

INSTALLATION MANUAL FOR SENPIR-HLB-D SENSOR

SAVE THESE INSTRUCTIONS - READ ALL INSTRUCTIONS CAREFULLY



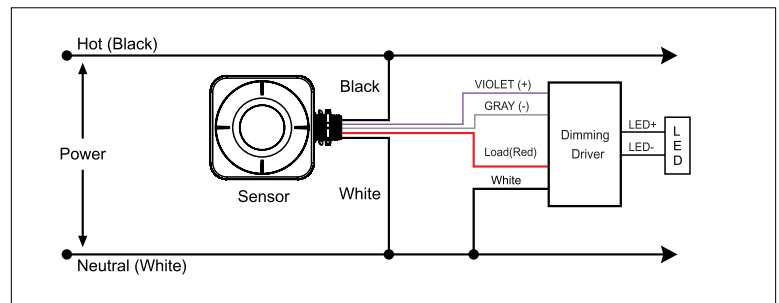
The Etlin-Daniels wet location rated SENPIR-HLB-D infrared Low / High Bay Sensor mounts to an indoor or outdoor lighting fixture and provides multi-level control based on motion and lux levels. It controls both 0-10 VDC LED Drivers and dimming ballasts. When motion is detected within the sensor's coverage area, the relay in the sensor closes, and preset lighting loads are automatically turned on.

WARNING

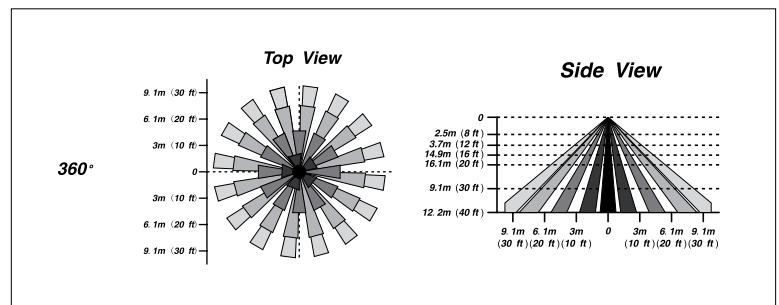
NOTE: Warm up time is 40 seconds. After the sensor connects input power for the first time, the fixture will stay on for 40 seconds, and then go to dimming to work normally.
NOTE: Factory Default Settings: 100% sensitivity / Hold On Time - 10 seconds / Daylight Sensor is 30 lux / Dimming Level - 30% / Dimming Time - 60 minutes.
NOTE: Any settings changed by either using DIP switches or Remote Control - the fixture will turn on / off to confirm.

POWER SUPPLY	120 - 347 VAC 50 / 60 Hz
	SENPIR-HLB-D
Maximum Load	Resistive / Halogen - 800W @ 120V / 1200W @ 277V / 1500W @ 347V Fluorescent Ballast - 660VA @ 120V / 1200VA @ 277V / 1500VA @ 347V Electronic Ballast (LED / CFL) - 5A @ 120V / 5A @ 277V / 5A @ 347V
Dim Control Output	0 - 10V, max. 25mA sinking current
PIR Lens	Coverage 8 ft - 40 ft height / 360°
Hold Time Setting	10 sec. - 15 min. (adjustable) dip switches
Light-Control	10 - 50 Lux (adjustable) dip switches
Humidity	Max. 95% RH
Temperature	-40° F - +167° F (-40°C - +75° C)

WIRING DIAGRAM (DIMMING DRIVER)

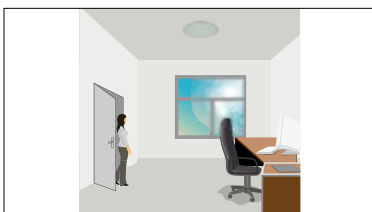


LOW / HIGH BAY LENS

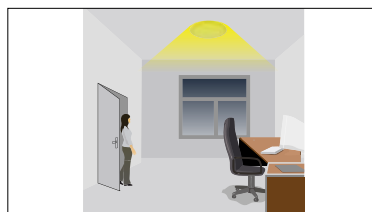


FUNCTION AND OPTIONS

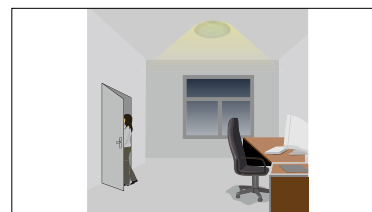
The sensor can achieve tri-level dimming control for areas that require lumen change notice before turning completely off. It offers 3 level of light control: 100% - dimming light (0, 10%, 30%, 50%) - off; and 2 periods of selectable waiting time: Motion hold time and stand-by time. Selectable daylight threshold and choice of detection area.



