

XS Window Fan Kits

Supply/Extract Units

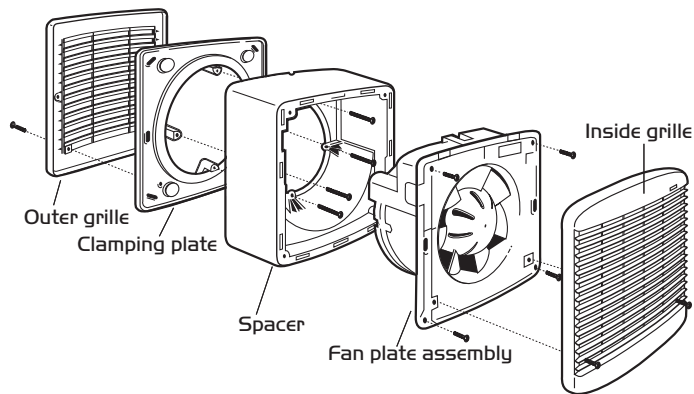
CE The EMC Directive 2014/30/EU
The Low Voltage Directive 2014/35/EU

Installation and Maintenance

Introduction

The Nuair XS Window Fan Kit is available in 6, 9 and 12 inch impeller sizes suitable for supply or extract and can be the heart of a room's automatic ventilation system. Ensure adequate air replacement for the fan and any fuel burning appliance in the room.

Fig 1 Main components of Window installation assembly.



Switching

Operated via a separately wired 3 amp fused spur (by others) or operated via the optional XS-MFC remote controller allowing supply or extract, variable speed and automatic or manual switching of several fans if desired.

Sensors

Sensors are available as remote units or integral 'plug in' units. They are able to control multiple fans, depending on sensor and fan types. Integral sensors are quick and easy to install and are aesthetically pleasing, whilst remote sensors give the benefit of location close to the pollutant source. Remote sensors can be fitted with an optional security strap to prevent unwanted tampering.

General

The removable interior grille provides easy access while the external rotor motor makes for simple removal of the push-on impeller for cleaning. Upward angled interior grille vanes shield workings from view and downward sloping external vanes throw off rain. The fan is IP24 splash proof approved with the motor rated at IP44.

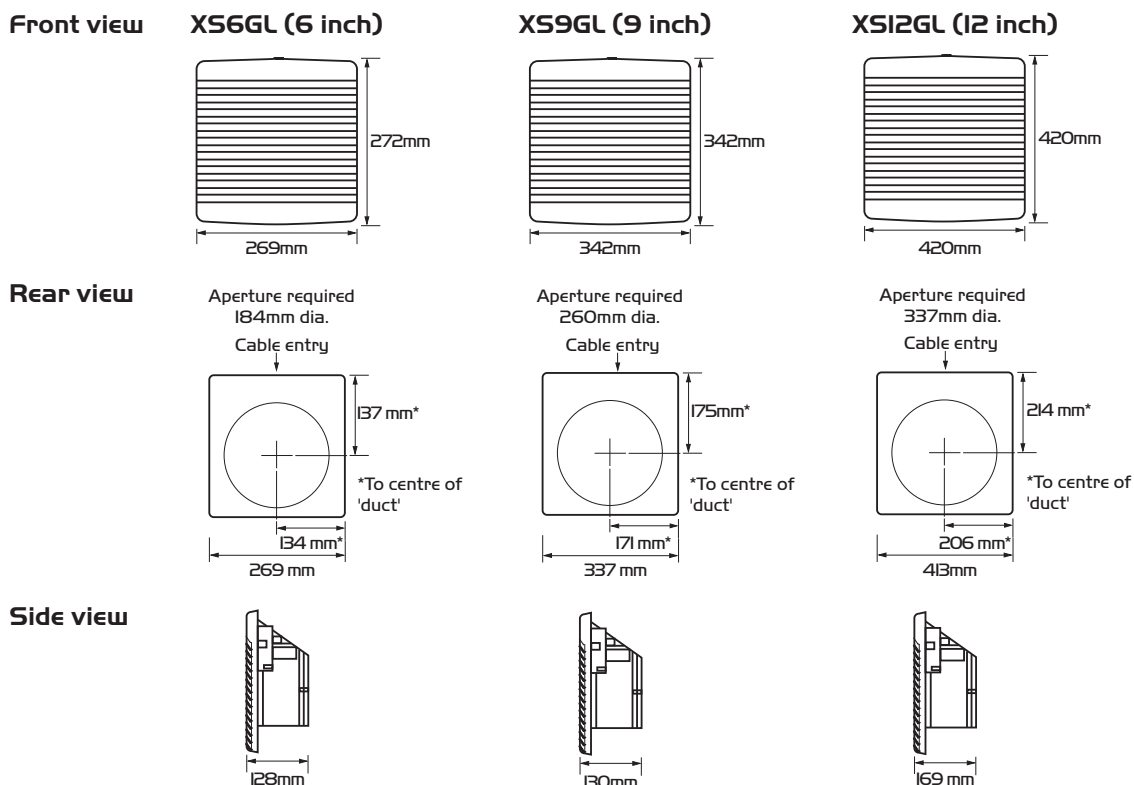
All external components are made in soft grey colours from ultra violet stable ABS material so they will blend with most decors and will not fade in sunlight.

