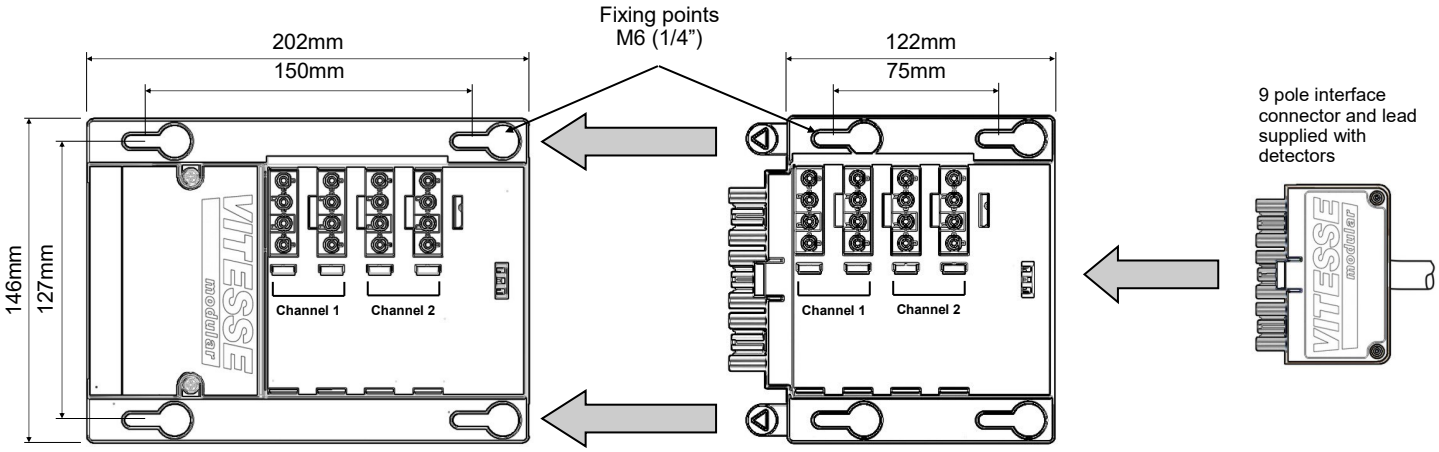
VITM4-2CH

Vitesse Modular 4 - 2 Channel Switching Modules

Overview

- The Vitesse modular system is a cost effective method of providing power and control for lighting installations in industrial, commercial and retail buildings. The system is designed for ease of installation: mains input is connected using the spacious wiring compartment; control inputs and outputs are pluggable using industry standard connectors. The modular approach allows for between 4 and 16 luminaires to be connected.
- The VITM4-2CH is a two channel, non-dimming distribution box for use in applications that require two independently switched lighting circuits, or lighting and ventilation circuits. For example this product is ideal for connection to a 2 channel presence detector for separate window row switching. It has two live inputs, a common neutral and two switch inputs.

