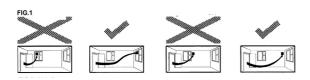
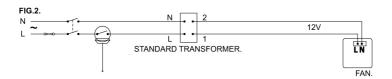
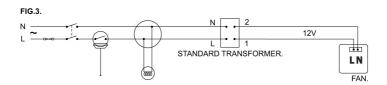
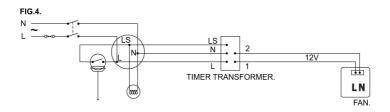
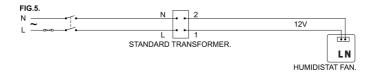
# INSTALLATION INSTRUCTIONS FOR THE 12 VOLT RANGE OF FANS + ST12 AND ST12T TRANSFORMERS

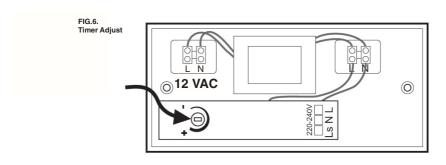


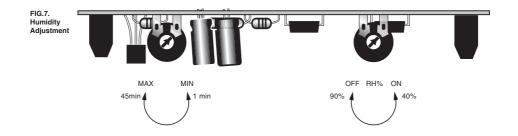












# READ INSTRUCTIONS IN CONJUNCTION WITH THE ILLUSTRATIONS BEFORE STARTING THE INSTALLATION

#### **IMPORTANT**

- ALWAYS ENSURE THAT THE INSTALLATION CONFORMS TO THE CURRENT EDITION OF THE IEE WIRING REGULATIONS (BS7671) OR APPROPRIATE NATIONAL REGULATIONS AND/ OR STANDARDS IN YOUR COUNTRY.
- THE FAN AND TRANSFORMER SHOULD BE SITED AWAY FROM DIRECT SOURCES OF HEAT IN EXCESS OF 40° C.
- 3. IF THE FAN IS INSTALLED IN A ROOM WITH A FUEL BURNING APPLIANCE, THE INSTALLER MUST ENSURE THE AIR REPLACEMENT IS ADEQUATE FOR BOTH THE FAN AND FUEL BURNING APPLIANCE.
- 4. WIRING SHOULD BE VIA A SUITABLE FUSED, ALL POLE ISOLATOR WITH A SEPARATION OF AT LEAST 3MM. THE FUSE RATING SHOULD BE 3 AMP (UK ONLY). IF THE EXTRACTOR FAN IS SITED IN A ROOM WITH A FIXED BATH OR SHOWER, THE ISOLATOR SWITCH AND TRANSFORMER SHOULD BE LOCATED OUTSIDE THE ROOM.
- 5. ALL REGULATIONS AND REQUIREMENTS MUST BE STRICTLY FOLLOWED TO PREVENT HAZARDS TO LIFE AND PROPERTY BOTH DURING AND AFTER INSTALLATION, AND DURING ANY SUBSEQUENT SERVICING AND MAINTENANCE.
- 6. MANUFACTURERS OF SOME FLUORESCENT/LOW ENERGY LIGHTING SYSTEMS INDICATE THAT THESE CAN INTERFERE WITH OTHER ELECTRONIC/TIMING CIRCUITS. FOR RELIABLE OPERATION WE RECOMMEND THAT TUNGSTEN FILAMENT LIGHTING BE USED.
- 7. THIS UNIT MUST ONLY BE FITTED AND ADJUSTED BY SUITABLY QUALIFIED PERSONNEL.
- 8. 1.5MM² CABLE WITH RIGID WIRES SUITABLE FOR FIXED WIRING SHOULD BE USED IN ACCORDANCE WITH THE STANDARD REQUIREMENTS IN YOUR COUNTRY.
- 9. THE FAN AND TRANSFORMER ARE DESIGNED TO WORK TOGETHER AND MUST NOT BE USED WITH ANY OTHER EQUIPMENT. DO NOT CONNECT MORE THAN ONE FAN TO A TRANSFORMER.
- 10. UNDER NO CIRCUMSTANCES SHOULD THE MAINS ELECTRICITY SUPPLY BE CONNECTED DIRECTLY TO THE FAN.
- 11. THE APPLIANCE IS NOT INTENDED FOR USE BY YOUNG CHILDREN OR INFIRM PERSONS UNLESS THEY HAVE BEEN ADEQUATELY SUPERVISED BY A RESPONSIBLE PERSON TO ENSURE THAT THEY CAN USE THE APPLIANCE SAFELY. YOUNG CHILDREN SHOULD BE SUPERVISED TO ENSURE THEY DO NOT PLAY WITH THE APPLIANCE.

