

INSTALLATION INSTRUCTIONS FOR THE 100mm 4"/ 120mm 5" & 150mm 6" RANGE OF MECHANICAL / ELECTRONIC HUMIDITY AND AUTOMATIC WALL & CEILING FANS.

(PULLCORD MODEL IS NOT SUITABLE FOR CEILING FIXING)

IMPORTANT NOTES:

- (i) When installing fan through an external wall, an external wall grille must be fitted at all times.
- (ii) This fan must be installed by fixed wiring only. A flexible cord should not be used.
- (iii) A double pole fused spur having a contact separation of at least 3mm in all poles **MUST** be used and fitted with a 3 amp fuse, and must be sited outside any room containing a shower or fixed bath. The fan must not be accessible to a person using either the shower or bath. Fan to be fitted a minimum of 1.8 metres from floor. When fitting through an external wall, an external grille must be fitted at all times.
- (iv) For best results this Extractor Fan should be fitted as high on the wall as possible, or if preferred, on the ceiling. (Pullcord model is not suitable for ceiling fixing)
- (v) Do not install the unit within a shower cubicle. Use our shower fan range of 12 volt S.E.L.V range.
- (vi) Switch off mains supply before making electrical connections. All installations must be supervised by a qualified electrician.
- (vii) This fan is double insulated and does not require an earth.

1. Cut a suitable diameter hole in the wall. If the fan is to be fixed in the ceiling ensure that the hole is between the joists. N.B. Fan to be fitted minimum 1.8 metres from floor.
100mm/4" - 112mm 4 1/2 120mm/5" - 140mm 5 1/2 150mm/6" - 173mm 6 1/2
2. Fit (internal diameter) ducting flush to the plaster.
100mm/4" - 100mm/ 4 120mm/5" - 135mm/ 5 3/4 150mm/6" - 165mm/ 6 1/2
3. Remove the cover from the fan by removing the two small screw caps on the front cover and remove the two retaining Phillips screws.
4. Hold the body of the fan against the wall or ceiling and mark the four screw holes and the cable entry. **IMPORTANT:** Ensure that the fan is square on wall or ceiling.
5. Bring power cable into position, as marked. Allow an extra 230mm (9") protruding to facilitate connection. Make good the duct and cable.
6. Drill holes to suit No 8x 1^{1/4} screws and insert wall plugs. Screw the fan and connect power supply to terminals as shown in diagrams 1-8. Make good to the external wall and fit cowl or grille over duct.

ELECTRONIC AUTOMATIC BACKDRAFT SHUTTERS

The range of automatic fans are fitted with an internal backdraft shutter system. The flaps of the backdraft shutter are operated by an electronic thermoactuator when the fan is switched on the flaps take 30-60 secs to open and close when the fan is switched off.

7. Electrical Connections : Standard Model (DIAGRAM 1)

The fan can either be operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. Requiring only a live & neutral supply.

8. Electrical Connections: Pullcord Model (DIAGRAM 1)

This fan requires only a live & neutral supply the fan has its own integral on/off switch.

9. Electrical Connections: Timer Model (DIAGRAM 2)

The fan can either be operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. (Timer adjustment 30 Secs to 20 minutes see diagram 3A)

10. Electrical Connections: Humidity Model (DIAGRAM 2)

For this fan unit to operate as a humidity fan with mechanical switch, a permanent live and neutral supply needs to be connected via a remote switch/fused spur unit. However, should the humidity rise above the pre-set level the Fan will switch on and continue to run until the humidity falls 5% below the pre-set level. In some cases, in a new house for example, the Fan will continue to run for extended periods, as the humidity will be high. It is, therefore, advisable that in normal situations the Fan is pre-set at between 70% and 80% RH. In exceptional circumstances e.g. very humid days in the Summer, the Fan may well switch on at 80%. This is not unusual and a higher setting may be preferable This can be adjusted by turning the adjuster knob as indicated. (see diagram 3)

11. Electrical Connection: Humidity Model with Pullcord (DIAGRAM 1)

This fan requires a permanent live and permanent neutral supply. The humidity setting is adjustable by turning the adjuster knob as indicated. It has its own integral pullcord on/off override switch.

12. Electrical Connections: Humidity Model with Timer (DIAGRAM 2)

This fan will operate as the standard humidity unit except when the fan has been switched off from a remote switch, the timer circuit inside the fan will keep running for the pre-set period of time (adjustment from 30 seconds to 20 minutes see diagram 3A). However, should the humidity be higher then the pre-set level, the fan will continue to run until the humidity level falls 5% below the pre-set level. In some cases, in a new house for example, the fan will continue to run for extended periods, as the humidity will be high.