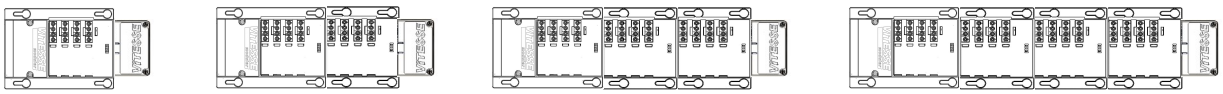
System Components



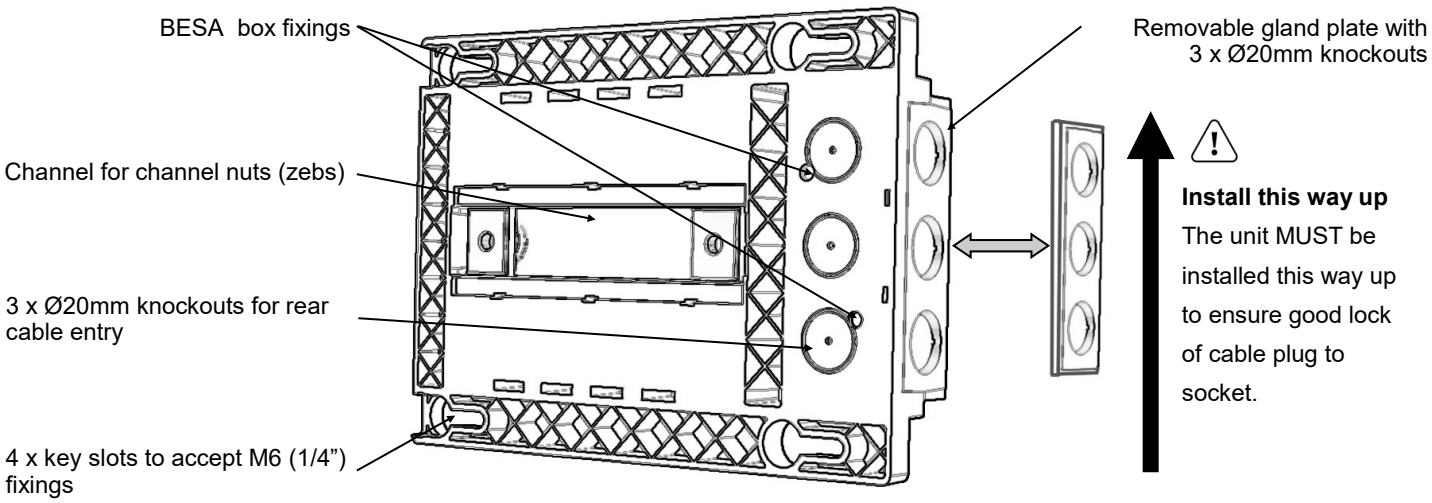
VITM4-S-2CH
Vitesse modular starter for non-dimming systems

VITM4-E-2CH
Vitesse modular extender for non-dimming systems

Height - allow 150mm for total height of unit (including connectors and cable)



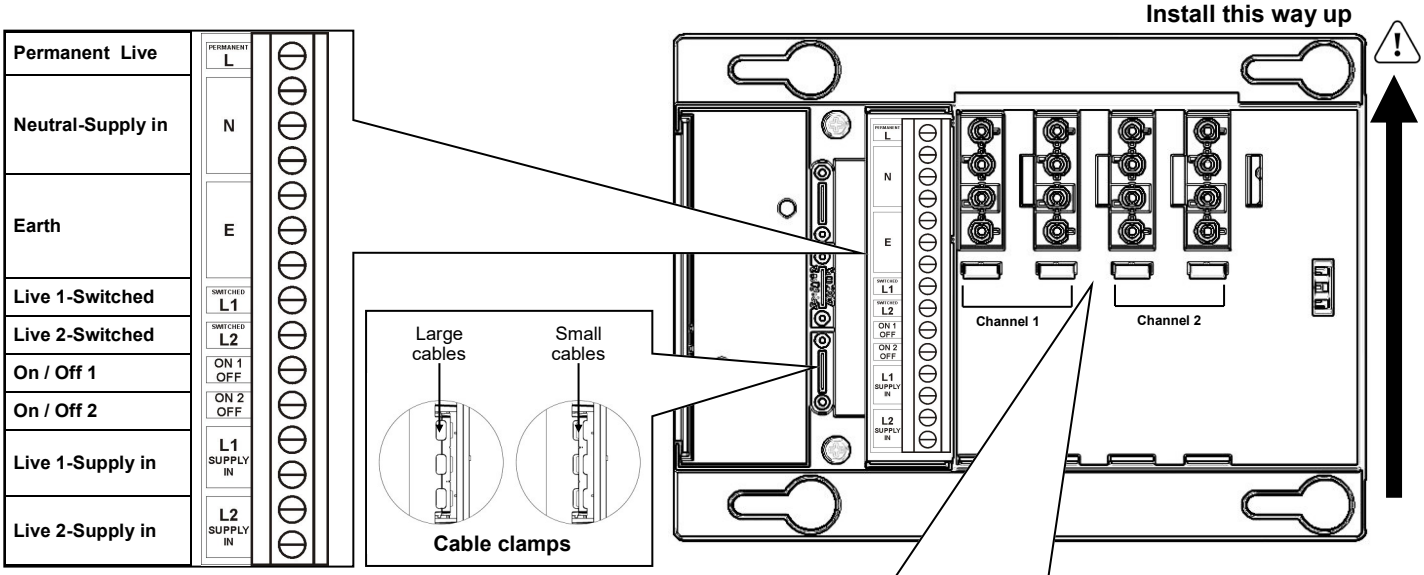
Installation



***Warning**. This device works at mains voltage. Be sure to take care when working with electricity.*

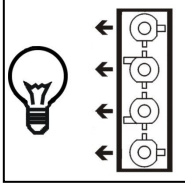
- The box should be fixed on a smooth, flat surface or using drop rod fixings attached to channel nuts.
- Ensure that there is easy access to the wiring compartment and all connectors once the box is in-situ.

