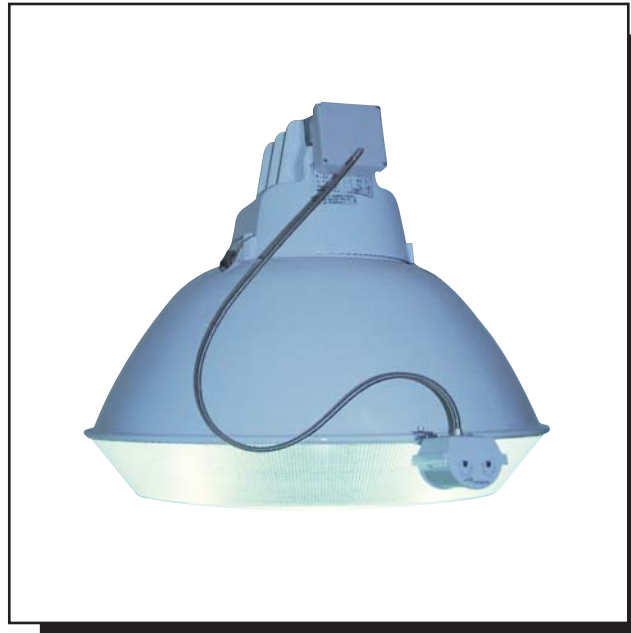


Type 1: INTEGRAL CONTROL HI/LO

The Integral Control HI/LO System from Day-Brite provides bi-level dimming to H.I.D. high bays and low bays. It installs to individual luminaires and senses motion within the area illuminated by each fixture. When motion is detected, the system individually switches the lamp to full light output instantly. After activity is no longer sensed, the lamp is switched to a “LO” or energy-saving mode.



APPLICATIONS:

- Warehouse/staging areas where no aisle architecture is pre-set (i.e. aisles can shift or move location as stock is moved or replenished). *Benefit:* Entire aisles do not switch to “HI” mode—it occurs only in those units where activity is sensed.
- Warehouse cross-aisles. *Benefit:* Entire aisle is not activated when fork lift or people are traveling at a 90° angle to aisle. Only the unit at the intersection goes to full brightness.
- Small areas utilizing only a few units. *Benefit:* It is not necessary to buy and install separate infrared transmitters so equipment cost is reduced.
- When aisle-length dictates the installation of a third sensor mid-way down. Use up to five HLIC-controlled luminaires in the mid-section of long aisles.
- As an addition or option to a full-blown HI/LO System, where periodic additions to the system are desired.
- When the absolute simplest HI/LO control is sought.
- Anywhere remote control of units is not required (now or in the future), **and** anywhere individual units can be allowed to dim or brighten independently.

Catalog Number: HLIC

Luminaire Applications:

- All H.I.D. lamp types - MH, PSMH, HPS - using “CWA” transformers.
- 150w through 1000w
- 120-480 volt.
- Luminaires: All Day-Brite High Bay Reflectors. All Day-Brite Low Bay Opticals except 12" low wattage refractors. Note: Luminaire must have factory-installed HI/LO option.
- UL/cUL Listed damp location, up to 65°C ambient.

Type 2: CONTROL WIRE HI/LO

The Control Wire HI/LO System from Day-Brite Lighting is the value approach to achieving energy savings through stepped dimming for H.I.D. industrial luminaires. A single high-voltage control wire is utilized from the control transmitter to the H.I.D. fixtures. This wire connects to individual luminaires to be dimmed. The system warms the lamps up to full brightness for 15 minutes, ensuring maximum lamp life and lamp warranty. The system then automatically switches to "LO" energy-saving mode. When motion is sensed at the transmitter, the luminaires immediately come up to full light output. When activity has ceased and after five minute delay, the lamps are switched back down to low mode.

The system consists of an infrared motion detector placed near the end(s) of aisles, and a switching module mounted to each luminaire via the wiring access plate. The switching modules can also be controlled via a General Purpose Transmitter/Manual Override device which is contained within a single-gang wall box. It can be used with any outside I/O (photocell, time clock, etc.) or any external manual switch. This system can be enhanced by using Day-Brite ELECTRO/CONNECT wiring system which can also carry the control wire.

