

# fnc4000D(X, A)/AB/E - Controllers

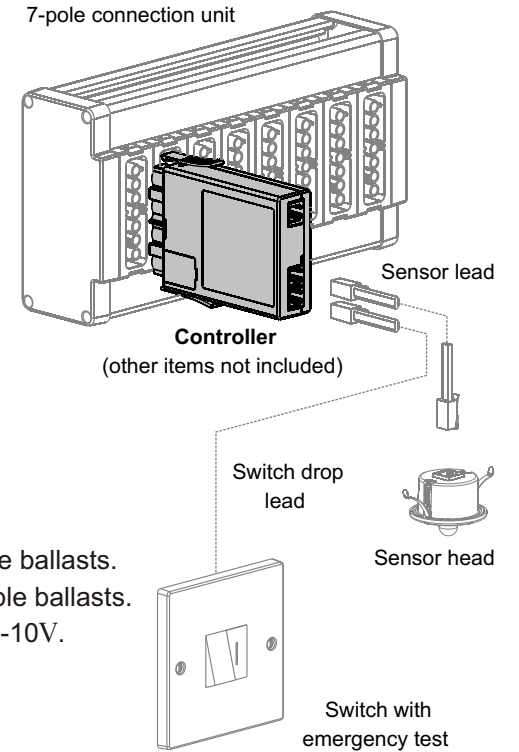
Includes Integral Emergency Test

The **fnc4000D(X, A)/AB/E**, are all control devices which can plug directly into any of the **flex7** 7-pole range of connection units or a 7-pole single socket outlet. Working with at least a switch or together with a plug in sensor head, the device will control the connected mains rated luminaires ON/OFF, DIM and will be able to carry out an emergency test. The exact operation will largely depend on which of the input devices are connected. Note that any connected switch or sensor head will be operating at ELV.

Three products are available:

- fnc4000D/AB/E** : DSI digital dimmable ballasts.
- fnc4000X/AB/E** : DALI digital dimmable ballasts.
- fnc4000A/AB/E** : Analogue ballasts 0-10V.

Please ensure the correct product is selected for the type of ballast being used as incorrect connection may damage the controller.



## Configuring the **fnc4000D(X, A)/AB/E** controller & wiring the connection unit

Prise open lid 'C' using a screw driver. Position link as required.

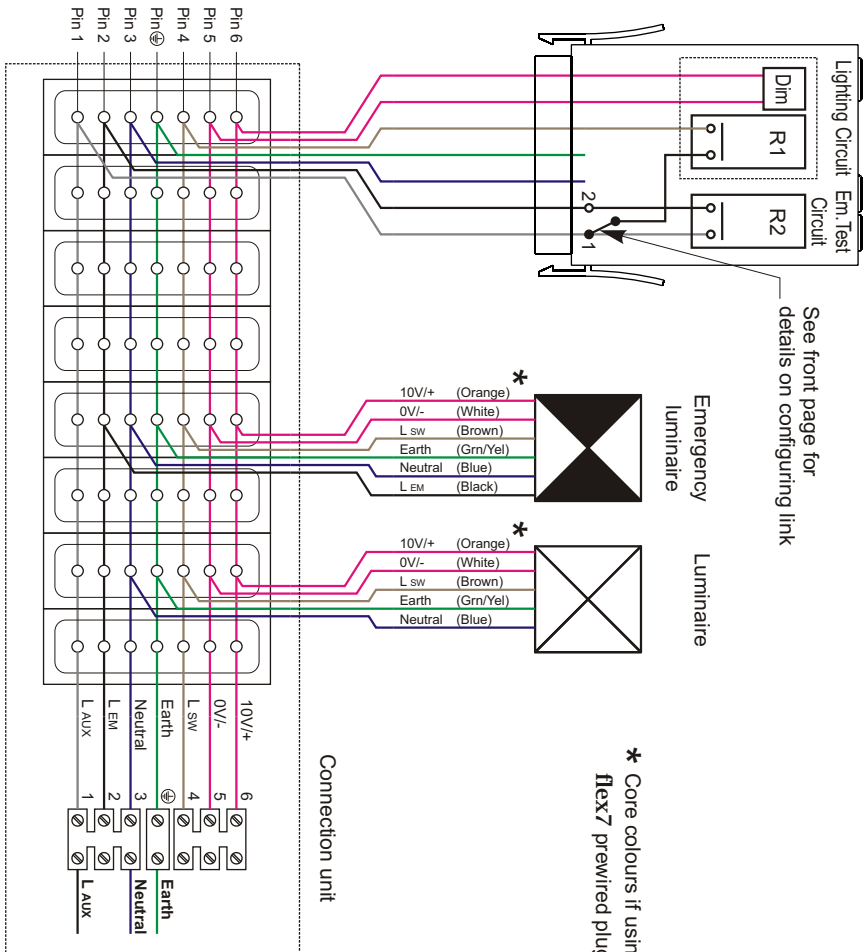
**Link in position 1**  
Lights can remain ON during an emergency test. Wire connection unit as shown on the back page.

**Link in position 2**  
Lights will switch OFF during an emergency test. Wire connection unit as shown on the back page.