Wiring



- All wiring should be mains rated.
- Remove wiring compartment cover. Wire the box using the diagrams below
  On/off 1 and On/Off 2 connect switches through to detectors
  Switched live turns the lights on and off
- Use the cable clamps to secure the wiring or use cable glands (not supplied). The clamps can be split, and flipped over to clamp different cable diameters.
- Replace wiring compartment cover.
- Plug in the luminaires ensuring that the connector latches to the box.
- The unit MUST be installed orientated as per the arrow to ensure good lock of cable plug to socket!

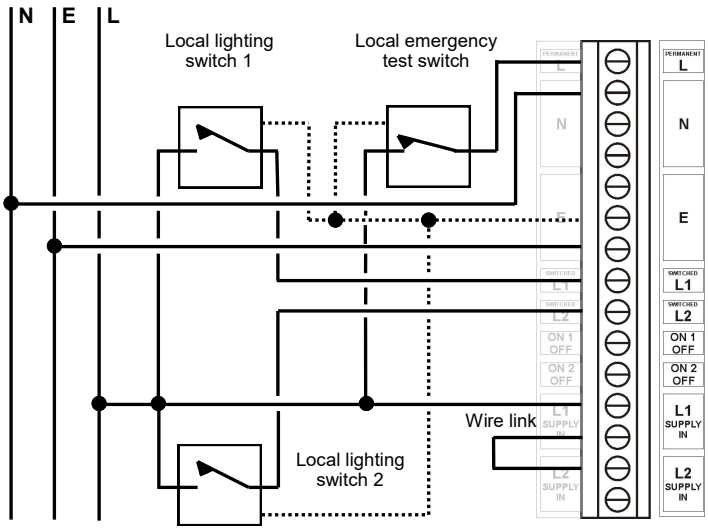
Luminaire connections / Lead colours



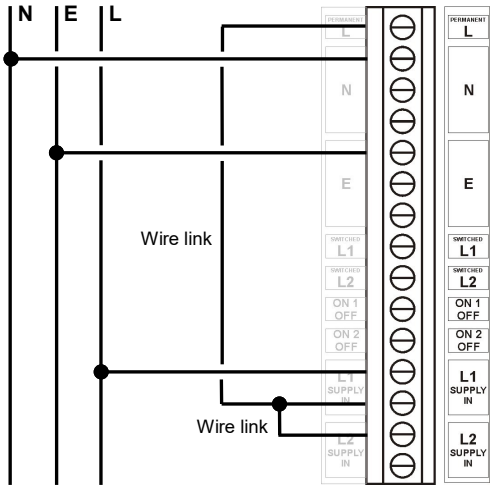
Permanent Live	Black (4 core only)
Neutral	Blue
Earth	Green / Yellow
Switched Live	Brown

Wiring using single supply

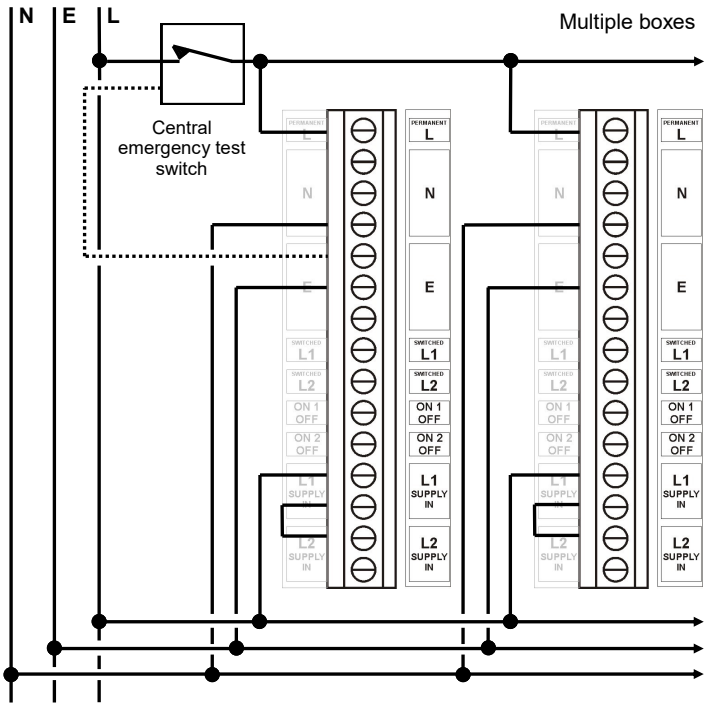
Local lighting switch and local emergency test switch



