

MLS Connect Digital Intelligent Lighting Control Modules

MLS Connect Digital Remote Microwave Sensors for CDW12U5, CDH4U5 & CDH8U5 LCMs

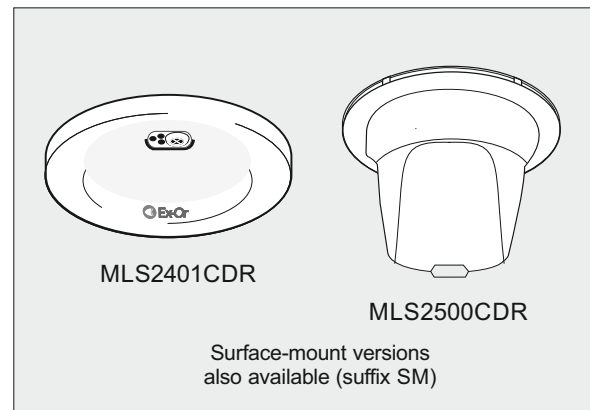
CDW12U5 Programmable Connection Centres and CDH4U5/CDH8U5 Hard-Wired Intelligent Lighting Control Modules support a range of dedicated high-performance presence detectors. Detectors contain a photocell to monitor total light levels, allowing the light output of dimmable luminaires to be adjusted to suit the natural light level available.

The range of sensors for remote mounting encompasses both Microwave and PIR technology (see D4140 for details of PIR Sensors). These microwave sensors are available in flush and surface versions (add suffix 'SM' to specify surface mount.)

MLS2401CDR - 360° microwave presence detection
 MLS2500CDR - directional microwave presence detection

Both contain an infrared port that can be used both for local control from a hand-held device when in service and for initial commissioning of the CDW12U5/CDH4U5/CDH8U5 Intelligent LCM system.

Sensors connect to the LCM via RJ45 patch leads and all are SELV devices when properly installed and connected. Ready-made patch leads are available in lengths of 3m, 5m and 10m.



Commissioning

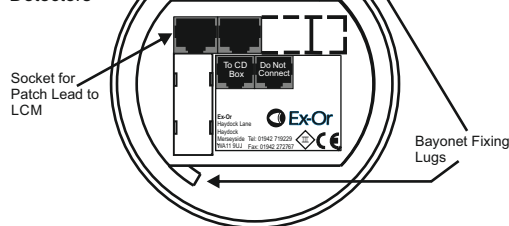
With the CDW12U5 and CDH4U5/CDH8U5 LCM systems, all configuration information is held within the Connection Centre itself, not the individual detectors. Most of the parameters are set up with the aid of a dedicated programme running on a portable PC which communicates with the LCM either by an infrared link, via one of the attached detectors, or by a specialised serial link into the LCM itself.

When setting the actual light levels around which dimming or switching decisions are made, the system utilises the same simple and convenient method as used for Ex-Or's traditional stand-alone detectors. An infrared programming tool (QuickSet Pro or HC5A) is used to set the controlling or switching set-point for the photocell. The setting is then transmitted from the detector to the LCM where it is uniquely associated with that particular detector. The setting will be preserved in the event of power failure. All settings can be re-programmed any number of times. (See 'Setting the Regulating Photocell' and 'Setting the Switching Photocell' sections of installation instructions for details of setting procedure.)

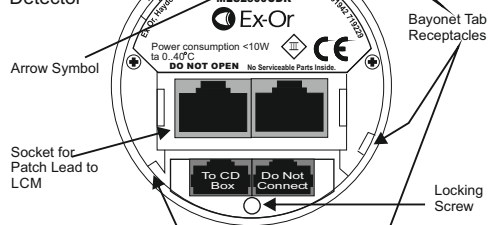


Positioning, Fixing & Connections

View on back of
MLS2401CDR
Detectors



View on Back of
MLS2500CDR
Detector



Positioning Notes

Do not mount within 0.25m of a luminaire.

The MLS2401CDR should not be positioned on a pitch narrower than 5m.

Microwave detectors (MLS2401CDR & MLS2500CDR) are extremely sensitive to movement and must be installed on a rigid surface that will not itself be subject to movement. Microwaves can penetrate lightly built partitions, glass etc and thus movement in adjacent spaces can cause spurious triggering if the orientation and sensitivity settings of the detector are not carefully managed. They are not recommended for areas where there are large areas of metal such as metal ceiling panels as unpredictable sensitivity may result.

