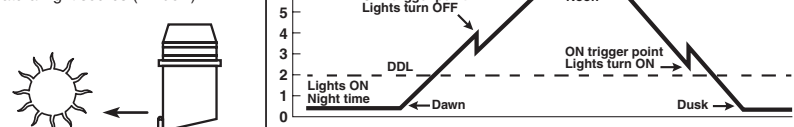
1. Move dip switch C4 to OFF position.
2. Install the flat light pipe (factory installed).
3. Turn the photocell knob (fully clockwise) to AUTO (LED will be solid GREEN for 24 hours indicating the device has entered Auto Calibration mode).
4. Re-install sensor cover.
5. When Auto Calibration is complete, the LED will resume normal operation. The device is now operating in Auto mode.

**PHOTOCELL OPERATION**

- In order to keep the lights from needlessly cycling ON and OFF, the OFF trigger point is set at a higher light level than the ON trigger point. In addition, there is a delay time that must be met which requires the light level to be above or below the trigger point for a period of time before a light change occurs. For example, there may be a 10% hysteresis gap between the OFF and ON trigger points, along with a 5 minute delay time to turn OFF the lights and a 1 minute time delay to turn ON the lights.
- OFF and ON trigger point levels can be adjusted at any time using the Photocell knob. **NOTE:** In order to make quick adjustments to DDL, the delay time for lights ON/OFF will be reduced from 1 min/ON and 5 min/OFF, to 30sec/ON or OFF once Photocell knob change is recognized. The reduced delay time will expire 2 minutes after knob change occurs. **NOTE:** The LED blinks BLUE when the knob setting has changed.
- To disable photocell or cancel calibrations turn the knob to SET/OFF (RED LED, YELLOW flash).
- **Open Loop**
  1. In Open Loop application the longer side of the angled light pipe must be facing toward the natural light source (window). See Figure 4A.
  2. The graph in Figure 4A tracks the value of a linear photocell throughout a day. It is assumed that it is a cloudless day so the increase of the daylight is relatively linear. The far left of the graph starts out at night and shows a very low level reading. At dawn, the level begins to increase. At some point, based on the setting of the trigger point, the lights will be turned OFF since there is enough contribution from the daylight. The photocell reading will begin to decrease around noon until the level matches the trigger point, then lights will be turned back ON.

Figure 4A

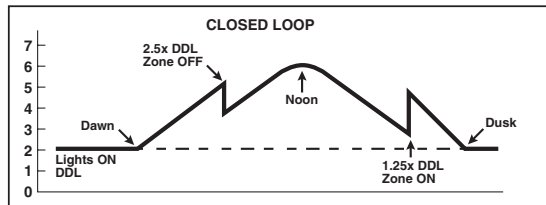
**NOTE:** Long side of angled light pipe must face toward natural light source (window).



**Closed Loop**

The graph in Figure 4B tracks the value of a linear photocell throughout a day. It is assumed that it is a cloudless day and that the desired light level is the same level without external light influence and only by the fixture(s). At the far left, the lights are ON because the area is occupied and since it is still night, there is no contribution from daylighting. As dawn arrives, the photocell level begins to increase as the daylight increases. In order to keep the light level from dropping below the trigger point, and in this case below the desired light level in the area (DDL), the trigger point is set to 2.5 times the level read with only the fixture(s). That way, the light is still adequate to hold the lights OFF. This is shown in the graph at the point where the level suddenly drops. The photocell level then continues to increase until around noon. As the daylight decreases, the area light eventually drops to near the desired light level. Before reaching this point, the lights are turned back ON, indicated by the sudden increase in the photocell level.

Figure 4B



**LED INDICATORS**

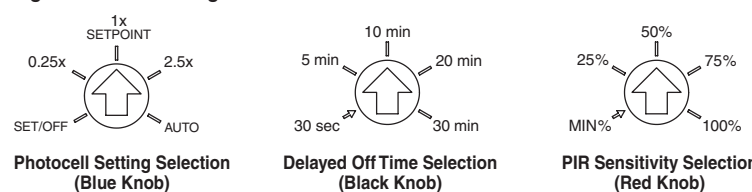
- RED** - Blinks upon PIR detection. Can be disabled by moving B4 to ON (See Table 2). Solid for 3 minutes then blinks for 3 minutes during photocell manual calibration. Solid when device malfunctions.
- GREEN** - Solid for 24 hours during photocell auto calibration.
- YELLOW** - Blinks in test mode. Solid with emergency interface/BMS input on.
- BLUE** - Blinks when the knob setting has changed.