Coding for Window Fan Kits

Description	Code
6 inch Window Fan kit complete	XS6GL
9 inch Window Fan kit complete	XS9GL
12 inch Window Fan kit complete	XS12GL

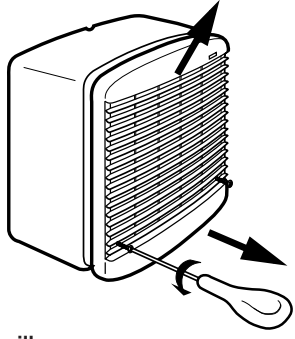
Window Fan Kits are supplied as a complete package with all window installation parts included and are suitable for glazing thickness of up to 32mm and wall/panels of 360mm.

Dimensions Fig 2.



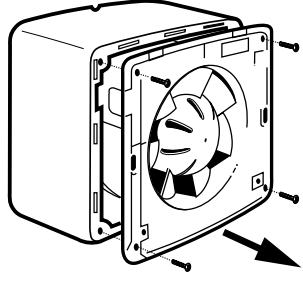
Installation of Window Fan kits

1



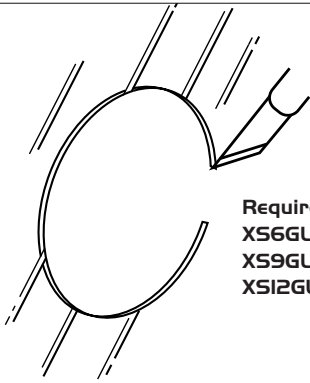
Remove front grille.
Release 2 screws. Lift grille upwards.

2



Remove fan plate.

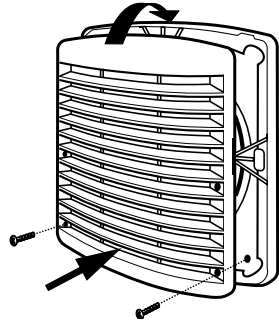
3



Prepare the window.

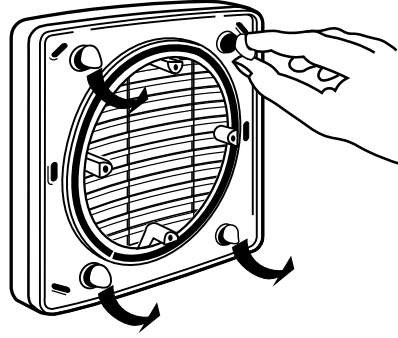
Required Glass Aperture	
XS6GL	184 dia
XS9GL	260 dia
XS12GL	337 dia

4



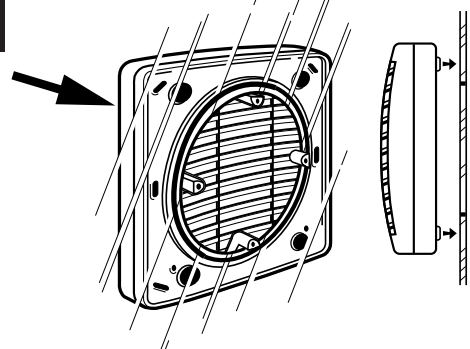
Fix outer grille to spigot plate. Check plate orientation is vertical. Note grille locates over top lugs on spigot plate.

5



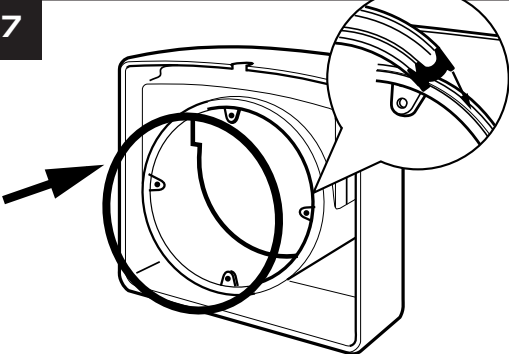
Remove adhesive pad covers.

6



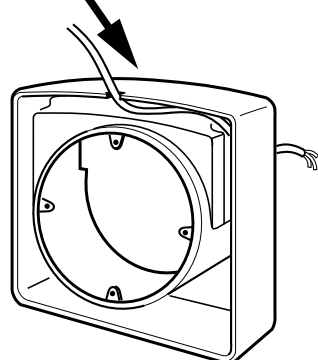
Clean the window glass and affix the outer grille assembly over window aperture.

