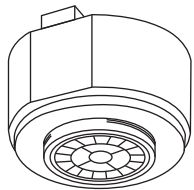


TRANS

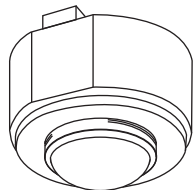
MRA-124S/MRA-124W

DALI-2 Occupancy & Light Sensor

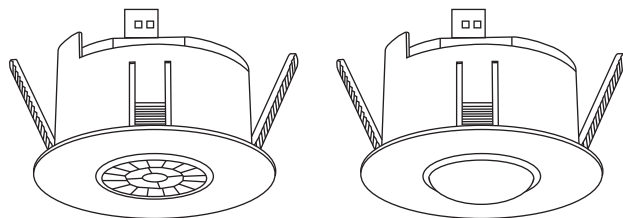
INSTALLATION INSTRUCTIONS



MRA-124S



MRA-124W



w/recess mount



WARNING & CAUTION

- Wire range: 24-20AWG / Strip length: 8mm

INTRODUCTION

The MRA-124S/MRA-124W is a miniature bus powered DALI-2 Occupancy and Light sensor designed for Digital Addressable Lighting Interface (DALI) control.

The MRA-124S comes with flat lens for general application and the MRA-124W comes with dome lens featuring wide angle coverage.

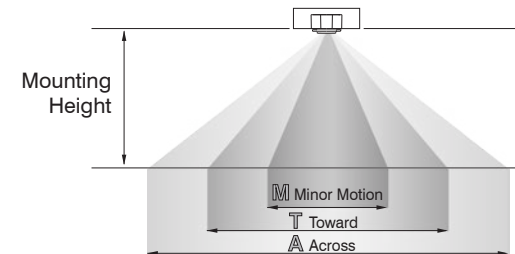
This multi-sensor employs a digital Passive Infrared (PIR) Sensor and a digital Ambient Light Sensor (ALS) to dynamically report local movement status and illuminance level for DALI Application Controller to execute smart lighting control.

The MRA-124S/MRA-124W can be recess mounted on the ceiling via an exclusive mounting bracket or directly integrated into an OEM luminaire. This DALI Input Device not only conform all electrical safety, EMC emission and immunity requirements, but also fully complies with IEC 62386 Parts 101, 103, 303, and 304 DALI standards.

SPECIFICATIONS

Device Type	DALI-2 Input Device w/o application controller
GTIN	MRA-124S: 4711498310057 MRA-124W: 4711498310064
Power supply	DALI bus power
Power consumption	10 mA max
Control output	Addressable/slave DALI
Movement sensor	Digital passive infrared (PIR)
Luminance sensor	Digital ALS
Light level range	2-1000 lux @ mounting position
Detectable speed	0.15~3 m/sec. (0.5~10 ft/sec.)
Mounting height	MRA-124S: 2.4~6 m (8~20 ft) MRA-124W: 2.4~3.6 m (8~12 ft)
DALI standards	IEC 62386 Parts 101, 103, 303, 304
Op. humidity	Max. 95% RH
Op. temperature	-20°C~50°C (-4°F~122°F)
Dimensions	Ø40 x H24mm (Ø1.57" x H0.94") (w/o bracket)

DETECTION COVERAGE

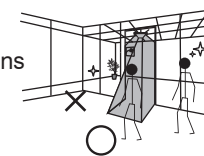
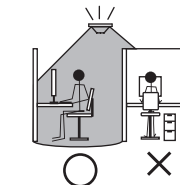
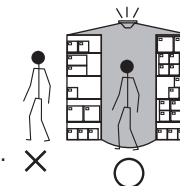


		Mounting Height	2.4 m (8 ft)	3.0 m (10 ft)	3.6 m (12 ft)	6.0 m (20 ft)
Coverage (diameter)	MRA-124S	M	1.0 m (3 ft)	2.0 m (7 ft)	3.0 m (10 ft)	--
		T	3.0 m (10 ft)	4.0 m (13 ft)	5.0 m (16 ft)	6.0 m (20 ft)
		A	5.0 m (16 ft)	6.0 m (20 ft)	7.0 m (23 ft)	9.0 m (30 ft)
	MRA-124W	T	4.0 m (13 ft)	3.0 m (10 ft)	2.0 m (7 ft)	--
		A	12.0 m (39 ft)	14.0 m (46 ft)	16.0 m (52 ft)	--

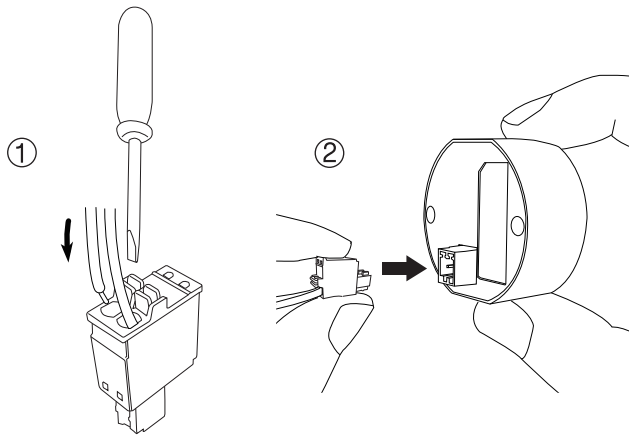
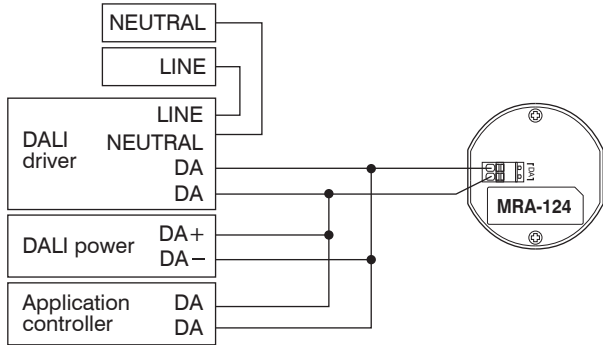
NOTE: High ambient temperature (above 28°C/82°F) could reduce the coverage of PIR sensor. If ambient temperature at the covered area are expected to be high sometimes, consider adding more sensors or reduce the mounting height, if possible.

