

CONTROL MODE

The LRD-309S sensor can be programmed to control the lighting in one of the following modes via a SRP-280 remote programmer. For more details of specific control mode, please visit www.irtec.com or contact an IR-TEC team member directly.

ON/OFF : ON-OFF Switching

OSO : Occupancy Sensing Only

OSLA : Occupancy Sensing at Low Ambient

OSLATO : Occupancy Sensing at Low Ambient with Time-Off

OFF : Light OFF all the time

Mode	Control
ON/OFF	<ol style="list-style-type: none"> While ambient lux is higher than the level set, light stays OFF. While ambient lux is lower than the level set, and occupancy detected, switch the light to HIGH DIM. Turn OFF the light after occupant leave and delay time elapses.
OSO	<ol style="list-style-type: none"> Ambient light sensor disabled. Dim the light to LOW DIM at all time under vacancy. Switch the light to HIGH DIM under occupancy. Dim the light to LOW DIM after occupant leave and delay time elapses.
OSLA	<ol style="list-style-type: none"> While ambient lux is higher than the level set, light stays OFF. While ambient lux is lower than the level set, dim the light to LOW DIM under vacancy. While ambient lux is lower than the level set, and occupancy detected, switch the light to HIGH DIM Dim the light to LOW DIM after occupant leave and delay time elapses.
OSLATO	<ol style="list-style-type: none"> While ambient lux is higher than the level set, light stays OFF. While ambient lux is lower than the level set, and occupancy detected, switch the light to HIGH DIM. Dim the light to LOW DIM after occupant leave and delay time elapses. Turn OFF the lights when TIME OFF delay elapses. When occupancy detected during TIME OFF, switch the light to HIGH DIM.
OFF	<ol style="list-style-type: none"> All lighting controlled by the sensor will remain OFF until another mode is selected.

SENSOR ACKNOWLEDGMENT

Acknowledgement	Sensor LED	Beep	Lighting
Full sensor setting upload completed	-	Long x 1 Short x 2	Flash x 2
Sensor resume to factory default	-	-	Flash x 2
SmartDIM level set completed	-	Short x 2	Flash x 2
Single setting ok	-	Short x 2	-
Occupancy detected	Flash x 1	-	-

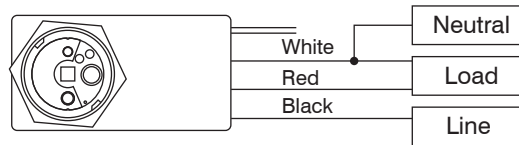
SENSOR SETTINGS

The followings are settings and options available with LRD-309S that can be configured via SRP-280 remote programmer. For more details of remote operation, please refer to the operation instruction of SRP-280.

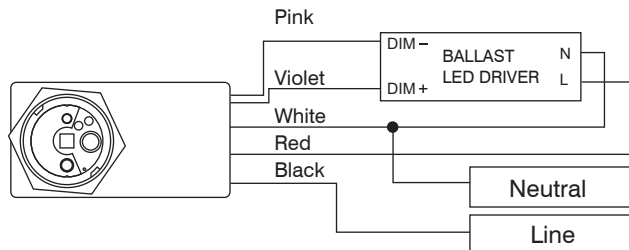
Settings	Description	Options	Default
CONTROL	The mode that the sensor will control.	ON/OFF, OSO, OSLA, OSLATO, OFF	OSLATO
AMBIENT LUX	The ambient light level that sensor will perform the control.	10/20/40/60/100/200/400 LUX/DISABLED	DISABLED
DELAY	The delay time that sensor is set to turn off or dim the light.	30 sec./1/3/5/10/15/20/30/60 min.	10 min.
TIME OFF	The delay time that sensor will keep the light at low dim level after the OFF delay time elapsed. Only available if OSLATO is selected.	10/30 sec./3/5/10/15/20/30/45/60 min.	10 min.
HIGH DIM	The output level set to control the light during occupancy.	50/55/60/65/70/80/90/100%/SmartDIM	100%
LOW DIM/SmartDIM	The output level set to dim the light when space is vacant for bi-level control. Low dim setting will become SmartDIM bar if SmartDIM control is selected.	0/5/10/15/20/25/30/40%	30%
RAMP UP	The speed of increasing the lighting output to HIGH DIM level.	INSTANT/SOFT/SLOW	INSTANT
FADE DOWN	The speed of decreasing the lighting output to LOW DIM level or off.	INSTANT/SOFT/SLOW	SOFT
LED INDICATOR	Enable/disable the LED indicator of sensor.	ENABLED/DISABLED	ENABLED
SENSITIVITY	The sensitivity of occupancy sensor.	HIGH/NORMAL/LOW	HIGH
MIN. DIM	The lowest dim level applicable on the sensor.	12%/15%/DISABLED	DISABLED
DAY O'RIDE	Enable/disable daylight override control. Sensor will shut off the light when ambient lux exceeds the override level set below. Only available if AMBIENT LUX is enabled.	ENABLED/DISABLED	DISABLED
O'RIDE LEVEL	The ambient lux level to enable daylight override. Only available if DAY O'RIDE is enabled.	HIGH/NORMAL/LOW	NORMAL

WIRING DIAGRAM

Non-dimmable Lighting (ON-OFF Switching only)



0-10V Dimmable Lighting



NOTE:

- The driver/ballast MUST be 0-10V dimmable to achieve dimming control.
- Ensure connection of LINE and NEUTRAL are not reversed to avoid damaging the sensor.
- Ensure TOTAL isolation between DIM+/DIM- and GROUND to avoid damaging the sensor.
- Conduct test with GROUND connected.

SPECIFICATIONS

Power supply	100/120/277VAC, 50/60 Hz	
Maximum load	100-120VAC	277VAC
	-Incandescent/Halogen	800/*500W(VA) 1200/*750W(VA)
	-Fluorescent Ballast/CFL	800/*500W(VA) 1200/*750W(VA)
-Ballast Electronic (LED)	540/*500VA	1200/*750VA
Infrared sensor	Digital pyroelectric sensor	
Photo sensor	Digital ambient light sensor	
HIC protection	Max. 80A for 16.7msec.	
Dim control output	0-10V, ±5%, isolated, max. 25mA	
Detectable speed	0.3 ~ 3 m/sec. (1~10 ft./sec.)	
Mounting height	Subject to the lens type applied	
Detection range	Subject to the lens type and mounting height	
Remote range	10 m (33 ft.) indoor, no backlight	
Op. humidity	Max. 95% RH	
Op. temperature	-40°C~70°C (-40°F~158°F)	
Dimensions	80x42x37mm (3.15"x1.65"x1.46")	
*Max load for operating temperature at 55°C~70°C (131°F~158°F)		