Emergency test using power interruption



Emergency test using central switch

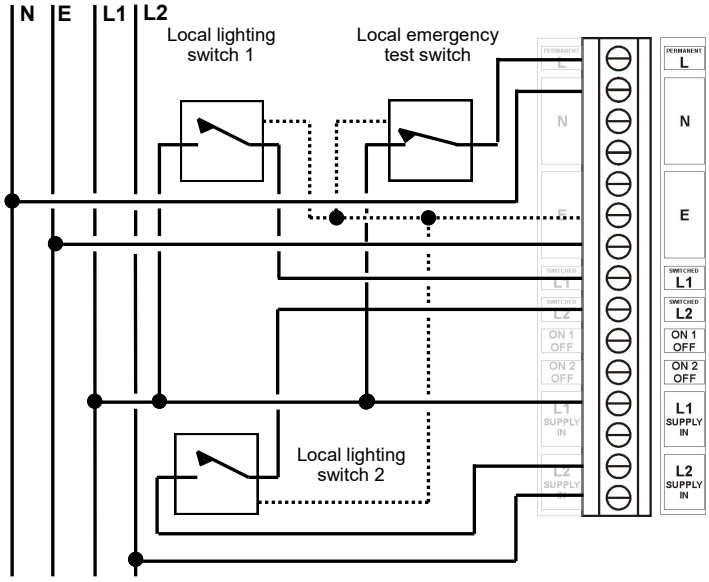


A local lighting switch may still be used when there is a central emergency test switch or when a circuit breaker is used to interrupt the power.

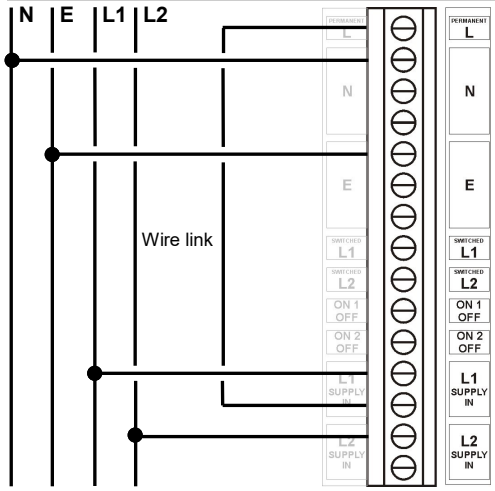
DO NOT WIRE ACROSS PHASES

Wiring using dual supply

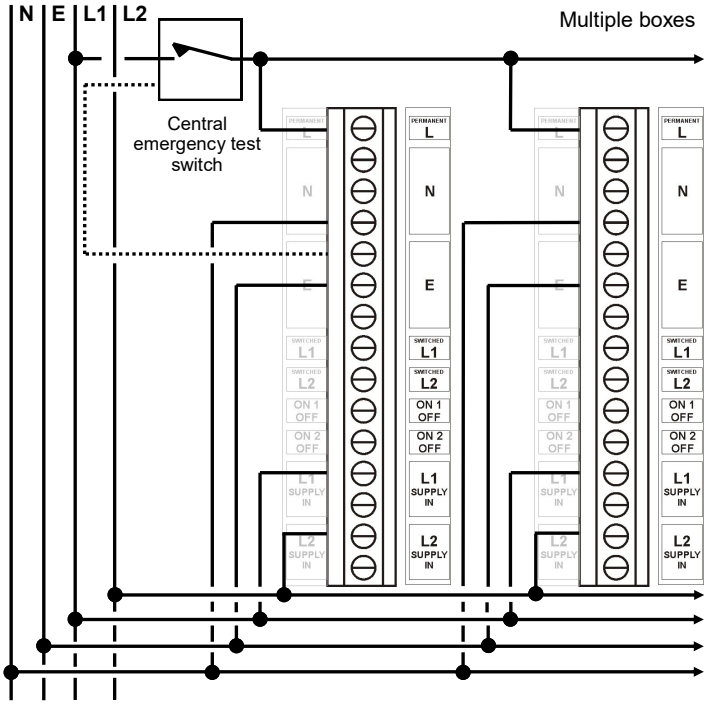
Local lighting switch and local emergency test switch



