

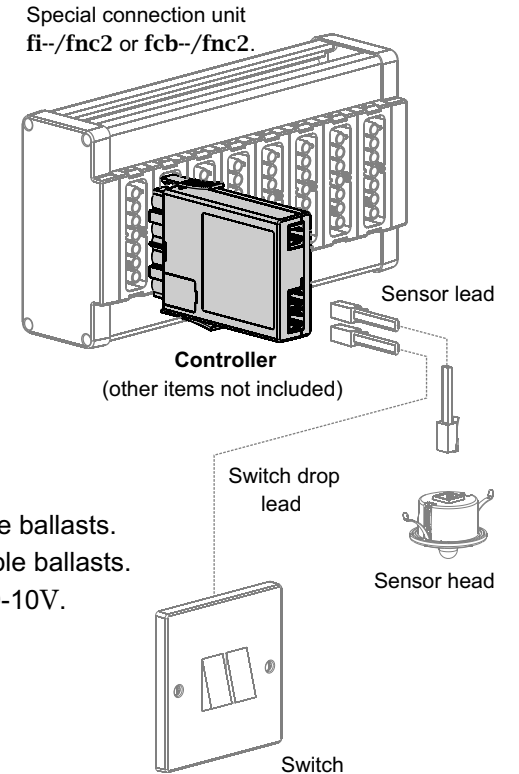
fnc4000D(X, A)/AT/2 - Controllers

Includes Additional Switch Circuit

The **fnc4000D(X, A)/AT/2** is a control device which plugs directly into a special type of **flex7** connection unit; the **fi--/fnc2** or **fcB--/fnc2**. Working with switches or together with a plug-in sensor head, the device can control one circuit ON/OFF/DIM and one other simply ON/OFF. The exact operation will depend on which, if any, sensor head is fitted. Note that any connected switch or sensor head will be operating at ELV.

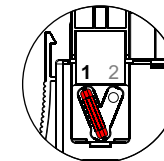
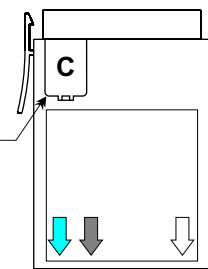
Three products are available:
fnc4000D/AT/2 : DSI digital dimmable ballasts.
fnc4000X/AT/2 : DALI digital dimmable ballasts.
fnc4000A/AT/2 : Analogue ballasts 0-10V.

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/2 controller & wiring the connection unit

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



Link MUST be in position 1 as shown

Wire connection unit as shown on the back page.

Rating

Supply Voltage : 220V-240V, 50Hz, ~

Load on Lighting Circuit - R1

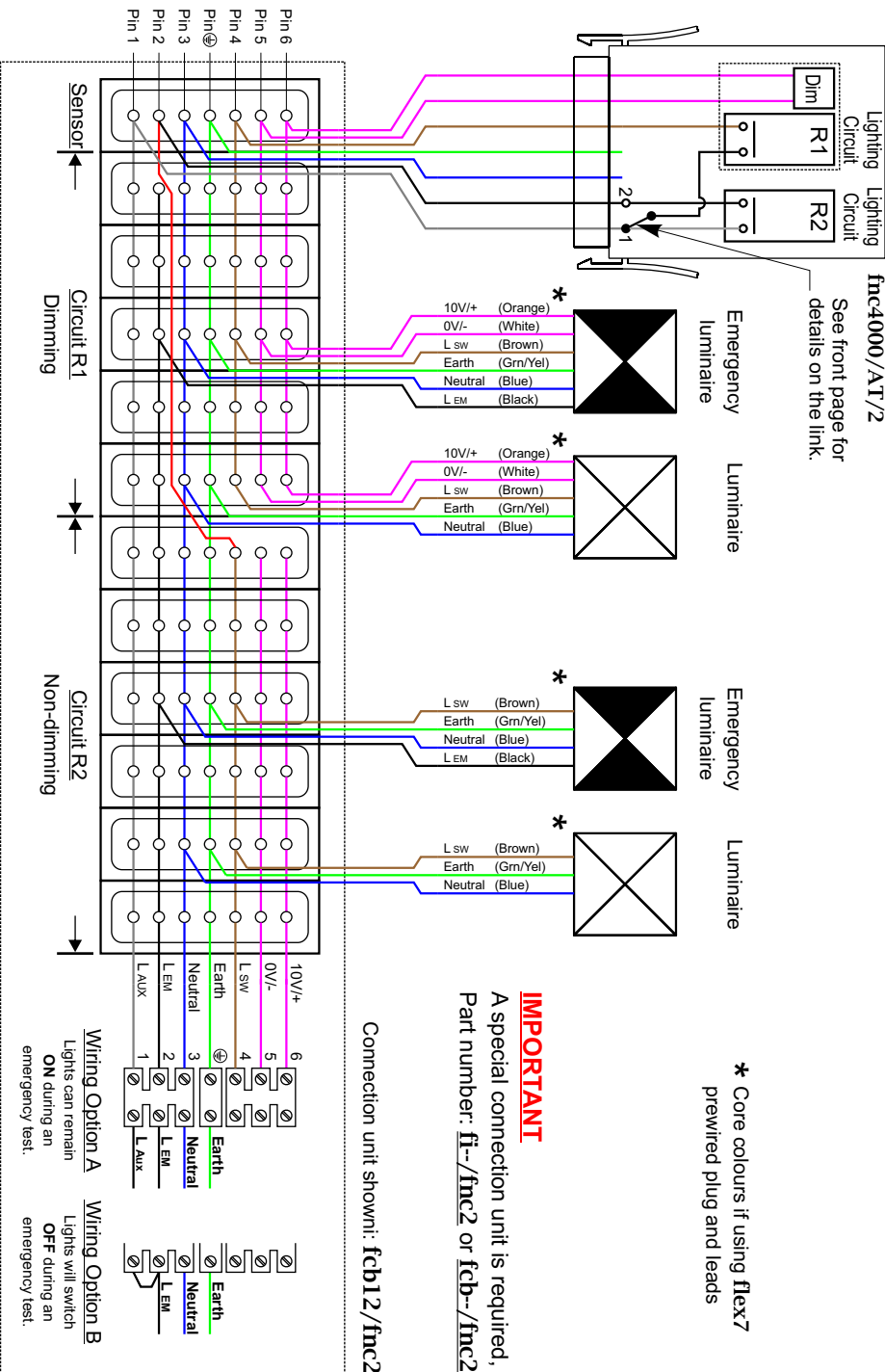
Fluorescent & Incandescent Lighting : 6A
 Compact Fluorescent Lighting : 3A