7



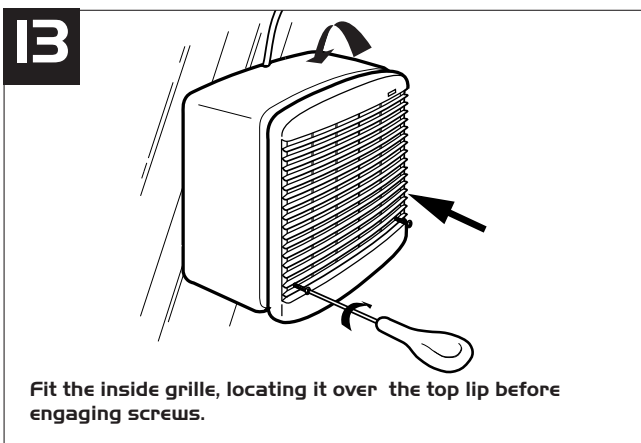
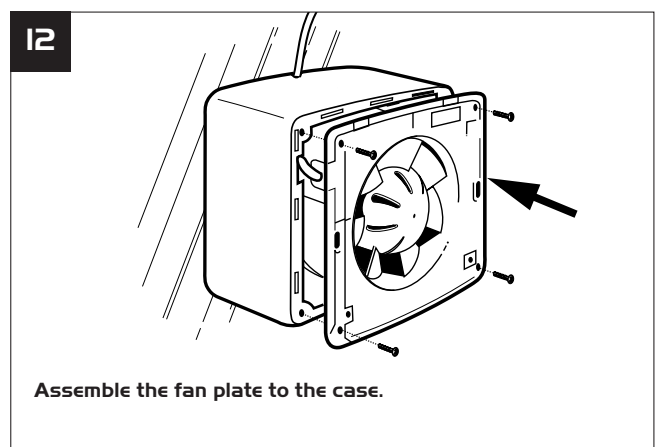
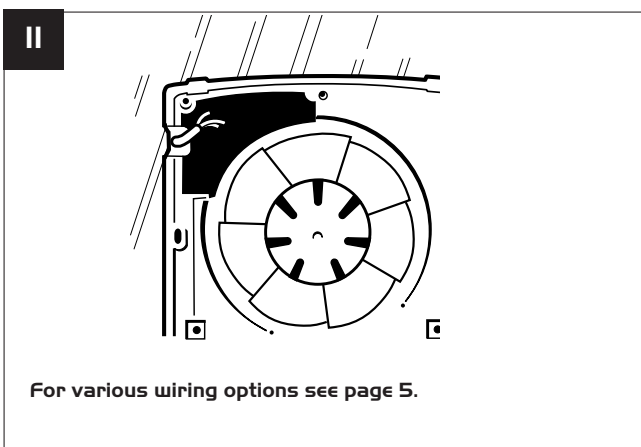
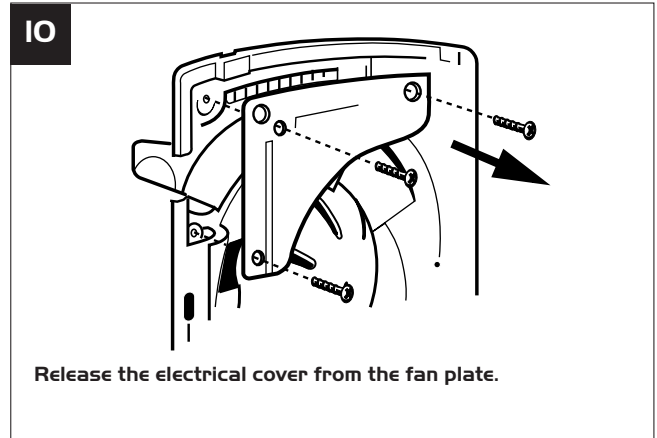
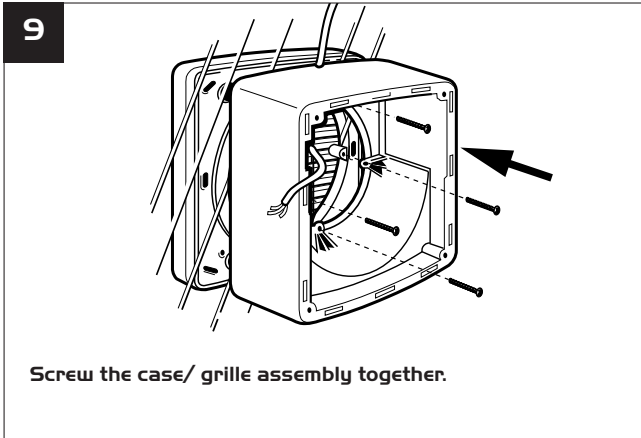
Ensure rubber seal is located into case spigot.

8



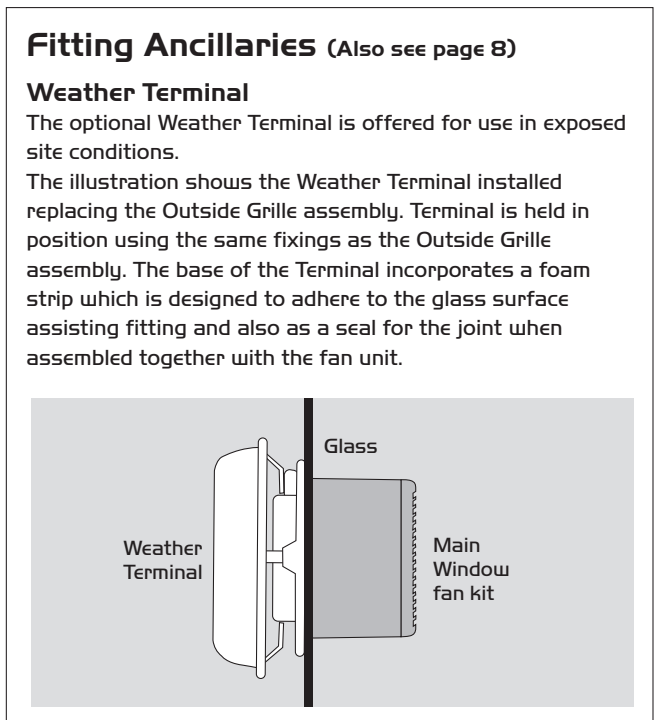
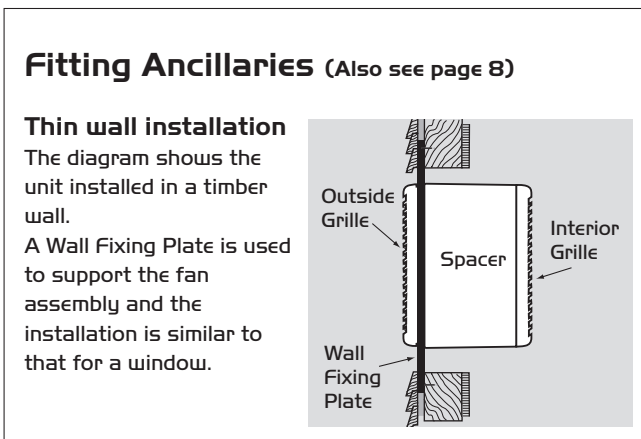
Feed supply cable into the case.

Installation of Window Fan



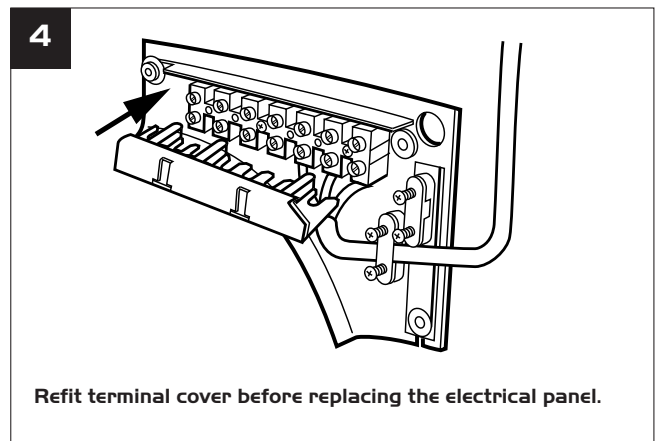
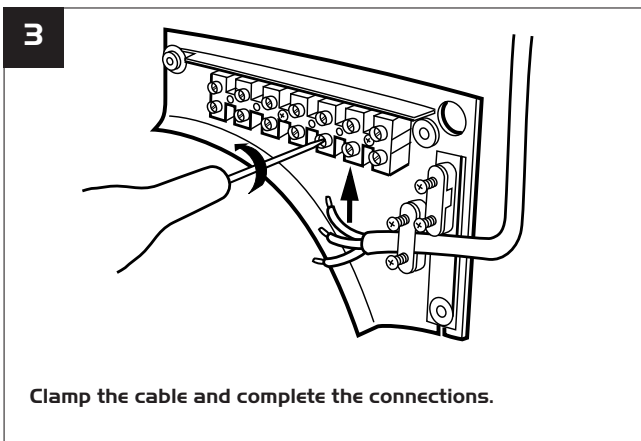
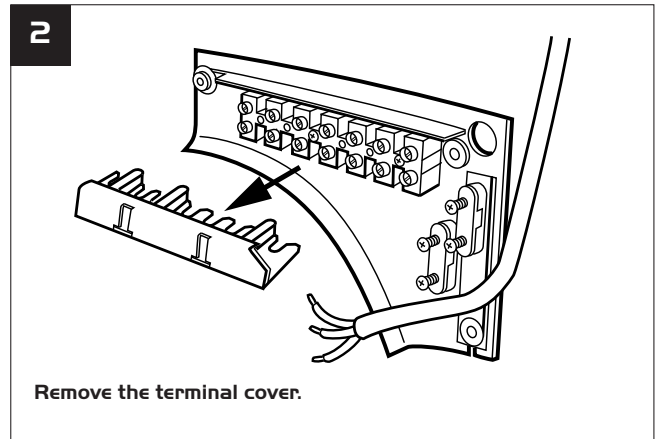
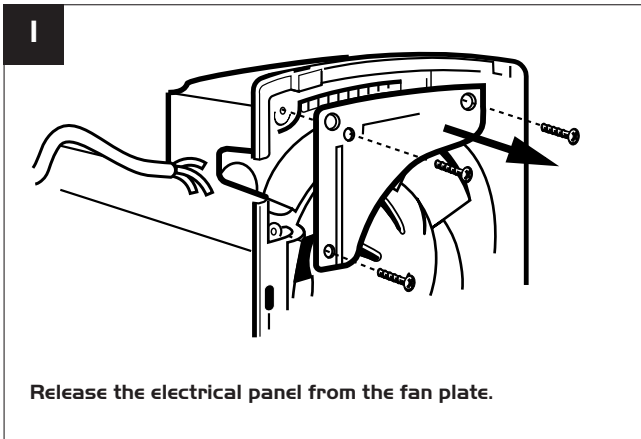
IMPORTANT

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



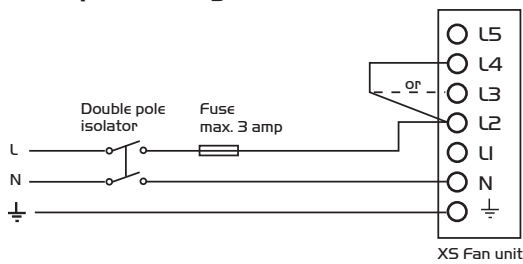
Electrical Installation

Electrical work should be undertaken by a qualified electrician in accordance with the wiring regulations.



