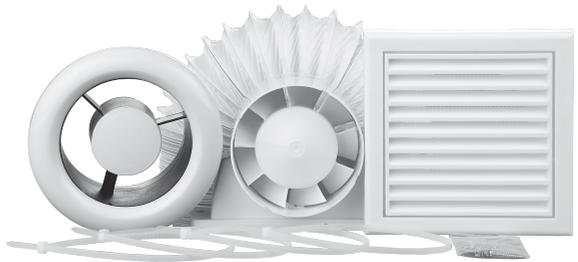


AirLine AirLine LED



EN

AXIAL FANS
user manual

www.xpelair.co.uk

 **Xpelair[®]**



Disconnect the fan from power mains prior to any connection, servicing and repair operations. Mounting and maintenance are allowed for duly qualified electricians with valid electrical work permit for electric operations at the units up to 1000 V after careful study of the present user's manual.

The single-phase power mains must comply with the acting local electrical norms and standards.

The fixed electrical wiring must be equipped with an automatic circuit breaker. The fan must be connected to power mains through an automatic circuit breaker QF integrated into the fixed wiring system with the gap between the breaker contacts on all poles not less than 3 mm.

Check the fan for any visible damages of the impeller and the casing before starting installation. The casing internals must be free of any foreign objects which can damage the impeller blades. Misuse of the device or any unauthorized modification is not allowed.

The fan is not to be used by children and persons with reduced physical, mental or sensory capacities, without proper practical experience or expertise, unless they are controlled or instructed on the product operation by the person(s) responsible for their safety. Do not leave children unattended and do not let them play with the product.

Take steps to prevent ingress of smoke, carbon monoxide and other combustion products into the room through open chimney flues or other fire-protection devices. Sufficient air supply must be provided for proper combustion and exhaust of gases through the chimney of fuel burning equipment to prevent back drafting. Transported medium must not contain any dust or other solid impurities, sticky substances or fibrous materials. Do not use the fan in the environment containing hazardous or explosive materials and vapours, i.e. spirits, gasoline, insecticides, etc.

Do not close or block the fan intake or extract vents in order to ensure the most effective air passage. Do not sit on the fan and do not put objects on it. Fulfill the requirements stated in this user's manual to ensure long service life of the product.



Recycle at the end of the service life.

Do not dispose the product with unsorted municipal trash.

FAN DESIGNATION KEY

Xpelair

X X

Fan series - AirLine AL100, AirLine LED ALL100

Extra options:

T - turn-off delay timer (only for AL100T & ALL100T)

Designation key example:

AirLine AL100T - fan with inlet spigot diameter 100 mm, AirLine series, equipped with a fixing bracket and a turn-off delay timer.



Read the present user manual carefully before proceeding with installation works. Compliance with the manual requirements ensures reliable operation and long service life of the product. Keep the user's manual available as long as you use the product. You may need to re-read the information on the product servicing.

DELIVERY SET

The delivery set:

1. Fan - 1 item;
2. Screws and rawl plugs (only for the models with the fixing bracket) - 4 items;
3. Plastic screwdriver - 1 item (only for the models with a timer);
4. Sealer - 2 items;
5. User manual;
6. Packing box.

BRIEF DESCRIPTION

The product described herein is an axial fan for supply and exhaust ventilation of small and medium-sized premises. The fan is made of white plastic. The fan is designed for connection to 100mm air ducts.

Due to constant improvements the design of some models may slightly differ from those ones described in this manual.

OPERATION GUIDELINES

The fan is designed for connection to AC 220-240 V, 50 Hz power mains.

The fan is designed for continuous operation always connected to power mains. Air flow direction in the system must match the pointer direction on the fan casing.

Ingress protection rating against access to hazardous parts and water ingress - IPX4.

The fan is rated for operation at the ambient temperature ranging from +1 °C up to +45 °C.

MOUNTING

The fan is designed for vertical or horizontal installation inside the round air duct of respective diameter, fig. 1.

Fan mounting sequence:

Step 1 - Disconnect power supply. Fig. 2;

Step 2 - Mark and drill holes for fastening of the fixing bracket, install the fan. Fig. 3-5.

Step 3 - Remove the electrical cover on the fan terminal box (wired to the fan) and on the Light terminal box (if applicable). Remove cable clamps. Fig 6-7.

Step 4 - Connect the mains supply to the terminal block in the terminal box(es) as shown in the wiring diagrams. Re-install cable clamp. For Timer setting adjustment on Timer models, the electrical compartment cover on the fan will need to be removed to access the timer adjustment. Fig 8-10.

Step 5 - Re-fit electrical covers to both fan and terminal box (as required).

Step 6 - connect air ducts of respective diameter on both sides of the fan. Fig. 13.

