

LCHB-SENSOR-T low-voltage microwave motion sensor (12 V DC, 3.5 mm jack) and **LCHB-REMOTE-T** infrared remote for the 200-270 W and 320-400 W linear high bays: 5 modes, 0-10 V bi-level dimming, hold time, stand-by and daylight harvesting.

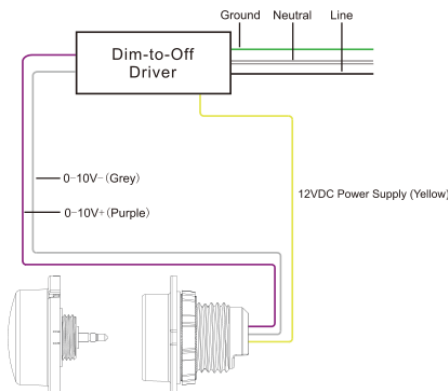
SENSOR FEATURES

- **0-10 V** bi-level dimming control.
- **3.5 mm audio jack**: lowest installation cost.
- Operates on **12 V DC**, easily fed from an LED driver.
- Fits UFO high bays, area lights and wall packs that cannot take an external sensor.
- 5 modes, 10% to 100% dimming level, 30 s to 30 min delay time, selectable to customize your setting.
- IP65 rated for outdoor fixtures.
- Programmed with a remote control (LCHB-REMOTE-T).

SENSOR SPECIFICATIONS

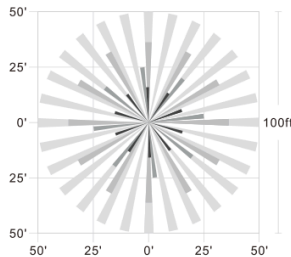
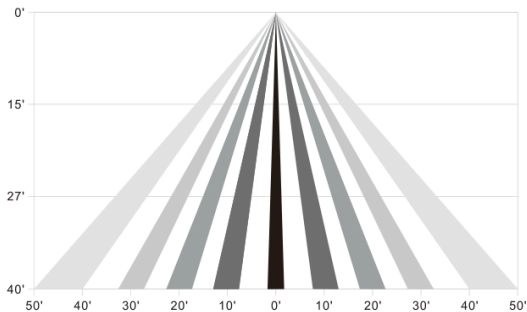
Input voltage	12 V DC
Power consumption	0.1 W
Dimming	0-10 V
Mounting height	40 ft max.
Detection range	100 ft max.
Operating temperature	-30 °C to 55 °C (-22 °F to 131 °F)
IP rating	IP65
Modes	A, B, C, D, E
Dimming levels	10, 20, 30, 50, 60, 70, 80, 100%
Delay time	30 s to 30 min (remote: 30 s, 5 min, 15 min or 30 min)
Certification	UL

WIRING



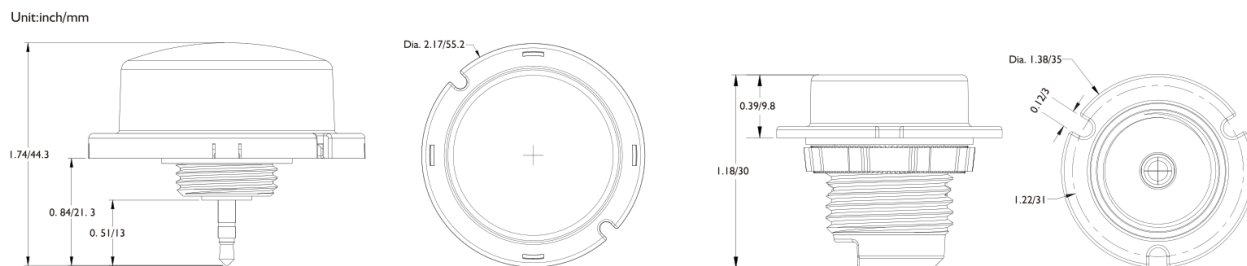
Ground / Neutral / Line · Dim-to-Off Driver · 0-10V- (Grey) · 0-10V+ (Purple) · 12VDC Power Supply (Yellow).

COVERAGE



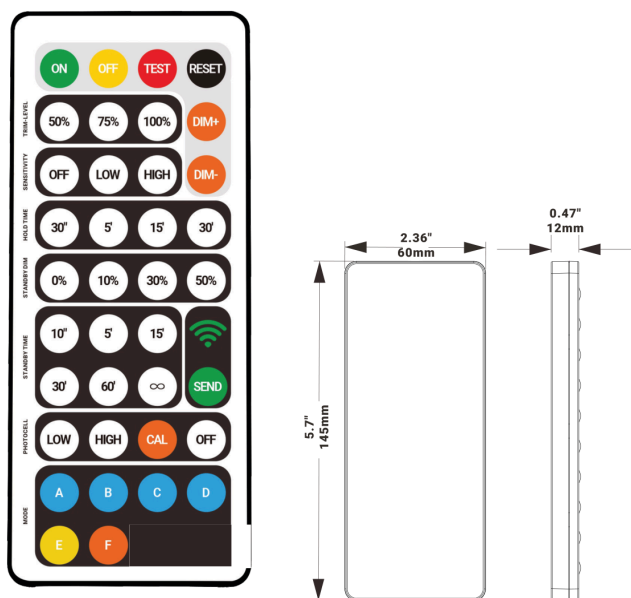
Left: side view (mounting height 0 to 40 ft, width ±50 ft) · right: top view (100 ft).

SENSOR LINE DRAWINGS



Unit: in / mm (Dia. = diameter).