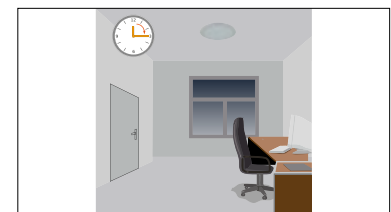
With sufficient natural light, the light does not switch on when presence detected



With insufficient natural light, the sensor switches on the light automatically when person enters room.



People left, light still dims to 0 / 10% / 30% / 50% (options) stand-by level after the hold time.



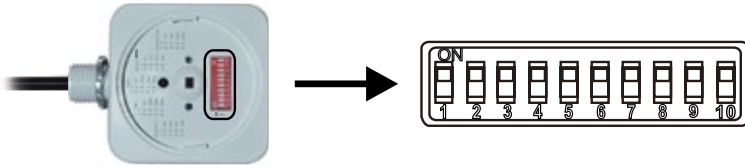
Light switches off automatically after stand-by time elapsed.

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PARAMETER SETTINGS BY DIP SWITCH



Use DIP SWITCHES 1,2 to set detection range of the connected fixture.
 Use DIP SWITCHES 3,4 to set hold time for the connected fixture.
 Use DIP SWITCHES 5,6 to set lux level control of the connected fixture.
 Use DIP SWITCHES 7,8 to set the stand-by light level.
 Use DIP SWITCHES 9,10 to set the stand-by time.

LUX CONTROL SETTING

The chosen lux response threshold can be set between 10 - 50 lux, or disabled. Pull switches to the corresponding ON / OFF positions as shown below for the 4 settings.

ON ↑

OFF ↓

LIGHT: 5, 6

LIGHT		
↓ ↓	5 6	(light sensor disable)
↓ ↑		10Lux
↑ ↓		30Lux
↑ ↑		50Lux

DETECTION RANGE SETTING (SENSITIVITY)

Detection range is the term used to describe the radius of the circular detection zone produced on the ground after the sensor is mounted at a height of 40ft. Pull switches to the corresponding ON / OFF position as shown below to adjust the 4 sensitivity settings.

ON ↑

OFF ↓

SENSITIVITY: 1, 2

SENSITIVITY		
↓ ↓	1 2	20%
↓ ↑		50%
↑ ↓		75%
↑ ↑		100%

STAND-BY LIGHT LEVEL SETTING

Pull switches to the corresponding ON / OFF positions for the 4 available settings.

ON ↑

OFF ↓

STAND-BY LEVEL: 7, 8

STAND-BY LEVEL		
↓ ↓	7 8	0%
↓ ↑		10%
↑ ↓		30%
↑ ↑		50%

HOLD TIME SETTING

The fixture can be set to remain on once occupancy is no longer detected for any period of time between 10 seconds and 15 minutes (using DIP SWITCHES). Each time the fixture detects movement before the hold time elapses, a new hold time count-down will begin. It is suggested to select the shortest hold time when adjusting the Detection Range, or for doing walk test. Pull switches to the corresponding ON / OFF positions as shown below to adjust for the 4 available settings.

ON ↑

OFF ↓

TIME: 3, 4

TIME		
↓ ↓	3 4	10S
↓ ↑		1Min
↑ ↓		5Min
↑ ↑		15Min

STAND-BY TIME SETTING

Pull switches ON / OFF positions for the 4 available settings.

ON ↑

OFF ↓

STAND-BY TIME: 9, 10

STAND-BY TIME		
↓ ↓	9 10	+∞
↓ ↑		1Min
↑ ↓		30Min
↑ ↑		60Min



RC-100 - SENSOR REMOTE PROGRAMMER OPERATION INSTRUCTIONS

WARNING: Remove batteries from remote control if the remote will not be used for 30 days.

