flex7 ZoneLite

Lighting connection & control unit

Type T- Configured for use in
teaching and educational environments

flex connectors

MADE IN
BRITAIN

flex7 ZoneLite Features & Benefits

A lighting connection & control solution in one, that comes preprogrammed with up to 15 distinct lighting configurations common to teaching and educational environments.

Offering a prefabricated alternative to traditional wiring, the ZoneLite Type T is designed for use in educational environments. It provides options for absence/presence/daylight linking/graduated daylight dimming lighting control, independent switching of whiteboard or projector lights, emergency test, corridor hold, last man out switch and scene setting.

Control up to 4 lighting channels

Available with 4, 12, 16 or 20 outlets

15 preconfigured lighting layout options

Cost Effective

System simply plugs together, saving time on site, and reducing need for skilled electricians.

No Commissioning Required

Just choose the required configuration using the rotary selector switch on your ZoneLite (detailed in following pages).

Protected Extra Low Voltage (PELV)

All sensor heads and switch drops operate at PELV. This allows us to use lightweight plug-in switch drops and sensor leads. In particular because our switch drops operate at PELV they do not require enclosing in an earthed metallic covering nor the protection of an RCD as is often the requirement for mains switch drops.

Global Switch Inputs

Each ZoneLite can also accept up to 3 global switch commands:

Emergency Test - tests emergency fittings.

Last Man Out - initiates all connected luminaires off.

All Lights On - initiates all connected luminaires on.

(Global switch inputs are typically connected to a group of ZoneLites).

Quick And Easy To Wire

Large wiring compartment. Remove cover with a single screw.

Corridor Hold

Interlinking corridor hold between a group of ZoneLites allows circulation areas and exit routes to be illuminated when outlying spaces are occupied.

Once the ZoneLite has been wired, simply:

- Select your configuration
- Plug-in pre-wired flex7 leads, and connect to luminaires
- Plug-in sensor heads
- Plug-in switch drop leads
- Use Remote Control to make any adjustments to brightness, timeout periods etc.

Sensor head

To channel 4 luminaires
To channel 3 luminaires
To channel 2 luminaires
To channel 1 luminaires
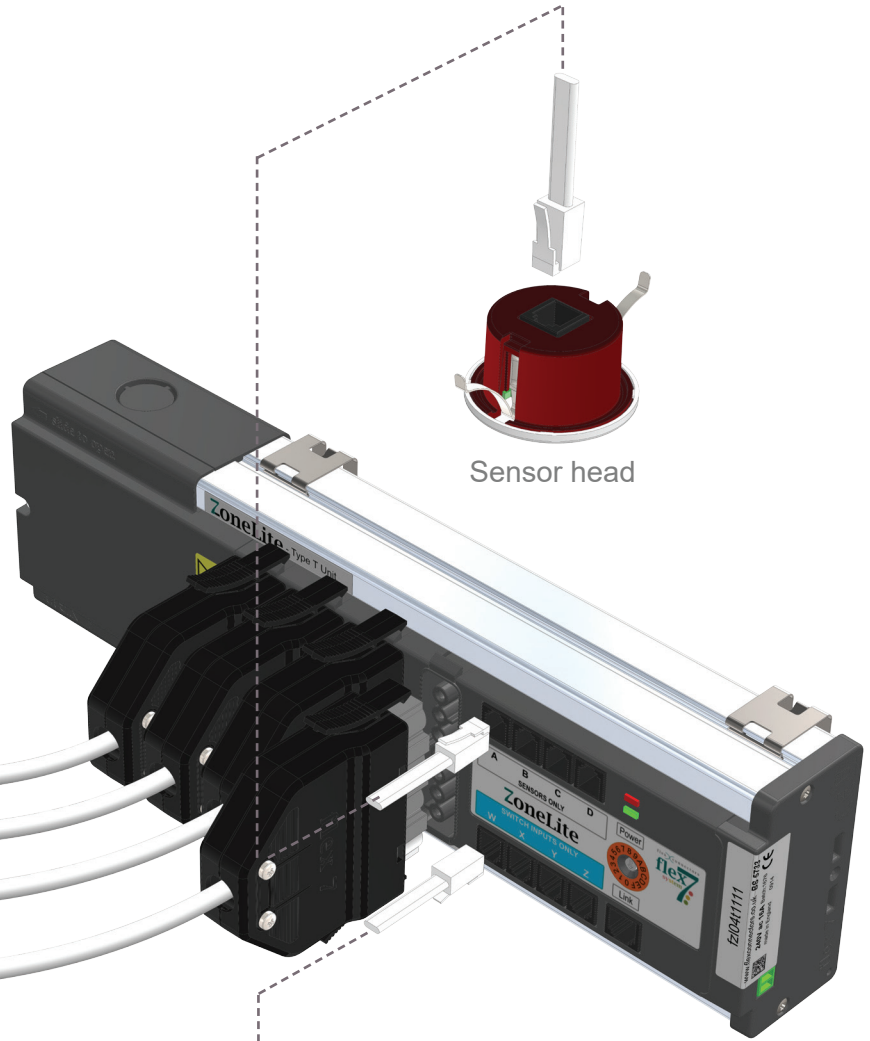
Adding outlets

