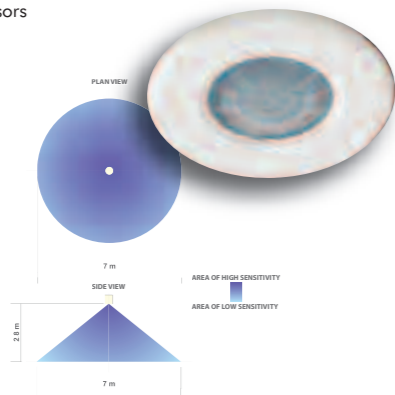
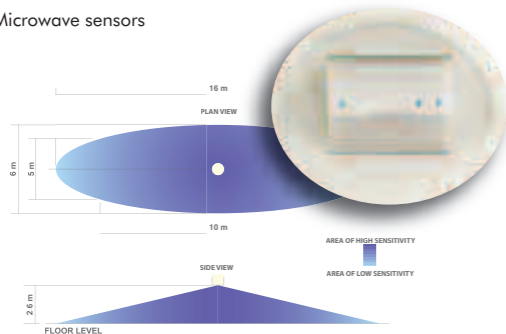


Lighting controls (basic)

PIR sensors

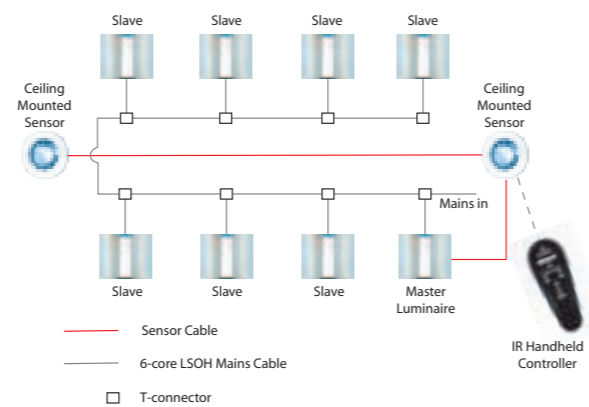


Microwave sensors



Lighting controls

The most important aspect of controls is ensuring that their function matches the needs of the users and is intelligible to them in operation. If this is not the case, and it is common that it isn't, many problems ensue. As a rule, complex controls should only be specified for sophisticated users. Clearvision believes that it serves its customers best by being largely agnostic regarding systems and protocols, but with the capacity to supply any system on the market.

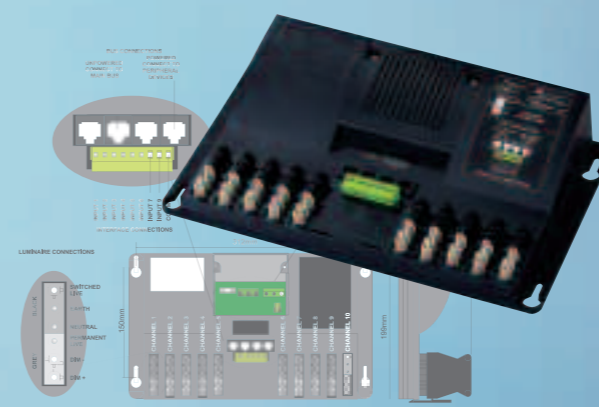


SwitchDim®

A simple control for fluorescent is based on SwitchDim® technology from Tridonic (Touch&Dim from Philips/Osram) using a momentary (push-to-make) wall switch. This can cope with very simple daylight linking, but is not good for presence detection. It is best used for relatively small areas of a floor with manual control. Single control wire required. (see pages 246-247 for further details)

DSI control

DSI control is the original digital protocol (message format) and only available from Tridonic and is only for use with Tridonic ballasts. This is effective for presence detection and daylight linking, being able to use more sophisticated sensors than SwitchDim®. With stand-alone DSI sensors, the fittings are controlled by each individual sensor/DSI and generally do not communicate with each other as an overall system. Twin control wires required. (see pages 246 - 247 for further details)



Analogue (1-10v) control

Analogue is the original dimming system and relies on a voltage (1-10v) on the twin control wires to control the output of the ballast. It has the advantage of multiple suppliers and is more readily understood by installers, but the signal is perhaps more susceptible to interference than for digital. (see pages 246 - 247 for further details)

Lighting Control Modules (LCM)

This type of system involves each fitting being plugged (using for example Wieland or Flex connectors) into a box with several connection ports (the LCM). A degree of intelligence can be built into the LCM. Various sensors can also be plugged in, allowing for some communication between them, and between the fittings and central lighting control software. LCM systems are most commonly configured for either DSI or Analogue (1-10v) dimming protocols.

Radio frequency (RF) controls

RF control uses switches (transmitters) that can be wireless to actuators (receivers) that control groups of fittings. The actuator will be wired at the head of a circuit and control all the downstream fittings. This is a good system for small rooms, retrofit situations, and space in which only a few fittings need to be dimmed.