Fixing (Outline guidance - see installation instructions for full details)

MLS2401CDR

Flush Versions - Depth required behind ceiling: 62mm from front flange plus an allowance for the minimum bend radius of the cable. Sinking box fits into a 89mm diameter hole in ceiling tile or plasterboard ceiling. To avoid damage to ceiling tile, do not overtighten. No access above the ceiling is necessary. The unit fits into the housing with a simple bayonet action.

Surface Versions - The housing may be secured to a hard surface or a BESA box. The unit fits into the housing with a simple bayonet action.

MLS2500CDR

Semi-flush Version - Use a hole saw to drill a 76mm hole into the ceiling tile. The flush ring is designed to clamp the tile between its two halves.

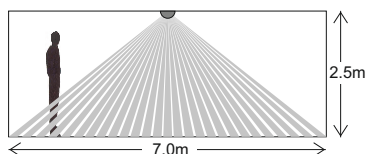
Surface Version - The back-box can be secured directly to a hard surface or to a conduit stop end box.

Technical Data

MLS2401CDR

MAX RECOMMENDED MOUNTING HEIGHT: 3.0m

RANGE: Cone-shaped detection pattern. Diameter (at floor level) = 2.8 x mounting height



OPERATING VOLTAGE: 12V DC, SELV if installed correctly

PHOTOCELL: Regulating

DEPTH REQUIRED BEHIND CEILING (FLUSH VERSION):

62mm plus an allowance for the minimum bend radius of the patch lead

WEIGHT: 243g (flush version); 251g (surface version)

COLOUR: White

MATERIAL: Flame retardant PC/ABS

IP RATING: 2X

MLS2500CDR

MAX RECOMMENDED MOUNTING HEIGHT: 3.5m

RANGE: Adjustable up to 20m

OPERATING VOLTAGE: 12V DC, SELV if installed correctly

PHOTOCELL: Regulating

DEPTH REQUIRED BEHIND CEILING (SEMI-FLUSH VERSION):

40mm plus an allowance for the minimum bend radius of the patch lead

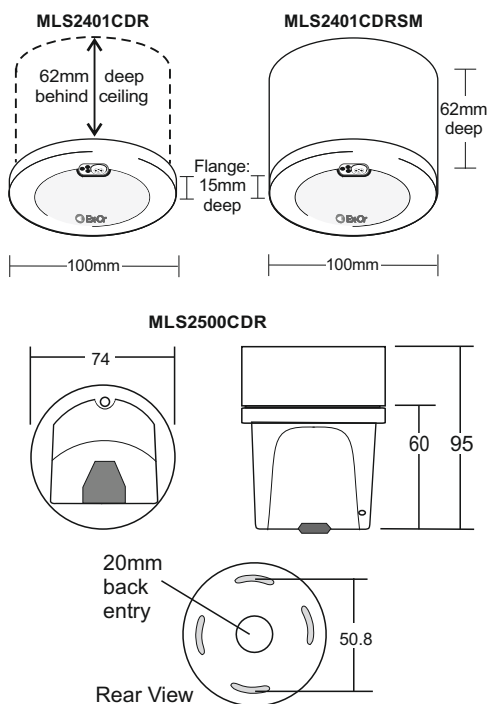
WEIGHT: 180g (flush version); 160g (semi-flush version)

COLOUR: White

MATERIAL: Flame retardant PC/ABS

IP RATING: 4X

Dimensions



Accessories



QuickSet Pro Digital 2-Way Programming Tool

Menu-driven LCD Programmer with automatic equipment recognition and parameter download facilities.



HC5A Universal Hand-held Controller

Allows manual override. Supplied with wall bracket.

Ex-Or operates a genuine policy of continuous improvement. You may expect the specification to be regularly enhanced. For latest technical information, please visit www.ex-or.com.

Part Numbers

MLS2401CDR	360° Microwave Detector - flush
MLS2401CDRSM	360° Microwave Detector - surface
MLS2500CDR	Directional Microwave Detector - semi-flush
MLS2500CDRSM	Directional Microwave Detector - surface
BT5E030GY	3m Detector Patch Lead
BT5E050GY	5m Detector Patch Lead
BT5E100GY	10m Detector Patch Lead
QUICKSET PRO	QuickSet Pro Digital 2-Way Programming Tool
HC5A	Universal Hand-held Controller c/w wall bracket