

XS Fans Switches & Sensors

Remote Switch Control: XS-MFC

Integral Sensors: XS-PIR, XS-H, XS-AQ, XS-TH, XS-TA

Remote Sensors: XS-PIRR, XS-HR, XS-AQR

Installation Guide

XS-MFC Remote Switch Control

Designed to work in conjunction with the XS range of fans and associated integral and remote sensors, the XS-MFC Remote Switch Control offers the user the following:

- On/Off.
- Maximum or Economy performance.
- Variable Speed Control.
- Forward/Reverse airflow.
- Auto/Manual operation.

Refer to the unit lift up lid for switch operating instructions.

The Remote Switch can control one fan or multiple fans, depending on the fan and type of sensor being used.

Up to 5 fans (6 inch/9 inch) can be controlled by one XS-MFC.

Up to 2 fans (size 12 inch) can be controlled by one XS-MFC.

Note: Do not mix fans of different sizes on the same control.

Siting position

Mount in a vertical plane with the grille at the bottom.

Mount the switch 1.5 metres from the floor (minimum).

Do not expose to excessive amounts of oil, grease or direct water spray.

Do not subject switches to a direct heat source in excess of 45°C.

Installation

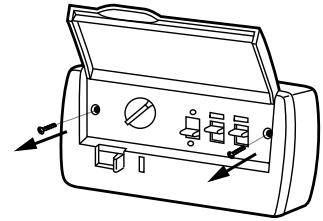
Follow the pictorial sequence on this page.

IMPORTANT

Isolation - Before commencing work make sure that the unit is electrically isolated from the mains supply.

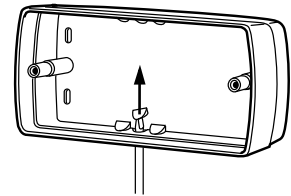
1

Lift up panel and remove two screws to dismantle unit.



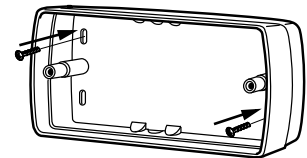
2

Push out backplate box cable entry using a screwdriver.



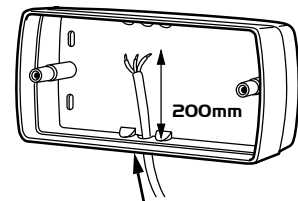
3

Spot through backplate box and drill and plug the wall. Fix backplate box to the prepared wall.



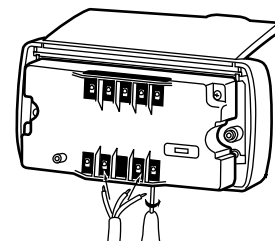
4

Feed approx. 200mm of supply cable into the box.



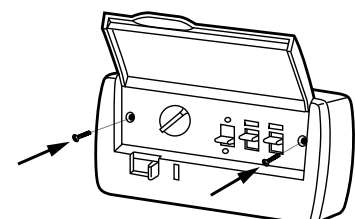
5

Connect the end of the cable into the control block. Connect wires as shown in the appropriate wiring diagram.



6

Hook lip of security strap (if fitted) in hinge socket. Fit the control into the backplate box & secure. Test the installation.



XS Integral Sensors

Designed to work in conjunction with and fit inside the XS range of fans, the range of XS Integral Sensors offer the user the following functions:-

XS-PIR

Passive Infra Red movement detector - senses body movement, Run on Timer is adjustable between 2 and 40 minutes.

XS-H

Humidity Sensor - senses relative humidity. Adjustable between 30% and 90% RH. Run on Timer is adjustable between 2 and 40 minutes.

XS-AQ

Air Quality Sensor - detects odours and tobacco smoke. Adjustable to suit size requirements. Run on Timer is adjustable between 2 and 40 minutes.

XS-TH

Temperature Sensor - adjustable between 5°C and 35°C.

XS-TA

Run on Timer - adjustable between 2 and 40 minutes.

Siting

Mounted inside a fan.

Grille section adjacent to sensor must be changed to suit the sensor being used (see fig 1).

Do not expose to excessive amounts of oil, grease or direct water spray.

Do not subject sensors to a direct heat source in excess of 45°C.