**SETTINGS**

**Default Settings:**

Adjust knob settings as per "recommended manual settings," (refer to Figure 5 and Table 1). All switches in the OFF position, except A3, A4, C1, C2, C3 are set to ON (refer to Table 2).

Figure 5 - Knob Settings



Knob Color	Symbol	Function	Knob Setting	Factory Default Setting
Red		Sets the infrared range	Range Setting Full CCW = min. Full CW = max.	75 %
Black		Delayed - Off Time	Full CCW = min. (30 sec) Full CW = max. (30 min.)	50 % (10 min)
Blue		Ambient Light Override (Photocell)	Full CCW - SET/OFF (NO ambient light override) Full CW - Auto Calibration Range - 3-16000 LUX	0 %

SWITCH	SWITCH FUNCTIONS			SWITCH SETTINGS	
	Bank A	Bank B	Bank C	OFF	ON
A3	Manual Mode			Auto Adapting Enabled	Auto Adapting Disabled
A4	Walk-Through			Walk-Through Enabled	Walk-Through Disabled
				OFF	ON
B1	Forced Mode			Normal	Override Enabled (B2)
B2	Forced State			Override OFF	Override ON
B3	Test Mode			Disabled	Enabled. OFF → ON
B4	LEDs State			LEDs Enabled	LEDs Disabled
B5	Reset Device State			OFF → ON → OFF	

	Bank C	C1	C2	C3	Load
Mode 1	OFF	OFF	OFF	OFF	Manual ON *
Mode 2	ON	ON	ON	ON	Auto ON *
C4	Daylight Harvesting - OFF Closed Loop / ON Open Loop				

\* All modes are Auto OFF.

Figure 6 - (Cat. No. ODC04) Field-of-View Ranges  
High density lens (blue frame), mounting height (8-12 ft)

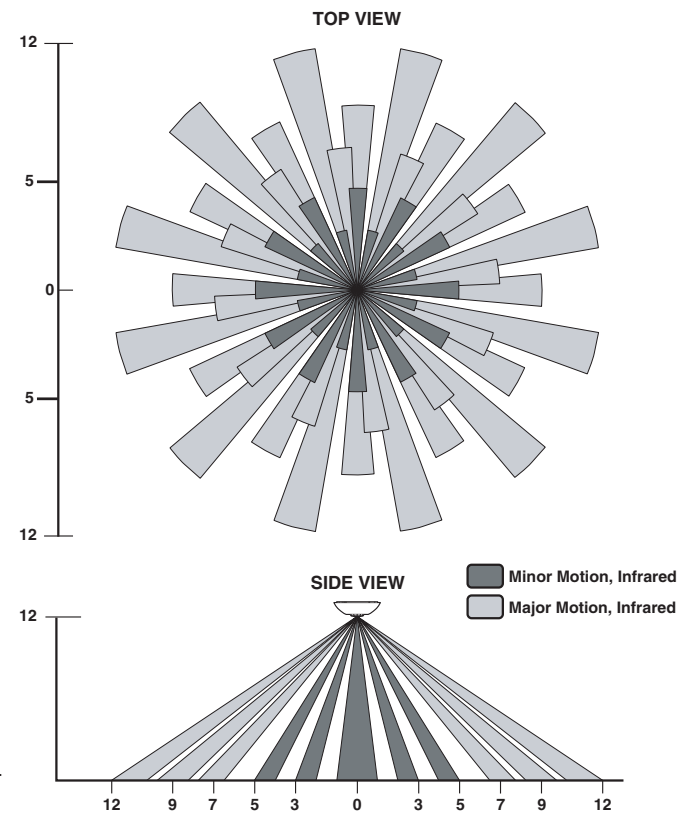


Figure 8 - (Mid-Range Lens) Field-of-View Ranges  
Mid range lens (red frame), mounting height (13-20 ft)  
Note: This lens is included with all PIR models