Emergency test using power interruption



Emergency test using central switch



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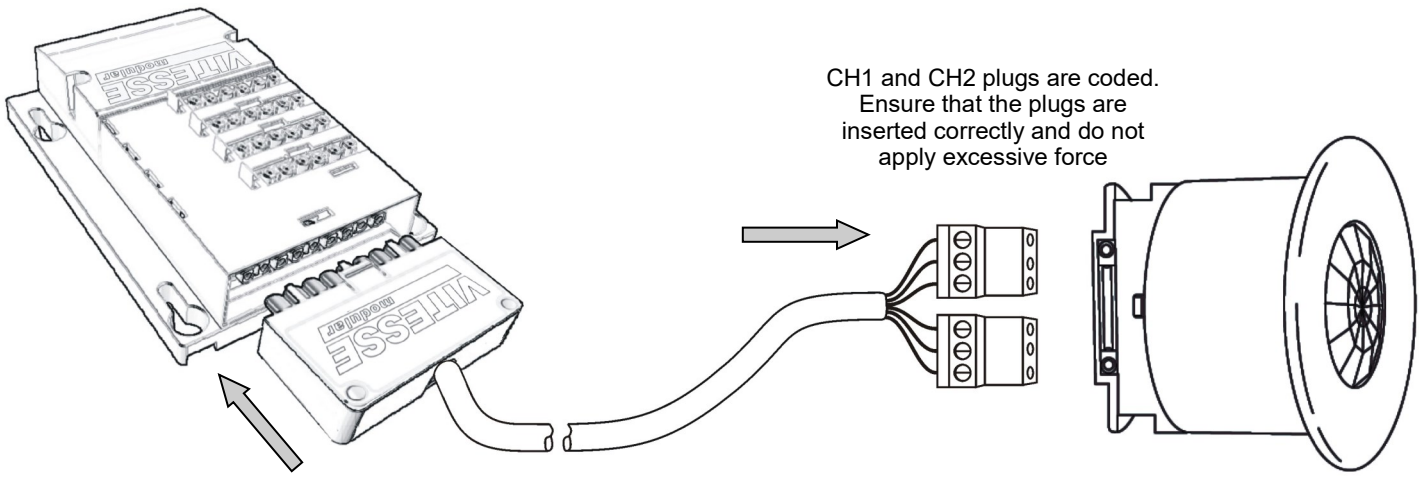
DO NOT WIRE ACROSS PHASES

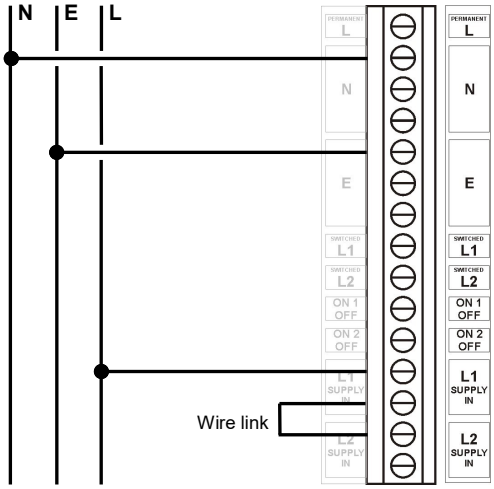
Connecting a detector



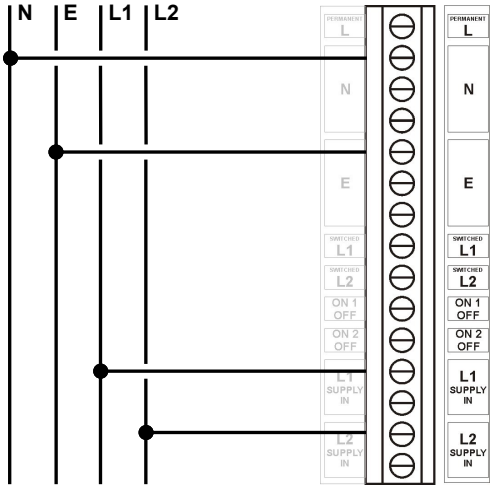
Detector lead needs to be ordered separately from the detector. Order code VITM4-L3-2CH. Where two detectors connect to a single box a dual lead is available VITM4-LD3-2CH.