#### DESCRIPTION

This fan is a SELV (Safety Extra Low Voltage), 100mm or 120mm axial through the wall, extraction fan suitable for domestic bathrooms and WC's. It is available as either a standard, timer or humidistat model. Complies with the requirements of European Directives 73/23 EEC (LVD), 89/336/EEC (EMC). Complies with the 2006 Building Regulations Part F requirements for installed performance of a wall fan

when installed in accordance with the instructions in this leaflet

#### MOUNTING LOCATIONS

A short circuit of the airflow should always be avoided. Fig 1, by siting the fan as far away as possible from, and opposite to the main source of, air replacement in the room. The controller must be sited away from direct sources of heat or water spray. Ambient temperature range 0 to 40° C. Cable length between transformer and fan should be no more than 8m.

### **FAN INSTALLATION**

Fans can be window, wall or ceiling mounted and are available in two diameters - 100mm (4") and

All fans are of the standard type but are manufactured with 12V~ 50Hz shaded pole motors. The unique feature of this product is that the control gear and switching mechanism is mounted remotely either in the roof space or high on the wall next to the pullcord light switch. Obviously Pullcord, Humidistat and PIR have to be mounted inside the room where the fan is installed but must be mounted out of reach of the person using the bath or shower.

- 1. SLV 100mm (4") Cut a 112mm (41/2") min 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 the floor.
- 2. SLV 120mm (5") As above but cut a 140mm (51/2") diameter hole. Fit 100/125mm (4/5") as appropriate (internal diameter) ducting flush to the plaster.
- 3. Remove the cover from the fan by removing the two small screw caps on the front cover and remove the two retaining Philips screws.
- 4. Hold the body of the fan against the wall or ceiling and mark the four screw holes and cable entry.

IMPORTANT: Ensure 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.
- 6. Connect cable from the fan to the transformer which must be fitted at least 2m away from a fixed bath or shower cubicle

## TRANSFORMER FITTING INSTRUCTIONS

### A. ST12 Standard Model

Single speed fan. Controlled by remote switch (e.g. pullcord switch, auto sensor or light switch) Fig.2. or Fig.3.

#### B. ST12T Timer Model

Single speed with overrun Timer. The fan must to a remote switch, pullcord or lighting circuit switch. Fig.4. When switched on the fan will operate at full speed and will continue to run for a pre-set time after the switch is turned off.

# **TIMER ADJUSTMENT (1-30 MINUTES)** BEFORE ADJUSTING THE TIMER, SWITCH OFF MAINS SUPPLY

- 1. Remove the timer transformer's plastic cover.
- 2. The timer is factory set to approximately 15 minutes.
- 3. To reduce the operating time, use a small screwdriver to turn the adjuster on the PCB (printed circuit board) ANTI-CLOCKWISE. Fig.6.
- 4. To increase the operating time, turn the adjuster CLOCKWISE.
- 5. Replace the transformer's cover.

### C. HUMIDISTAT MODEL

Single speed with humidistat control. See Fig.5.

The fan will come on when it senses that humidity has reached a certain level and turn off again once humidity has been lowered.

# HUMIDISTAT ADJUSTMENT (65-90% RELATIVE HUMIDITY) BEFORE ADJUSTING THE HUMIDISTAT. SWITCH OFF THE MAINS SUPPLY

- 1. Remove fan cover by unscrewing two cover screws, remove inner circuit board cover. The humidity set point is factory set to approximately 75% relative humidity.
- To REDUCE the humidity set point, use a small screwdriver to turn the adjuster ANTI-CLOCKWISE Fig.7.
- 3. To INCREASE the humidity set point, turn the adjuster CLOCKWISE.
- 4. Replace the circuit board cover, the outer cover and tighten the two cover screws.

### SERVICING AND MAINTENANCE

WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING MAINTENANCE.

At intervals appropriate to the installation, the fan should be inspected and cleaned to ensure there is no build up of dirt or other deposits.

The fan has sealed for life bearings, which do not require lubrication.



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