13. Electrical Connections: Electronic Humidity Model (DIAGRAM 5)

For the fan to operate as a normal time delay unit with humidity over-ride i.e. when connected with a switched live coming from the light switch into the fan, the fan will operate when the light is switched on, and switch off after about 20 seconds to 20 minutes (timer is pre-set for the minimum). However should the humidity in the room reach about 75%, which will happen if the shower is run or the bath filled with hot water, the fan will switch on and keep running until the humidity has been reduced to a normal level, about 65%. Connect to electrical supply as follows:

Time delay and humidity over-ride operation

Terminal 1 - **1 Neutral Supply**

Terminal 2 - **2 Switch live Supply**

Terminal 3 - **3 Permanent live Supply**

14. Electrical Connections: PIR Model with Timer (DIAGRAM 4)

The fan is sensitive to movement and will switch on when someone enters a room (according to timer run on) and switch off when room is vacated. Diagram 4 indicates the range of the PIR sensor.

Timer Adjustment


The Timer fan will run approximately one minute after it has been switched off. This time delay can be increased by firstly switching off the power to the fan. Remove the cover and the timer cover as detailed in diagram 4A. Insert a small screwdriver into the slot, marked  in **Diagram 4A**, and turn clockwise to reduce the time and anti-clockwise to increase the time. **Only adjust with power switched off.** the timer will run for is 20 seconds and the maximum is about 20 minutes. **NB Timer delay is adjustable as indicated on the timer strip cover.**

Diagram 1

(including the following fans)

Standard Model **Timer Pullcord Model**
Pullcord Model **Humidity Pullcord Model**
PIR Model

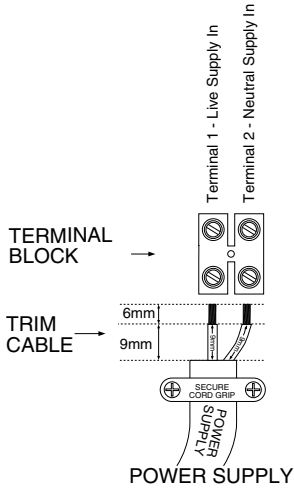


Diagram 2

(including the following fans)

Timer Model **Humidity Model**

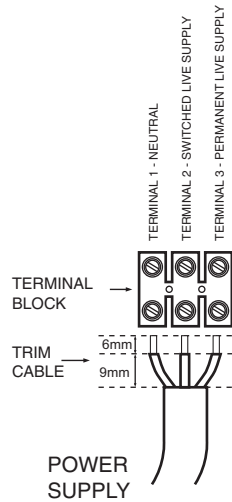
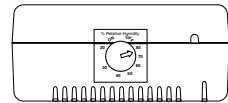
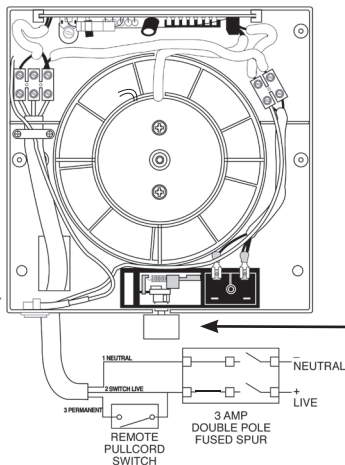
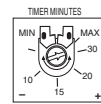


Diagram 3

100mm/4", 120mm/5" & 150mm/6"
Humidity Model with Timer



Adjuster details viewed from below

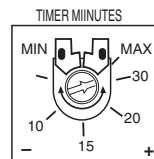
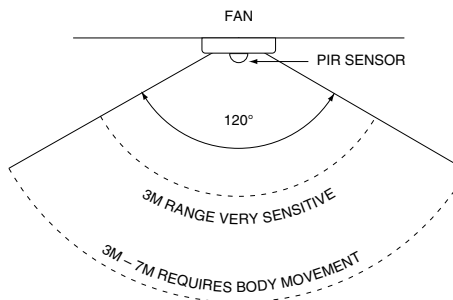


DETAILED VIEW
 Only adjust with power switched off

Diagram 3A

Diagram 4

PIR Fan

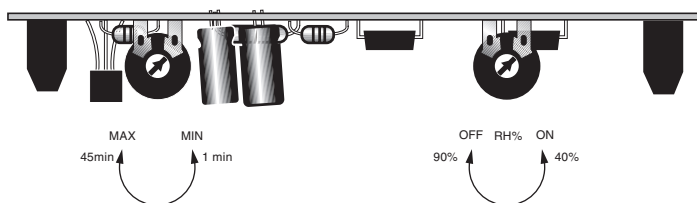


DETAILED VIEW
Only adjust with power switched off

Diagram 4A

Diagram 5

HUMIDITY OPERATED TIME DELAY CONTROL



The timer and humidity adjustments are as the normal instructions

ELECTRICAL WARNING.

All wiring must be fixed securely and the cable to the fan should be a minimum of 1 mm² in section. All wiring must comply with current I.E.E. Regulations. A double pole fused spur having a contact separation of at least 3mm in all poles must be used and fitted with a 3 amp fuse, and must be sited outside any room containing a shower or fixed bath. The fan must not be accessible to a person using either the shower or bath. Fan to be fitted a minimum of 1.8 metres from floor. When fitting through an external wall, an external grille must be fitted at all times.

IMPORTANT

**Switch off mains supply before making any electrical connections.
Installation must be supervised by a qualified electrician.**

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other open-fire appliances when mounted in outside windows or walls.

Fan must be disconnected from electrical power before any maintenance is carried out.