Applications:

- Warehouses and staging areas.
- Small areas utilizing few units to be controlled.
- Gymnasiums
- Arenas

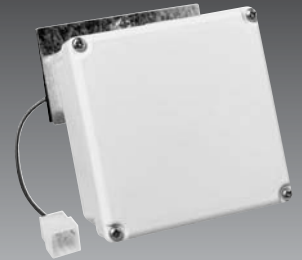
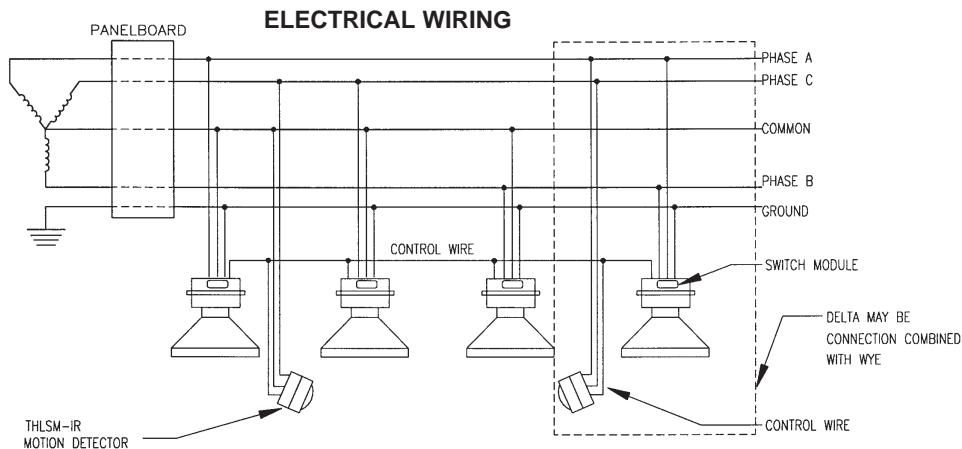
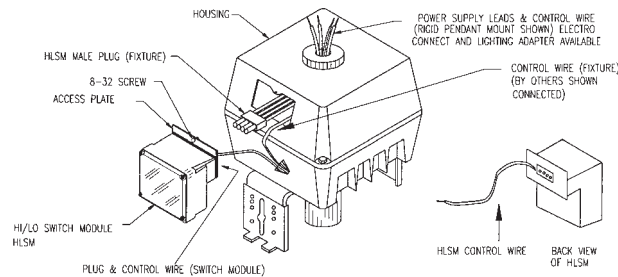
Catalog Numbers:

- HLSM** Receiver/Switching Module
THLSM-IR Transmitter/Infrared
THLSM-GP4 Transmitter/General Purpose

Luminaire Applications:

- All H.I.D. lamp types - MH, PSMH, HPS
- using "CWA" transformers.
- 150w through 1000w
- 120-480 volt
- Luminaires: All Day-Brite industrial lighting products. Maximum of 30 fixtures per THLSM-IR. Maximum of 120 fixtures per THLSM-GP4.
- UL/cUL listed wet location, up to 65° C ambient

Note: Luminaire must have HI/LO factory installed option.



HLSM



THLSM-IR



THLSM-GP4

For more information concerning the Control Wire HI/LO, consult specification sheet number HC-17020, in your Day-Brite H.I.D. Binder or go to www.daybritelighting.com.

Type 3: POWER LINE CARRIER

Day-Brite's Power Line Carrier is unique to the lighting industry for control of H.I.D. lighting. Luminaires, in groups or individual units, can be controlled in response to any "On-Off" signal. The signal can be triggered by a simple switch, time clock, photocell, or motion detector.

Power Line Carrier control uses existing wiring which is already in place, eliminating the need to pull new lighting circuits. When an event such as motion triggers the system from energy-saving "LO" setting, the signal moves along on the power wiring and immediately the luminaires come up to full lamp output or "HI" mode. This makes the

Power Line Carrier approach ideal for *luminaire retrofit* since no new control wires need to be installed. Each luminaire is separately addressable using any of 1,000 discrete codes. This allows retrofit into existing wiring systems which are not perfectly laid-out for new fixture and aisle configurations. It is also easy to achieve changes in aisle architecture by merely changing the address using a dedicated "lighting only" panel. The Power Line Carrier is fully supported with Applications Engineering assistance, as well as ancillary signal equipment needed for any new construction or luminaire retrofit project.