Presence detector connections - Automatic on, automatic off

Single live supply



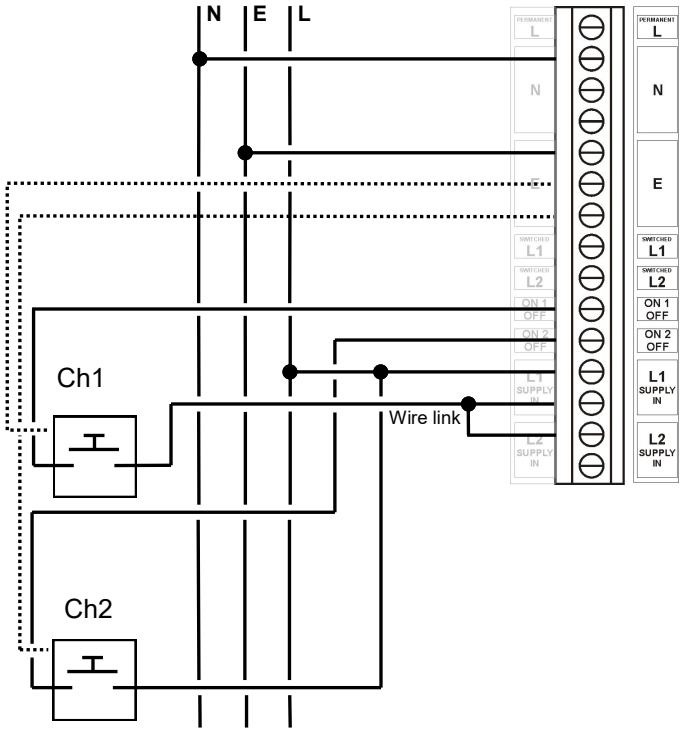
Dual live supply



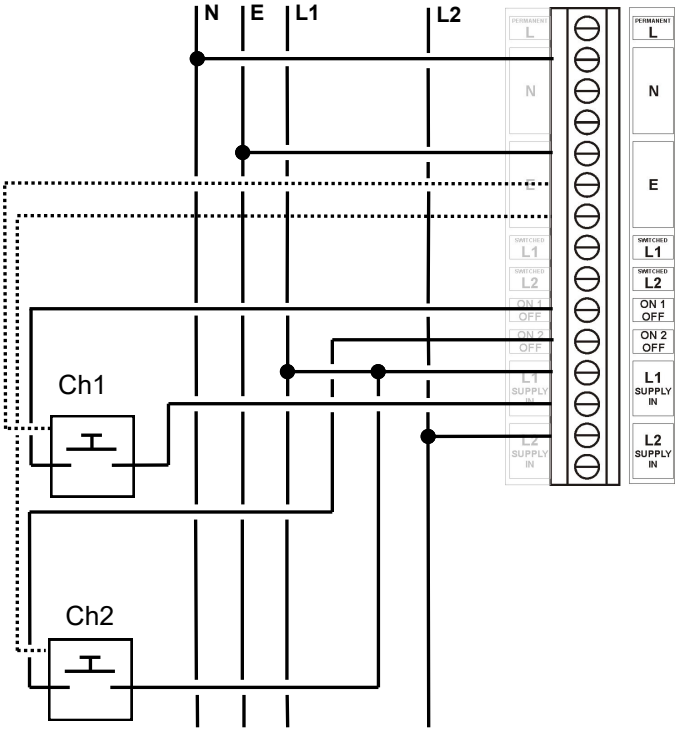
Absence detector connections - Manual on, automatic off

- Diagrams show separate switches for each channel. One switch can be used for both channels. For 2 switches set switch mode on detector to "*1 position switch separate"* otherwise it can be left as default for 1 switch operation set to "*1 position switch together*."
  - **In 2 switches mode as shown, short push turns ON, Long held push turns OFF (>1 sec)**
  (Allow a few minutes initial power-on setup to take place before operation the switches!)
- See detector programming manual further information.

Single live supply



Dual live supply



Switch Noise Filtering
Due to the noise filtering process, there is a small delay of ~0.3 seconds. Therefore, kindly apply an assured push action to these momentary switches, as fast clicks on the switches will be ignored as they are treated as noise on the line.