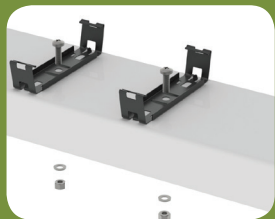If the ZoneLite Unit has insufficient outlets use double extender leads to create more.

PELV
Switch drop

(Switch not included)
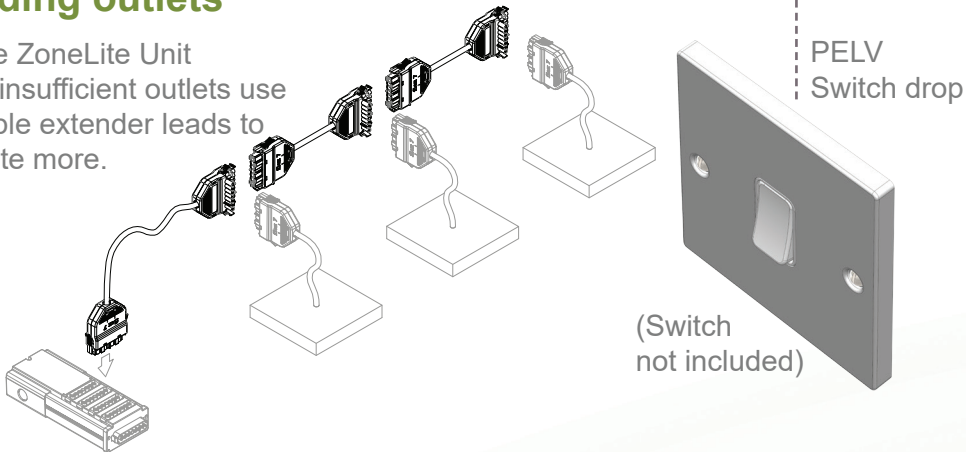
Various Simple Fixing Options

Solid Surface   **Cable Basket**   **Trunking**   **Drop Rods**   **Conduit Box**
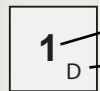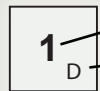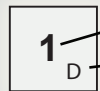
Configuration Options

Key:

1 D

Channel - represents channel controlling the luminaire

Dimmable Luminaires- if 'D' is not present then denotes non-dimmable luminiaires

Shading represents brightness (degree of which represents daylight linking in action).

Option 1:
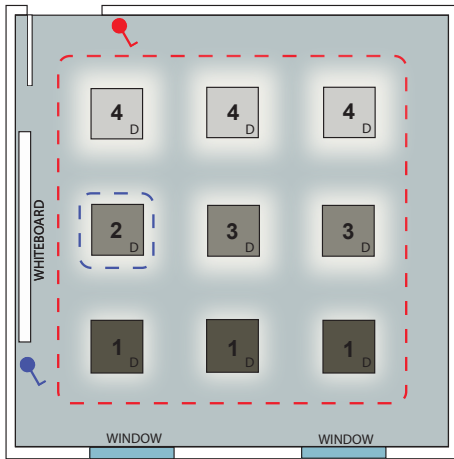
Operation:

Operates all luminaires bound within red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

3 stage offset daylight linking - referencing from the window row, each subsequent row has a progressively brighter offset (adjustable).