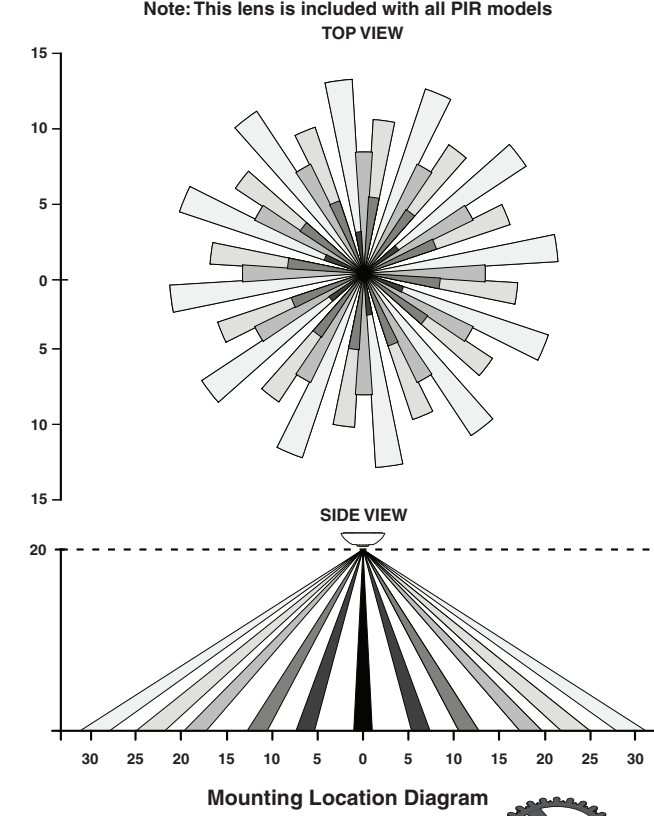
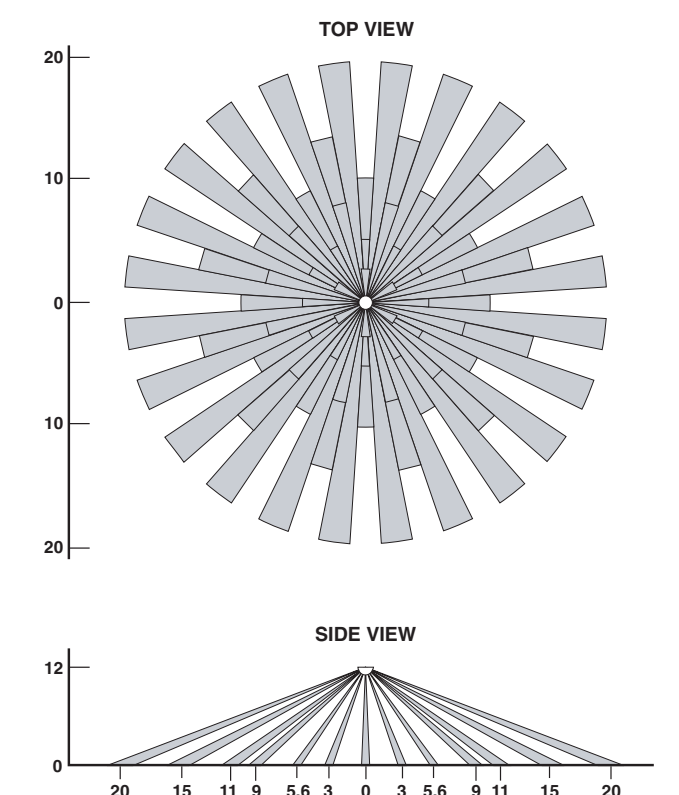


Figure 7 - (Cat. No. ODC15) Field-of-View Ranges  
Extended range lens (black frame), mounting height (8-12 ft)



**TROUBLESHOOTING**

- **Lights do not turn ON**
  - Circuit breaker or fuse has tripped.
- **Lights stay ON**
  - Constant motion. **To Test:** Reduce RED knob by 25%; remove motion source. If unsatisfactory, move sensor.
  - Infrared sensor can "see" into hallway. **To Test:** Put sensor in Timer Test mode and walk hallway. If lights continue to come ON, move sensor.
- **Light turns ON too long**
  - Timer setting too high. **To Test:** Check switch settings. Typical setting is 10 minutes.
  - LED illuminates solid RED for longer than 5 minutes, device malfunction, contact technical assistance.

**PRODUCT INFORMATION**

- For technical assistance, contact us at 1-800-824-3005
- Visit our website at [www.leviton.com](http://www.leviton.com)

**FCC COMPLIANCE STATEMENT**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by Leviton could void the user's authority to operate this equipment.

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**LIMITED 5 YEAR WARRANTY AND EXCLUSIONS**

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such five year period the product is returned prepaid, with proof of purchase date, and a description of the problem to Leviton Manufacturing Co., Inc., Att: Quality Assurance Department, 201 North Service Road, Melville, New York 11747. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.