MRA-124
DALI Occupancy & Light Sensor

APPLICATION

☑ DALI Lighting Control

The MRA-124 series Occupancy and Light Sensor can be used to provide local occupancy status and ambient light level of private office, open office, work station, function room, washroom, private toilet/stall…etc.

DETECTION PATTERN

Mounting Height

M Minor Motion
T Toward
A Across
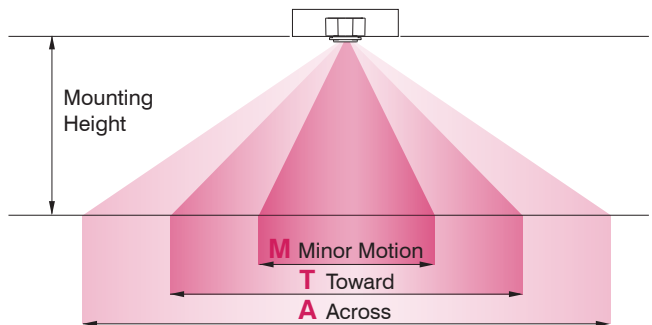
Mounting Height		2.4 m (8 ft)	3.0 m (10 ft)	3.6 m (12 ft)	6.0 m (20 ft)
Coverage Diameter	**M**	1.0 m (3 ft)	2.0 m (7 ft)	3.0 m (10 ft)	--
	T	3.0 m (10 ft)	4.0 m (13 ft)	5.0 m (16 ft)	6.0 m (20 ft)
	A	5.0 m (16 ft)	6.0 m (20 ft)	7.0 m (23 ft)	9.0 m (30 ft)

OVERVIEW

The MRA-124* is a miniature DALI-2 Occupancy and Light sensor designed for Digital Addressable Lighting Interface (DALI) control. This multi-sensor employs a digital Passive Infrared (PIR) Sensor and a digital Ambient Light Sensor (ALS) to dynamically report local occupancy status and ambient luminance level for DALI Application Controller to execute smart lighting control.

The MRA-124 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.

FEATURES

- Digital pyroelectric infrared and ambient light sensor
- Fully comply with IEC 62386 Parts 101, 103, 303, 304
- Low energy consumption over DALI bus power supply
- Discrete appearance ideal for commercial applications
- Ceiling recess mounting or luminaire integration

SPECIFICATIONS

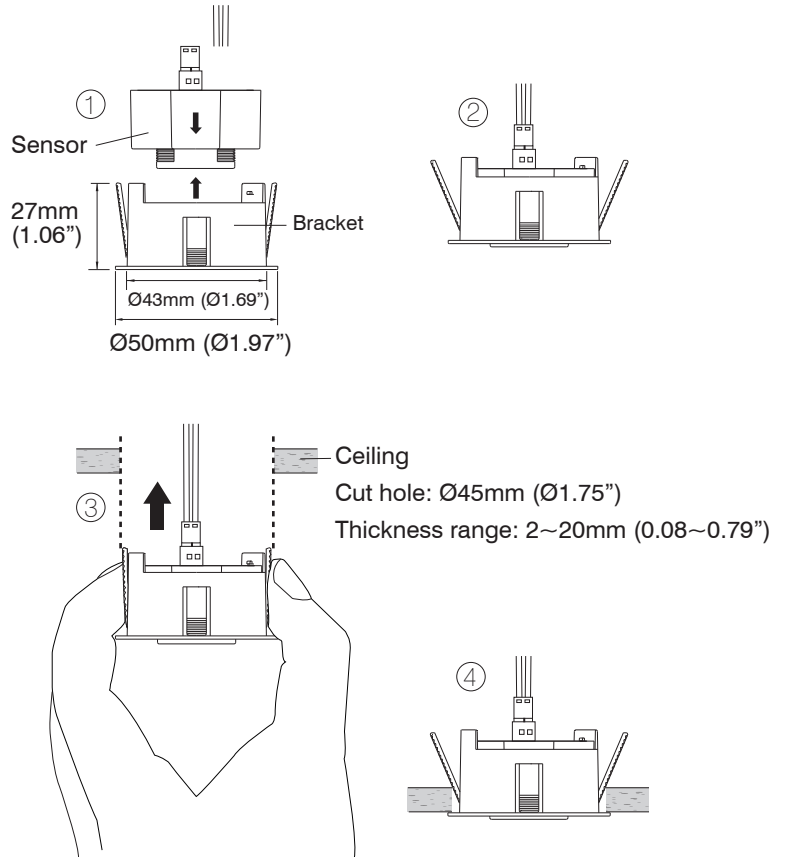| Device Type	DALI-2 Input Device
Power supply	DALI bus power
Power consumption	10 mA max
Control output	Addressable/slave DALI
Movement sensor	Digital passive infrared (PIR)
Luminance sensor	Digital ALS
Light level range	2-1000 lux @mounting position
Detectable speed	0.5~10 ft/sec. (0.15 ~ 3 m/sec.)
Mounting height	2.4~4m
DALI standards	IEC 62386 Parts 101, 103, 303, 304
Op. humidity	Max. 95% RH
Op. temperature	-40°C~70°C(-40°F~158°F)
Dimensions	Ø40 x H24mm (Ø1.57"x H0.94")