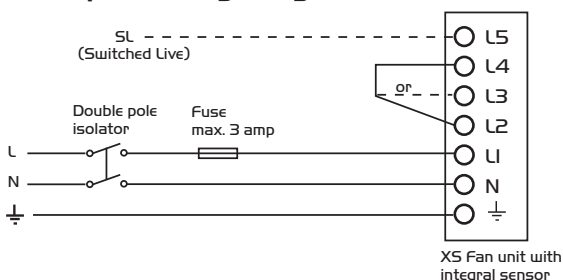
Wiring

Fan operated by on / off switch



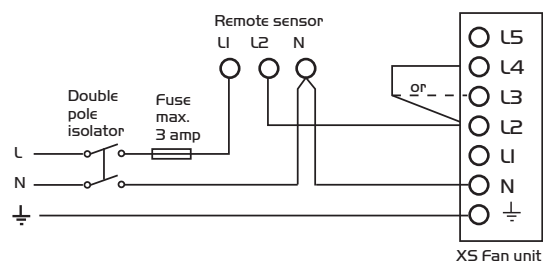
Connect link wire between L2 & L4 for extract
or Connect link wire between L2 & L3 for supply.

Fan operated by integral sensor



Connect link wire between L2 & L4 for extract
or Connect link wire between L2 & L3 for supply.
Connect switched live signal to L5 for integral timer module.

Basic fan operated by remote sensor



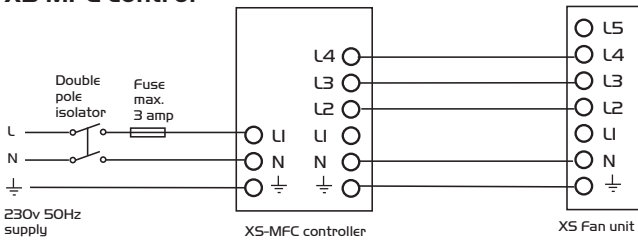
Connect link wire between L2 & L4 for extract
or Connect link wire between L2 & L3 for supply.

IMPORTANT

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

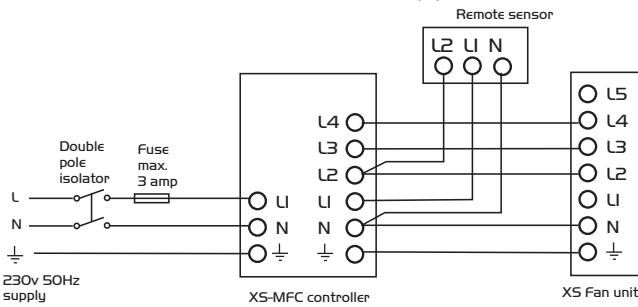
Electrical Wiring cont.

Supply / Extract fan operated via remote XS-MFC control



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

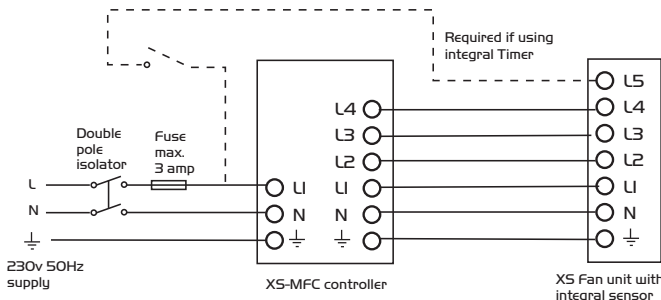
Supply / Extract fan operated via remote XS-MFC control & Remote Sensor(s)



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.

IMPORTANT

(Shutter Operation XS fans)

There will be a short delay on startup and shutdown of approximately 40 seconds. This is normal.

XS6GL Consumption and weight

Model	Input Power Watts		Weight kg
	Max.	Economy	
XS6GL supply + extract	38	20	4.1

Note figures are for extract only.

Electrical Specification

230V ~ 50Hz Class I. Motor thermally protected by overload device. Cable: 1mm max. or min. Fuse: 3 amp (if fan is supplied from a 5A lighting circuit, no local fuse is required).

XS9GL Consumption and weight

Model	Input Power Watts		Weight kg
	Max.	Economy	
XS9GL supply + extract	50	37	5.7

Note figures are for extract only

Electrical Specification

230V ~ 50Hz Class I. Motor thermally protected by overload device. Cable: 1mm max. or min. Fuse: 3 amp (if fan is supplied from a 5A lighting circuit, no local fuse is required).

XS12GL Consumption and weight

Model	Input Power Watts		Weight kg
	Max.	Economy	
XS12GL supply + extract	100	70	8.6

Note figures are for extract only

Electrical Specification

230V ~ 50Hz Class I. Motor thermally protected by overload device. Cable: 1mm max. or min. Fuse: 3 amp (if fan is supplied from a 5A lighting circuit, no local fuse is required).

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).