2 Channel detectors
The flexibility of using two channels detectors allows the following scenario:

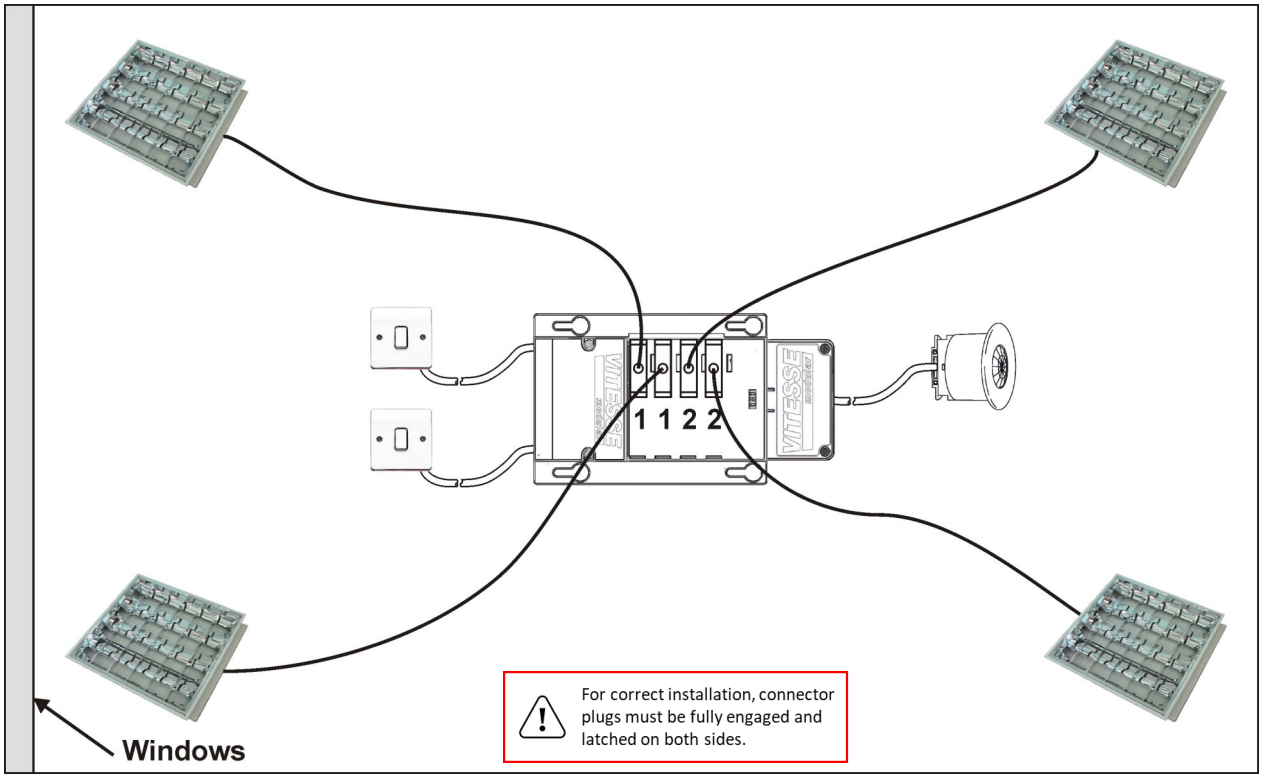
- Channel 1 - occupancy and lux
  Channel 1 of the detector can be used to switch the Channel 1 luminaires at a preset lux level. These luminaires are typically situated nearest the windows. The luminaires will also switch with occupancy.
- Channel 2 - occupancy only
  The inner luminaires, ie those furthest from the windows, are switched with occupancy only.