LCHB-REMOTE-T REMOTE CONTROL



Dimensions: 2.36 in (60 mm) × 5.7 in (145 mm) × 0.47 in (12 mm).

REMOTE CONTROL SPECIFICATIONS

Communication	Infrared
Supply voltage	3 V (CR2032 battery, "1/2 pcs" per the source)
Flame rating	HB
Working humidity	≤ 90% RH
Working temperature	0 to 45 °C
Low power consumption	Yes
Memories	A, B, C, D, F

REMOTE CONTROL BUTTONS

Button	Function
ON	Turns the luminaires on.
OFF	Turns the luminaires off.
TEST	Test mode lasts 5 min, then returns to the previous setting. Test mode: hold time 2 seconds, stand-by dim level (SDL) 50% and stand-by time 2 seconds.
RESET	Trim-High = 100%, sensitivity = High, T1 = 5 min, Standby Dim = 30%, T2 = 60 min, Photocell = OFF.
DIM+/-	The remote manually dims the luminaire up or down in 0.5 volt increments. Smooth dimming when the dimming button is held.
TRIM-LEVEL	Sets the maximum threshold value: 50 / 75 / 100%.
SENSITIVITY	OFF (PIR off, PC ON/OFF function) / LOW (50%) / HIGH (100%).
HOLD TIME	Time of no occupancy after which the fixture goes to stand-by: 30 s / 5 min / 15 min / 30 min.
F MODE DAYLIGHT HARVESTING	(Enable/disable) Measure and set feature allowing the fixture to maintain a light level, if turned on.
STANDBY DIM	Select the stand-by dim level: 0 / 10 / 30 / 50%.
STANDBY TIME	Stand-by time: 10 s / 5 min / 15 min / 30 min / 1 h / ∞. "∞" means the stand-by time is infinite and the fixture is effectively controlled by the daylight sensor.

REMOTE CONTROL BUTTONS (CONTINUED)

Button	Function
PHOTOCELL	LOW (1 fc) / HIGH (50 fc) / CAL (collects the current lux level) / OFF.
MODE	Saves the settings to a program profile, A to F.
SEND	Sends the settings to the sensor.

DEFAULT MODES

Mode	Settings
A	Trim-High = 100%, sensitivity = low, T1 = 30 min, Standby Dim = 50%, T2 = ∞, Photocell = CAL
B	Trim-High = 100%, sensitivity = low, T1 = 30 min, Standby Dim = 50%, T2 = 15 min, Photocell = CAL
C	Trim-High = 100%, sensitivity = low, T1 = 30 min, Standby Dim = 50%, T2 = 15 min, Photocell = OFF
D	Trim-Low = 50%, sensitivity = low, T1 = 30 s, Standby Dim = 50%, T2 = 30 min, Photocell = CAL
E	Manual mode, Trim-High = 100%
F	Daylight harvesting, Trim-Low = 50%, sensitivity = low, T1 = 15 min

T1 = hold time · T2 = stand-by time.

MEMORY MODE (COMMISSIONING)

- 1 Select **A, B, C or D**.
- 2 The indicator lights on the remote flash to show the current saved settings.
- 3 Configure the settings with the buttons in the grey area of the remote (TRIM-LEVEL, SENSITIVITY, HOLD TIME, STANDBY DIM, STANDBY TIME and PHOTOCELL). Review the selected settings and change them as needed.
- 4 Point the IR remote at the luminaire to configure and press "**SEND**".
- 5 If configuration is successful, the luminaire flashes twice: the settings are saved. Any change to the saved settings A to F overrides the previous settings and is saved automatically in the remote. To configure several luminaires, select the configured memory mode (A to E) then repeat steps 4 and 5.

Mode E allows visual adjustment of the desired dimming level.

CONTINUOUS ADJUSTMENT MODE OR DAYLIGHT HARVESTING (F MODE)

- 1 This mode enables dimming in response to available daylight. Point the IR remote at the desired luminaire.
- 2 Press "ON", then press DIM+ or DIM- to adjust the dimming level.
- 3 Press "F": the indicator lights on the remote show the current saved settings. Note: only TRIM-LEVEL, SENSITIVITY and HOLD TIME can be selected for daylight harvesting.
- 4 Review the selected settings and change them as needed. Press "**SEND**".

CONTINUOUS ADJUSTMENT MODE OR DAYLIGHT HARVESTING (F MODE) (CONTINUED)

- 5** If configuration is successful, the luminaire flashes twice to confirm the setting is saved. To configure several luminaires, select the configured daylight harvesting settings then repeat steps 4 and 5.

RESET MODE

Default settings: motion → 100%; no motion for 5 min or more → dim to 30%; no motion for 60 min or more → off.

MICROWAVE SENSOR NOTES

- Microwaves can penetrate walls or glass thinner than 20 cm: movement in adjacent corridors may be detected.
- The detection area is affected by the speed of motion, mounting height and movement volume.
- Avoid mounting where the luminaire itself shakes, which causes false triggering (rooftop HVAC, upper floor vibration, etc.).
- Do not install next to large operating machines such as ventilators or ceiling fans: their vibration causes false triggering.
- Microwaves cannot penetrate metal: a large metal object near the sensor may create a "dead zone" behind it.
- Microwave sensors have an advantage over PIR devices in that they can operate in hot environments; however, they are sensitive and can be falsely triggered by everyday items like ceiling fans, moving branches or curtains, loose packaging, etc.
- Other options may be available: consult LEDCO. Specifications and data are subject to change without notice.
- **Test microwave sensors beforehand** if they are used close to airports, communication towers, etc.