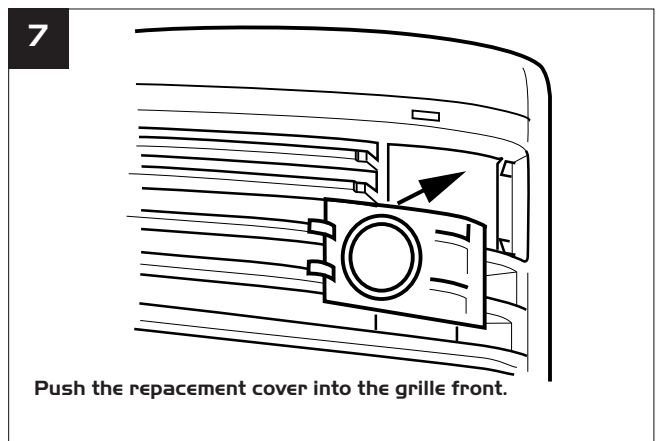
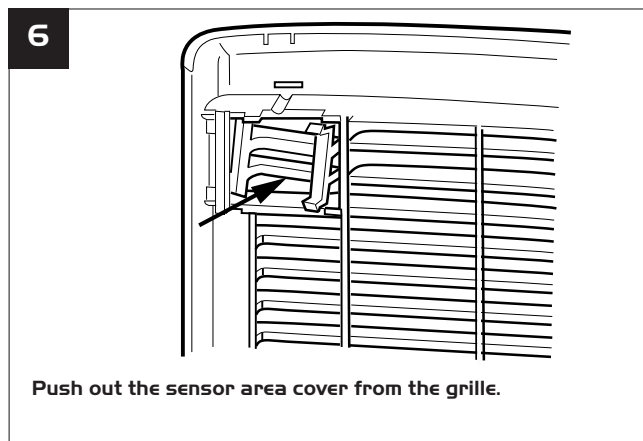
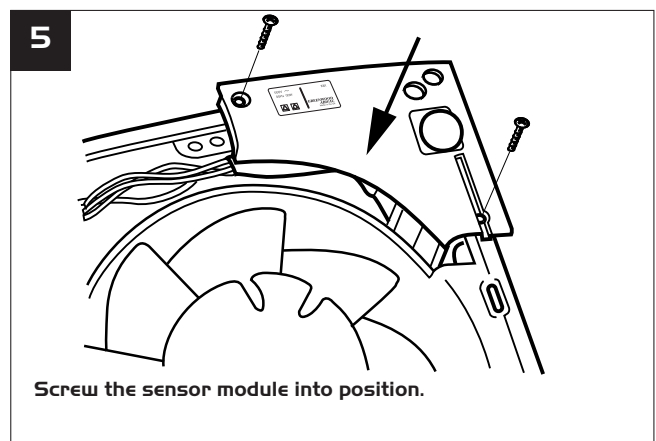
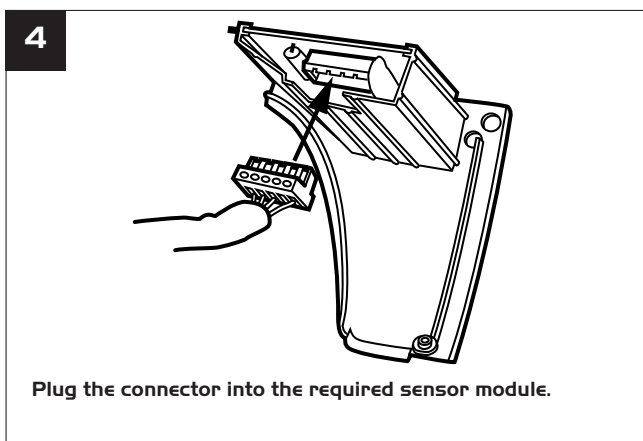
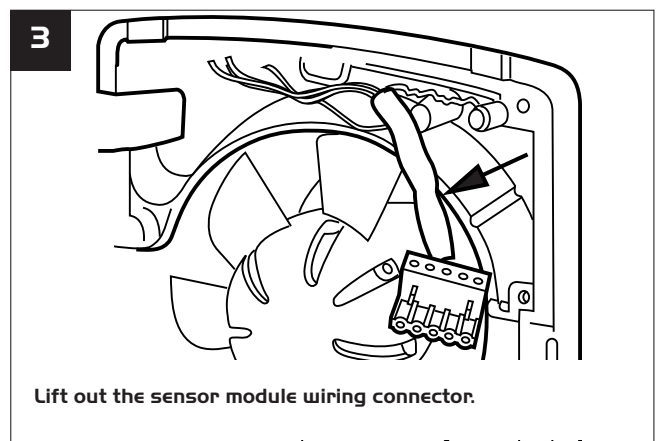
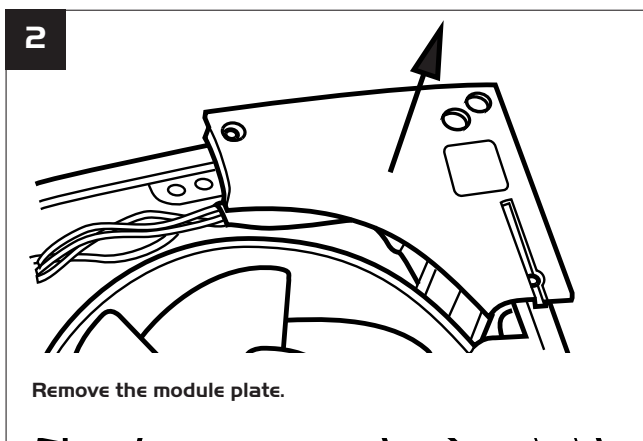
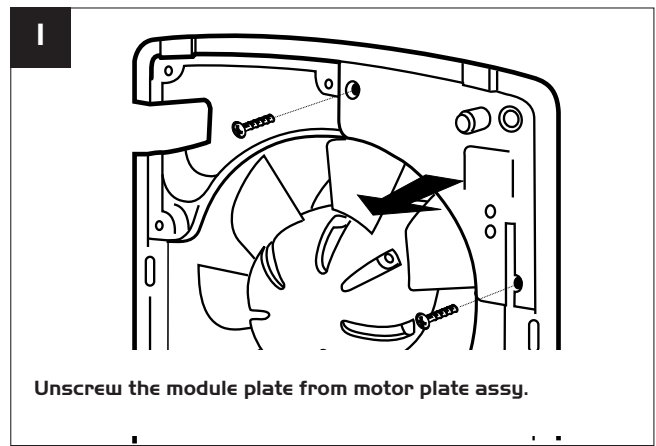
Adequate make-up air provision sufficient to provide ventilation in accordance with building regulations is required in all rooms. This should be checked during commissioning with all fans in the same room running together in all possible configurations.