Installation

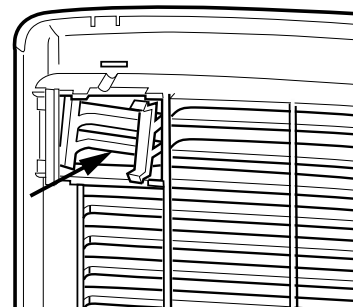
Follow the pictorial sequence on this page.

IMPORTANT

Isolation - Before commencing work make sure that the unit is electrically isolated from the mains supply.

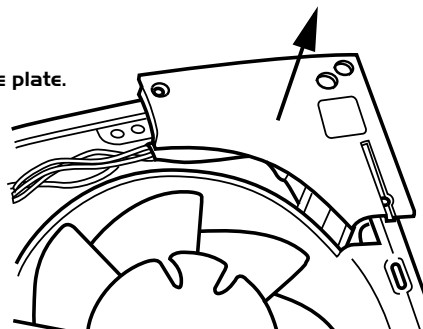
1

Push out the sensor area cover from the grille.



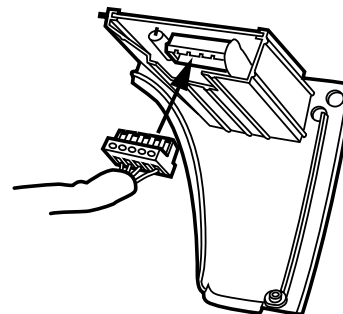
2

Remove the module plate.



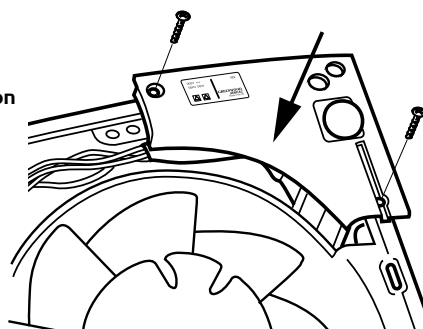
3

Connect sensor to fan using pre-wired plug.



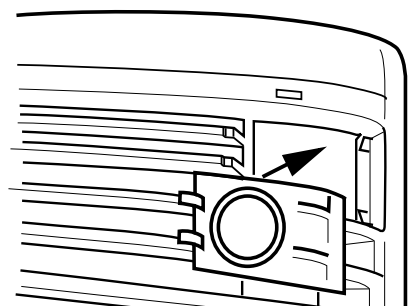
4

Screw the sensor module into position on the fan.



5

Fit new grille insert into main grille.



XS Remote Sensors

Designed to work in conjunction with the XS range of fans, the range of XS Remote Sensors offer the user the following functions:-

XS-PIRR

Passive Infra Red movement detector - senses body movement, Run on Timer is adjustable between 2 and 40 minutes.

XS-HR

Humidity Sensor- senses relative humidity. Adjustable between 30% and 90% RH. Run on Timer is adjustable between 2 and 40 minutes.

XS-AQR

Air Quality Sensor- detects odours and tobacco smoke. Adjustable to suit size requirements. Run on Timer is adjustable between 2 and 40 minutes.

Note: Refer to the lift up lid for sensor operating instructions.

Siting

Mount in a vertical plane.

The grille in sensor box should be at the bottom.

Mount the sensor 1.5 metres from the floor.

Do not expose to excessive amounts of oil, grease or direct water spray.

Do not subject switches to a direct heat source in excess of 45°C.

Installation

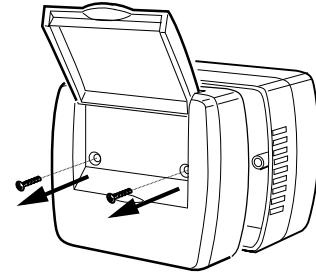
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IMPORTANT

Isolation - Before commencing work make sure that the unit is electrically isolated from the mains supply.

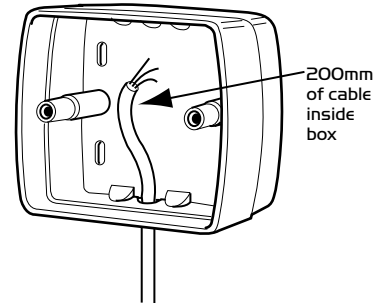
1

Remove screws securing cover to box.



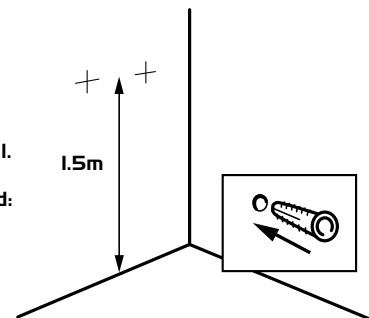
2

Knock out cable entry point and feed the supply cable through allowing approx. 200mm of cable to protrude into box.



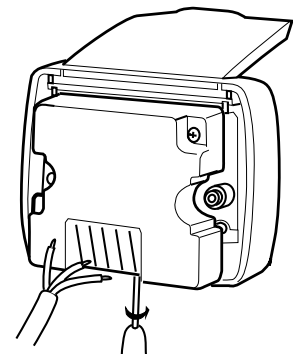
3

Drill & plug the surface and fix the back box to the wall. If security strap XS-SS is to be fitted: Locate boss centrally in slots.



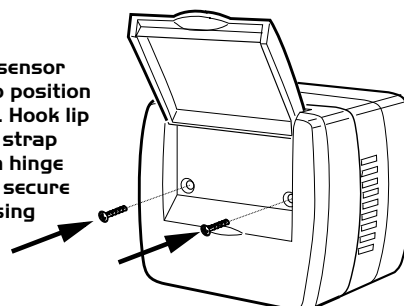
4

Wire in the sensor (see various wiring options in the wiring section),



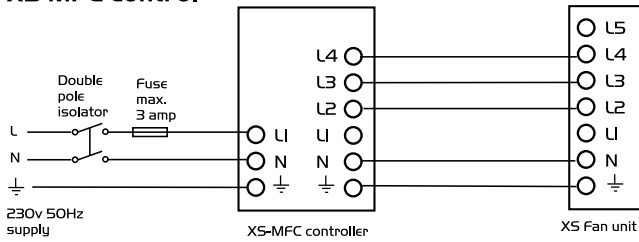
5

Screw the sensor module into position on the wall. Hook lip of security strap (if fitted) in hinge socket and secure the boss using the screw.



Electrical Wiring for One Fan

Supply / Extract fan operated via remote XS-MFC control

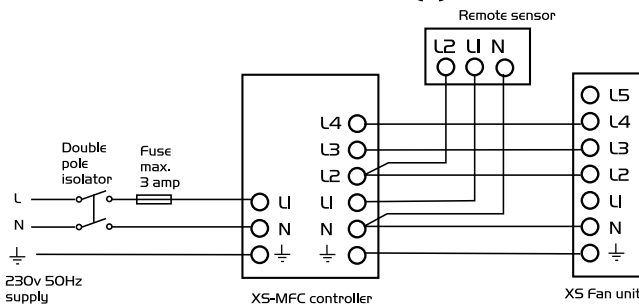


Remote switch may be set: On / Off, Forward / Reverse, Economy / Std. (variable speed), Auto / Manual.

IMPORTANT

Isolation - Before commencing work make sure that the unit is electrically isolated from the mains supply.

Supply / Extract fan operated via remote XS-MFC control & Remote Sensor(s)

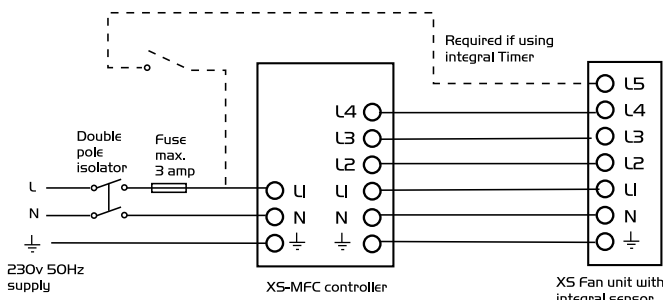


Remote switch may be set: On / Off, Forward / Reverse, Economy / Std.(variable speed), Auto / Manual.

One or more Remote Sensors may be wired in parallel to one XS-MFC Control.

Humidity Sensor: XS-HR, Air Quality Sensor: X S-AQR
Passive Infra Red Sensor: XS-PIRR,

Supply / Extract fan operated via remote XS-MFC control and Integral Sensor



Remote switch may be set: On / Off, Forward / Reverse, Economy / Std. (variable speed), Auto / Manual.

Maximum one Integral Sensor per fan 6/9/12 denotes unit size identity
Humidity Sensor: XS-H6/9/12, Air Quality Sensor: XS-AQ6/9/12
Passive Infra Red Sensor: XS-PIR6/9/12, Temperature Sensor: XS-TH6/9/12
Run on Timer: XS-TA6/9/12

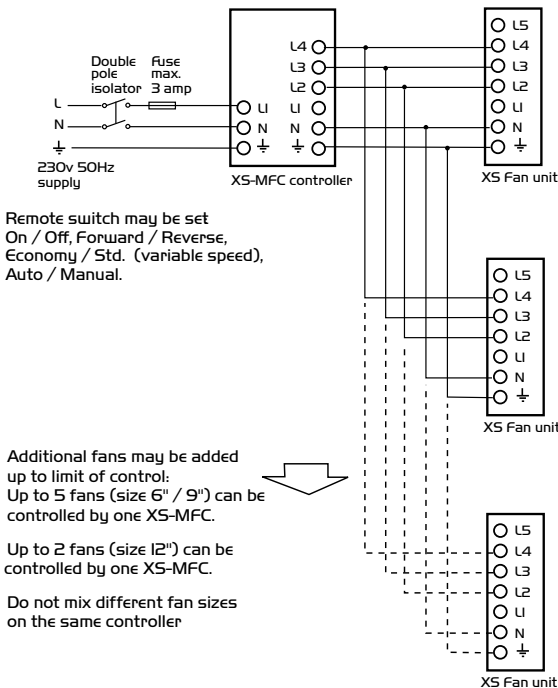
A single sensor will switch all fans if more than one fan is being operated by a single XS-MFC controller.

NOTE:

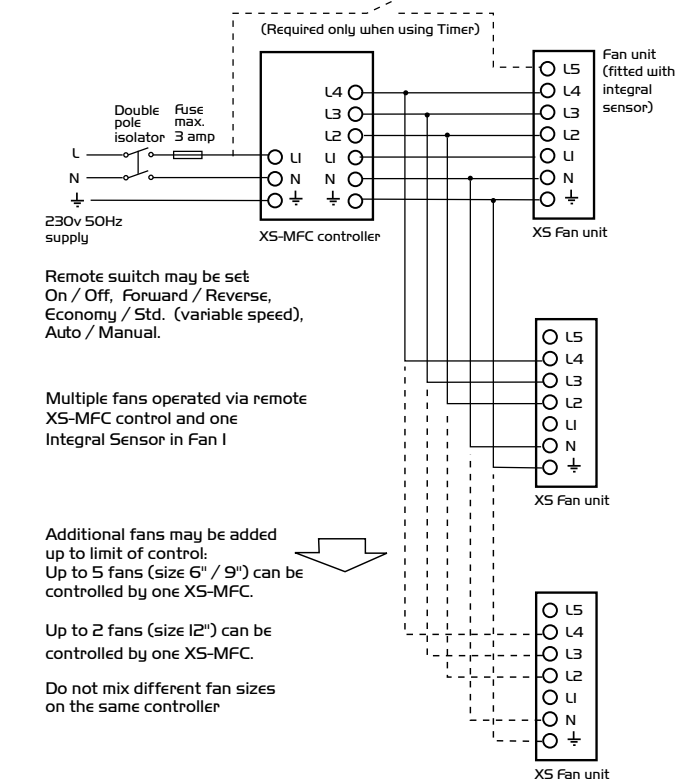
Multi-fan options:
Up to 5 fans (size 6" / 9") can be controlled by one XS-MFC.
Up to 2 fans (size 12") can be controlled by one XS-MFC.
Do not mix different fan sizes on the same controller.

Wiring - Multiple Fans

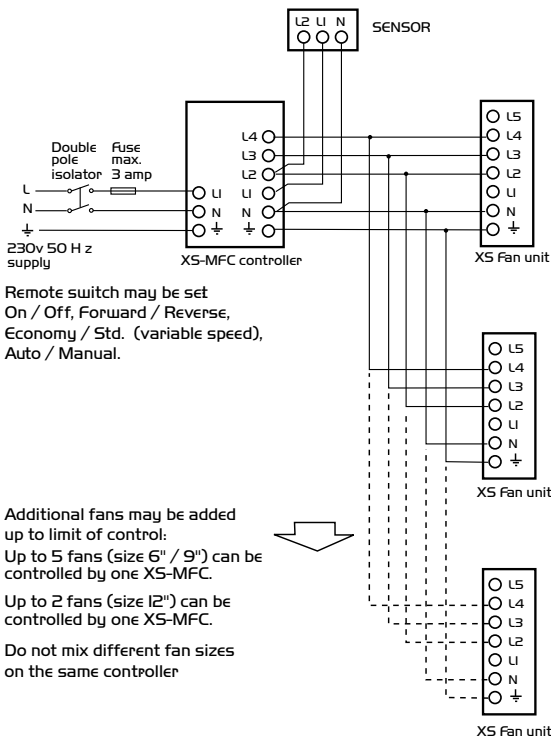
Multiple fans operated via remote XS-MFC control



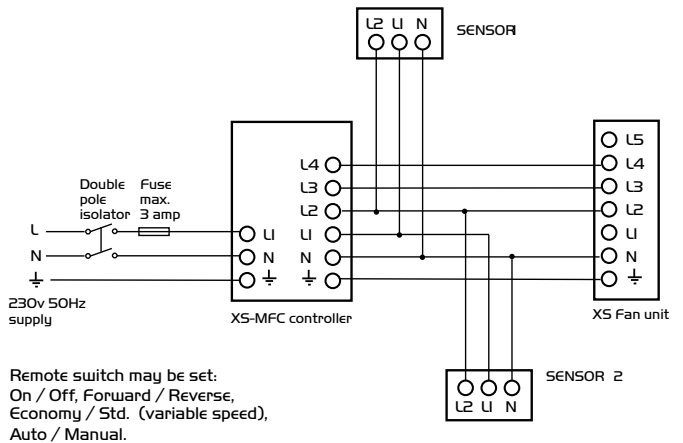
Multiple fans operated via remote XS-MFC control and one Integral Sensor in Fan 1



Multiple fans operated via remote XS-MFC control and a Remote Sensor



Fan operated using remote XS-MFC control and a Multiple Remote Sensor



Note:

Note: If 2 x 12 inch fans or 3 x 6 or 9 inch fans are used in the same operating mode in the same room they should all be controlled from the same MFC speed control. This avoids the possibility of one fan (if speed controlled at a lower flow rate) being stalled by the other fan(s).

Adequate make-up air provision sufficient to provide ventilation in accordance with building regulations is required in all rooms. This should be checked during commissioning with all fans in the same room running together in all possible configurations.

The automatic shutters, motor bearings should be frequently inspected and maintained to ensure they open fully/operate satisfactorily. Use of an RCD and fused spur with 1A, Bussmann TDC180, BSI362, fuse (Farnell order no: 1123029) for 1 fan or 2A, Bussmann TDC180, BSI362 fuse (Farnell order no: 1123032) for 2 or 3 fans is recommended.

Always confirm airflow direction before commissioning.

IMPORTANT

(Shutter Operation XS fans)
There will be a short delay on startup and shutdown of approximately 40 seconds. This is normal.

Maintenance

Periodically, at least once a year, or more frequently in case of heavy use, remove the dirt and encrustation from the casing.

Replacement of Parts

As a manufacturer Nuaire is aware that time is important. In the event of a breakdown of this equipment, it should be adequately packaged and returned to Nuaire.

IMPORTANT!

Please telephone Nuaire before posting your unit. We will give you a returns number to identify your package.

We will endeavour to repair or replace it within five working days of receipt. See our warranty terms.

Warranty

The 3 year warranty starts from the day of delivery and includes parts and labour for the first year. The remaining period covers replacement parts only.

This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuaire International Sales office for further details.

A unit returned to Nuaire should be suitably protectively packaged and clearly marked with the 'returns number' obtained from Nuaire prior to posting.

After Sales Enquiries

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

Telephone 02920 858 400

Notes



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