INSTALLATION NOTES

1. PIR sensor is more sensitive to the movements "crossing" the detection zones than "toward" or "away" the sensor unit. To obtain better sensitivity, avoid placing the sensor in line with occupant path, if possible.
2. The closer the movement is to the sensor, the more sensitive the sensor is. The higher the sensor is installed, the larger movement is required for detection. High room temperature (>30°C) will reduce detection sensitivity.
3. Ensure to place the sensor at least at 1.5m (5 ft.) away from air supply ducts as rapid air flow may cause false detections.
4. Avoid placing the sensor where obstructions may block the sensor's line of sight. PIR sensor cannot detect movements through glass.

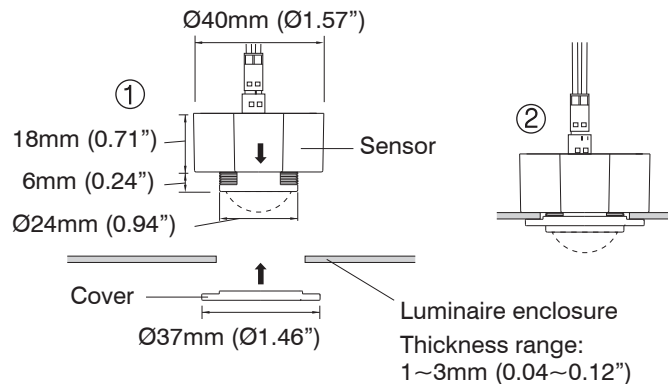


WIRING DIAGRAM



MOUNTING

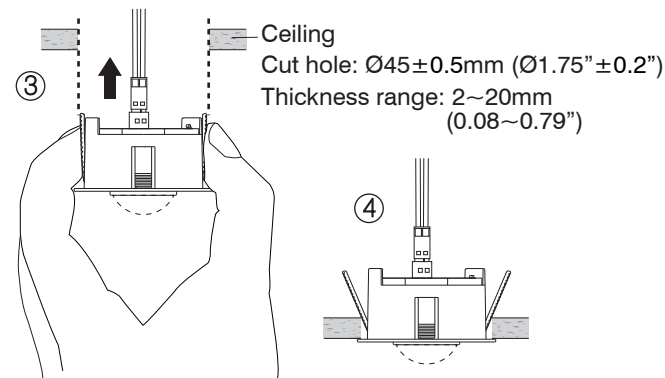
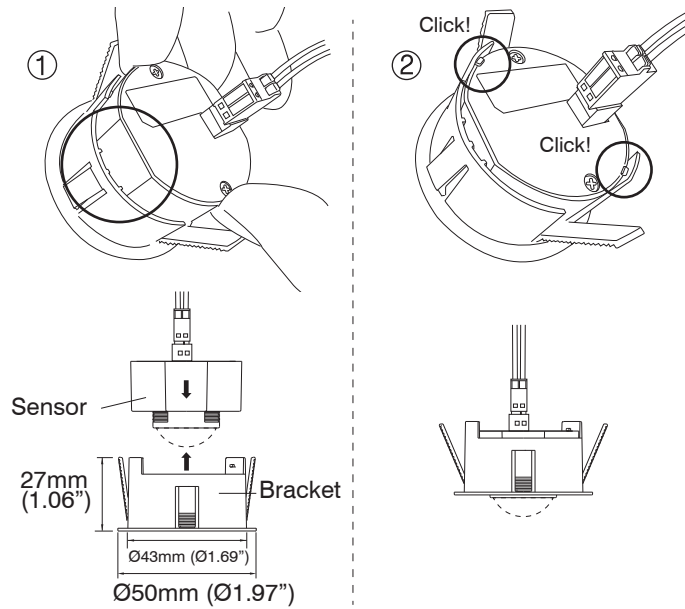
Luminaire Assembly (Inside-out)



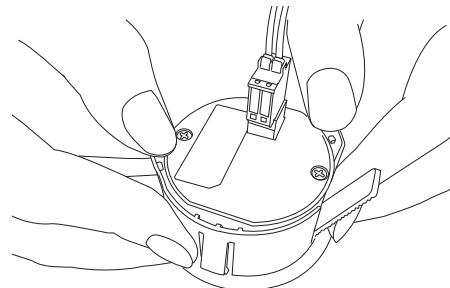
Assembly hole w/o cover: $\text{Ø}25.4 \pm 0.5\text{mm}$ ($1'' \pm 0.2''$)

Assembly hole with cover: $\text{Ø}27 \pm 0.3\text{mm}$ (1.06")

Ceiling Recess Mount (Outside-in)



To remove sensor from bracket



WARRANTY

IR-TEC International Ltd. warrants this product to be free of defects in materials or workmanship for a period of five years from date of shipment. There are no obligations or liabilities on the part of IR-TEC International Ltd. for consequential damages arising out or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation.