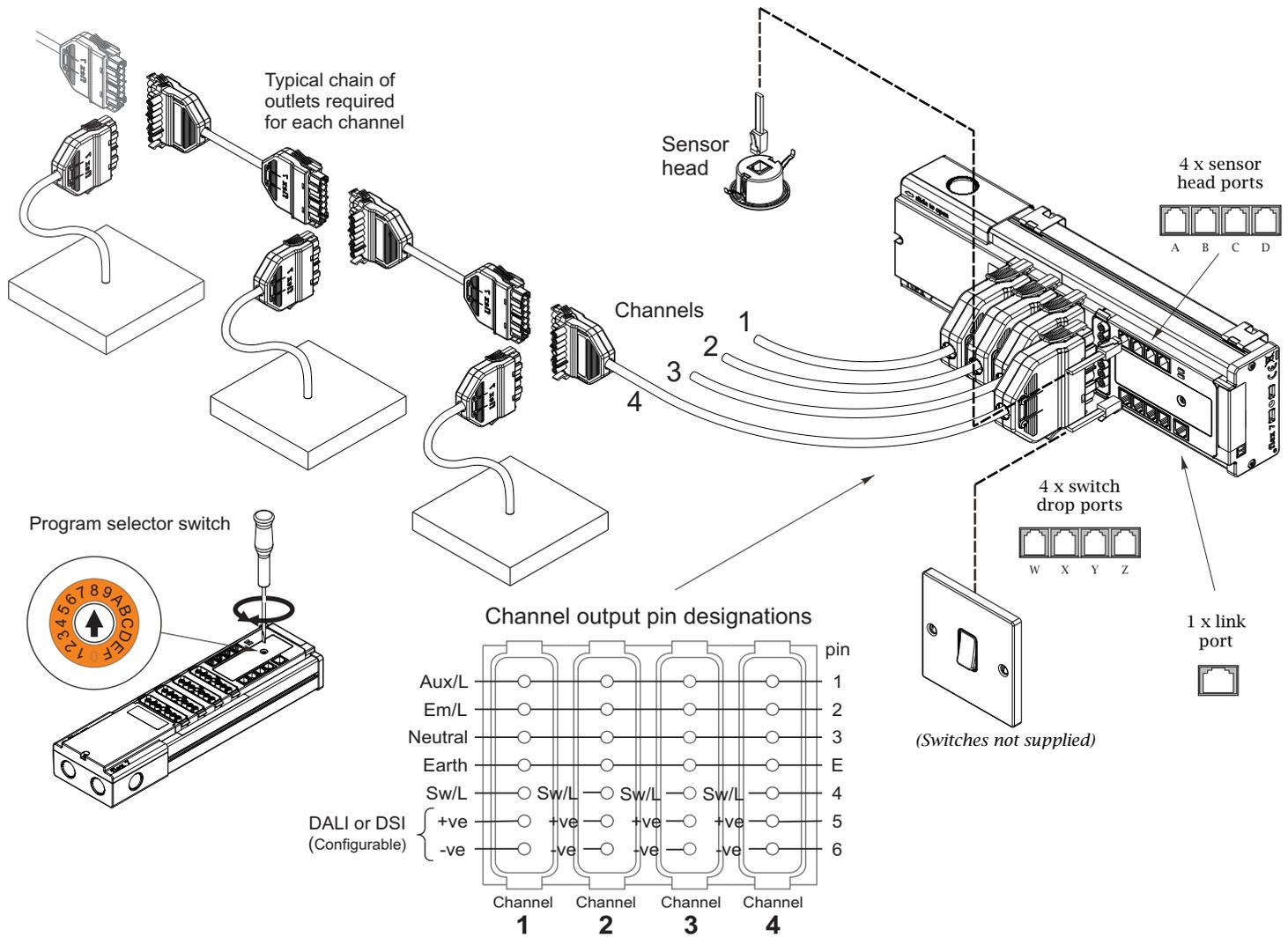


The ZoneLite **Type G** is a 4 channel lighting control unit designed specifically for general office applications. There are 14 individual pre-programmed solutions to choose covering virtually any requirement. Simply select the desired program and follow its specific installation instructions.

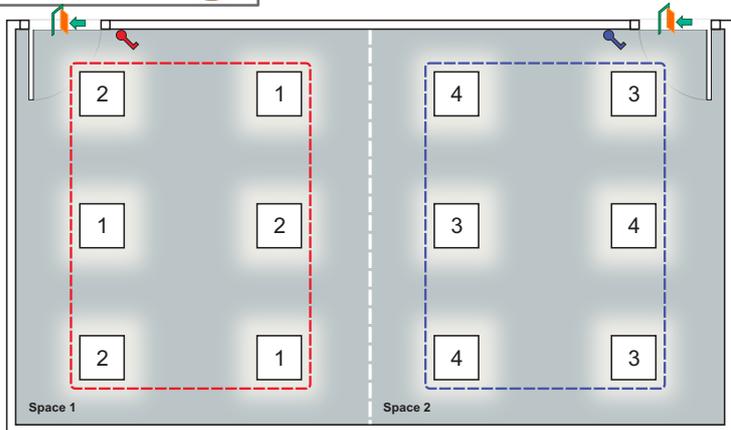


How to use this booklet

- STEP 1** Use the quick selection guide on pages 2 & 3 to choose the lighting layout that best suits your requirements. Your choice will direct you to a more detailed overview.
- STEP 2** Review the detailed overview to ensure the chosen lighting layout fully meets your needs. If not other operational variations may exist within that layout. Check that you have all the parts necessary to complete the installation.
- STEP 3** Fix the ZoneLite Unit in its final position and make the supply connections as per the instructions on page 36
- STEP 4** Return to the detailed overview pages of your chosen lighting layout and plug in all luminaires, sensor heads and switch drops as shown. Now is a good time to select the appropriate position on the program selector switch.
- STEP 5** If ZoneLite Units are required to share information with one another i.e. *corridor hold*, or if remote master switch inputs such as *Emergency test*, *Last man out*, *All lights on* are required then refer to page 34 & 35
- STEP 6** Power up the ZoneLite and test that the lighting is operating broadly as expected.
- STEP 7** If there is any daylight linking or if any other changes are required to the operational parameters then refer to the separate *setting up* leaflet 22/069. (An **fzl/rc** - ZoneLite set up remote is required for this purpose)
- STEP 8** Your installation should now be complete - if you are encountering any problems please refer to the trouble shooting guide on the back page.

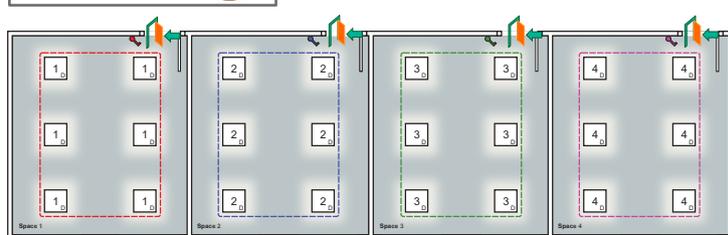
Config. 8

See pages 18 & 19



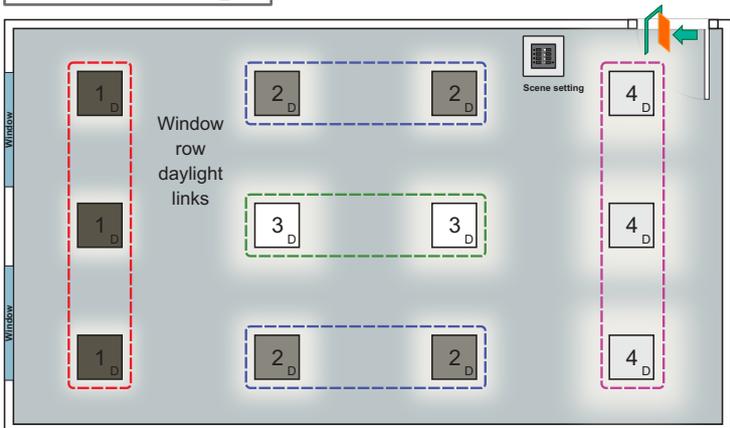
Config. 9

See pages 20 & 21



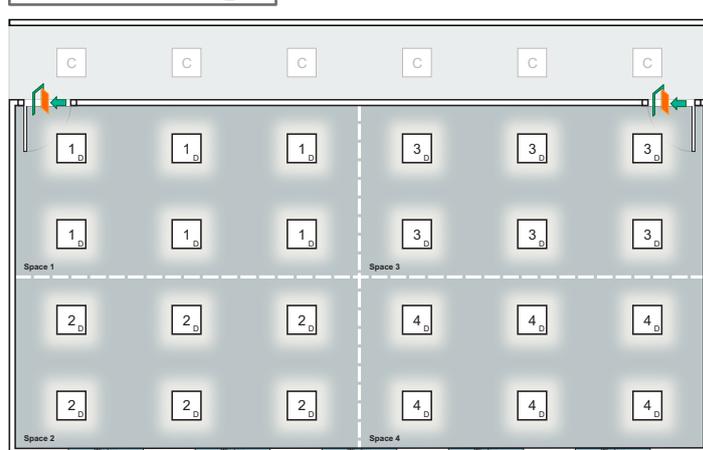
Config. A

See pages 22 & 23



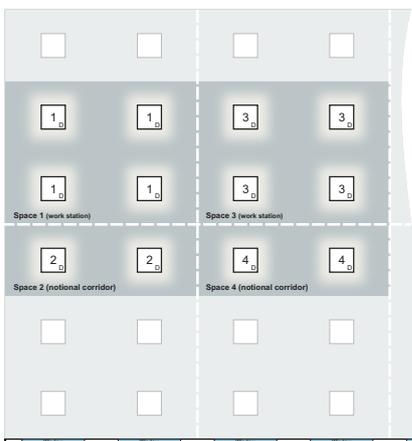
Config. B

See pages 24 & 25



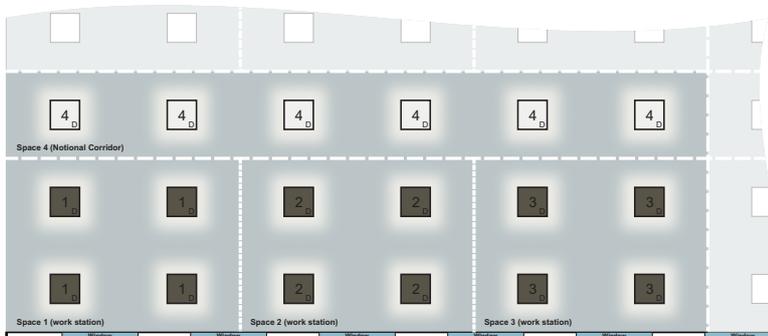
Config. C

See pages 26 & 27



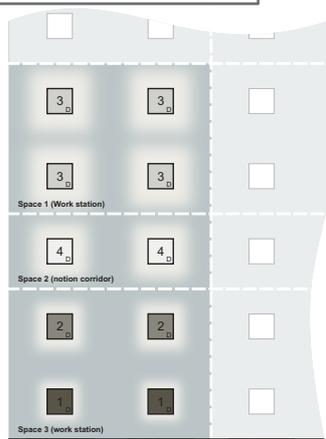
Config. D

See pages 28 & 29



Config. E

See pages 30 & 31



Config. F

See pages 32 & 33

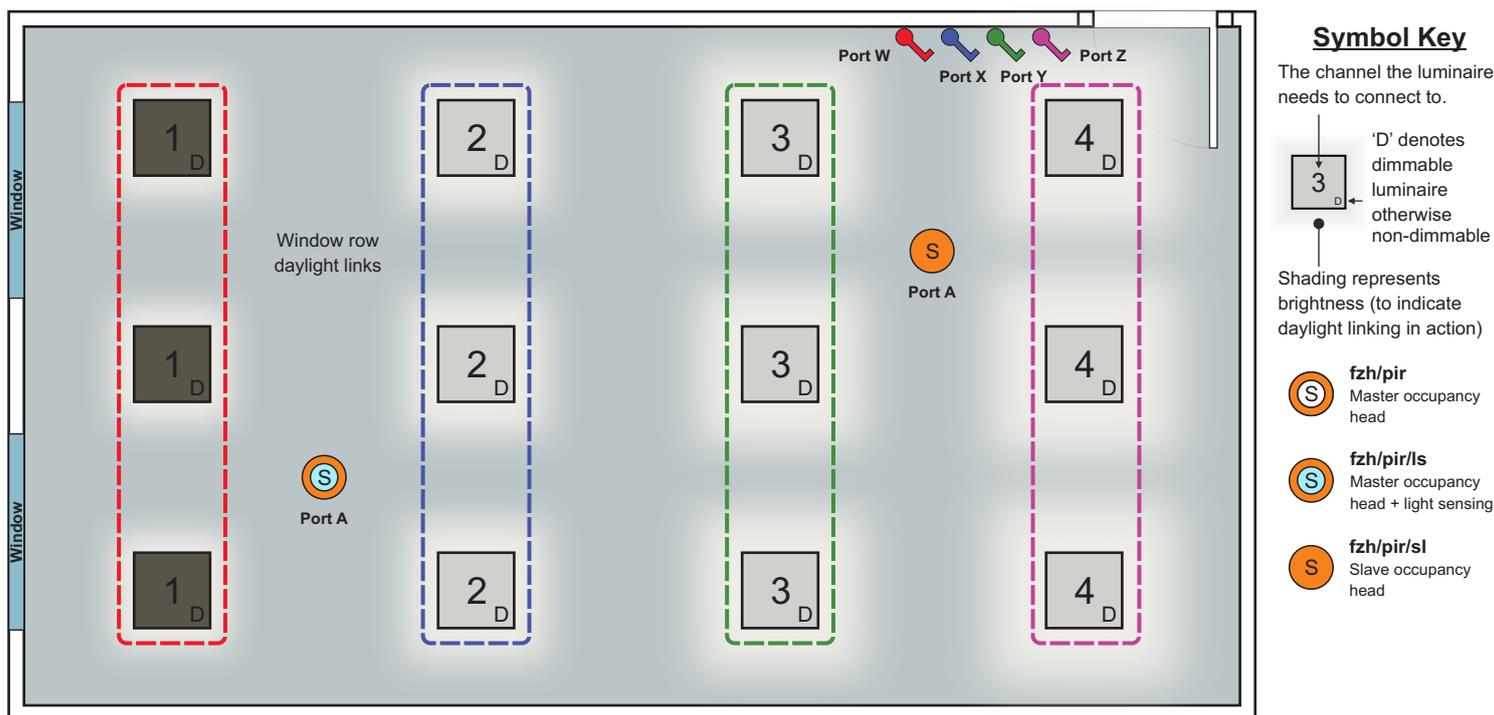


Note: Configuration F is reserved for user specific solutions that when not in use may be replaced by the default configuration below.



1

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Operation [default]

-  Operates all luminaires bound within red dotted line - On, Off, Dim (up/down)*.
-  Operates all luminaires bound within blue dotted line - On, Off, Dim (up/down)*.
-  Operates all luminaires bound within green dotted line - On, Off, Dim (up/down)*.
-  Operates all luminaires bound within purple dotted line - On, Off, Dim (up/down)*.
-  Daylight linking - The window row will daylight link according to the natural light level detected.
-  On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

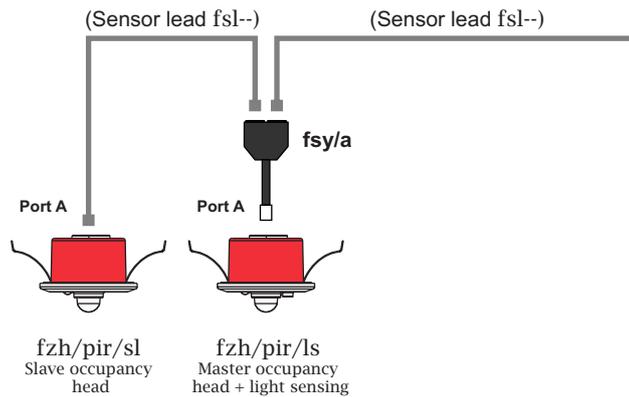
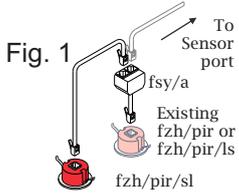
Table 1	Other available operational variations	Action
	Daylight linking not required anywhere.	Fit motion only sensor head fzh/pir instead of fzh/pir/lS
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/lS (light sensing only head) to port B. This will work with the existing fzh/pir/lS to average the light levels at both points.
	Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

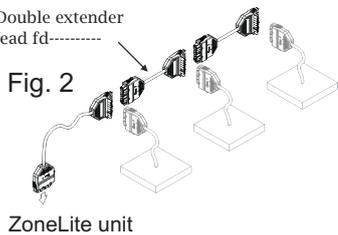


1

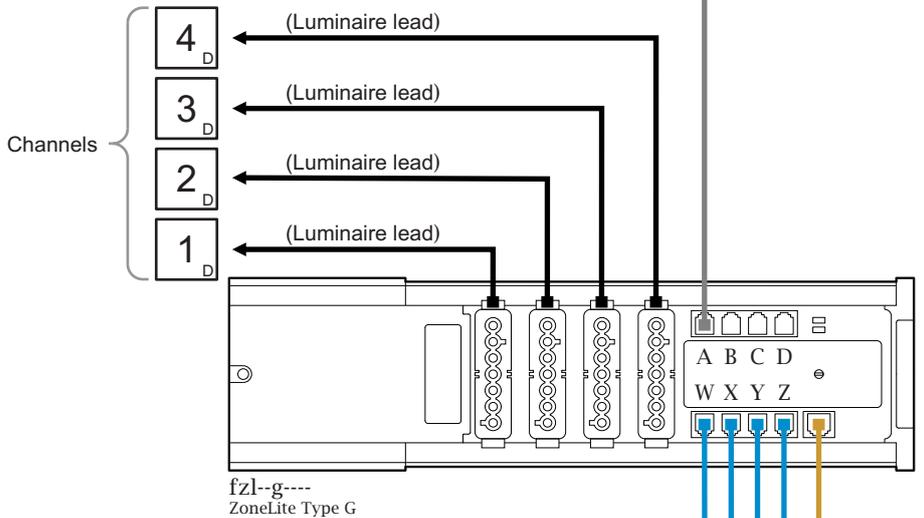
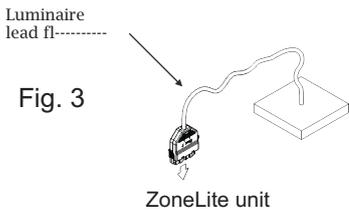
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.

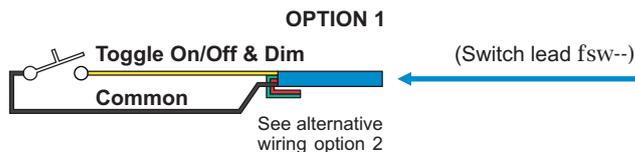
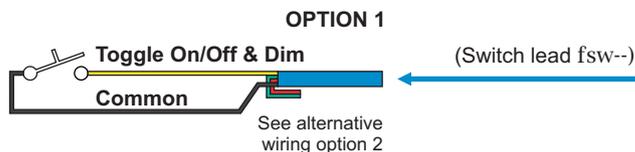
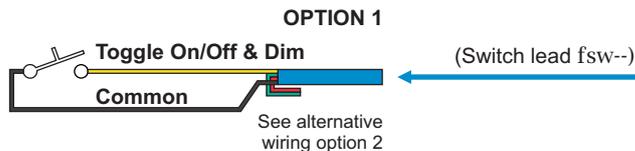
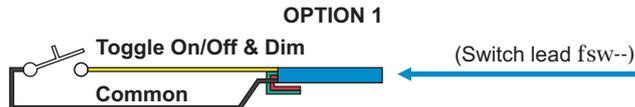


Switch channel 1 - ON/OFF and DIM
Port W (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
 Use 1 way retractive (not supplied)

Switch channel 2 - ON/OFF and DIM
Port X (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
 Use 1 way retractive (not supplied)

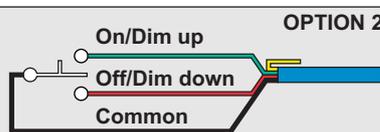
Switch channel 3 - ON/OFF and DIM
Port Y (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
 Use 1 way retractive (not supplied)

Switch channel 4 - ON/OFF and DIM
Port Z (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
 Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down)
 Use 3 pos. ctr. off retractive (not supplied)



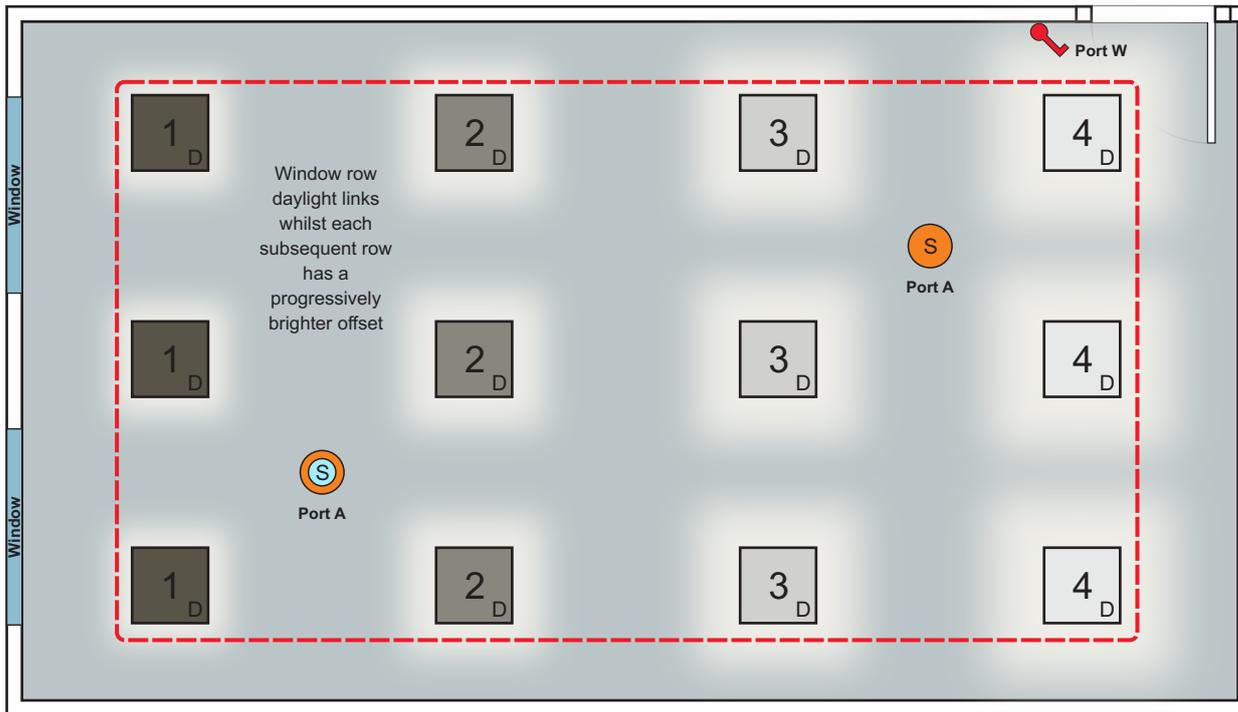
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 35

(Link port lead)



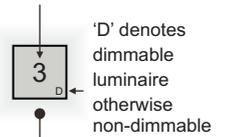
2

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

 fzh/pir
Master occupancy head

 fzh/pir/l
Master occupancy head + light sensing

 fzh/pir/sl
Slave occupancy head

Operation [default]



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



4 stage offset daylight linking - Referencing from the window row, back rows will have a brighter offset. (offset value is adjustable)



On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

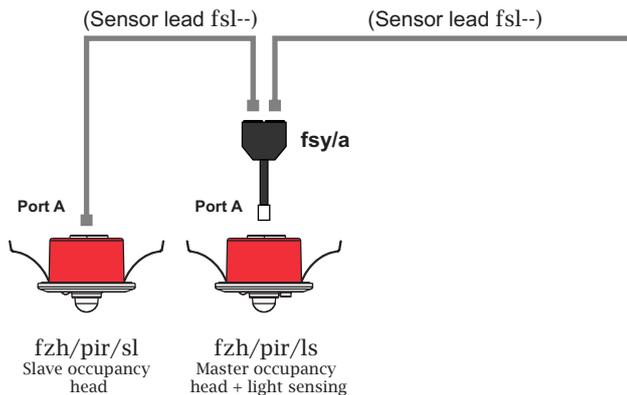
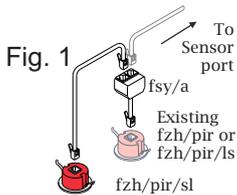
* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

Table 1	Other available operational variations	Action
	Daylight linking not required anywhere.	Fit motion only sensor head fzh/pir instead of fzh/pir/l
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/l (light sensing only head) to port B. This will work with the existing fzh/pir/l's to average the light levels at both points.
	Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

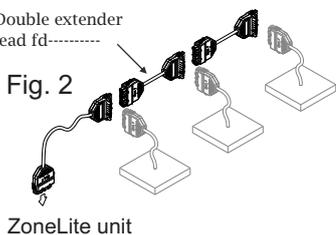


2

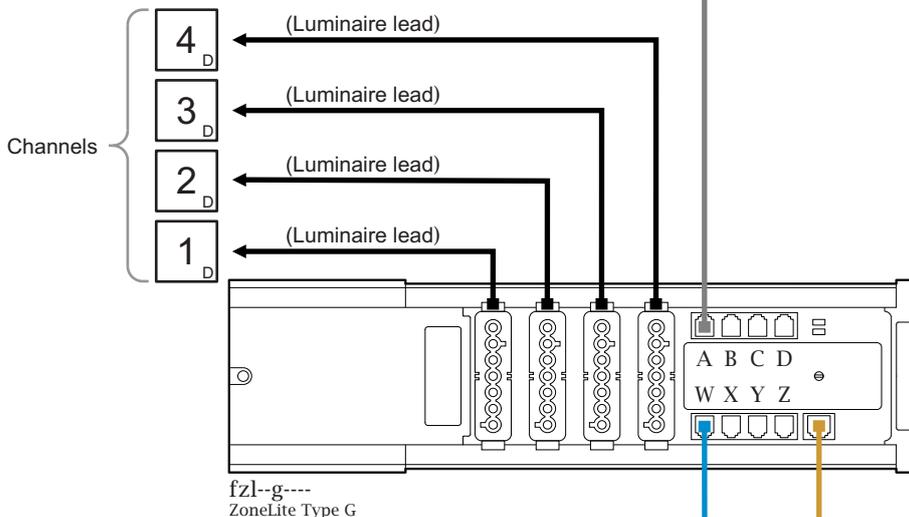
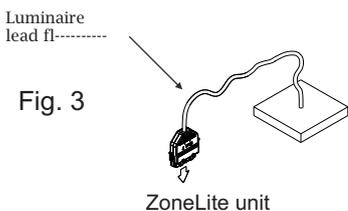
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.

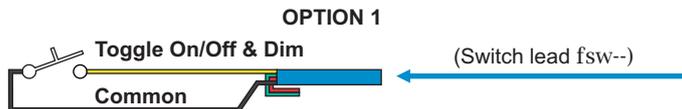


Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



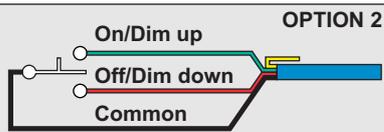
Switch channel 1, 2, 3 and 4 - ON/OFF and DIM

Port W (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down)
Use 3 pos. ctr. off retractive (not supplied)



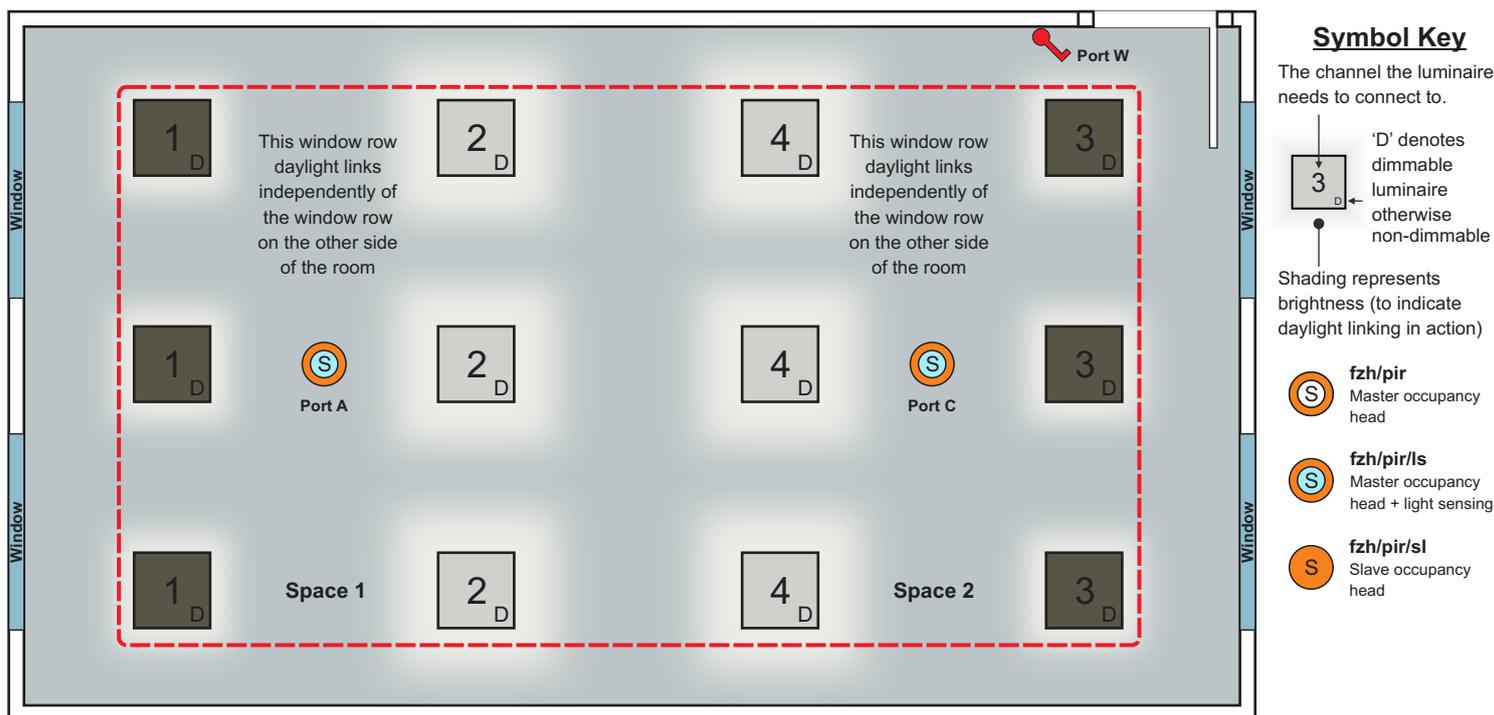
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 35

(Link port lead)



3

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Operation of space [default]

- Operates all luminaires bound within red dotted line - On, Off or Dim (up/down)*
- 2 stage offset daylight linking - Both window rows daylight link independently of one another whilst their respective inner rows will have brighter offsets.
- On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min)**

** Please note time-out adjustments must be made on both sensor heads A & C - *Setting up* leaflet 22/069

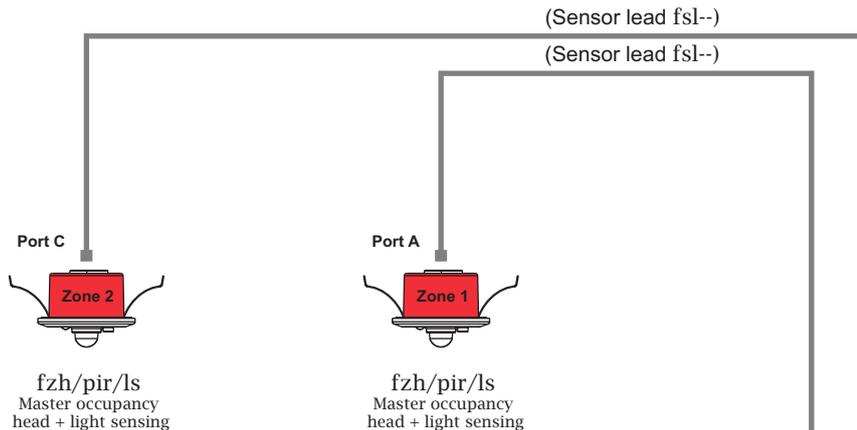
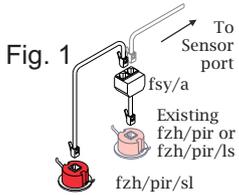
* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

Table 1	Other available operational variations	Action
	Daylight linking is not required in a space where it is shown.	Change the head to occupancy only fzh/pir (for no daylight linking)
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/lS (light sensing only head) to port B. This will work with the existing fzh/pir/lS to average the light levels at both points.
	Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

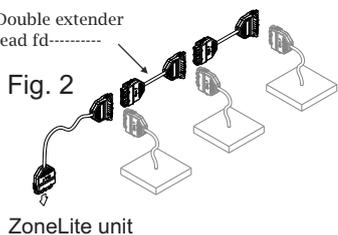


3

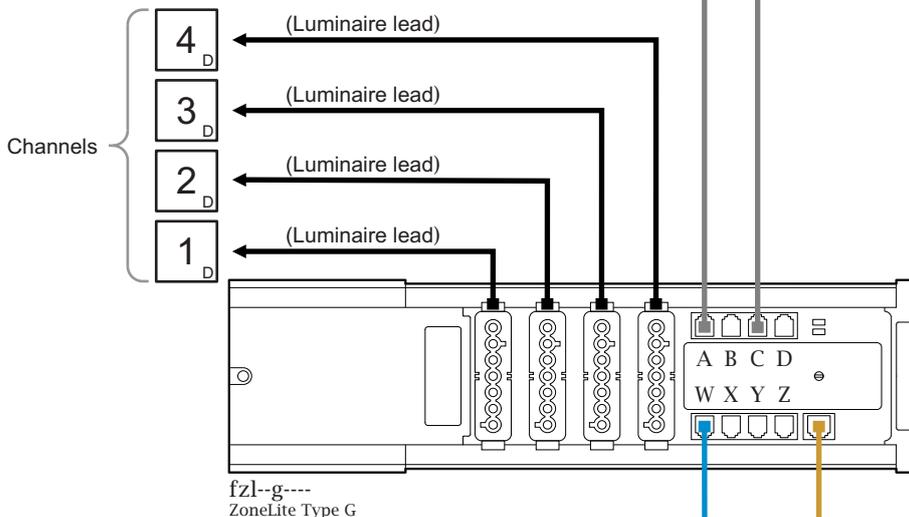
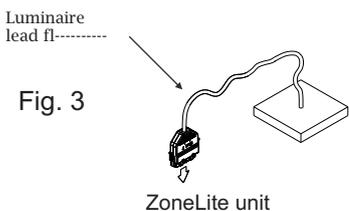
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.

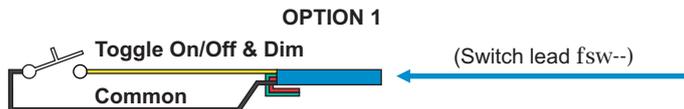


Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



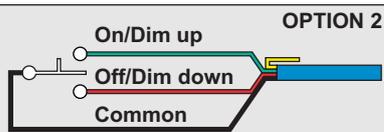
Switch channel 1, 2, 3 and 4 - ON/OFF and DIM

Port W (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down)
Use 3 pos. ctr. off retractive (not supplied)



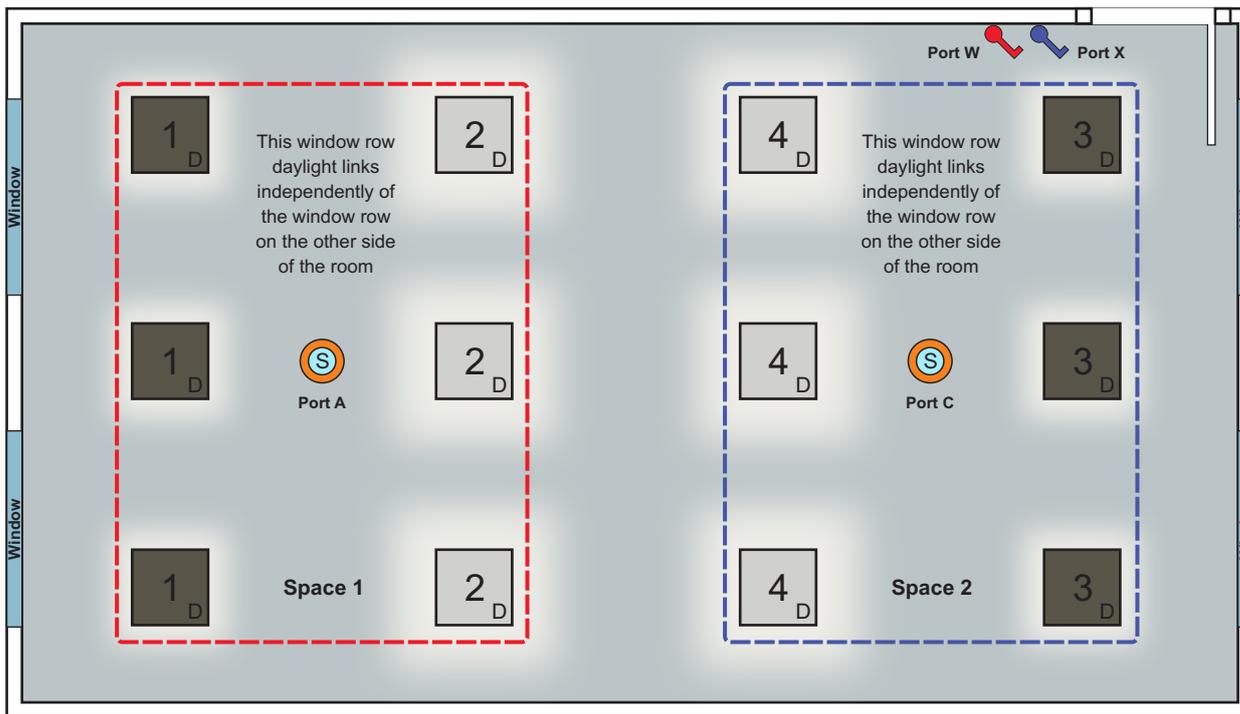
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 35

(Link port lead)



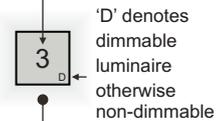
4

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/lS Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default]

- Operates all luminaires bound within red dotted line - On, Off or Dim (up/down)*
- 2 stage offset daylight linking - Referencing from the window row, back row will have a brighter offset. (offset value is adjustable)
- On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation of space 2 [default]

- Operates all luminaires bound within blue dotted line - On, Off or Dim (up/down)*
- 2 stage offset daylight linking - Referencing from the window row, back row will have a brighter offset. (offset value is adjustable)
- On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

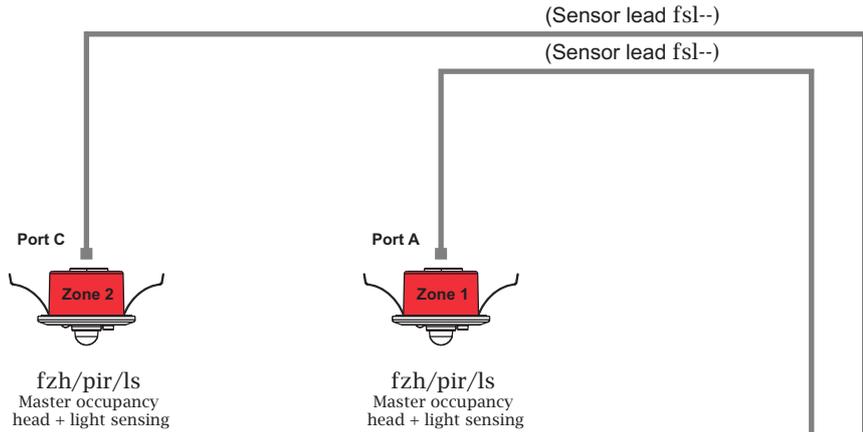
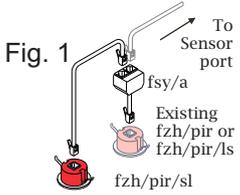
Table 1 Other available operational variations	Action
Daylight linking is not required in a space where it is shown.	Change the head to occupancy only fzh/pir (for no daylight linking)
There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/lS (light sensing only head) to port B. This will work with the existing fzh/pir/lS to average the light levels at both points.
Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

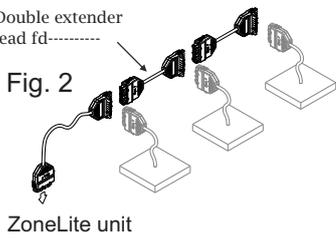


4

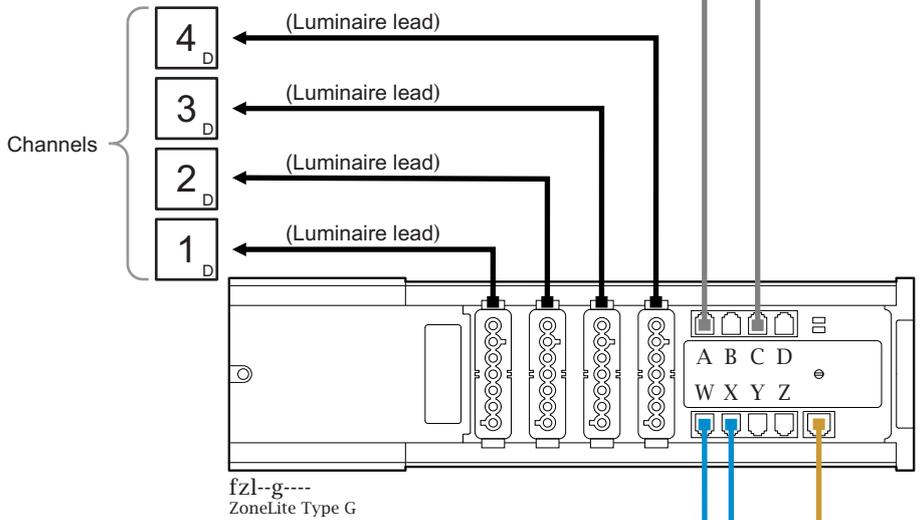
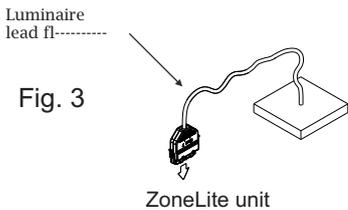
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.

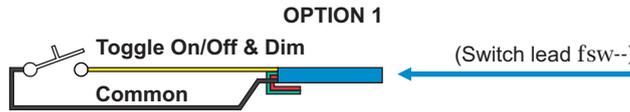


Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



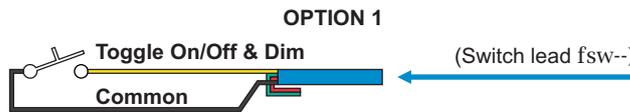
Switch channel 1 and 2 - ON/OFF and DIM

Port W (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Switch channel 3 and 4 - ON/OFF and DIM

Port X (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down)
Use 3 pos. ctr. off retractive (not supplied)



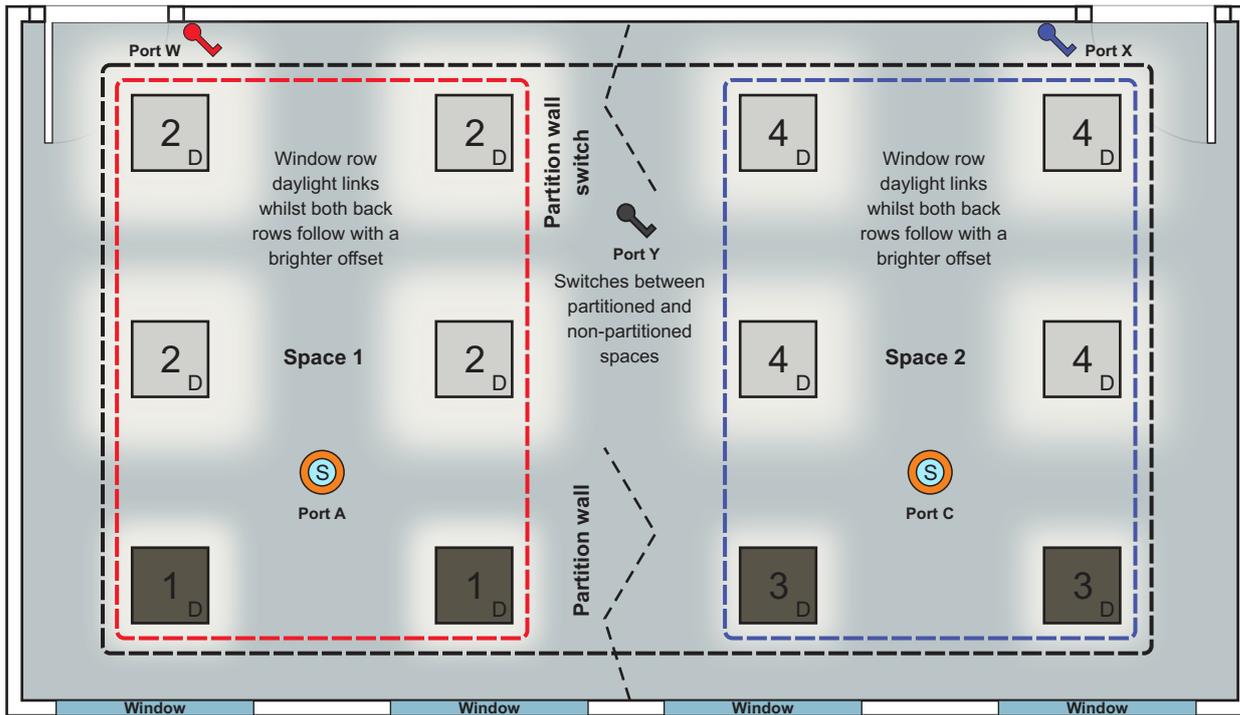
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 35

(Link port lead)



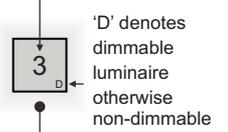
5

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/lS Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation: Partitioned space 1 [default]

Operates all luminaires bound within 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. (offset value is adjustable)

On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation: Partitioned space 2 [default]

Operates all luminaires bound within blue 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. (offset value is adjustable)

On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation: Unpartitioned space 1 and 2 [default]

Or Operates all luminaires bound within **BLACK** dotted line - On, Off or Dim (up/down)

2 stage offset daylight linking - Referencing from the window row (groups 1 and 3 synchronised), both back rows will have a brighter offset. (offset value is adjustable)

On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

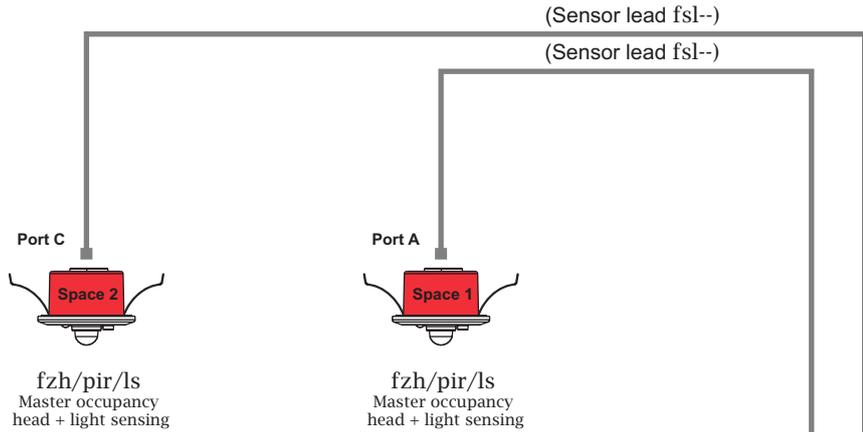
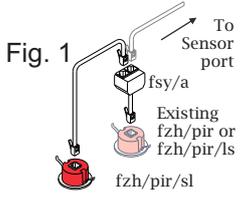
Table 1	Other available operational variations	Action
	Daylight linking is not required in a space where it is shown.	Change the head to occupancy only fzh/pir (for no daylight linking)
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/lS (light sensing only head) to port B. This will work with the existing fzh/pir/lS to average the light levels at both points.
	Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

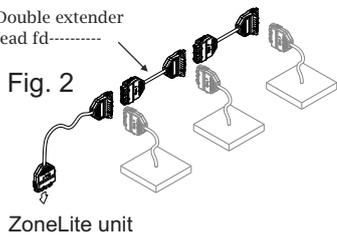


5

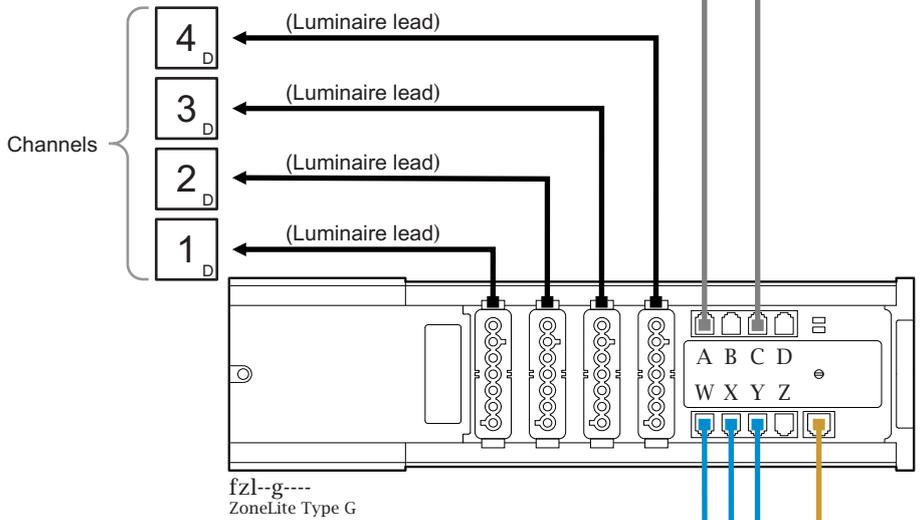
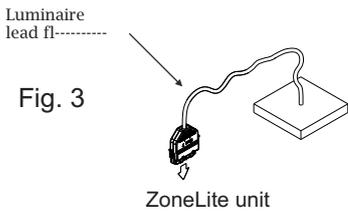
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



Operation when partitioned:
Switch channel 1 and 2 - ON/OFF and DIM

Operation when unpartitioned:
Switch channel 1, 2, 3 and 4 - ON/OFF and DIM

(Short pulses ON/OFF, long pulses DIM UP/DOWN alternately) Use 1 way retractive (not supplied)

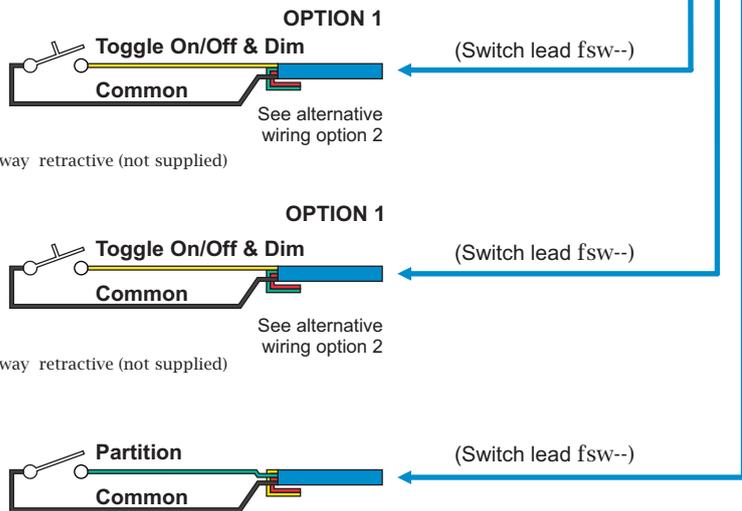
Operation when partitioned:
Switch channel 3 and 4 - ON/OFF and DIM

Operation when unpartitioned:
Switch channel 1, 2, 3 and 4 - ON/OFF and DIM

(Short pulses ON/OFF, long pulses DIM UP/DOWN alternately) Use 1 way retractive (not supplied)

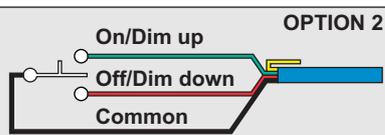
Partition Switch

Latched switch typically operated by partition doors (but can be manually operated) Use 1 way latched switch (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down) Use 3 pos. ctr. off retractive (not supplied)



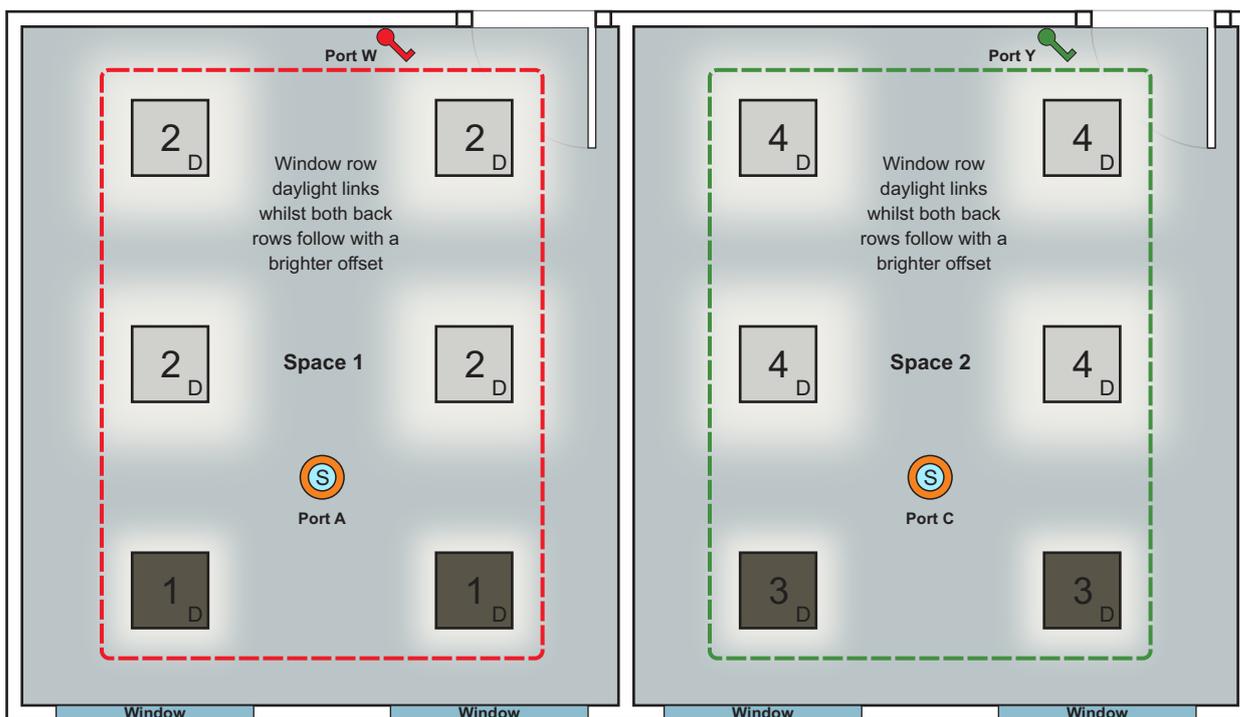
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 35

(Link port lead)



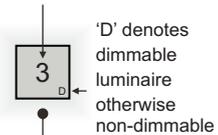
6

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



'D' denotes dimmable luminaire otherwise non-dimmable
Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/lS Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default]

- Operates all luminaires bound within 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. (offset value is adjustable)
- On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation of space 2 [default]

- Operates all luminaires bound within green 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. (offset value is adjustable)
- On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

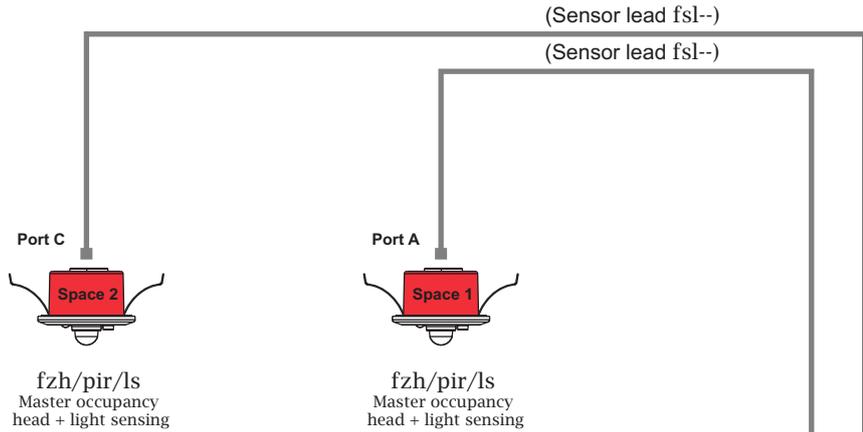
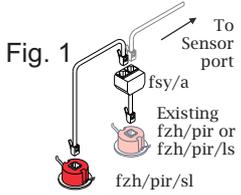
Table 1 Other available operational variations	Action
Daylight linking is not required in a space where it is shown.	Change the head to occupancy only fzh/pir (for no daylight linking)
There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/lS (light sensing only head) to port B. This will work with the existing fzh/pir/lS to average the light levels at both points.
Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

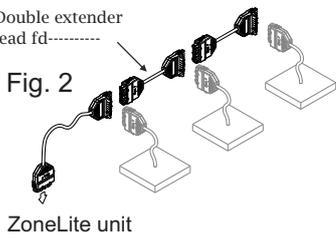


6

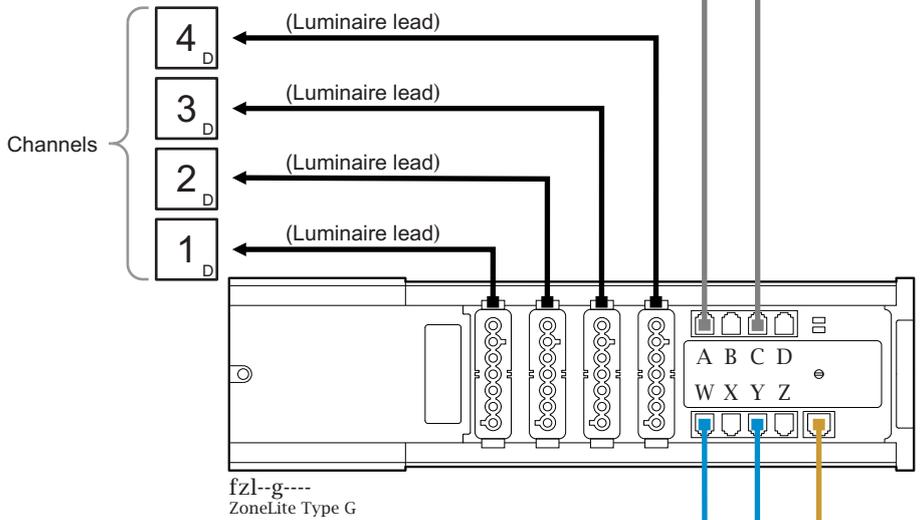
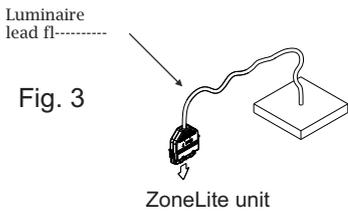
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.

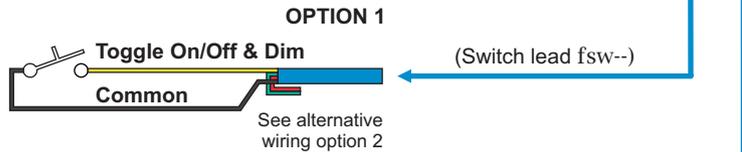


Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



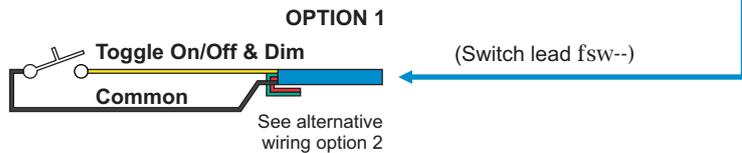
Port W Switch channel 1 and 2 - ON/OFF and DIM

(Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Port Y Switch channel 3 and 4 - ON/OFF and DIM

(Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down)
Use 3 pos. ctr. off retractive (not supplied)



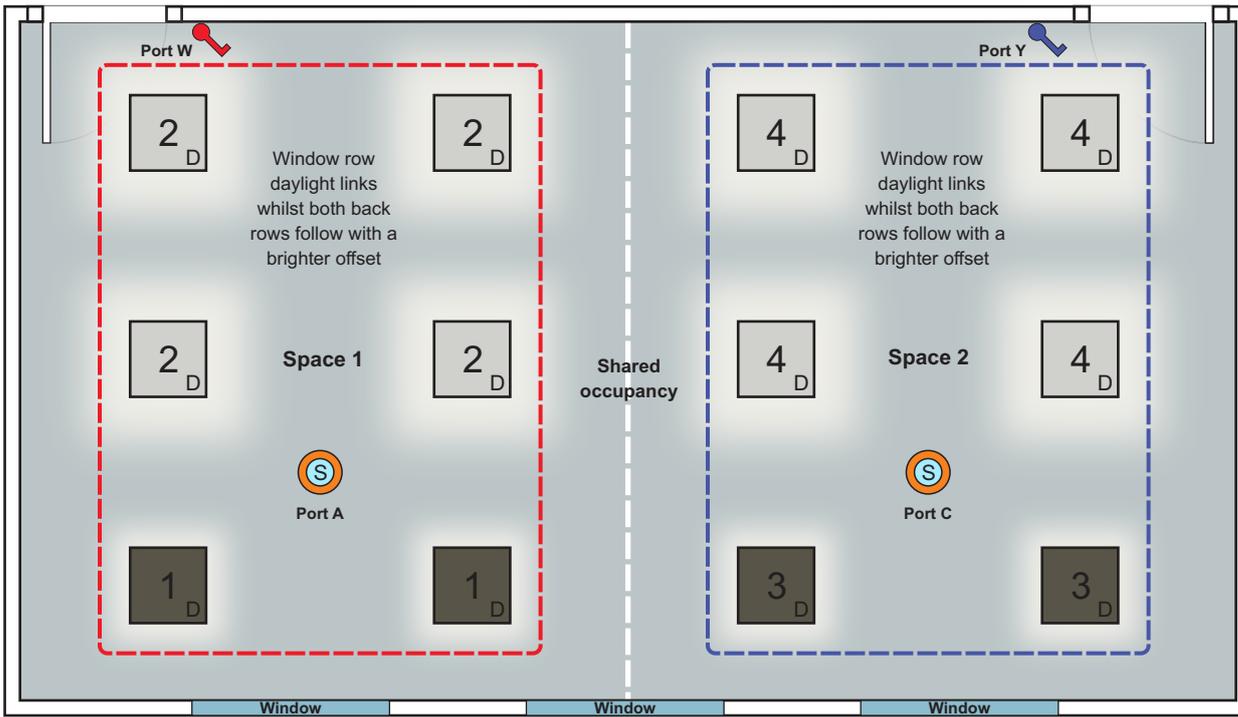
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 35

(Link port lead)



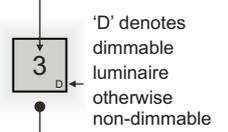
7

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/lS Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default]

- On entry of this space channel 1 and 2 luminaires switch on to maximum.
On entry of only the adjacent space channel 1 and 2 luminaires switch to minimum (adjustable).
- Operates channel 1 and 2 luminaires in this space - Off, On or Dim* (Those bound within red dotted line)
- 2 stage offset daylight linking - Provided this space is occupied, the window row daylight links according to the natural light level detected, whilst the back 2 rows will adopt a brighter offset (adjustable)
- On exit of this space (after time-out) but not adjacent space, channel 1 and 2 luminaires revert to minimum (adjustable).
on exit of this space and adjacent space (after time-outs) channel 1 and 2 luminaires switch off.

Operation of space 2 [default]

- On entry of this space channel 3 and 4 luminaires switch on to maximum.
On entry of only the adjacent space channel 3 and 4 luminaires switch to minimum (adjustable).
- Operates channel 3 and 4 luminaires in this space - Off, On or Dim* (Those bound within blue dotted line)
- 2 stage offset daylight linking - Provided this space is occupied, the window row daylight links according to the natural light level detected, whilst the back 2 rows will adopt a brighter offset (adjustable)
- On exit of this space (after time-out) but not adjacent space, channel 3 and 4 luminaires revert to minimum (adjustable).
on exit of this space and adjacent space (after time-outs) channel 3 and 4 luminaires switch off.

* Manually dimming luminaires via a switch temporarily disables daylight linking (until next switch On initiation). If not desired manual dimming can be disabled at set up - *Setting up* leaflet 22/069

Note: Zonelites with the same configuration (config 7) can be networked together to expand this 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

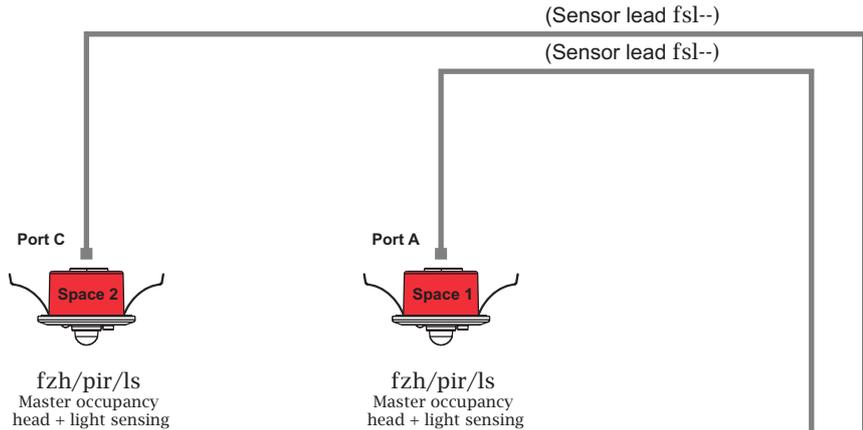
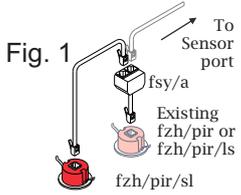
Table 1	Other available operational variations	Action
	Daylight linking is not required in a space where it is shown.	Change the head to occupancy only fzh/pir (for no daylight linking)
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The window row is too long to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/lS (light sensing only head) to port B. This will work with the existing fzh/pir/lS to average the light levels at both points.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

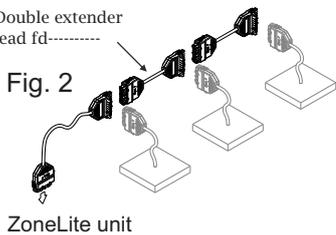


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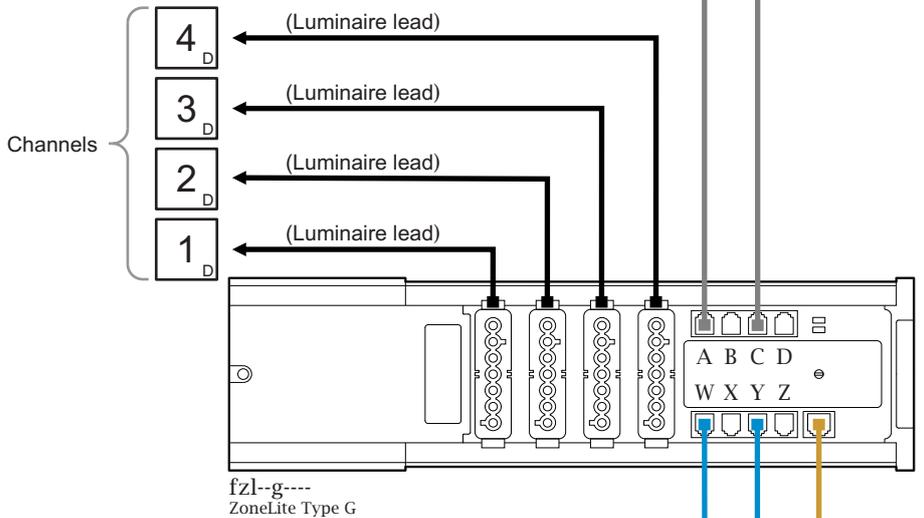
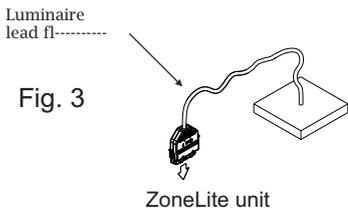
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.

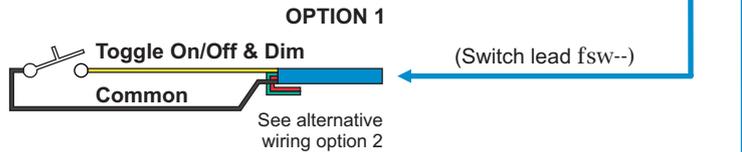


Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



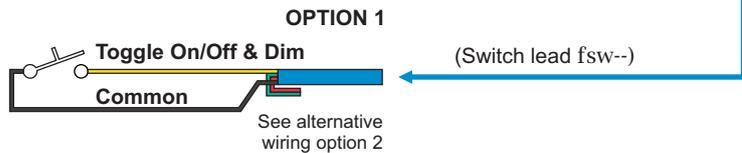
Switch channel 1 and 2 - ON/OFF and DIM

Port W (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



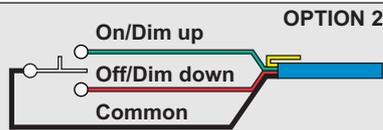
Switch channel 3 and 4 - ON/OFF and DIM

Port X (Short pulses ON/OFF, long pulses DIM UP/DOWN alternately)
Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF, long pulses Dim up/down)
Use 3 pos. ctr. off retractive (not supplied)



If ZoneLites with this same configuration (config. 7) are required to be networked together to expand the 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

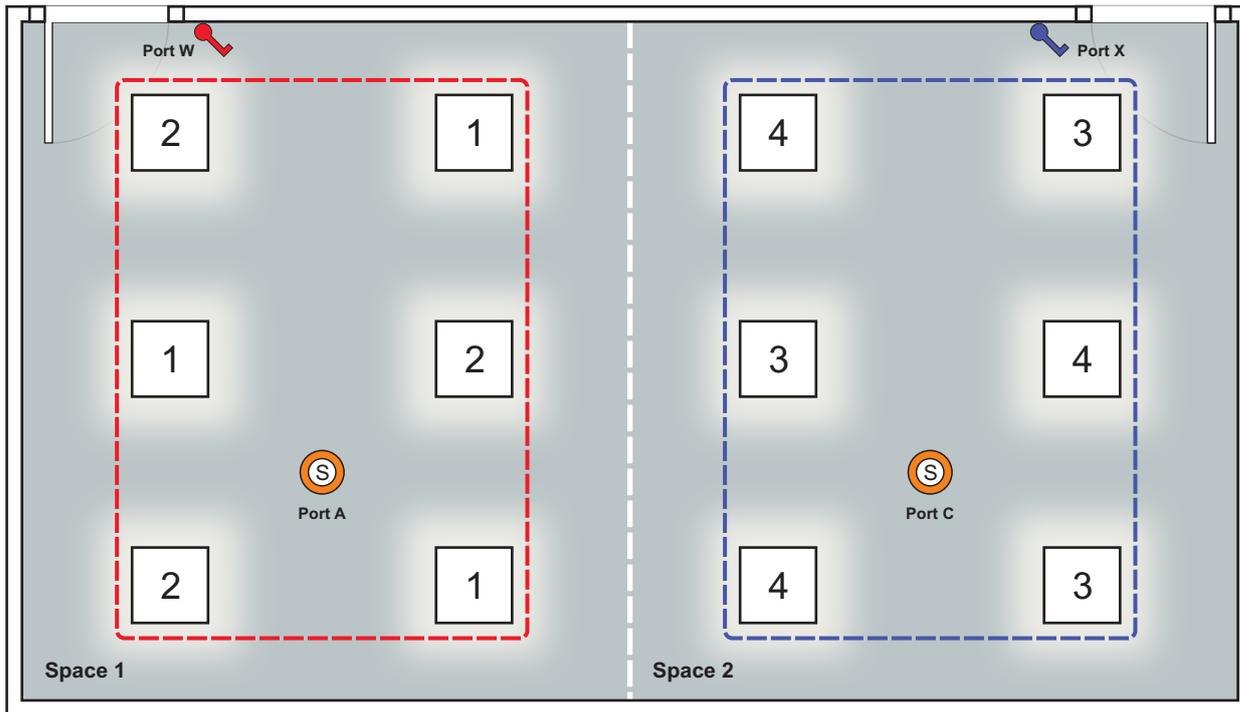
If any of *Emergency Test, Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 and 35





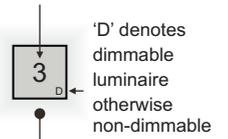
8

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/ls Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default]

- On entry of this space channel 1 and 2 luminaires switch on.
On entry of only the adjacent space channel 1 luminaires switch on.
- Operates channel 1 and 2 luminaires in this space - Off, On (Those bound within red dotted line)
- On exit of this space (after time-out) but not adjacent space, channel 2 luminaires switch off.
On exit of this space and adjacent space (after time-outs) channel 1 and 2 luminaires switch off.

Operation of space 2 [default]

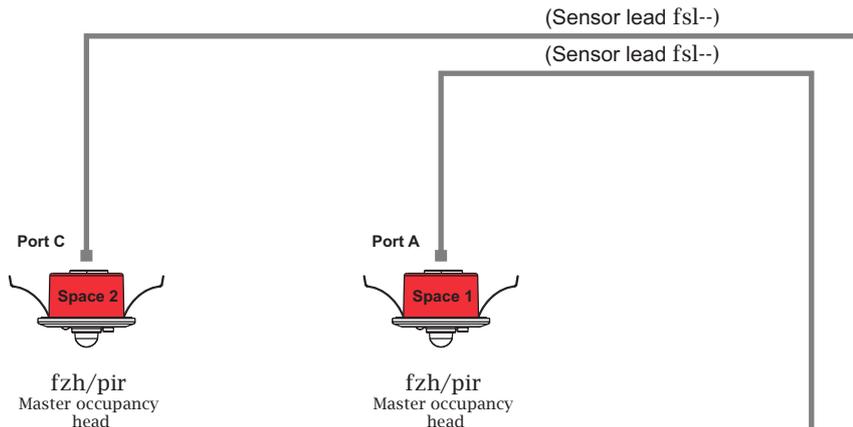
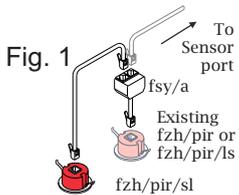
- On entry of this space channel 3 and 4 luminaires switch on.
On entry of only the adjacent space channel 3 luminaires switch on.
- Operates channel 3 and 4 luminaires in this space - Off, On (Those bound within blue dotted line)
- On exit of this space (after time-out) but not adjacent space, channel 4 luminaires switch off.
On exit of this space and adjacent space (after time-outs) channel 3 and 4 luminaires switch off.

Note: Zonelites with the same configuration (config 8) can be networked together to expand this 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

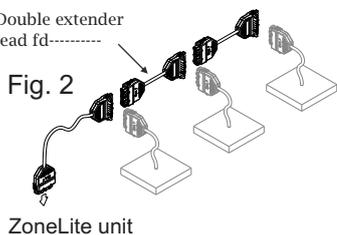
Table 1	Other available operational variations	Action
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Light level, Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

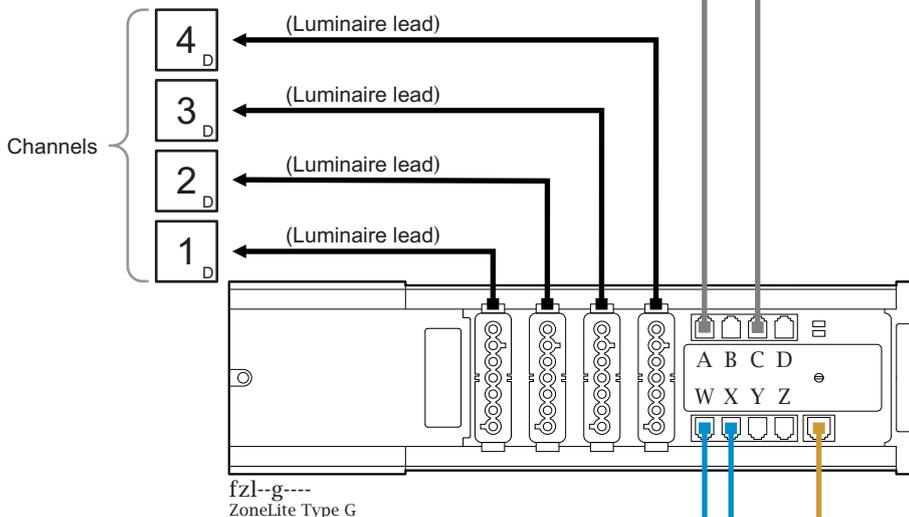
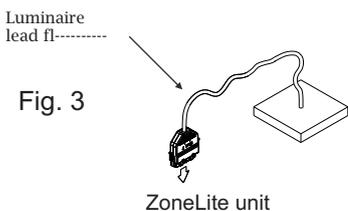
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.

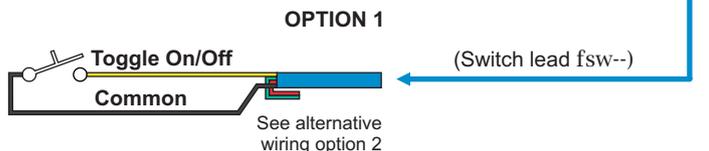


Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



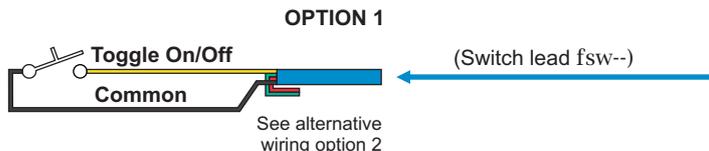
Port W Switch channel 1 and 2 - ON/OFF

(Short pulses ON/OFF)
Use 1 way retractive (not supplied)



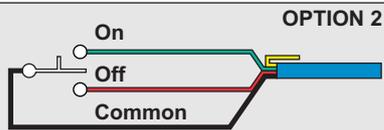
Port X Switch channel 3 and 4 - ON/OFF

(Short pulses ON/OFF)
Use 1 way retractive (not supplied)



Alternative to option 1 switch wiring.

(Short pulses ON/OFF)
Use 3 pos. ctr. off retractive (not supplied)



If ZoneLites with this same configuration (config. 8) are required to be networked together to expand the 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

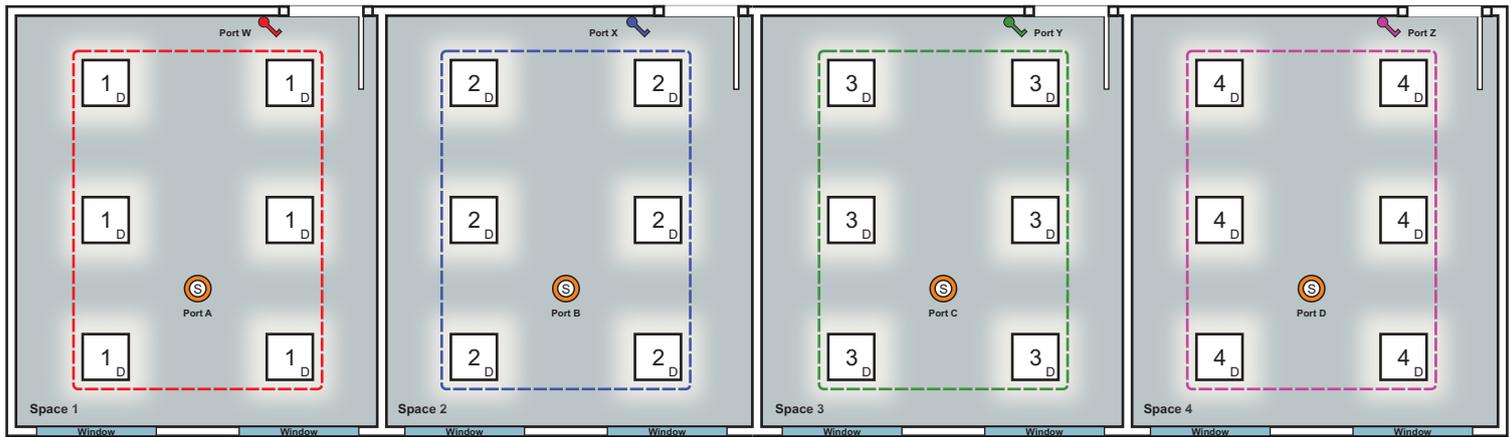
If any of Emergency Test, Last man out or All lights on switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 and 35

(Link port lead)



9

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Operation of space 1 [default]

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

All luminaires in this space daylight link at the same rate

On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation of space 2 [default]

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

All luminaires in this space daylight link at the same rate

On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation of space 3 [default]

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

All luminaires in this space daylight link at the same rate

On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Operation of space 4 [default]

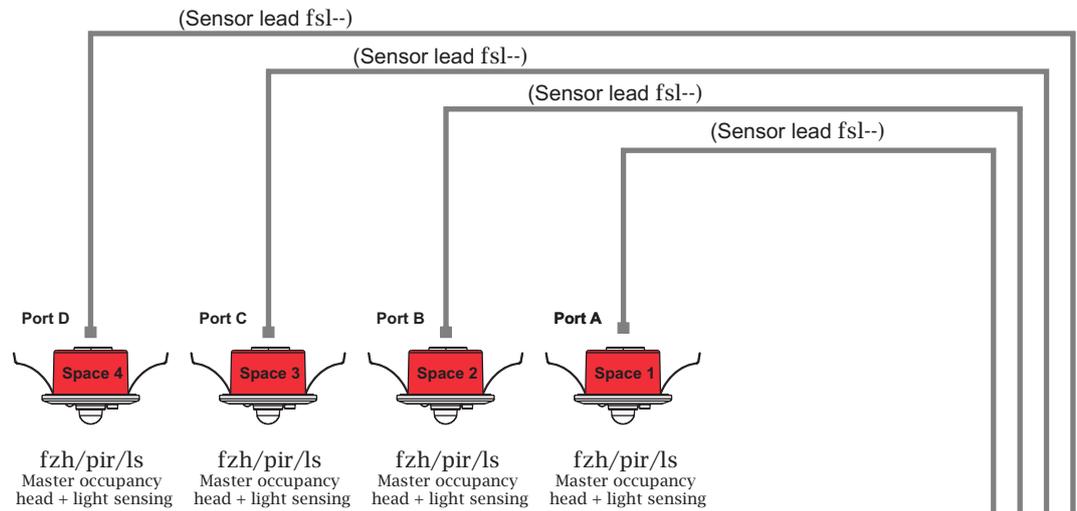
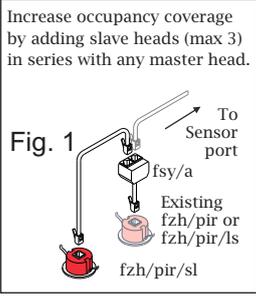
Operates all luminaires bound within purple dotted line - On, Off or Dim (up/down)*

All luminaires in this space daylight link at the same rate

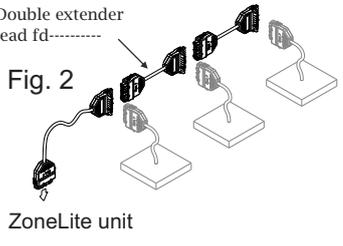
On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Table 1	Other available operational variations	Action
	Daylight linking not required anywhere.	Fit motion only sensor head fzh/pir instead of fzh/pir/lS
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	The same type of switch operation is required at more than one point in the room.	Add as many switch drops to the same port using fsy/a 'Y' connectors and fsw-- switch drop leads.
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

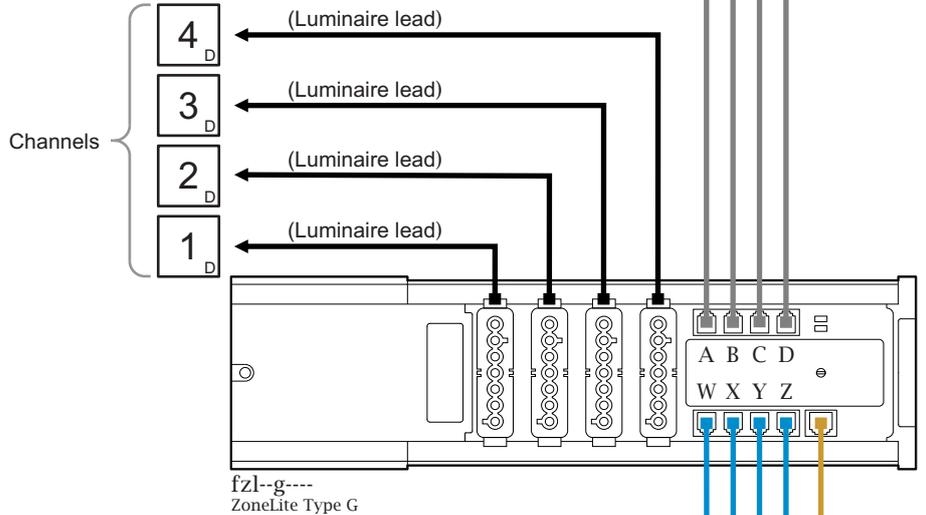
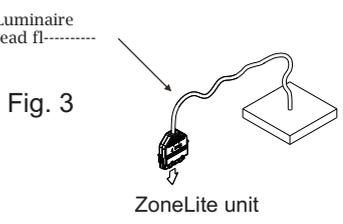
Connecting up the ZoneLite



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.

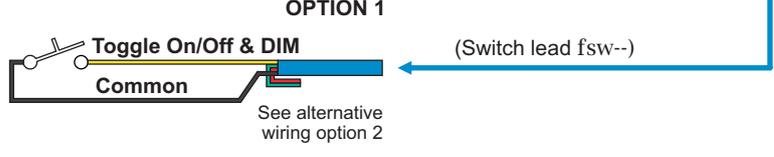
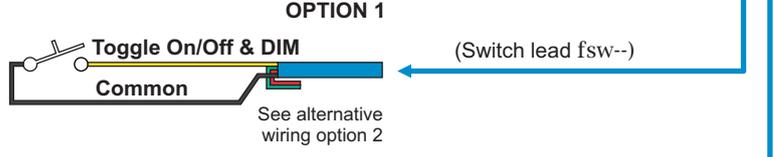
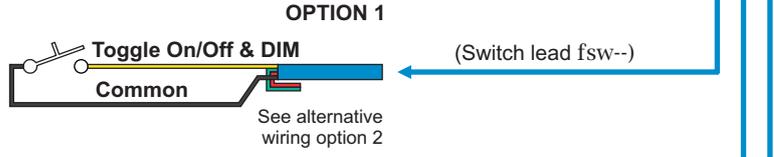
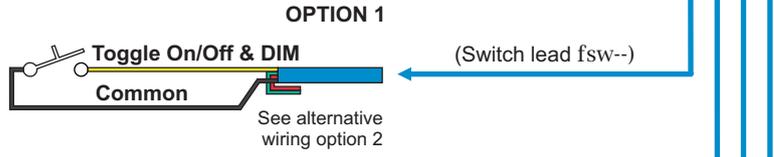


Port W Switch channel 1 - ON/OFF and DIM
(Short pulses ON/OFF, long pulses DIM UP/DOWN alternatively)
Use 1 way retractive (not supplied)

Port X Switch channel 2 - ON/OFF and DIM
(Short pulses ON/OFF, long pulses DIM UP/DOWN alternatively)
Use 1 way retractive (not supplied)

Port Y Switch channel 3 - ON/OFF and DIM
(Short pulses ON/OFF, long pulses DIM UP/DOWN alternatively)
Use 1 way retractive (not supplied)

Port Z Switch channel 4 - ON/OFF and DIM
(Short pulses ON/OFF, long pulses DIM UP/DOWN alternatively)
Use 1 way retractive (not supplied)



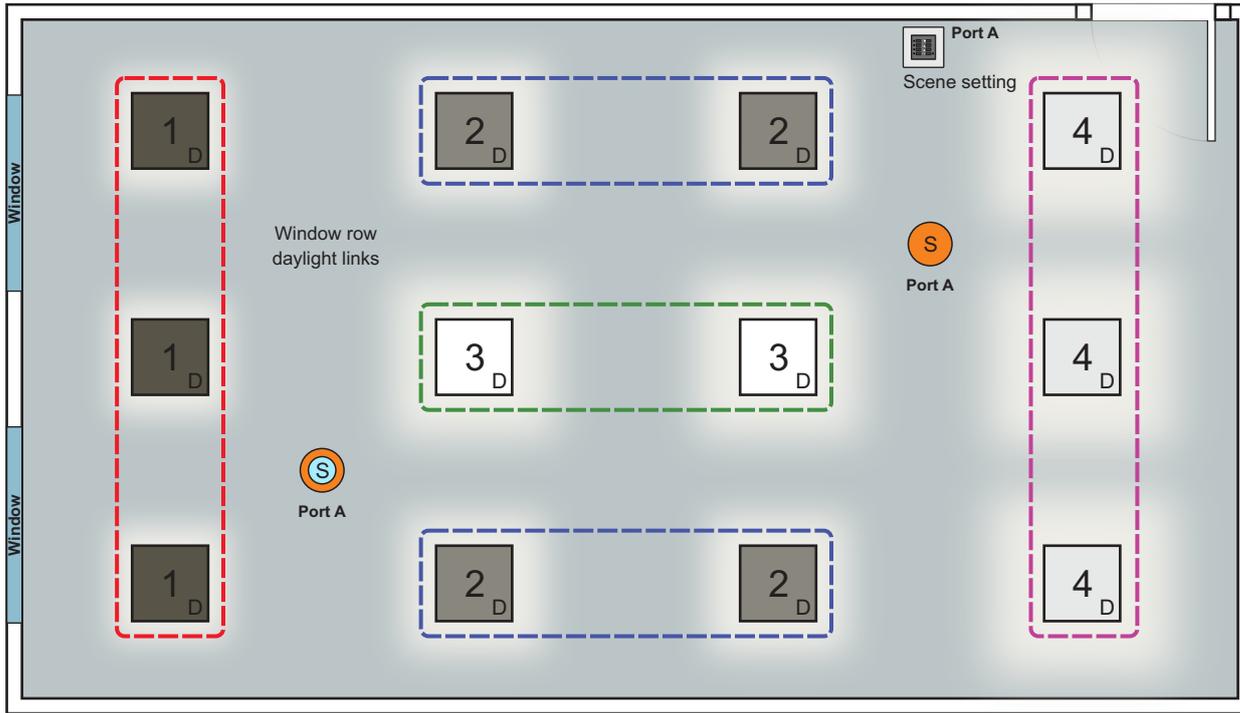
If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 & 35

(Link port lead)



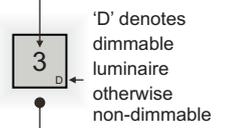
A

The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/ls Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head
- fss04/_/_ Scene setting panel

Scene Setting

Using the Flex Connectors scene setting panel(not supplied) with configuration 9 provides a scene setting solution that uniquely offers the user two standard modes of operation. Simply toggle between either mode at any time.

Operation [default]

- Operates all luminaires - On, Off, Dim (up/down) or recall/set up scenes 1 - 4 or toggle/dim channels 1 - 4.
- On vacation of the space any luminaires left on will switch off after an adjustable time-out period (default 20min).

Note: Please refer to FSS04 INSTRUCTION (leaflet number 22/094) for operational instructions on using the scene setting panel

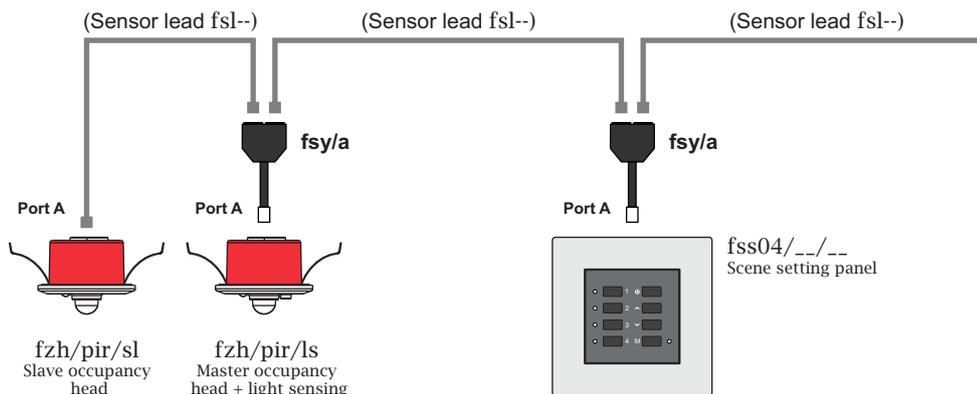
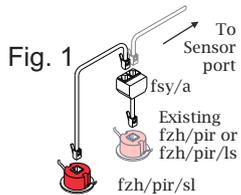
Table 1 Other available operational variations	Action
Daylight linking not required anywhere.	Fit motion only sensor head fzh/pir instead of fzh/pir/ls
There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
The same type of switch operation is required at more than one point in the room.	With the exception of the <i>Mode Select</i> switch, additional switches can be added in parallel using fsy/a 'Y' connectors and fsw-- switch drop leads.
There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
Lights should not only switch off automatically when the room is vacated but should also turn on automatically on entry.	Enable presence detection - <i>Setting up</i> leaflet 22/069. Note: Lights will turn on automatically on entry only if the occupancy time out period had elapsed.
The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
Other software adjustable parameters not mentioned so far.	Various software parameters such as Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

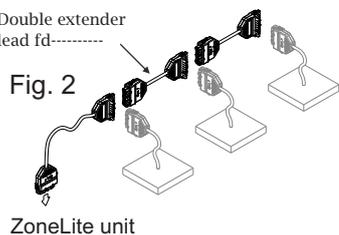


A

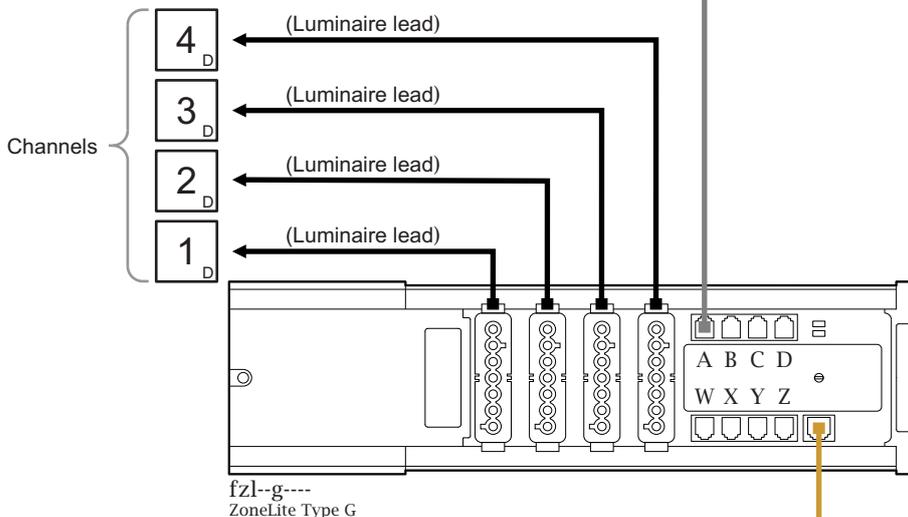
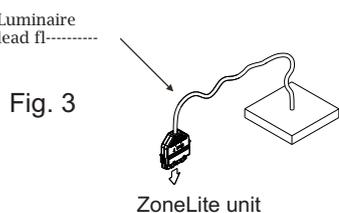
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.

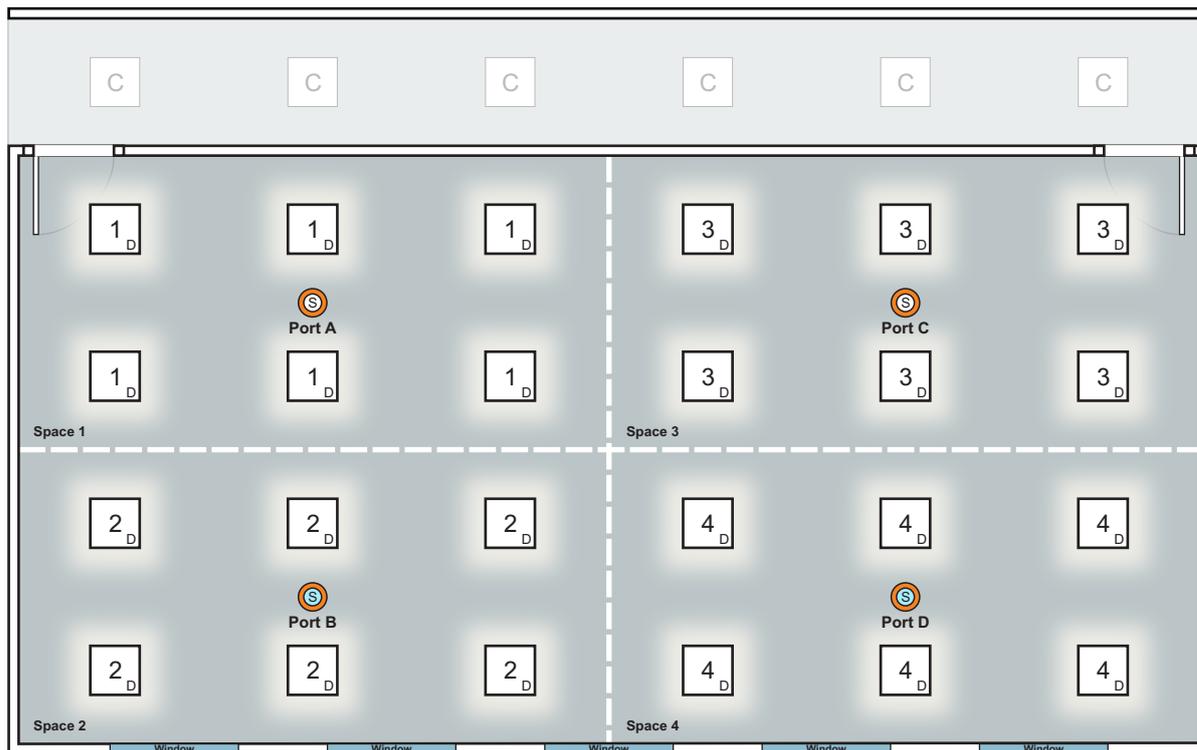


If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 & 35

(Link port lead)

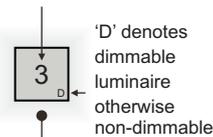


The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/ls Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default]

- On entry of this space all luminaires switch on to maximum. On entry of any other space all luminaires switch on to minimum.
- As drawn no daylight linking is required but is an available option - see table below
- On exit of this space (after time-out) but not any other space all luminaires revert to minimum (adjustable). On exit of this space and all the other spaces (after time-outs) all luminaires switch off.

Operation of space 2 [default]

- On entry of this space all luminaires switch on to maximum. On entry of any other space all luminaires switch on to minimum.
- Provided this space is occupied, all luminaires daylight link according to the natural light level detected.
- On exit of this space (after time-out) but not any other space all luminaires revert to minimum (adjustable). On exit of this space and all the other spaces (after time-outs) all luminaires switch off.

Operation of space 3 [default]

- On entry of this space all luminaires switch on to maximum. On entry of any other space all luminaires switch on to minimum.
- As drawn no daylight linking is required but is an available option - see table below
- On exit of this space (after time-out) but not any other space all luminaires revert to minimum (adjustable). On exit of this space and all the other spaces (after time-outs) all luminaires switch off.

Operation of space 4 [default]

- On entry of this space all luminaires switch on to maximum. On entry of any other space all luminaires switch on to minimum.
- Provided this space is occupied, all luminaires daylight link according to the natural light level detected.
- On exit of this space (after time-out) but not any other space all luminaires revert to minimum (adjustable). On exit of this space and all the other spaces (after time-outs) all luminaires switch off.

Note: Zonelites with the same configuration (config B) can be networked together to expand this 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

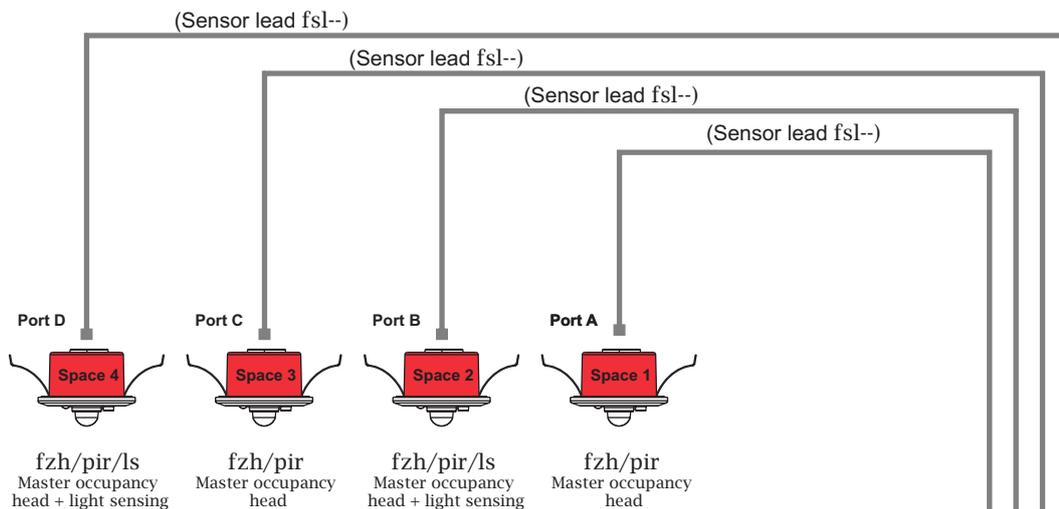
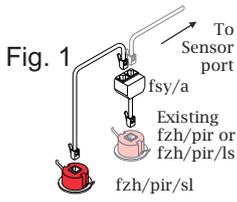
Table 1	Other available operational variations	Action
	Daylight linking is not required anywhere.	Fit motion only sensor head fzh/pir instead of fzh/pir/ls
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.
	Other software adjustable parameters not mentioned so far.	Various software parameters such as Time out, and more can all be adjusted using a setup remote control. See <i>Setting up</i> leaflet 22/069

Connecting up the ZoneLite

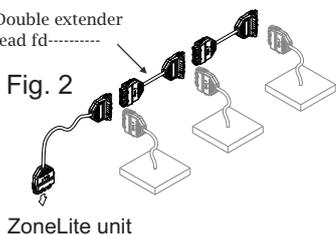


B

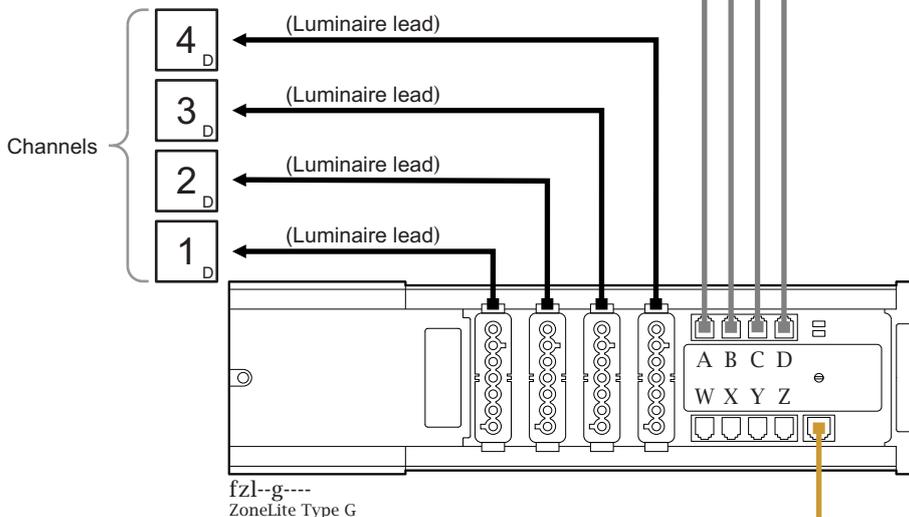
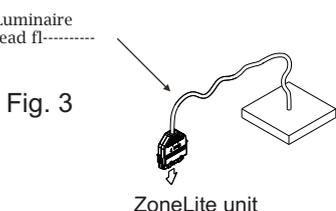
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



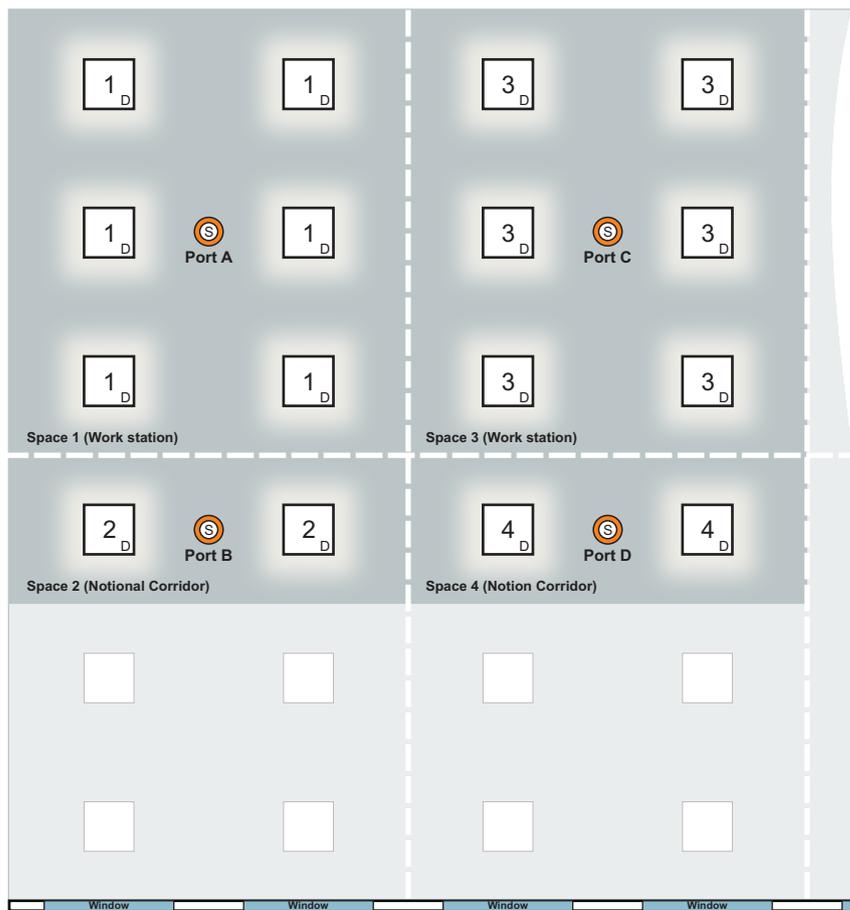
If ZoneLites with this same configuration (config. B) are required to be networked together to expand the 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

If any of *Emergency Test, Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 and 35

(Link port lead)

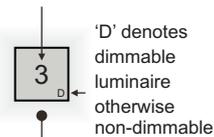


The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



'D' denotes dimmable luminaire otherwise non-dimmable
Shading represents brightness (to indicate daylight linking in action)

-  **fzh/pir**
Master occupancy head
-  **fzh/pir/l**
Master occupancy head + light sensing
-  **fzh/pir/sl**
Slave occupancy head

-  **Operation of space 1 [default] (Work station)**
On entry of this space luminaires switch on to maximum.
-  As drawn no daylight linking is required but is an available option - see table below
-  On exit of this space (after time-out) luminaires switch off.
-  **Operation of space 2 [default] (Notional corridor)**
When unoccupied, occupancy in ANY other space switches luminaires to minimum (Set-back illumination).
On specific entry of this notional corridor space the luminaires switch on to maximum.
-  On exit of this notional corridor (after time-out) luminaires revert to set-back illumination.
Only when ALL other spaces are unoccupied will the luminaires switch off (after time-outs).

-  **Operation of space 3 [default] (Work station)**
On entry of this space luminaires switch on to maximum.
-  As drawn no daylight linking is required but is an available option - see table below
-  On exit of this space (after time-out) luminaires switch off.
-  **Operation of space 4 [default] (Notional corridor)**
When unoccupied, occupancy in ANY other space switches luminaires to minimum (Set-back illumination).
On specific entry of this notional corridor space the luminaires switch on to maximum.
-  On exit of this notional corridor (after time-out) luminaires revert to set-back illumination.
Only when ALL other spaces are unoccupied will the luminaires switch off (after time-outs).

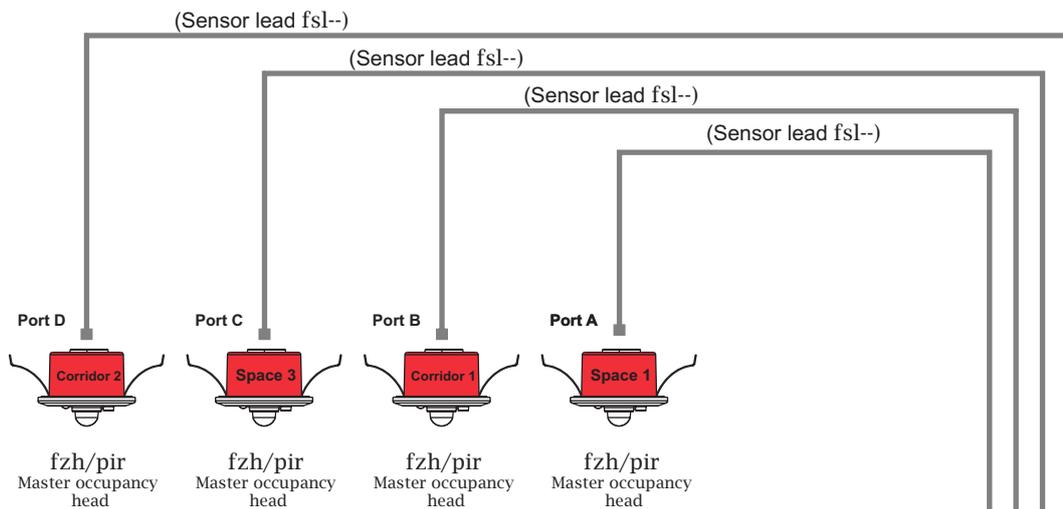
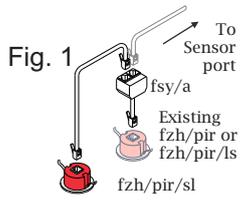
Note: Zonelites with the same configuration (config C) can be networked together to expand this 'set-back' principle i.e. Open plan multiple spaces where occupancy anywhere maintains a set-back illumination level in all non occupied spaces. see page 35, networking open plan areas section

Table 1	Other available operational variations	Action
	Daylight linking is not required in a space where it is shown OR is required in a space where it is not shown.	Change the head to occupancy only fzh/pir (for no daylight linking) or change the head to occupancy + light level fzh/pir/l (for daylight linking)
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl- link leads. (fig. 1)
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.

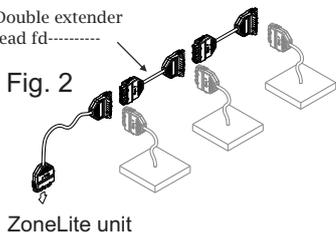
Connecting up the ZoneLite



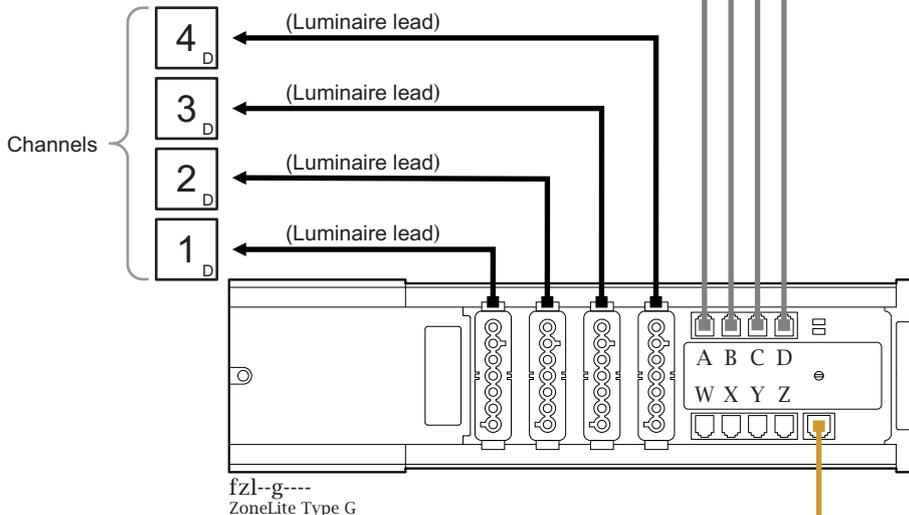
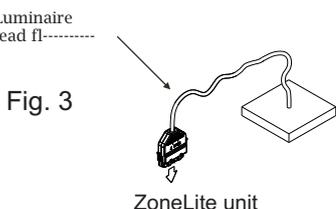
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



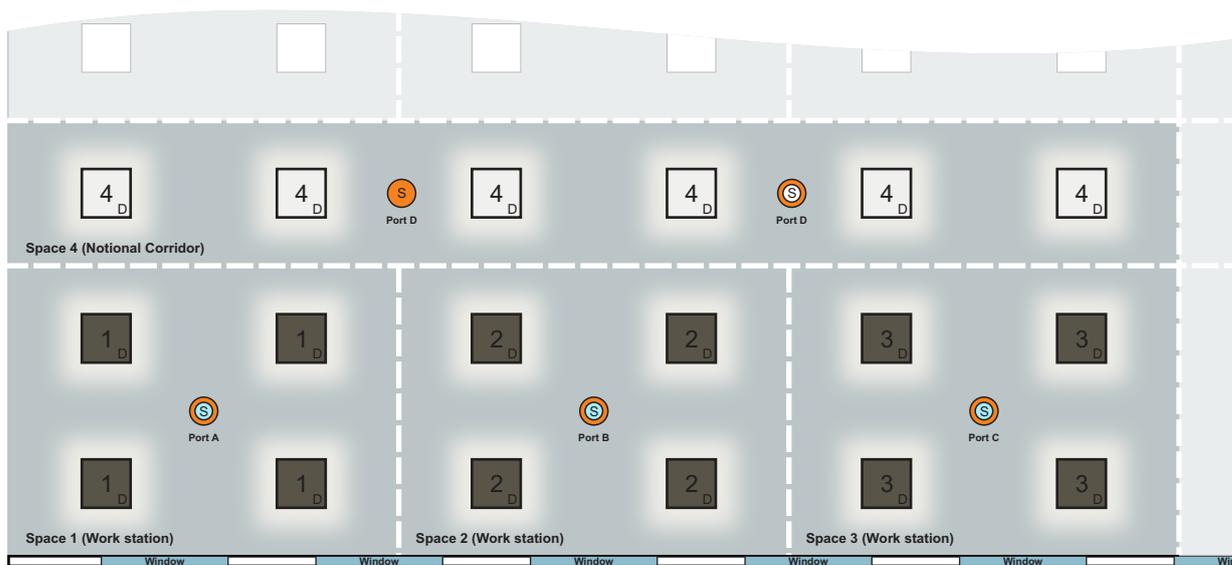
If ZoneLites with this same configuration (config. C) are required to be networked together to expand the 'notional corridor' principle i.e. Open plan multiple spaces where occupancy anywhere holds illuminated - all luminaires designated a notional corridor. see page 35, networking open plan areas section

If any of *Emergency Test, Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 and 35

(Link port lead)

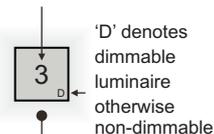


The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/ls Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default] (work station)

- On entry of this space luminaires switch on to maximum.
- Luminaires daylight link according to the natural light level detected.
- On exit of this space (after time-out) luminaires switch off.

Operation of space 3 [default] (work station)

- On entry of this space luminaires switch on to maximum.
- Luminaires daylight link according to the natural light level detected.
- On exit of this space (after time-out) luminaires switch off.

Operation of space 2 [default] (work station)

- On entry of this space luminaires switch on to maximum.
- Luminaires daylight link according to the natural light level detected.
- On exit of this space (after time-out) luminaires switch off.

Operation of space 4 [default] (notional corridor)

- On entry of this or ANY other space all luminaires switch on.
- As drawn no daylight linking is required but is an available option - see table below
- On exit of this and all other spaces (after time-outs) luminaires switch off.

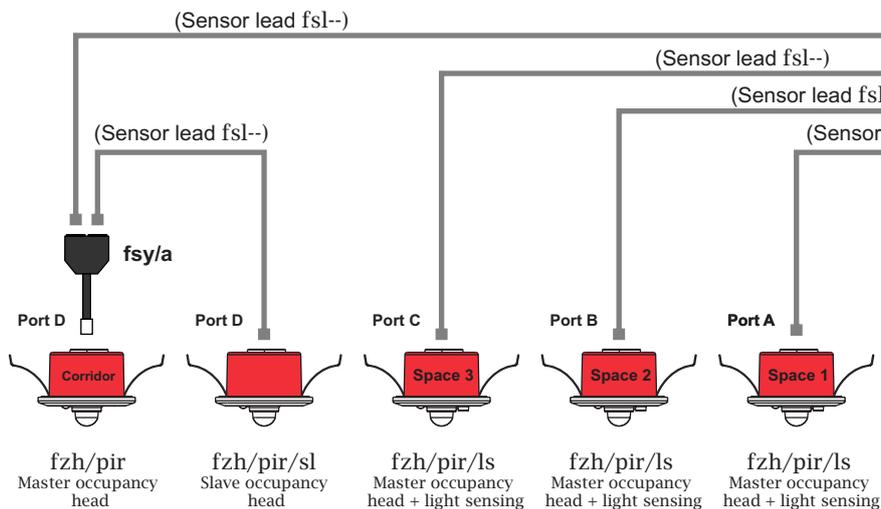
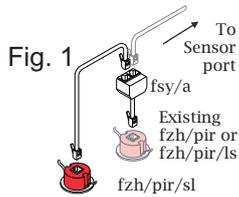
If ZoneLites with this same configuration (config. D) are required to be networked together to expand the 'notional corridor' principle i.e. Open plan multiple spaces where occupancy anywhere holds all luminaires designated a notional corridor illuminated. see page 35, networking open plan areas section

Table 1	Other available operational variations	Action
	Daylight linking is not required in a space where it is shown OR is required in a space where it is not shown.	Change the head to occupancy only fzh/pir (for no daylight linking) or change the head to occupancy + light level fzh/pir/ls (for daylight linking)
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The daylight linking group is too big to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/ls (light sensing only head) to port B. This will work with the existing fzh/pir/ls to average the light levels at both points.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.

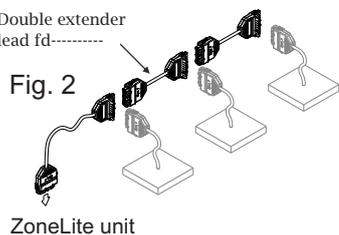
Connecting up the ZoneLite



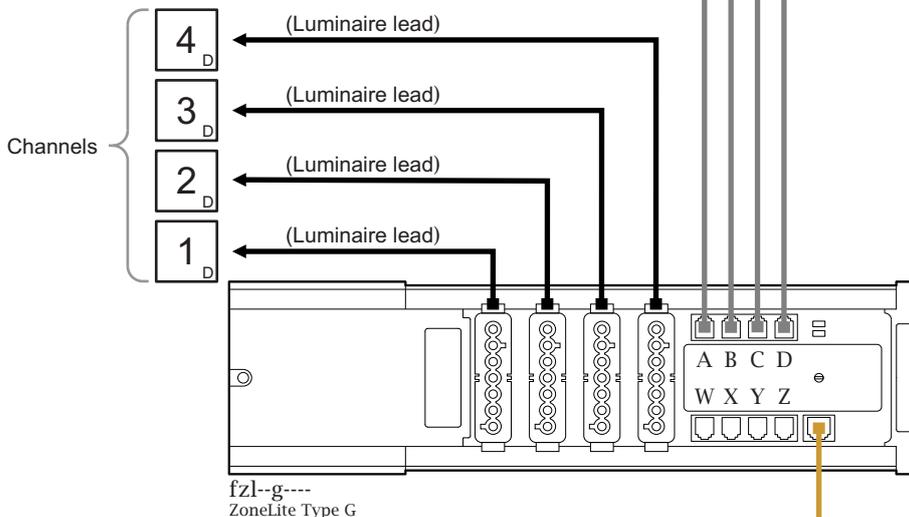
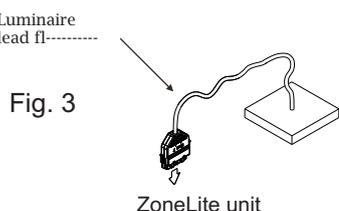
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



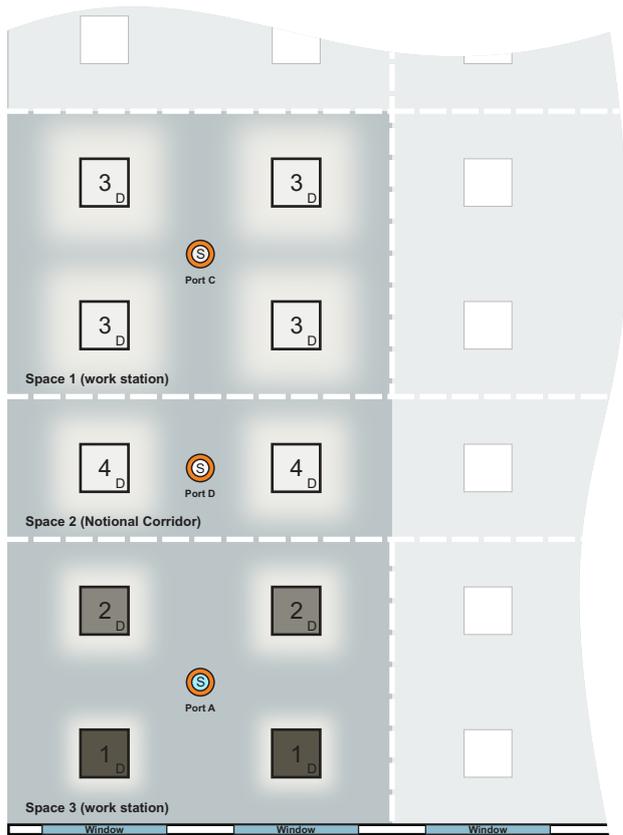
If ZoneLites with this same configuration (config. D) are required to be networked together to expand the 'notional corridor' principle i.e. Open plan multiple spaces where occupancy anywhere holds illuminated - all luminaires designated a notional corridor. see page 35, networking open plan areas section

If any of Emergency Test, Last man out or All lights on switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 and 35

(Link port lead)

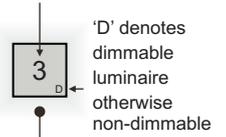


The scenario below and connection instructions opposite are intended to show a typical installation for this configuration. As the precise requirements of any real installation may vary, use table 1 below to help identify adaptations that may be possible and if so how they can be accommodated.



Symbol Key

The channel the luminaire needs to connect to.



Shading represents brightness (to indicate daylight linking in action)

- fzh/pir Master occupancy head
- fzh/pir/ls Master occupancy head + light sensing
- fzh/pir/sl Slave occupancy head

Operation of space 1 [default] (work station)

On entry of this space luminaires switch on to maximum.



As drawn no daylight linking is required but is an available option - see table below



On exit of this space (after time-out) luminaires switch off.

Operation of space 2 [default] (notional corridor)

On entry of this or ANY other space all luminaires switch on.



As drawn no daylight linking is required but is an available option - see table below



On exit of this and all other spaces (after time-outs) luminaires switch off.

Operation of space 3 [default] (work station)

On entry of this space luminaires switch on to maximum.



2 stage daylight linking - The window row daylight links whilst the back row adopts a brighter offset (adjustable).



On exit of this space (after time-out) luminaires switch off.

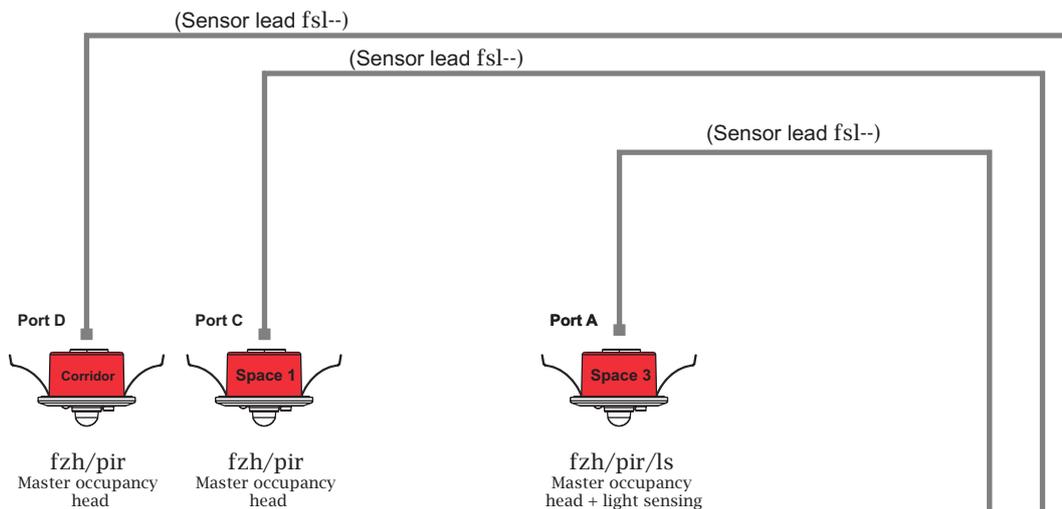
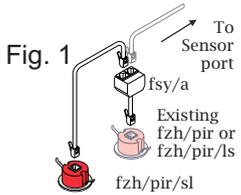
Table 1	Other available operational variations	Action
	Daylight linking is not required in a space where it is shown OR is required in a space where it is not shown.	Change the head to occupancy only fzh/pir (for no daylight linking) or change the head to occupancy + light level fzh/pir/ls (for daylight linking)
	There are more luminaires than available output sockets.	Add double extender leads to increase the number of available outlets on the ZoneLite Unit. (Fig. 2)
	There is insufficient occupancy coverage for the space. (range is typically 5.66m x 7.42m per head)	Add fzh/pir/sl slave heads (max 3) to the same port as the master sensor head using fsy/a 'Y' connectors and fsl-- link leads. (fig. 1)
	The daylight linking group is too big to rely on one light level reading to be reliable. it needs to be sampled at both ends.	Add a special fzh/ls (light sensing only head) to port B. This will work with the existing fzh/pir/ls to average the light levels at both points.
	The dimming protocol of the luminaires is DSI and not DALI (or there is a mixture of both).	Each of the 4 channels output DALI by default however any or all channels can be reassigned to DSI. See <i>Setting up</i> leaflet 22/069
	This room (and others?) require an emergency test switch facility.	Link just this ZoneLite (or multiple ZoneLites linked together) to a standard emergency test key switch - see page 34 & 35 for further details.
	This room (and others?) require a 'last man out' or 'all lights on' switch remote from this area.	Link just this ZoneLite (or multiple ZoneLites linked together) to a remote switch/s - see page 34 & 35 for further details.

Connecting up the ZoneLite

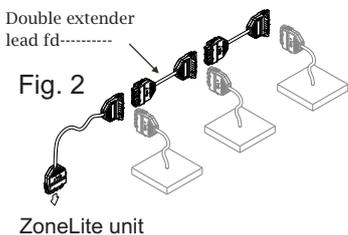


E

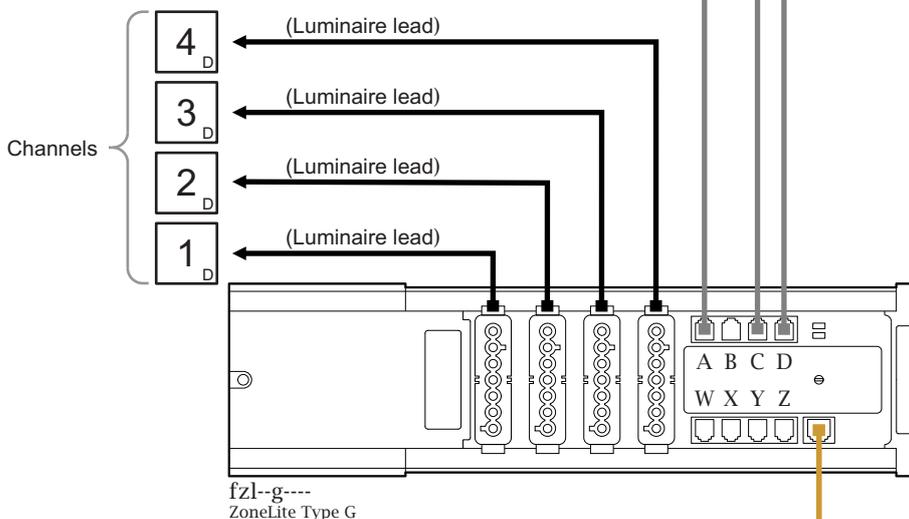
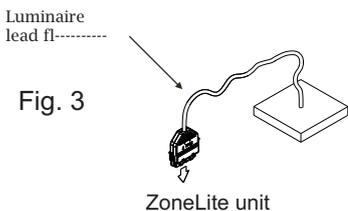
Increase occupancy coverage by adding slave heads (max 3) in series with any master head.



Where the ZoneLite unit has insufficient outlets use double extender leads to create more outlets.



Where the ZoneLite has sufficient outlets use a single supply lead for each luminaire.



If ZoneLites with this same configuration (config. E) are required to be networked together to expand the 'notional corridor' principle i.e. Open plan multiple spaces where occupancy anywhere holds illuminated - all luminaires designated a notional corridor. see page 35, networking open plan areas section

If any of *Emergency Test*, *Last man out* or *All lights on* switch inputs are required, or if networking between ZoneLites then please refer to 'using the link port' on page 34 and 35

(Link port lead)



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

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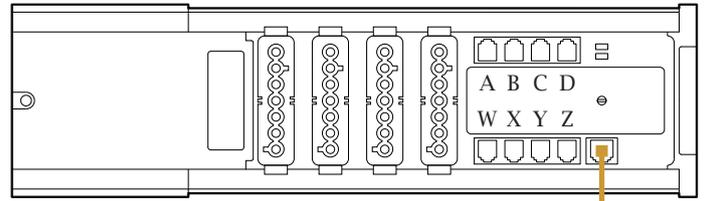


F

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There are 3 possible global switch inputs possible using the Link port.

Use none, some or all of these switch inputs for global control of the ZoneLite's channels. These switches may be installed local or remote (at the main exit / entrance to a building for example).

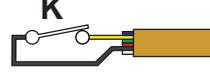


Switch the Emergency (Track) supply.

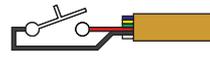
A single pulse initiates ALL sensor heads attached to the Zonelite to a one off temporary 10s timeout such that they will time out early provided no one is detected. The lights will also dim to 50% brightness. Any Channels not controlled by sensor heads will switch off immediately.

A single pulse initiates ON all channels and takes any that were already on to full bright.

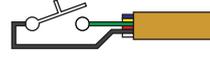
Emergency test



Last man out



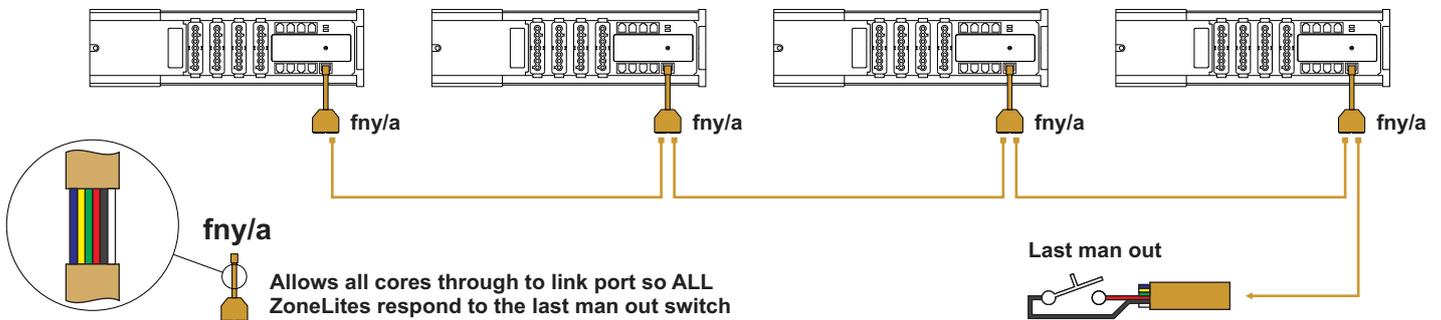
All lights On



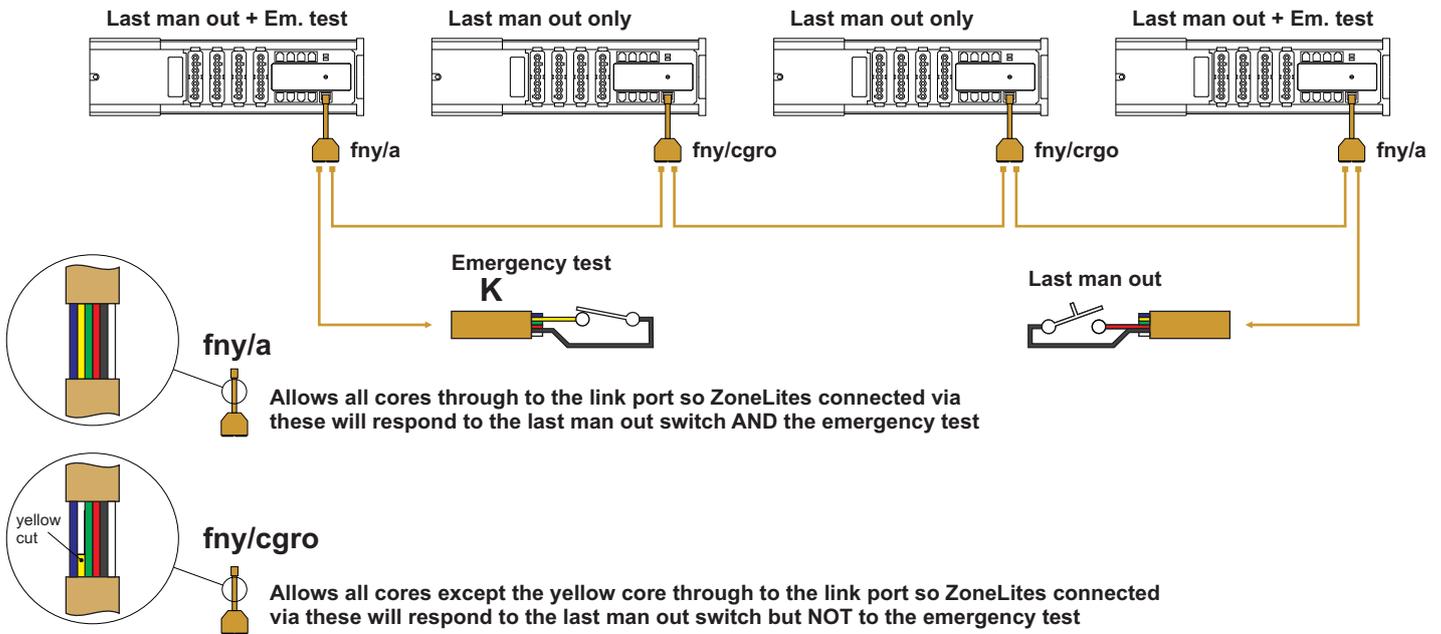
(Link switch lead fnw_..)