SPECIFICATION

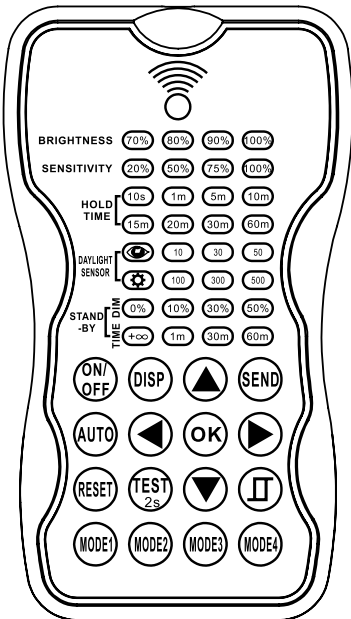
POWER SUPPLY	2 x AAA 1.5V BATTERY, ALKALINE PREFERRED
CARRYING CASE	RC-100 IN CARRYING CASE
UPLOAD RANGE	UP TO 15 m (50 FT.)
OPERATING TEMPERATURE	0°C - 50°C (32°F - 122 °F)
DIMENSIONS	123 x 70 x 20.3 mm (4.84" x 2.76" x 0.8")

OVERVIEW

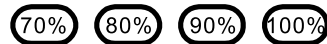
The RC-SENPIR-HLB is a handheld tool for remote configuration of the IR-enabled fixture integrated sensors. The remote enables modifying sensors parameters without the need of ladders or lifters, and can store up to 4 program modes to speed up configuration of multiple fixtures / sensors.

The remote can transmit sensor settings at mounting heights up to 50 feet. The device can display previously set sensor parameters, copy parameters and send new parameters or store parameters profiles. For projects where identical settings may be desired over a large number of areas and spaces, this capability provides a streamlined method of configuration. Setting can be copied throughout a site, or to a different site.

REMOTE INDICATORS AND FUNCTIONS



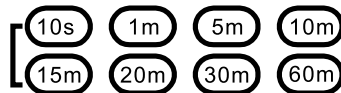
BRIGHTNESS



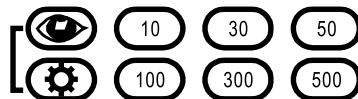
SENSITIVITY



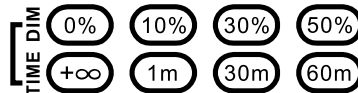
HOLD TIME



DAYLIGHT SENSOR



STAND-BY



LED INDICATORS

LED	DESCRIPTION	LED	DESCRIPTION
BRIGHTNESS	High end trim turning function (to set the output level of connected lighting during occupancy)		To select the current surrounding lux value as the daylight threshold. This feature enables the fixture to function well any real application circumstances
SENSITIVITY	To set the occupancy sensing sensitivity of the sensor		The daylight sensor stops working, and all motion detected could turn on the lighting fixture, no matter how bright the natural light is.
HOLD TIME	The time that the sensor will turn off (if you choose stand-by level is 0) or dim the light to a low level after the area is vacated	STANDBY DIM	To set the output level of connected lighting during vacancy. The sensor will regulate the lighting output at the set level. Setting the STANDBY DIM level at 0 means light are in full OFF during vacancy.
DAYLIGHT SENSOR	To represents various thresholds of natural light level for the Sensor.	STANDBY TIME	To represents the time that the sensor will keep the light at low dim level after HOLD TIME elapsed

BRIGHTNESS

Adjust the fixture light level from 100% down to 70%.

SENSITIVITY (DETECTION RANGE)

100% down to 20% sensitivity. Actual detection distance differs by mounting height. Please refer to sensor coverage field diagram on page. 1

HOLD TIME

After no more detection, the amount of time the fixture holds light at selected brightness. 10 to 60 mins.

DAYLIGHT SENSOR

Set the ambient lux level - fixture will turn on when below this level. And off above this level. 10 lux to 50 lux.

EYEBALL image - can select ambient level up to 500 lux. When the EYEBALL image is lit, the fixture will turn off at the current ambient lux level.