HLR



THL-IR



THL-GP



THL-MO



HL-PCSJ



THL-RP

Four main components make up the PLC System:

- 1. Luminaires with HI/LO receiver** Any Day-Brite industrial luminaire equipped with a system receiver and HI/LO ballast can be used.
- 2. Phase Coupler** Mounts on or near the lighting panel board. Bridges the lighting circuit to assure a clear PLC signal to all three phases; allows luminaires to receive distinct commands from occupancy sensors and other control devices.
- 3. Occupancy Detector/Transmitter** Includes passive infrared detectors with a transmitter. Used to detect the presence of personnel in the controlled areas. These devices communicate over the lighting circuits, signaling HI/LO luminaires to go to 100% light levels when motion is sensed.
- 4. Manual Overrides/General Purpose Transmitters** Convert an On-Off signal from a time clock, switch, photocontrol or integral keyswitch, to a HI/LO signal which is then sent to luminaires.

Catalog Numbers:

THL-IR*	Infrared Detector Transmitter (120-480v, UL Wet Location listed).	HL-PCSJ	Phase Coupler. Transmits signal to all phases of lighting circuit.
THL-GP*	General Purpose Transmitter. Use with time clock, photo cell, etc. Switch supplied by others.	THL-RP*	Repeater to receive weak signal and amplify it.
THL-MO*	Manual Override Transmitter with keyed selector switch.	HL-LF	Line filter used to filter distorting noise on power line.
HLR	HI/LO Receiver (UL Wet Location listed). One per fixture.		

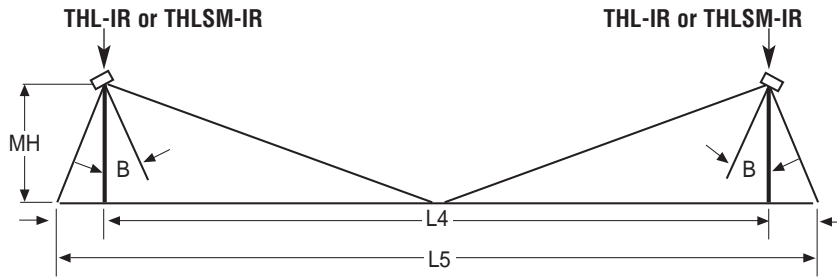
Note: Consult Day-Brite for assistance with Power Line Carrier Hi/Lo System.

*NOTE: Maximum three transmitters per zone of HI/LO control.

Luminaire Applications:

- All H.I.D. lamp types - MH, PSMH, HPS - using "CWA" transformers.
 - 150w through 1000w
 - 120-480 volt
 - Luminaires: All Day-Brite industrial lighting products.
- Note: Luminaire must have HI/LO factory installed option.
- UL/cUL listed wet location, up to 65° C ambient

HI/LO SENSOR SPACING



INFRARED OCCUPANCY SENSOR APPLICATION IN WAREHOUSE AISLE

MULTIPLE UNITS						
Mounting Height		Distance Between Two Sensors Aimed at Each Other L4		Total Length Covered		Tilt Angle B°
				L5		
ft.	m	ft.	m	ft.	m	
15	4.57	156	47.54	170	51.81	27
20	6.09	154	46.93	176	53.64	23
25	7.62	152	46.32	182	55.47	20
30	9.14	148	45.11	190	57.91	16
35	10.66	144	43.89	202	61.56	16
40	12.19	138	42.06	214	65.22	8
45	13.71	132	40.23	232	70.71	4
50	15.24	128	39.01	256	78.02	0

HI/LO Advantages

Wattage	Lamp Type	INPUT WATTS		WATTS SAVED
		HI (100%)	LO	
1000w	METAL HALIDE	1080	562	518
400w		458	251	207
250w		285	157	128
175w		210	116	94
1000w	HIGH PRESSURE SODIUM	1100	574	526
400w		465	252	213
250w		300	169	131
150w		188	115	73
1000w	PULSE START METAL HALIDE	1080	616	464
875w		940	489	451
750w		818	442	376
450w		503	266	237
400w		453	240	213
350w		400	188	213
320w		368	173	197
250w		288	155	133
200w		232	120	112
175w		208	119	89



DESCRIPTION:

HL-TT HI/LO TRAFFIC TESTER - UNIT TO BE INSTALLED IN TRAFFIC AREA TO DETERMINE AMOUNT OF OCCUPIED TIME VS. TOTAL ELAPSED TIME. 120V POWER SUPPLY REQUIRED.

ASK A DAY-BRITE SALES REPRESENTATIVE FOR DETAILS.