Product	Control Type	Max. no. of Ballast	Rating
<b>fnc4000D/AB/E</b>	DSI Digital	25	Supply Voltage : 220V-240V, 50Hz, ~
<b>fnc4000X/AB/E</b>	DALI Digital	25	<b>Load</b> Fluorescent & Incandescent Lighting : 6A
<b>fnc4000A/AB/E</b>	Analogue 0-10V	25	Compact Fluorescent Lighting : 3A

## Circuit diagram for **fnc4000D(X, A)/AB/E** Controller

**fnc4000D(X, A)/AB/E**

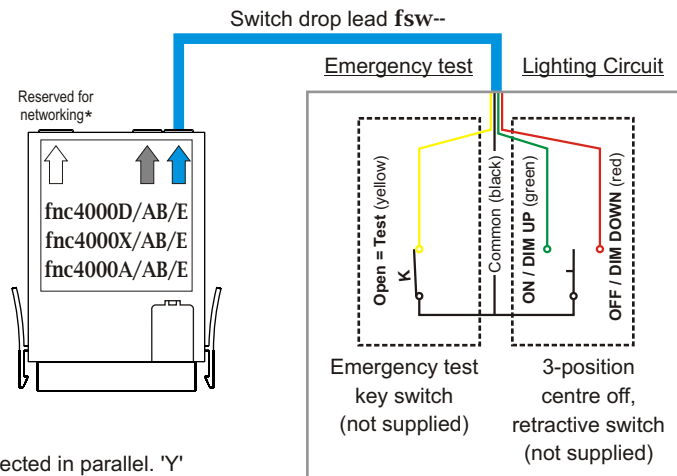


See front page for details on configuring link

\* Core colours if using 5 & 6-core flex7 prewired plug and leads

## Using a fnc4000D(X, A)/AB/E controller with a switch (dimming)

\* Refer to leaflet *Networking Sensors*, leaflet number 17/245.



Retractive switch control with emergency test key switch

### Note:

Multiple switches can be connected in parallel. 'Y' connectors are available to enable two switch drop leads to be connected into one point. (Part No. fsy/A - adaptor)

### Operation:

#### Switch control:

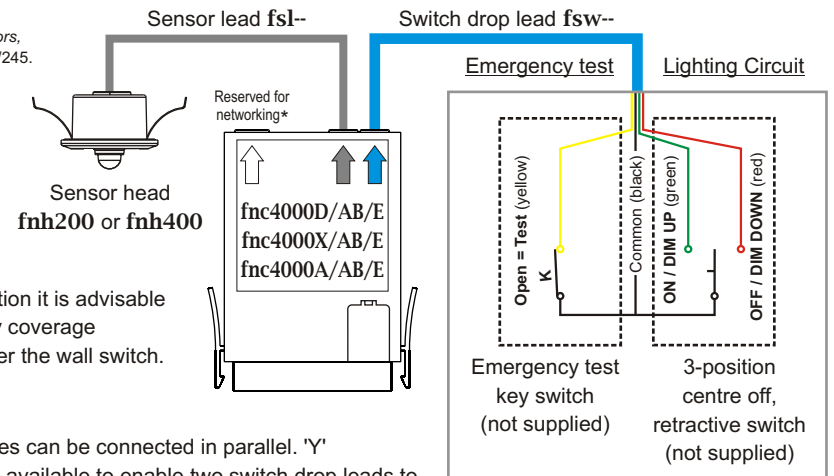
- A short ON pulse (<0.5 secs) - turns the lights ON (to last dimmed level).
- A short OFF pulse (<0.5 secs) - turns the lights OFF.
- A long ON pulse (>0.5 secs) - brightens lights (eventually to maximum).
- A long OFF pulse (>0.5 secs) - DIM lights (eventually to minimum but should the pulse exceed 15 secs the lights will switch OFF completely).

#### Operation for the Emergency Test

Operate key switch to carry out an emergency test.

## Using fnc4000D(X, A)/AB/E controller with a sensor head and a switch

\* Refer to leaflet *Networking Sensors*, leaflet number 17/245.



Retractive switch control with emergency test key switch

### Note:

For best operation it is advisable that occupancy coverage extends to cover the wall switch.

### Note:

Multiple switches can be connected in parallel. 'Y' connectors are available to enable two switch drop leads to be connected into one point. (Part No. fsy/A - adaptor)

### Operation:

#### If the sensor head is of type fnh200

- Switch control:**
- A short ON pulse (<0.5 secs) - turns the lights ON (to last dimmed level).
  - A short OFF pulse (<0.5 secs) - turns the lights OFF.
  - A long ON pulse (>0.5 secs) - brightens lights (eventually to maximum).
  - A long OFF pulse (>0.5 secs) - Dims lights (eventually to minimum but should the pulse exceed 15 secs the lights will switch OFF completely).

**Absence detection:** When occupancy is no longer detected, lights will switch OFF after a pre-selected *time-out* period.

#### If the sensor head is of type fnh400

#### Switch control:

As above except lights always switch ON with *daylight linking* activated. If the lights are subsequently dimmed up or down by the switch, *daylight linking* will be deactivated in preference to the DIM state attained by the switch.

**Absence detection:** As above.

**Daylight linking:** Provided *daylight linking* is activated (see above) the light output will adjust to compensate for any changes in ambient light in order to maintain a constant light level under the sensor head - the *target level*.

#### Operation for the Emergency Test

Operate key switch to carry out an emergency test.

**Note:** Alternative operational options not necessarily shown above are available using the frc/setup remote control. Full instructions for setting up the sensor are supplied with the sensor head and the frc/setup remote control - both ordered separately.