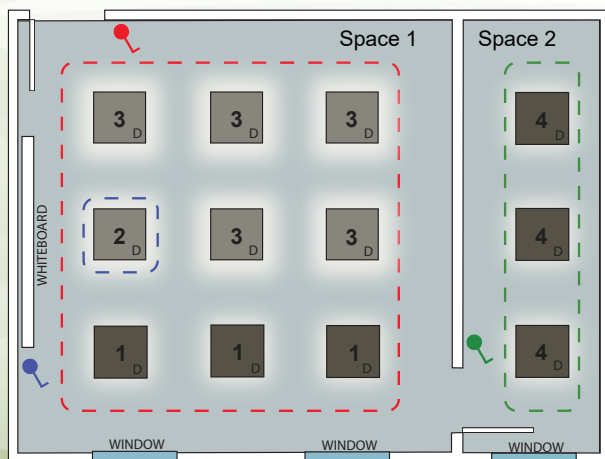On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Option 2:
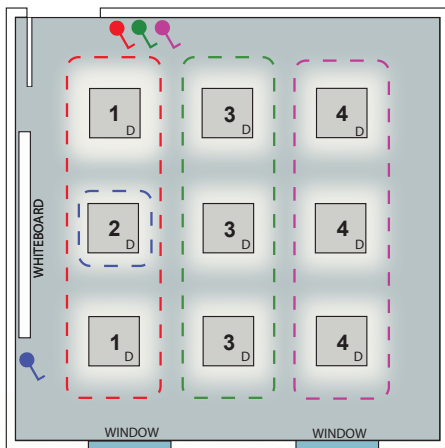
Operation:

Each switch operates luminaires bound within the same colour dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

All luminaires daylight link at the same rate.

On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Option 3:

Operation of space 1:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

2 stage offset daylight linking - referencing from the window row, both back rows will have a brighter offset (adjustable).
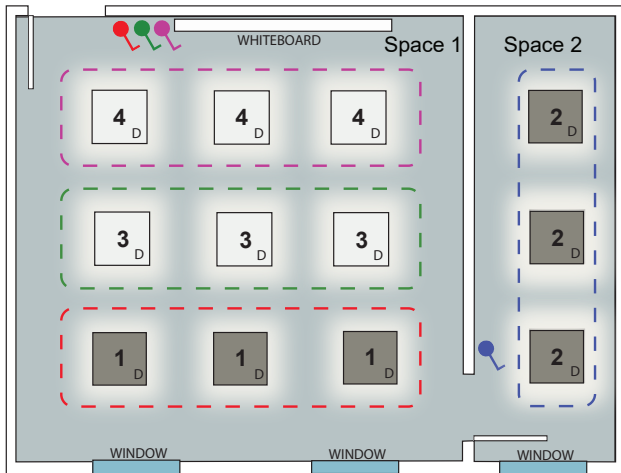
Operation of space 2:

Operates luminaires bound within the green dotted line - On, Off or Dim (up/down).

All luminaires in this space daylight link at the same rate.

All areas:

On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

Option 4:

Operation of space 1:

Each switch operates luminaires bound within the same colour dotted line - On, Off or Dim (up/down).

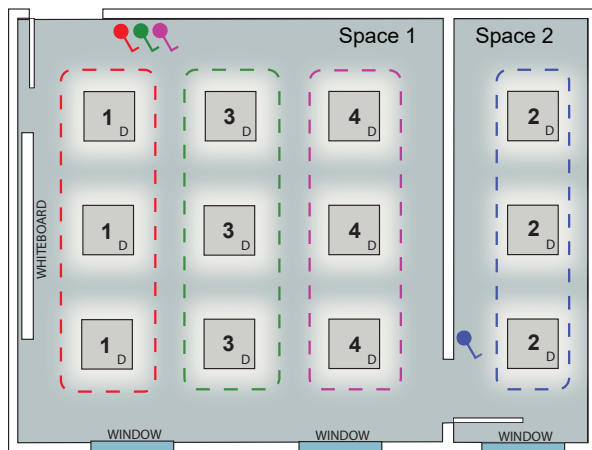Only window row daylight links.

Operation of space 2:

Operates luminaires bound within the blue dotted line - On, Off or Dim (up/down).

All luminaires in this space daylight link at the same rate.

All areas:

On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

Option 5:

Operation of space 1:

Each switch operates luminaires bound within the same colour dotted line - On, Off or Dim (up/down).

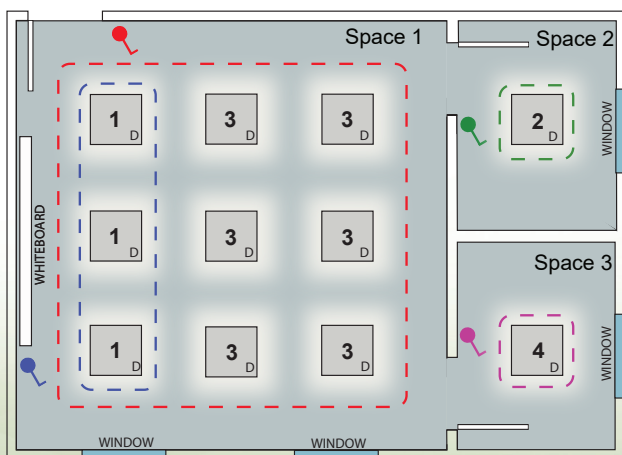All luminaires in this space daylight link at the same rate.

Operation of space 2:

Operates luminaires bound within the blue dotted line - On, Off or Dim (up/down).

All luminaires in this space daylight link at the same rate.

All areas:

On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

Option 6:

Operation of space 1:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

All luminaires in this space daylight link at the same rate.

Operation of space 2 & 3:

Each switch operates luminaires bound within the same colour dotted line - On, Off or Dim (up/down).
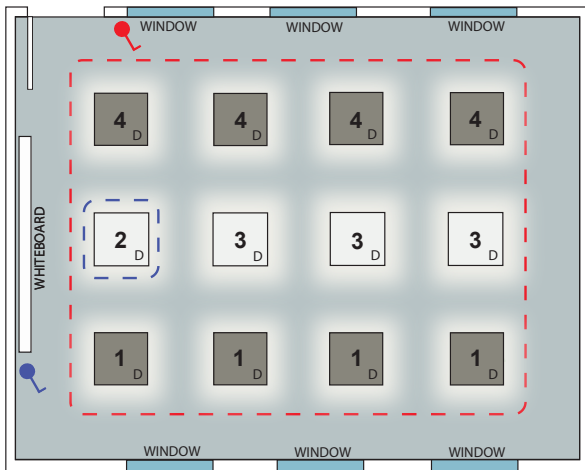
Luminaires in each space daylight link.

All areas:

On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

Configuration Options

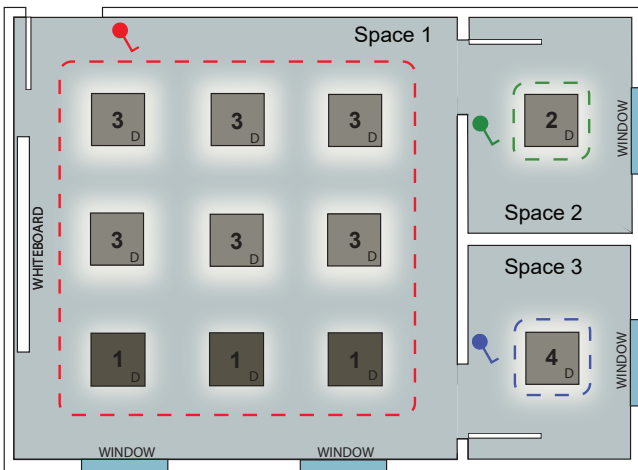## Option 7:

Operation:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

Both window rows daylight link independently of one another.

On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Option 8:

Operation of space 1:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

2 stage offset daylight linking - referencing from the window row, both back rows will have a brighter offset (adjustable).
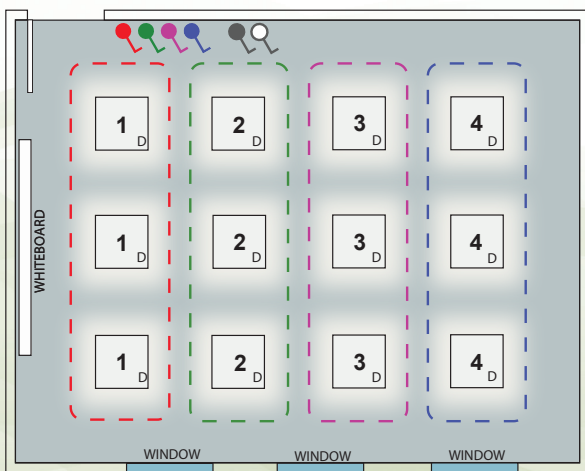
Operation of space 2 & 3:

Each switch operates luminaires bound within the same colour dotted line - On, Off or Dim (up/down).

Luminaires in each space daylight link.

All areas:

On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

Option 9 Scene Setting:

Operation when: Mode select switch is in channel control position:

Operates all channel 1 luminaires - On, Off or Dim (up/down).

Operates all channel 2 luminaires - On, Off or Dim (up/down).

Operates all channel 3 luminaires - On, Off or Dim (up/down).

Operates all channel 4 luminaires - On, Off or Dim (up/down).

Operation when: Mode select switch is in scene control position:

Recalls (or sets) scene 1.

Recalls (or sets) scene 2 .

Recalls (or sets) scene 3.

Recalls (or sets) scene 4.

All areas:

On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Master switch operates ALL channels 1,2,3 and 4 Together - On, Off or Dim (up/down).

Note: Uses conventional switches (not supplied).

Option A:
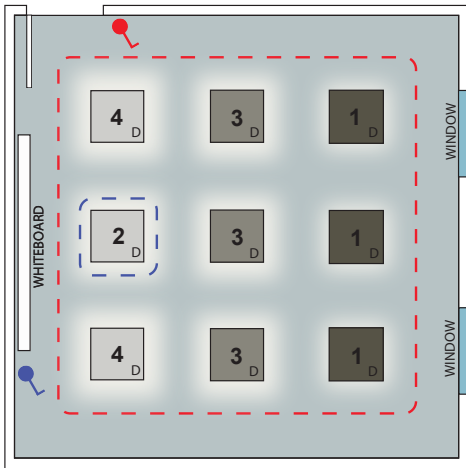
Operation:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

3 stage offset daylight linking - referencing from the window row, each subsequent row has a progressively brighter offset (adjustable).

On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Option B:
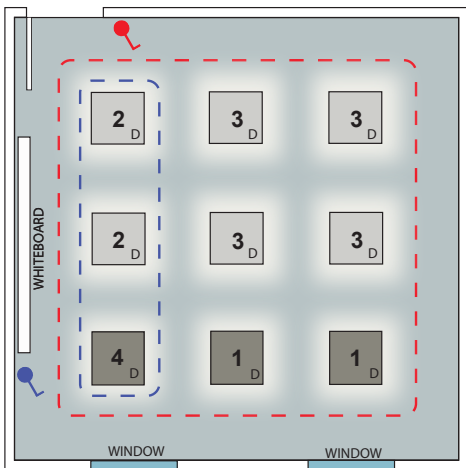
Operation:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).

2 stage offset daylight linking - referencing from the window row, both back rows will have a brighter offset (adjustable).

On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Option C:

Operation of space 1:

Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire independently - On or Off (bound within blue dotted line).

All luminaires in this space daylight link at the same rate.

Operation of space 2:

Operates luminaires bound within the purple dotted line - On, Off or Dim (up/down).

Switches the whiteboard luminaire (bound within green dotted line) independently - On or Off.

All luminaires in this space daylight link at the same rate.

All areas:

On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

Configuration Options

Note: Many adaptions to each option are possible during setup. Please enquire if you can't find a configuration that exactly matches your specific requirements.

Option D:

Operation:

🔴 Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

🔵 Switches the whiteboard luminaire/s independently - On or Off (those bound within blue dotted line).
(Note that in this particular option this is only possible when main lights are on).

☀️ 4 stage offset daylight linking - referencing from the window row each subsequent row has a progressively brighter offset (adjustable).

🚪 On vacation of the space any luminaires left on will switch off after an adjustable time-out period.
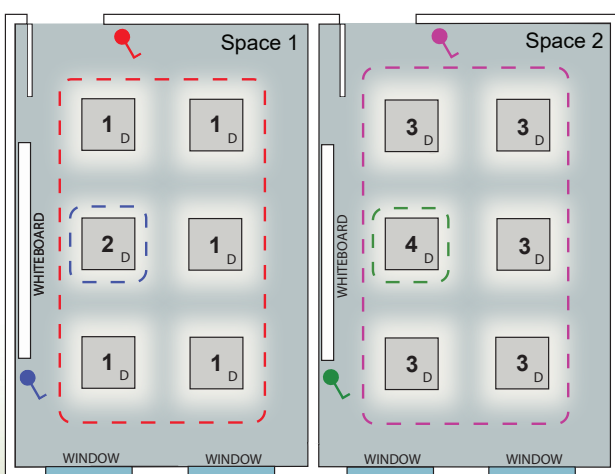
Option E:
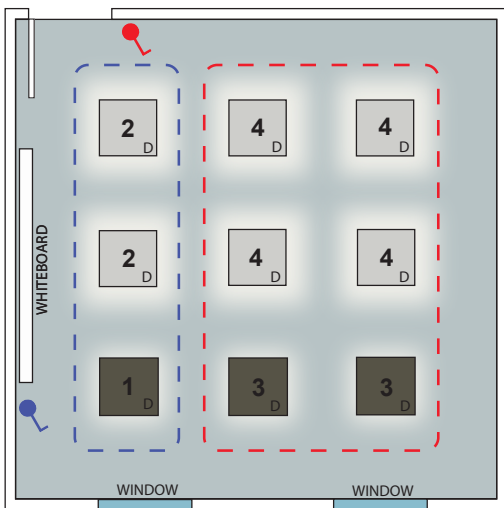
Operation:

🔴 Operates all luminaires bound within the red dotted line - On, Off or Dim (up/down).

🔵 Switches the whiteboard luminaire/s independently - On, Off or Dim (up/down) (those bound within blue dotted line).

☀️ 2 stage offset daylight linking - referencing from the window row, both back rows will have a brighter offset (adjustable).