Load on Lighting Circuit - R2

Fluorescent & Incandescent Lighting : 6A
 Compact Fluorescent Lighting : 3A
Total Maximum Load : 10A

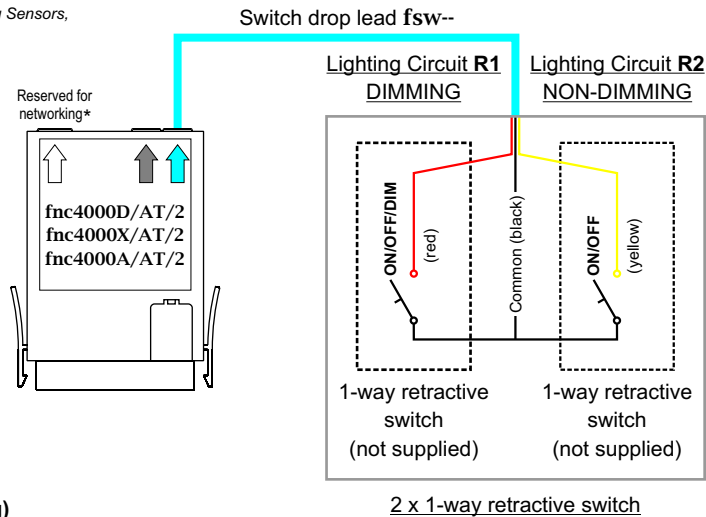
Product	Control Type	Max. no. of Ballast
(Dimming circuit only)		
fnc4000D/AT/2	DSI Digital	25
fnc4000X/AT/2	DALI Digital	25
fnc4000A/AT/2	Analogue 0-10V	25

Circuit diagram for fnc4000D(X, A)/AT/2 Controllers



Using a fnc4000D (X or A)/AT/2 controller with 2 x switches

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



Operation:

Circuit R1 (Dimming)

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.

Circuit R2 (Non-dimming)

Switch control:

- A pulse on the switch - Toggles the lights ON or OFF.

Operation:

If the sensor head is of type fnh200

Circuit R1: (Dimming)

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.

Circuit R2: (Non-dimming)

Switch control:

- A pulse on the switch - toggles the lights ON or OFF.

Absence detection:

- When occupancy is no longer detected, lights will switch OFF after a pre-selected time-out.

If the sensor head is of type fnh400

Circuit R1: (Dimming)

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. Lights can only dim down to the minimum operating range of the ballast.
- A prolonged pulse (>15 secs) - Synchronizes the lights to OFF.

Note: 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:

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

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*.

Circuit R2: (Non-dimming)

Switch control:

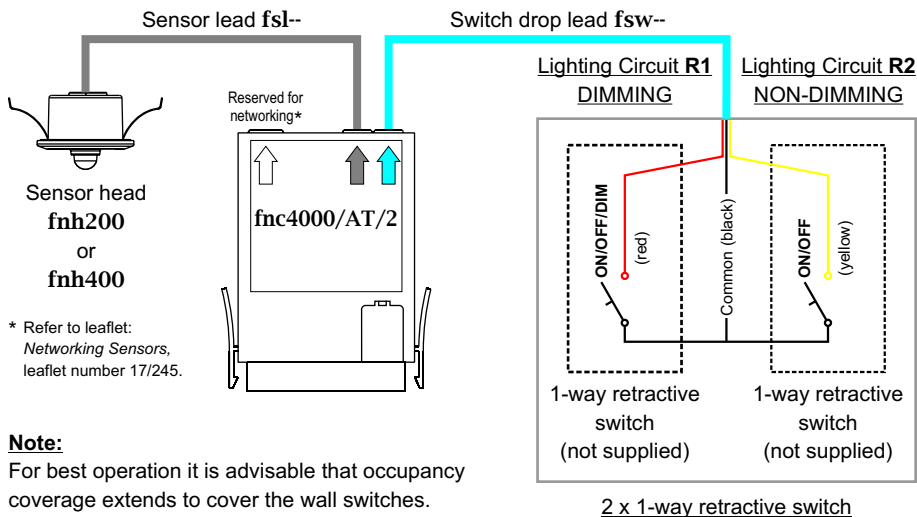
- A pulse on the switch - Toggles the lights ON or OFF.

Absence detection:

- When occupancy is no longer detected, lights will switch OFF after a pre-selected time-out.

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.

Using a fnc4000D (X or A)/AT/2 controller with a sensor head & 2 x switches



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

Note:

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