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, BS1362, fuse (Farnell order no: 1123029) for 1 fan or 2A, Bussmann TDC180, BS1362 fuse (Farnell order no: 1123032) for 2 or 3 fans is recommended.

Always confirm airflow direction before commissioning.

Fitting Integral Sensors (optional)

Note: Before following the pictorial sequence shown, first remove the fans front cover grille (2 screws). Release the four main corner screws and lift out the motor/fan plate assembly. Remove the electrical cover plate opposite the sensor plate. Follow the pictorial sequence on this page.



Fitting Remote Controller XS-MFC or Remote Sensors (optional)

The XS-MFC Multi Fan Control provides supply or extract, variable speed and automatic or manual switching of several fans if desired, (see note below).

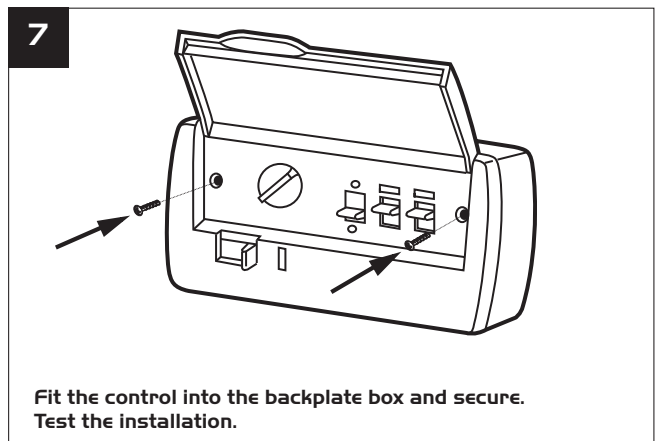
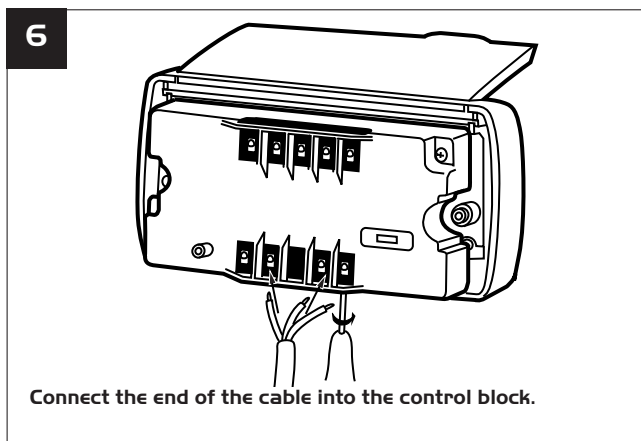
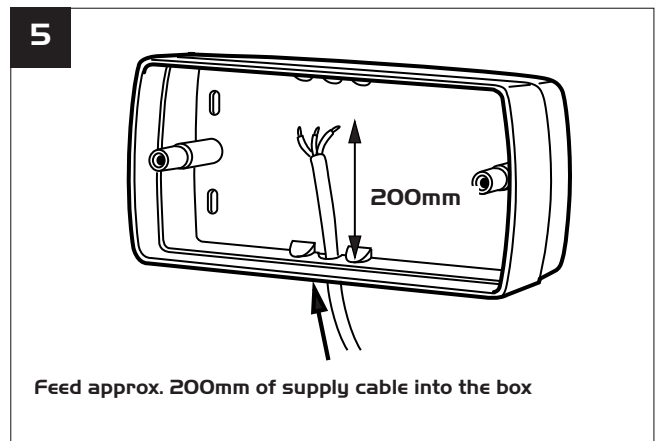
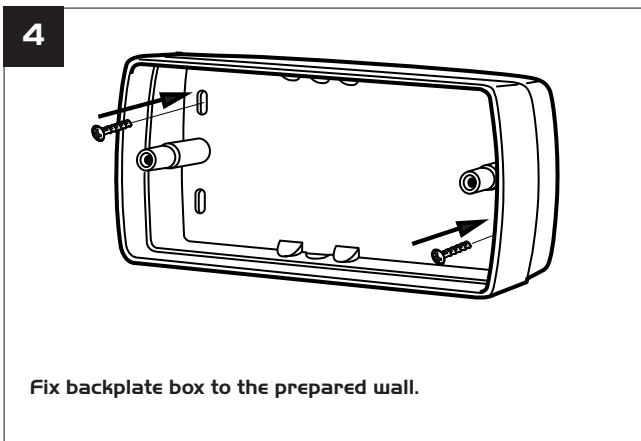
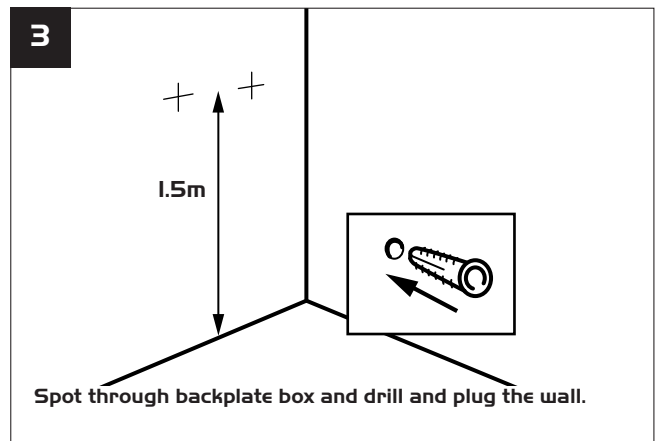
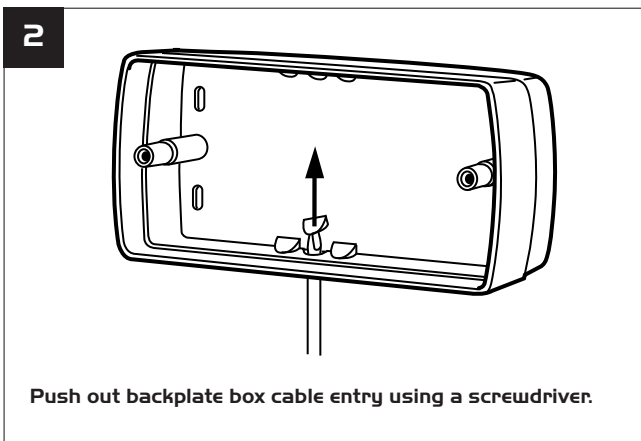
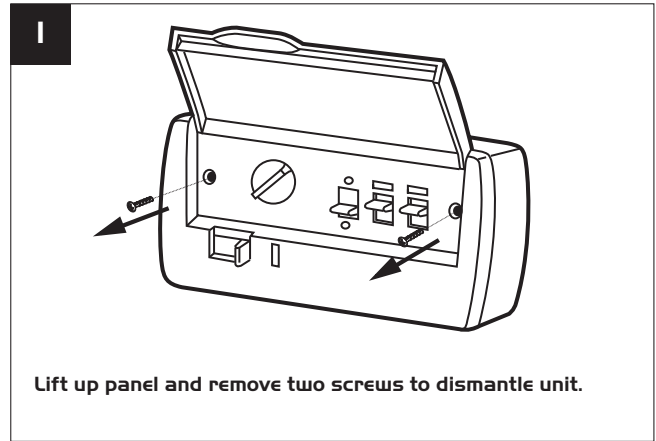
The control is best mounted approx 1.5m above the floor.