🚪 On vacation of the space any luminaires left on will switch off after an adjustable time-out period.

Option F:
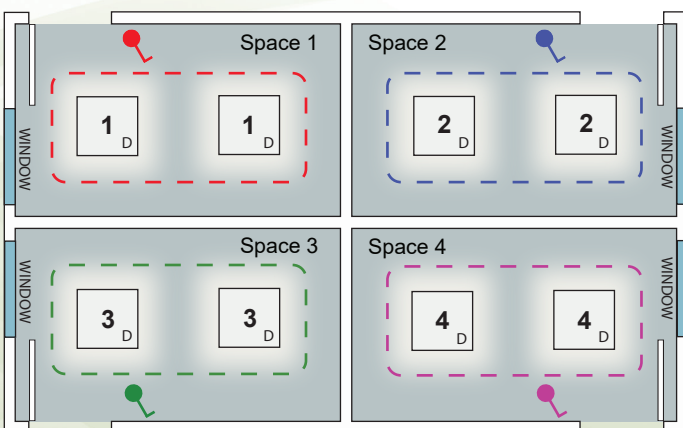
Operation of space 1:

🔴 Operates luminaires bound within the red dotted line - On/Off or Dim (up/down).

Operation of space 2:

🔵 Operates luminaires bound within the blue dotted line - On/Off or Dim (up/down).

Operation of space 3:

🟢 Operates luminaires bound within the green dotted line - On/Off or Dim (up/down).

Operation of space 4:

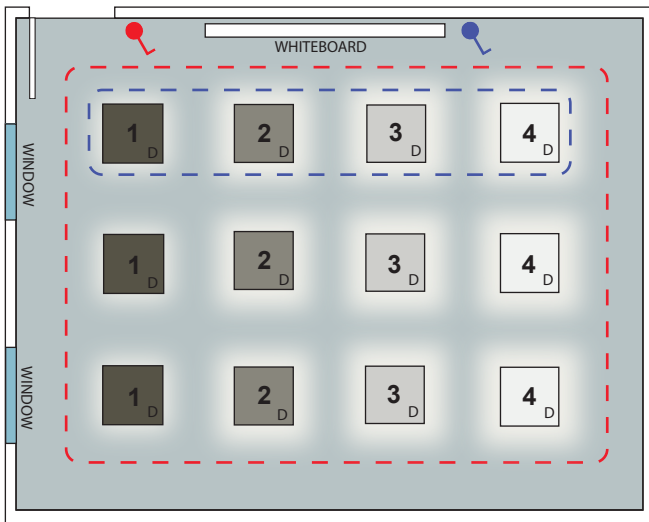🟣 Operates luminaires bound within the purple dotted line - On/Off or Dim (up/down).

All areas:

🚪 On vacation of each space any luminaires left on will switch off after an adjustable time-out period.

IMPORTANT: Configuration F is usually reserved for customised user specific configurations. On some occasions, when not required for this purpose the default configuration above may be installed instead.

Ordering from the flex7 ZoneLite Range

ZoneLite Lighting Control Units Type T (for teaching and educational environments)

4-Way, 4 Channel, Type T	**fzl04t1111**	Note: the last 4 numbers of the part number represent the number of outlets per channel. For example an fzl16t4354 has 4 outlets for ch1, 3 for ch2, 5 for ch3 & 4 for ch4 (alternative splits may be available on enquiry).
16-Way, 4 Channel, Type T	**fzl16t4354**	
20-Way, 4 Channel, Type T	**fzl20t5465**	

ZoneLite Sensor Heads

Master occupancy head	**fzh/pir**	Use slave heads to increase the range of any master occupancy head up to 6 fold (5 max. can be connected in parallel to any Master). Each slave head comes complete with a 'Y' adaptor to facilitate parallel connecting.
Master occupancy head + light sensing	**fzh/pir/ls**	
Slave occupancy head	**fzh/pir/sl**	

ZoneLite Remote Controls

Setup Remote Control	**fzl/rc**	Note: At least one Setup Remote Control will be required for setting up your ZoneLite/s
User Remote Control	**frc/user**	

Ordering flex7 Leads & Adaptors

05	5 metres	
10	10 metres	
15	15 metres	
20	20 metres	
30	30 metres	
40	40 metres	
50	50 metres	

leave blank for pvc or add **/lshf** for low smoke halogen free cable

leave blank or add **/bl** for link leads in blue.

