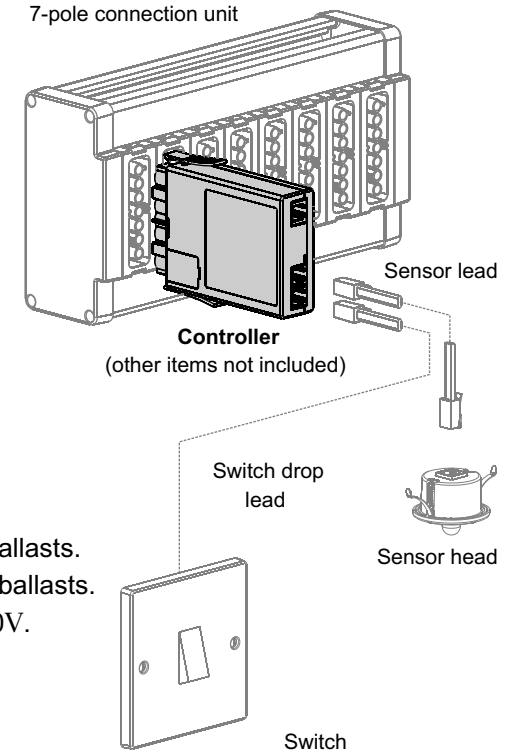


Circuit diagram for fnc4000D(X, A)/AT Controllers

(see front cover for details on options)

**fnc4000D(X, A)/AT - Controllers**

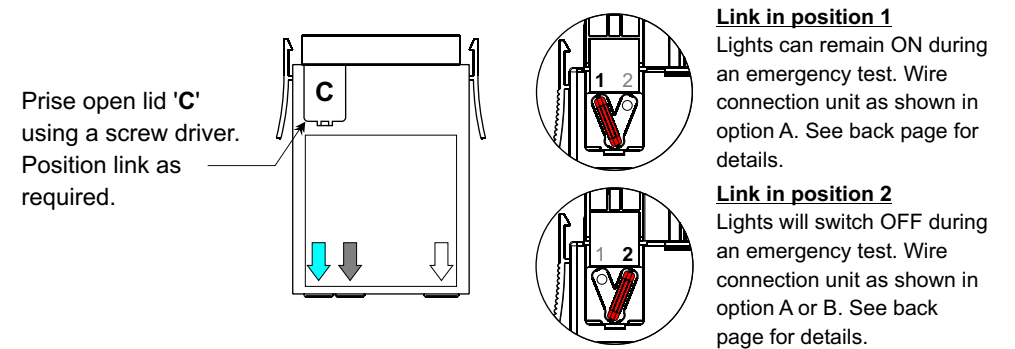
The **fnc4000D(X, A)/AT** are all control devices which can plug directly into any of the **flex7** 7-pole range of connection units or a 7-pole single socket outlet. Working with at least a switch or together with a plug-in sensor head, the device will control the connected mains rated luminaires ON, OFF and DIM. 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/AT**: DSI digital dimmable ballasts.  
**fnc4000X/AT**: DALI digital dimmable ballasts.  
**fnc4000A/AT**: 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)/AT controller and wiring the connection unit**



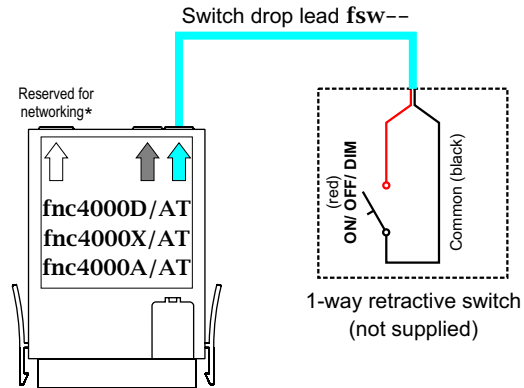
Product	Control Type	Max. no. of Ballast	Rating
<b>fnc4000D/AT</b>	DSI Digital	25	Supply Voltage : 220V-240V, 50Hz, ~
<b>fnc4000X/AT</b>	DALI Digital	25	<b>Load</b> Fluorescent & Incandescent Lighting : 6A
<b>fnc4000A/AT</b>	Analogue 0-10V	25	Compact Fluorescent Lighting : 3A

## Using a fnc4000D (X or A)/AT controller with a switch (dimming)

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

### 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:

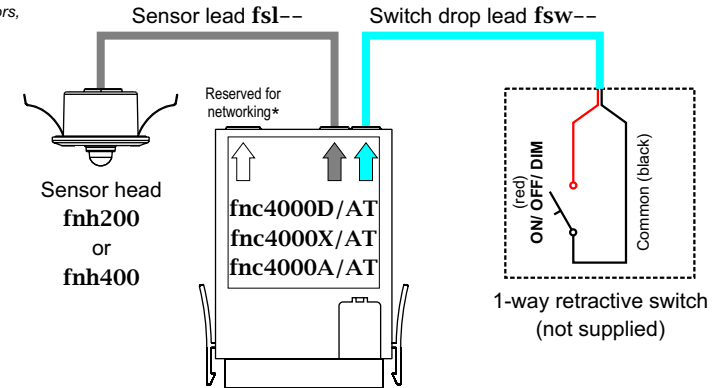
- A short pulse (<0.5 secs) - toggles the lights ON or OFF (when turning ON, lights adopt the last dimmed level).
- A long pulse (>0.5 secs) - alternates from brightening the light to dimming the light with each consecutive long pulse. Lights can only dim down to the minimum operating range of the ballast.
- A prolonged pulse (>15 secs) - synchronizes the lights to OFF.

## Using fnc4000D (X or A)/AT controller with a sensor head & switch

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

### 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 pulse (<0.5 secs) - toggles the lights ON or OFF.
- A long pulse (>0.5 secs) - alternates from brightening the light to dimming the light with each consecutive long pulse. Note that lights can only dim down to the minimum operating range of the ballast.
- A prolonged pulse (>15 secs) - synchronizes the lights to OFF.

**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*.

**Note:** Alternative operational options not necessarily shown above are available using the **frc/set** setup remote control.

Full instructions for setting up the sensor are supplied with the sensor head and the **frc/set** remote control - both ordered separately.