Note: Do not use the blue fsl_.. switch drop lead in the link port - only use fnw_.. leads

An example of simple global switching of multiple ZoneLites on a single network (All configs)

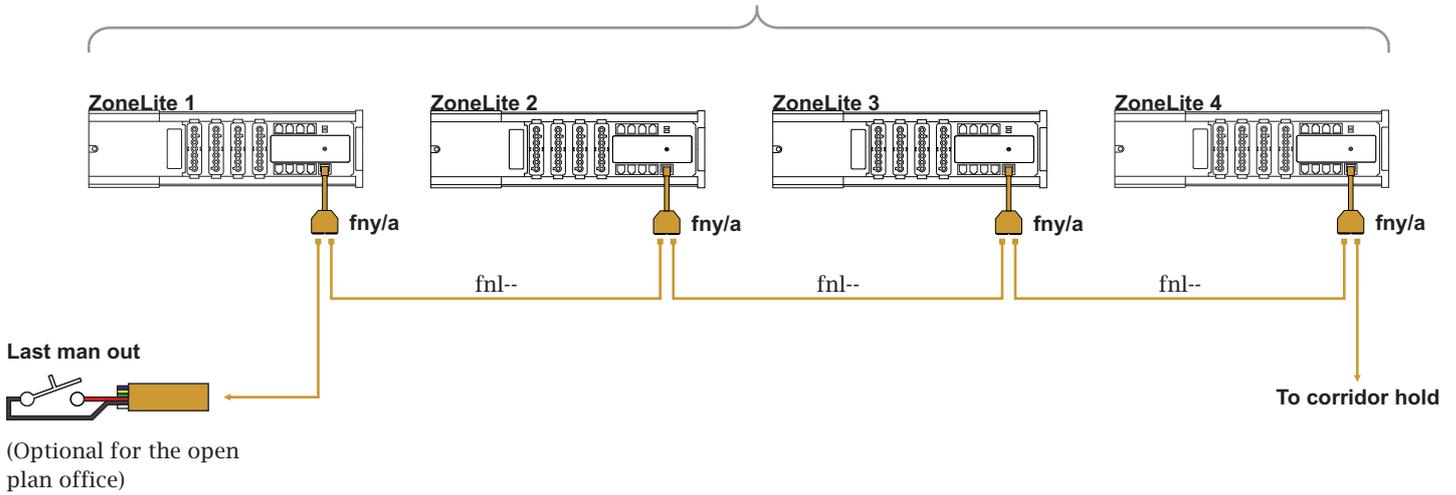


An example of varied global switching of multiple ZoneLites on a single network (All configs)



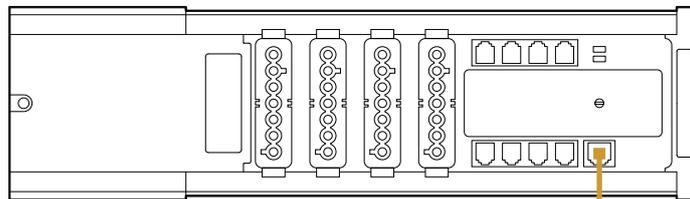
	KEY:		
	□ = C	Corridor hold output	Special 'Y' adaptor part numbers: Standard network 'Y' connectors are referred to as simply fny/a however where one or more wires are deliberately cut to create specials, start with the part number fny/cygro and of the last 5 letters, remove the core colour/s that are not required. thus in the above example where the yellow wire (y) is removed the part number required is fny/cgro
	■ = Y	Emergency test	
	■ = G	All lights On	
	■ = R	Last man out (Off)	
	■ = O	Occupancy input	

Open plan office

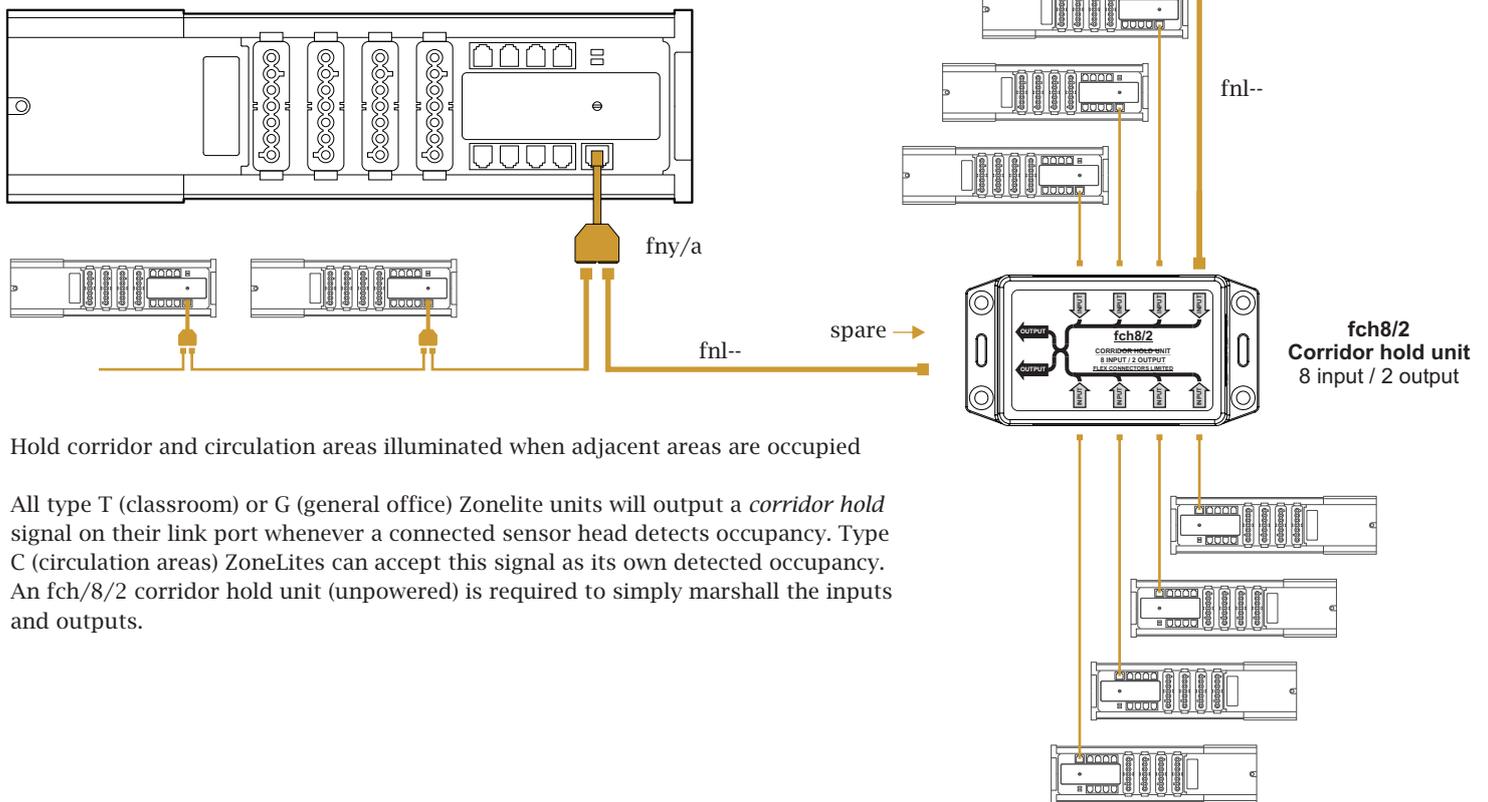


Holding corridors and circulation areas

Types T or G ZoneLites only



Type C ZoneLite only (for circulation areas)



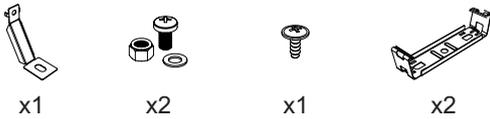
Hold corridor and circulation areas illuminated when adjacent areas are occupied

All type T (classroom) or G (general office) Zonelite units will output a *corridor hold* signal on their link port whenever a connected sensor head detects occupancy. Type C (circulation areas) Zonelites can accept this signal as its own detected occupancy. An fch8/2 corridor hold unit (unpowered) is required to simply marshall the inputs and outputs.

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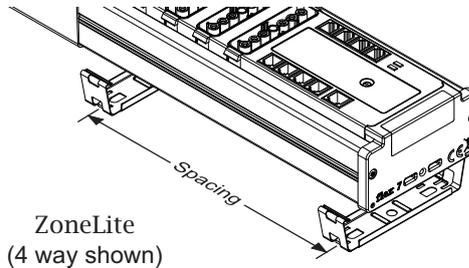
Installing a ZoneLite

Supplied accessories pack contained under lid



x1 x2 x1 x2

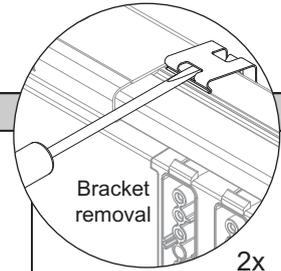
Current & Voltage rating: 16A, 230V~
Knock-outs: 20mm (x4) & 25mm (x1)



ZoneLite
(4 way shown)

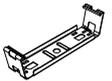
Bracket spacing guide

Outlets	Spacing /mm
4 way	190 ± 10
16 way	490 ± 10
20 way	590 ± 10

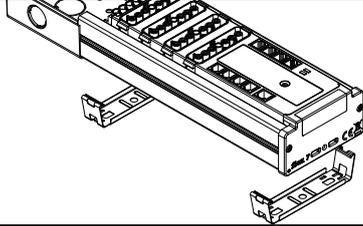


Bracket removal

2x

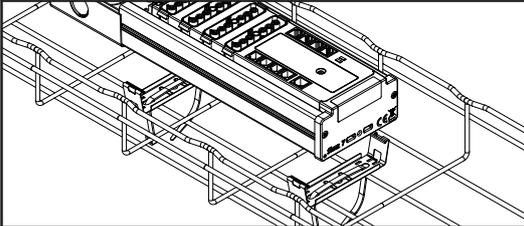


Fixing to a solid surface



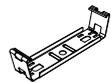
- At the appropriate spacings (see Bracket spacing guide) secure each bracket to the surface with a single screw (not supplied).
- Prior to snapping-in the ZoneLite unit, remove appropriate knock-outs for cable/conduit entry.
- Clip the ZoneLite unit securely into the fixing brackets.

Fixing to wire basket

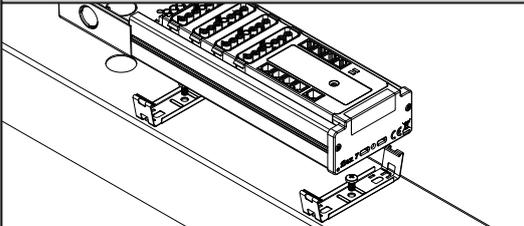


- At the appropriate spacings (see Bracket spacing guide) secure each bracket.
- Prior to snapping-in the ZoneLite unit, remove appropriate knock-outs for cable/conduit entry.
- Clip the ZoneLite unit securely into the fixing brackets.
- Ensure compliance with BS7671:2018 Reg. 521.10.202

2x



Fixing to Trunking

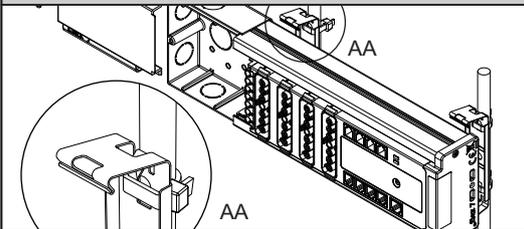


- At the appropriate spacings (see Bracket spacing guide) secure each bracket using fixings supplied.
- Prior to snapping-in the ZoneLite unit, remove appropriate knock-outs for the cable/conduit entry.
- Clip the ZoneLite unit securely into the fixing brackets.

2x

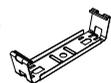


Fixing to drop rods

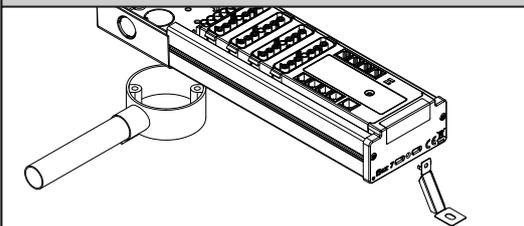


- Ensure drop rods are pitched at the appropriate spacings (see Bracket spacing guide) and secure each bracket to a drop rod.
- Prior to snapping-in the ZoneLite unit, remove the appropriate knock-outs for cable/conduit entry.
- Clip the ZoneLite unit securely into the fixing brackets.
- Ensure compliance with BS7671:2018 Reg. 521.10.202

2x



Fixing to conduit box



- Remove knock-out on base of wiring box for cable entry.
- Locate and secure the ZoneLite unit onto the conduit box, break through the appropriate holes for the screw, (not supplied).
- Anchor other end of the ZoneLite unit, by bending and fixing the support bracket.

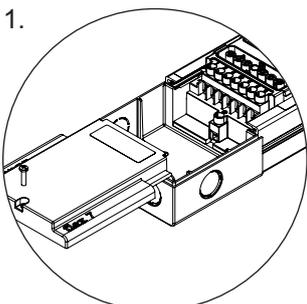
1x



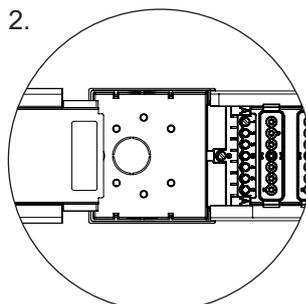
1x



Supply wiring options



1. Unscrew & slide open the wiring compartment.



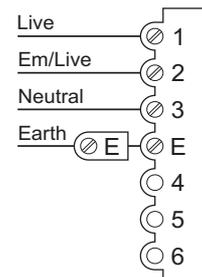
2. Hard wire the supply to the required terminals. (see opposite)

Supply Wiring options

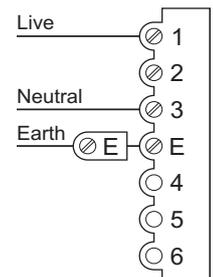
- Use option A if an external emergency test method is required.
- Use option B to utilise the Emergency test facility built into the ZoneLite.

Warning: 230V AC

This product must be installed by a qualified electrician in accordance with the current IET Wiring Regulations BS 7671 or appropriate regulations if installed outside of the UK.



Wiring Option A

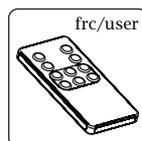


Wiring Option B

Trouble shooting guide

	Check power is on and is correctly connected to the ZoneLite - The green LED should be illuminated	Are the luminaires wired up correctly and plugged into the correct ZoneLite channels	Has the correct configuration been set on the configuration selector switch.	Restart the ZoneLite if altering the configuration switch. See 'configuration settings' in leaflet 22/069	Check: Switch wiring, is it the correct type of switch and is the switch drop plugged into the correct port - see chosen configuration for help	Are the channels configured to output the correct dimming protocols to suit your luminaires. See setting up leaflet 22/069 for assigning channels to DSI or DALI	Are the luminaire leads wired correctly for dimming. Ensure pins 5 (+ve) & 6 (-ve) feed the dimming input to the luminaire.	Has the daylight level been set up - See setting up leaflet 22/069	check that the ZoneLite is not in test mode. See leaflet 22/069 for details	Enable daylight link to off, if available on your configuration. see leaflet 22/069 for details	Check that the sensor is plugged into the correct sensor port. See chosen configuration.	Check that the sensors blue LED is periodically flashing
Lights will not operate at all - nothing is happening	●	●	●									
Some switches operate correctly but others do not			●	●	●							
Lights flicker or do not dim correctly						●	●					
Lights switch but will not dim at all			●	●		●						
Lights that should daylight link either don't or are not working as expected.			●	●		●		●				
The lights keep timing out to quickly								●				
The lights will not time-out		●								●	●	
The lights will not switch off when it is extremely bright outside. They just remain at a dim level.									●			

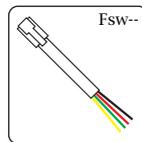
Optional extras



frc/user

User Remote Control - frc/user

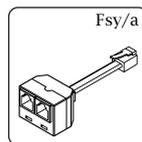
The frc/user remote control is a convenient method for the user to control the lighting remotely. Lights can be temporarily overridden ON or OFF dimmed UP or DOWN. In addition, up to six preset light levels can be stored and recalled.



Fsw--

PELV - Switch Drop

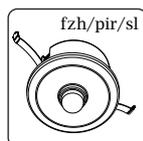
To add additional switches a PELV switch drop lead and a fsy/a will be required to connect the additional switch to the control unit.



Fsy/a

Fsy/a

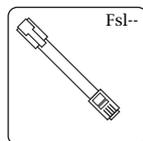
If your room requires additional sensor heads (fnh/slave) or additional switch drops you will require an fsy/a to link your additional cables into.



fzh/pir/sl

Increasing Occupancy Coverage - fzh/pir/slave

Occupancy coverage can be increased by adding up to a maximum of three slave sensor heads (fzh/pir/slave) to your existing sensor head. The fzh/pir/slave comes complete with a 'Y' adaptor to facilitate connection. A connecting lead may also be required, part number fslXX (XX = length /5m).



Fsl--

Increasing Occupancy Coverage -

Occupancy coverage can be increased by adding up to a maximum of three slave sensor heads (fzh/pir/sl) to your existing sensor head. The fzh/pir/sl comes complete with a 'Y' adaptor to facilitate connection. A connecting lead may also be required, part number fslXX (XX = length /5m).

Technical

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 to 40°C

3 x 2.50mm², 2 x 4.00mm² or 1 x 6.00mm² conductors

Per Channel Load

Fluorescent & Incandescent Lighting : 6A

Compact Fluorescent Lighting : 3A

IP20

LVD-2006/95/EC Compliance

EMC-2004/108/EC Compliance

Maximum number of Ballasts

DSI Digital control : 25

DALI Digital control : 25



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Leaflet reference number: 22/084 issue 5 09/08/2017

Due to continual product improvement flex7 reserves the right to alter the specification of this product without prior notice.