Remote Sensors are available for Humidity, Air Quality and Passive Infra Red control.

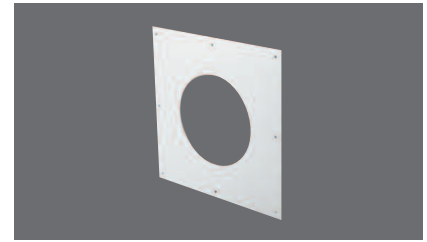
Remote Sensors should be positioned at least 1.5m above the floor and away from direct heat sources e.g. radiators.

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

Up to 2 fans (size 12 inch) can be controlled by one XS-MFC.
Do not mix different fan sizes on the same controller.



Ancillaries



Weather Terminal

Used for exposed site wall installations, comprising one weather terminal. Manufactured from HIPS.

The Weather terminal unit replaces the outside grille and is supplied with installation details.

Wall Fixing Plate

The Wall Fixing Plate is used for thin wall and above ceiling applications, to support the Fan assembly.

Order Code XS-WT6

Dimensions: 360 x 360 x 170mm

Order Code XS-WT9

Dimensions: 425 x 425 x 180mm

Order Code XS-WT12

Dimensions: 506 x 506 x 185mm

Maintenance

Periodically, at least once a year, or more frequently in case of heavy use, remove the dirt and encrustation from the grille(s) fan impeller and motor casing. Ensure the impeller is not cracked or deformed and is able to rotate freely and without oscillation. **Do not use any solvents to clean this product.**

Replacement of Parts

As a manufacturer Nuairé is aware that time is important. In the event of a breakdown of this equipment, it should be adequately packaged and returned to Nuairé. **IMPORTANT!** Please telephone Nuairé 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.

Terms

This warranty applies to units installed and used in the United Kingdom.

The equipment will be repaired or replaced at Nuairé's cost provided that the appliance:

1. Has been installed and used in accordance with the fitting and wiring instructions supplied with each unit.
2. Has not been connected to an unsuitable electrical supply. (The correct supply voltage is shown on the appliance rating label attached to the unit).
3. Has not been modified or repaired by persons not authorised by Nuairé.
4. A unit returned to Nuairé should be suitably protectively packaged and clearly marked with the 'returns number' obtained from Nuairé 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

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.