Note: All leads and adaptors operate at PELV (Protected extra low voltage)

|		
Link lead (4-core) **fsl** ☐ ☐ ☐ (Grey cable)	Use to link sensor leads to the ZoneLite or sensor to sensor (Master to Slave)
Switch drop lead (4-core) **fsw** ☐ ☐ (Blue cable)	Use to connect wall switches to the ZoneLite to provide local switch control
Global switch drop lead (6-core) **fnw** ☐ ☐ (White cable)	Use to connect wall switches to the ZoneLite to provide global switch control.
Network lead (6-core) **fnl** ☐ (White cable)	Use to link between ZoneLites to provide common control from a Global Switch Input, or to connect a series of ZoneLites via a Corridor Hold Unit to hold escape routes illuminated.
'Y' adaptors (4-core) **fsy/a**	For two connections into one - for use with 4-core Link leads or Switch drop leads only.
Network 'Y' adaptors (6-core) **fny/a**	For two connections into one - for use with 6-core Network leads or Global switch drop leads only.

Ordering flex7 Luminaire Connections

For all Pre-wired Luminaire Leads, Plugs, Double Extender Leads and any other parts not shown here, please refer to our main flex7 catalogue.

ZoneLite Units

Length

48.94

89.40

flex 7
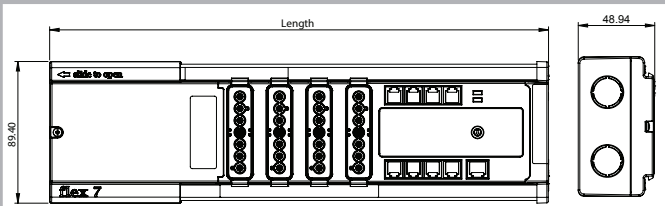
ZoneLite unit length
4 way outlet: 315mm
16 way outlet: 615mm
20 way outlet: 715mm

All measurements are in millimetres

Rating
Nominal 230V~ 16A, 50Hz, Class 1
Manufactured in black PA6 UL94 V-0 rated, PC/ABS, and Anodised Aluminium.
7 contacts per outlet each rated at 16 amps, using the flex7 outlet format.
Total system rating: 16A.
Operating range: -10°C to 40°C
IP20
Incoming terminals accept 3 x 2.50mm², 2 x 4.00mm² or 1 x 6.00mm² conductors.

Load (per channel)
Fluorescent & incandescent lighting   : 6A
Compact fluorescent lighting   : 3A
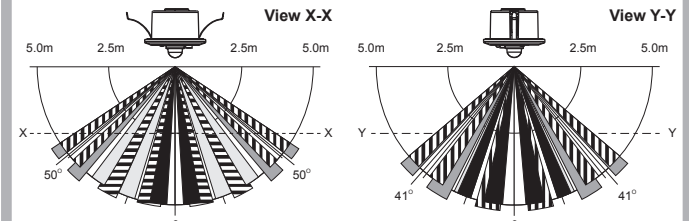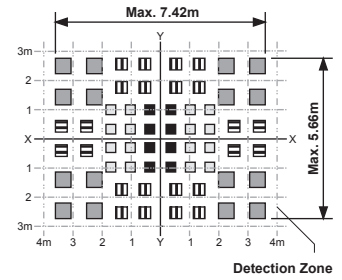**Maximum number of ballasts (per channel):**
DSI Digital control   : 25
DALI Digital control   : 25

Compliance: LVD-2006/95/EC & EMC-2004/108/EC

flex7 Sensor Link & Switch Drop Leads

fsl   XXm

fsw   XXm

Lengths
Comes in lengths up to 50 metres, refer to price list.

Specification
Connectors:	4P4C modular jack, RJ11 style
Conductor:	Stranded Copper (PVC variant)
	Stranded Tinned Copper (LSHF variant)
	28 a.w.g.
Insulation:	PP (PVC variant)
	PE (LSHF variant)
Jacket:	PVC (PVC variant)
	PE (LSHF variant)
Standard	IEC 332-1 (PVC variant)
	UL1581 (LSHF variant)

Insulation DC Resistance @ 20°C: > 500MΩM

Conductor DC Resistance @ 20°C: < 17.01Ω/100M

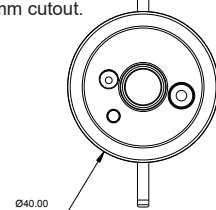|	
Rated Temperature:	70°C
Rated Voltage:	500V

flex7 ZoneLite Occupancy Sensor Heads

Detection Zone
64 discreet detection zones are acquired by the PIR detector. An object with a higher than background temperature will be detected if it moves between any two zones.