SUN image - disables photocell / daylight sensor function. When SUN is lit, the fixture will turn off regardless of lux levels.

STAND-BY DIMMING LEVEL

No motion dimming level from 0% to 50%. If no motions is detected for the selected hold time, the light will dim down to between 0% - 50%. The fixture will remain off or dimmed for the selected stand-by period. Once motion is detected, the fixture return to set brightness level.

STAND-BY PERIOD

When no motion is detected, fixture dimming stand-by time in minutes. 1 minute to infinity. Fixture will remained dimmed until motion is detected again.



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DEFAULT MODES

Please refer to DEFAULT MODE settings table (below). These settings are also on the back of the Remote. You can modify a default mode setting by selecting it and using arrows to edit initial settings. Press OK to confirm and save new settings to the new desired default mode. Please note that, removing batteries will reset all default mode settings to initial mode settings.

PHOTOCELL RANGE

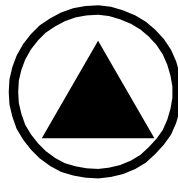
Enables the selection of both lower and upper ambient lux levels. Only lower lux levels remain once deselected. The lower ambient lux level can be set to 10 / 30 / 50 lux. Fixture will turn on once below selected level. The upper ambient lux level can be set to 100 / 300 / 500 lux. Fixture will turn off once above selected level. Stand-by period is set to infinity.



ON / OFF Mode
sensor is disabled



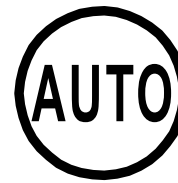
Displays previous
saved settings



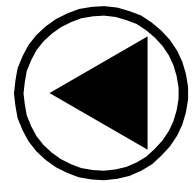
Move cursor up



Transmit saved
settings to sensor



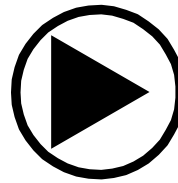
EXIT On / Off mode. Sensor
is enabled to previously
saved settings.



Move cursor left



Saves all selected set-
tings. Depress before
sending send.



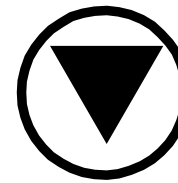
Move cursor right



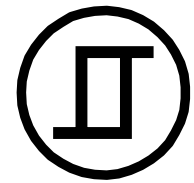
Revert to previously
set DIP SWITCH
settings. Does not
affect Default Modes



Test Mode - H
old time is 2s



Move cursor down



Select and deselects
photocell range
functions

DEFAULT MODE SETTINGS

APPLICATION	SCENE OPTIONS	BRIGHTNESS	DETECTION AREA	HOLD TIME	STANDBY TIME	STANDBY DIM LEVEL	DAYLIGHT SENSOR
INDOOR	MODE 1	100%	75%	5 min	30 min	30%	
INDOOR	MODE 2	100%	75%	1 min	1 min	30%	
INDOOR	MODE 3	100%	75%	5 min	30 min	30%	30 LUX
OUTDOOR	MODE 4	100%	75%	1 min	1 min	30%	(30 LUX / 300 LUX)

Setting your desired parameters with the Remote Control

ON / OFF Only use this button when you want the fixture to stay on or off at all times. If you are programming settings, DO NOT TOUCH THIS BUTTON.

Press **AUTO** to enter programming mode. Press **DISP** to see previous settings. Use the 4 arrow buttons to change settings. Once your settings are complete, press **OK**. To transmit these settings to the fixture, press **SEND**.

To save current settings and apply them to other fixtures, start by pressing **AUTO**. Either press **DISP** to see current program or depress one of the 4 **MODE** buttons at the bottom of the remote. Override any existing **MODE** settings by using the 4 arrow buttons to achieve desired settings and press **OK**. If you modified one of the 4 **MODE** selections (having started by pressing a **MODE** button), pressing **OK** will save the new settings to this **MODE** button. Press **SEND** to transmit these settings to the fixture.

Go to next fixture. Aim the remote to the sensor on the fixture. Press **AUTO**. Then select the **MODE** parameter you wish to send and press **SEND**. The same settings, saved to this **MODE** will be transmitted to the other fixtures.