*This product shown here is under development, is not DALI-2 certified, and is not available on the market. Engineering samples are available on request.

WIRING DIAGRAM
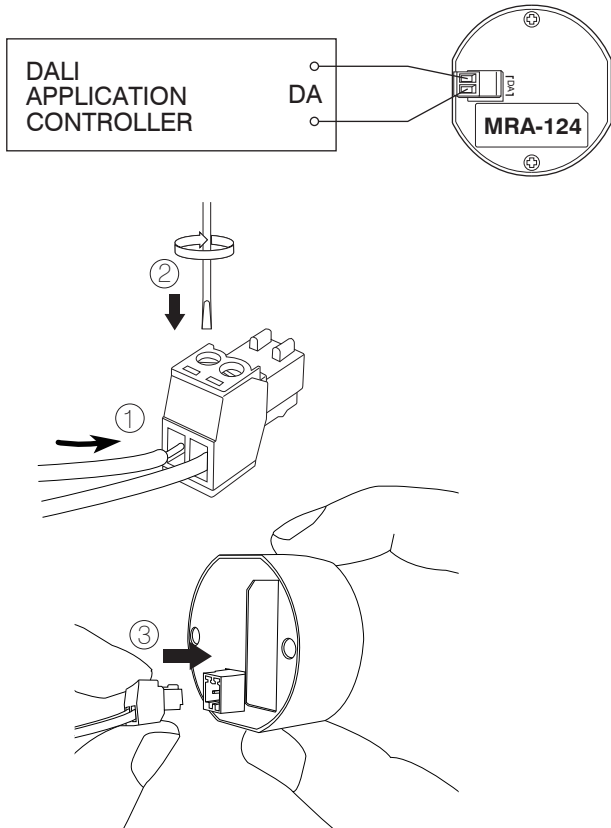
Ceiling Recess Mount (Outside-in)

DALI APPLICATION CONTROLLER — DA — MRA-124

Sensor

27mm (1.06")

Bracket

Ø43mm (Ø1.69")

Ø50mm (Ø1.97")

Ceiling

Cut hole: Ø45mm (Ø1.75")

Thickness range: 2~20mm (0.08~0.79")

MOUNTING

Luminaire Assembly (Inside-out)

Ø40mm (Ø1.57")

18mm (0.71")

6mm (0.24")

Ø24mm (0.94")

Sensor

Cover

Ø37mm (Ø1.46")

Luminaire enclosure

Thickness range: 1~3mm (0.04~0.12")
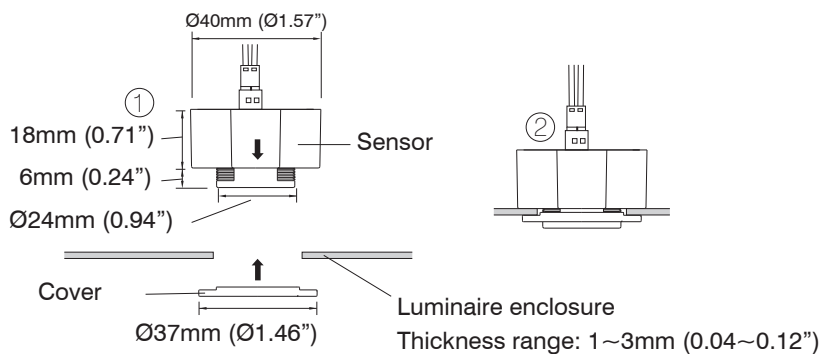
Assembly hole w/o cover: Ø25.4mm (1")

Assembly hole with cover: Ø27mm (1.06")