Max. 7.42m

Max. 5.66m

Detection Zone

View X-X
5.0m   2.5m   2.5m   5.0m
50°   50°

View Y-Y
5.0m   2.5m   2.5m   5.0m
41°   41°

Suitable for snapping into a Ø 32mm cutout.
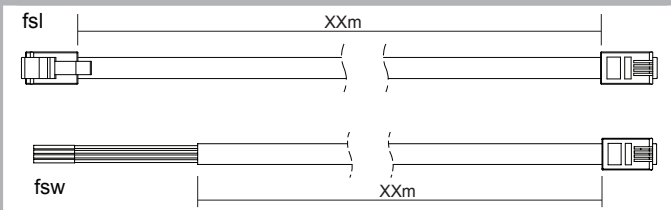
Ø40.00

13.70

33.20

All measurements are in millimetres

Rating
Supply Voltage: 12V DC
Manufactured in white & red PA6 UL94 V-0 rated, Non-halogen
Compliance: LVD-2006/95/EC & EMC-2004/108/EC
Operating range: -10°C to 40°C
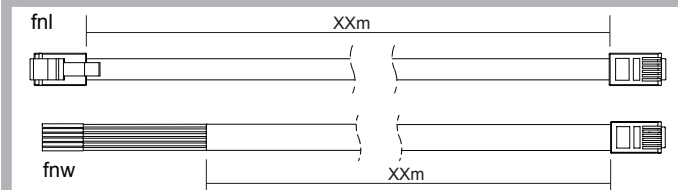Sensor Range: 7.42m x 5.66m at 2.5m height

flex7 Networking Leads

fnl   XXm

fnw   XXm

Lengths
Comes in lengths up to 50 metres, refer to price list.

Specification
Connectors:	6P4C modular jack, RJ12 style
Conductor:	Stranded Copper (PVC variant)
	Stranded Tinned Copper (LSHF variant)
	28 a.w.g.
Insulation:	PVC (PVC variant)
	PE (LSHF variant)
Jacket:	PVC (PVC variant)
	PE (LSHF variant)
Standard:	IEC 332-1 (PVC variant)
	UL1581 (LSHF variant)

Insulation DC Resistance @ 20°C: > 500MΩM

Conductor DC Resistance @ 20°C: < 17.01Ω/100M

Rated Temperature:	70°C
Rated Voltage:	500V

# Other products in the flex7 lighting connection and control range:

The flex7 System is fully modular, and products simply plug-together. This results in huge reductions in installation time on site, and reduced requirements for skilled labour. The product range is split into three sections - Power up, Light up, and Control.

Power up..

Provide power to your lighting circuit using flex7 eZeBoxes, Single Socket Outlets or Hub Units.

eZeBoxes come in 2, 4, 6, 8, 10 and 12-ways and are 7-pole as standard. If you need to extend your circuit to add luminiares, simply plug an eZeBox extender unit into your starter unit. Alternatively, if you want to add a separate circuit, plug-in an eZeBox Tap-off Unit.
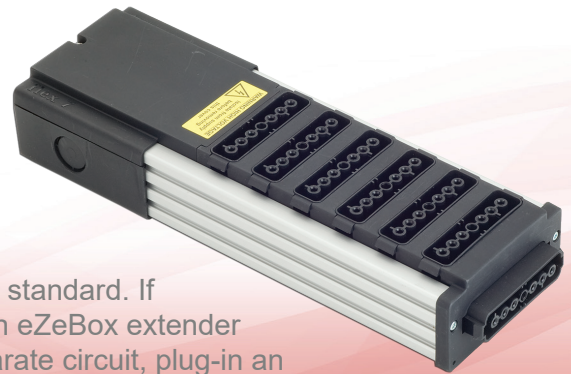
Light up..

Connect your luminaires to the power supply using our extensive range of pre-wired luminaire leads. These can simply be plugged into any eZeBox
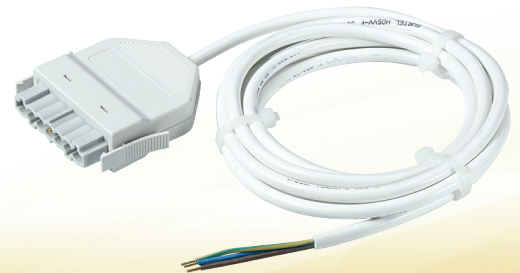
and Control

We have a huge range of lighting controls available - all of which can simply be plugged into any eZeBox. We offer occupancy/presence, absence, daylight linking, daylight dependency, manual dimming/switching and remote control. All controls operate at protected extra low voltage.

Contact us:

If you have any questions at all then please give us a ring/ send us an email/ visit the website.

www.flexconnectors.co.uk
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Tel: +44 (0)20 8580 1066