Switch inputs

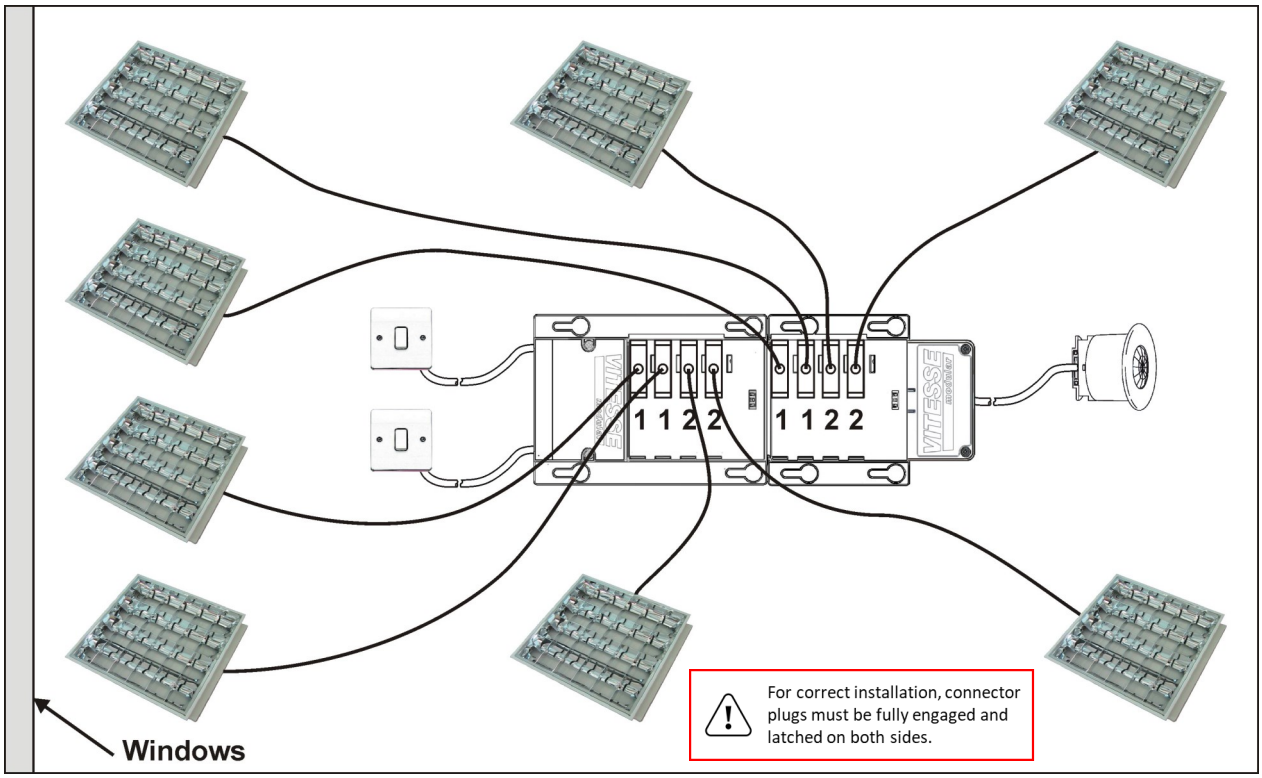
- One or two manual switches, ie for luminaires on channels 1 and 2, can be used to manually override the lights on or off, or in the case of absence detection activate the luminaires on entry.

The diagrams below illustrate a typical application.

Window / room switching



Window / room switching + Extender



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Part numbers

Presence / Absence Detectors

EBDSPIR-PRM-2CH	PIR 2-Channel presence detector
EBDSPIR-PRM-2CH-NC	PIR 2-Channel presence detector, normally closed fail safe contacts
MWS3A-PRM-2CH	Microwave 2-Channel presence detector
MWS3A-PRM-2CH-NC	Microwave 2-Channel presence detector, normally closed fail safe contacts
MWS6-PRM-2CH	Microwave 2-Channel presence detector
MWS6-PRM-2CH-NC	Microwave 2-Channel presence detector, normally closed fail safe contacts

Modules

VITM4-S-2CH	4 pole starter box, 2 channel
VITM4-E-2CH	4 pole extender box, 2 channel

Detector Leads (LSF)

VITM4-L3-2CH	3m 2 channel sensor lead
VITM4-LD3-2CH	3m 2 channel dual detector sensor lead

Luminaire Leads (LSF)

VITM4L303100W	3 core	3m	1.0mm^2 White plug
VITM4L305100W	3 core	5m	1.0mm^2 White plug
VITM4L403100R	4 core	3m	1.0mm^2 Red plug
VITM4L405100R	4 core	5m	1.0mm^2 Red plug

Other leads available to order.

Connectors

VITM4-LPW	4 pole luminaire plug white

Ratings

Voltage	230VAC +/- 10%
Frequency	50Hz
Terminal capacity	4mm^2 in wiring compartment
Temperature	0ºC to 35ºC
Power	Rating of system 16A. Rating of each output 10A (but limited on the detector output rating, check datasheet of detector!
Compliance	LVD-2014/35/EU

For further compliance information visit www.cpelectronics.co.uk/compliance

CE

UK Patent no. GB2463063
EU patent pending
EU registered design no. 001587544-0001, 001587544-0002

For lighting purposes only with suitable circuit protection. For fixed wiring only

IMPORTANT NOTICE!
This device should be installed by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.

bsi. ISO 9001 Quality Management FM 45789 | ISO 14001 Environmental Management EMS 534520 | ISO 45001 Occupational Health and Safety Management OHS 642036

ESTA energy services and technology association

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