

Connect - Lighting control modules and plug-in connection centres

MLS Connect Digital Remote Detectors 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 detectors for remote mounting encompasses both PIR and Microwave technology:

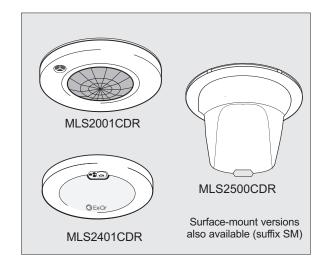
MLS2001CDR - 360° PIR presence detection

MLS2401CDR - 360° microwave presence detection

MLS2500CDR - directional microwave presence detection

All 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.

Detectors 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.

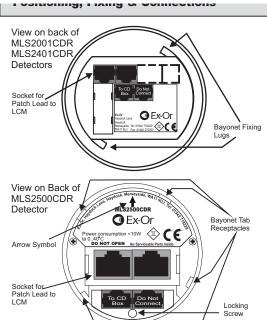


Commissioning

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 progamme 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 (HP2000 or HC5) 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.)

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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) MLS2001CDR & 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 Dimensions MLS2001CDR & MLS2401CDR MLS2001CDR MLS2001CDRSM MAX RECOMMENDED MOUNTING HEIGHT: 3.0m RANGE: Cone-shaped detection pattern. Diameter (at floor level) = deep 62mm 2.4 x mounting height (MLS2001CDR) 2.8 x mounting height (MLS2401CDR) behind ceiling 62mm MLS2001CDR MLS2401CDR deep Flange: 2.5m 2.5m 10mm deep 6.0m 7.0m 100mm 100mm OPERATING VOLTAGE: 12V DC, SELV if installed correctly PHOTOCELL: Regulating MLS2401CDR MLS2401CDRSM DEPTH REQUIRED BEHIND CEILING (FLUSH VERSIONS): 62mm plus an allowance for the minimum bend radius of the patch lead 62mm deep WEIGHT: 170g approx - MLS2001CDR ceiling behind 200g approx - MLS2401CDR 62mm deep COLOUR: White MATERIAL: Flame retardant PC/ABS Flange: IP RATING: 3X - MLS2001CDR 15mm deep 2X - MLS2401CDR MLS2500CDR 100mm 100mm MAX RECOMMENDED MOUNTING HEIGHT: 3.5m RANGE: Adjustable up to 20m MLS2500CDR 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: 130g approx 60 95 COLOUR: White MATERIAL: Flame retardant PC/ABS IP RATING: 4X 20_{mm} Accessories back entry 50.8 **HP2000 MLS Digital Programmer HC5 Universal Hand-held Controller** Menu-driven LCD Programmer with Allows manual override. Rear View automatic equipment recognition and parameter download facilities.

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

BT5E030GY 3m Detector Patch Lead MLS2001CDR 360° PIR Detector - flush BT5E050GY 5m Detector Patch Lead MLS2001CDRSM 360° PIR Detector - surface BT5E100GY 10m Detector Patch Lead MLS2401CDR 360° Microwave Detector - flush **HP2000** MLS Digital Programmer MLS2401CDRSM 360° Microwave Detector - surface HC₅

MLS2500CDR Directional Microwave Detector - semi-flush HC5 Universal Hand-held Controller c/w wall bracket
MLS2500CDRSM Directional Microwave Detector - surface