Step 7 - Cut a 100mm diameter hole in the ceiling in the appropriate position for the internal grille - ensure the hole lies between roof joists. Fix internal grille/fan light to ceiling using appropriate fastenings.

Step 8 - Cut a hole to suit the External Grille in the required position. Fit using appropriate fastenings.

Step 9 - Connect air ducts to internal and external grilles and secure with cable ties supplied.

Step 10 - For LED versions remove the electrical cover on the LED Driver terminal box (wired to fan). Remove cable clamp and wire according to wiring diagrams Fig. 8-9. Re-install cable clamp and re-fit electrical cover.

Step 11 - Connect the fan to the power mains. Fig.14

TERMINAL DESIGNATIONS ON WIRING DIAGRAMS

L - Live

N - Neutral

~ - power mains

LT (ST) - timer control line

QF - automatic circuit breaker

S - external switch

ELECTRONICS OPERATING LOGIC

The fan with the timer T - the fan starts after the external switch, e.g. the light switch, supplies control voltage to the input terminal L T (ST). After the control voltage is off, the fan continues operating within the set time period adjustable from 2 to 30 minutes by the timer.

To adjust the fan turn-off delay time, turn the control knob T clockwise to increase and counter-clockwise to decrease the turn-off delay time respectively, fig. 10.

Warning! *The timer circuit is under mains voltage. Disconnect the fan from power mains prior to any adjustment operations. The fan delivery set includes a specially designed plastic screwdriver for fan settings adjustments. Use the screwdriver to change the fan turn-off delay time (fig. 12). Do not use a metal screwdriver, knife, etc. for adjustment operations not to damage the circuit board.*

MAINTENANCE

The fan maintenance periodicity is at least once per 6 months. Maintenance sequence:

- disconnect power supply, fig. 15;
- remove air ducts, fig. 16;
- clean the fan with a soft cloth and a brush wetted in mild detergent water solution;
- wipe the fan surfaces dry;
- connect the air ducts to the fan, fig. 19;
- connect the fan to power mains, fig. 20.

WARNING! Avoid water dripping on the electric components.

TRANSPORTATION AND STORAGE RULES

Transport the product by any transportation vehicle in the manufacturer's original package. Store the delivered product in the manufacturer's original packing box in a dry ventilated premise with the temperature range from +5 °C up to +40 °C and relative humidity less than 80%. The storage environment must not contain dust, acid or alkali vapours that may cause corrosion of the product parts.

Guarantee

UK only:

We, Redring Xpelair Group Limited, provide a guarantee against faulty parts and manufacture for a period of 2 years, from the date of purchase. In the unlikely event of a product breakdown during the guarantee period, please call our technical helpline on 0844 372 7766 for advice and assistance.

Exclusions:

- This guarantee does not cover compensation for the loss of the product or consequential loss of any kind
- Damage or defects to the product arising from incorrect installation or lack of maintenance
- Transportation costs

This guarantee does not affect your statutory rights.

Technical Advice and Service

Customers outside UK - see International below

UK: Xpelair have a comprehensive range of services including:

- Free technical advice help-desk from Engineers on all aspects of ventilation
- Free design service, quotations and site surveys
- Service and maintenance contracts to suit all requirements

Contact us for details:

- By telephone on Techline: +44 (0) 844 372 7766
- By fax on Techfax: +44 (0) 844 372 7767
- At the address below

Head Office, UK Sales Office and Spares

Redring Xpelair Group Ltd, Newcombe House, Newcombe Way, Orton Southgate, Peterborough, PE2 6SE, England.

Telephone: +44 (0) 844 372 7761

Fax: +44 (0) 844 372 7762

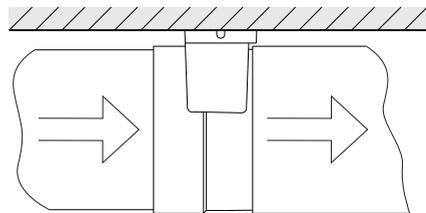
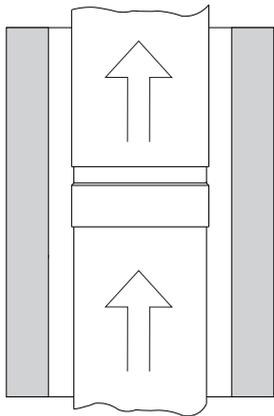
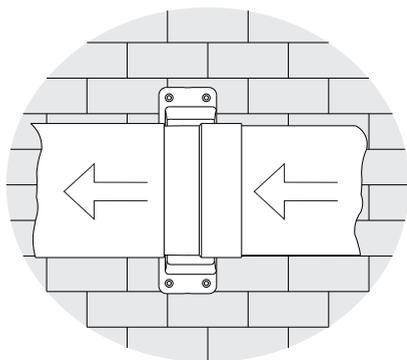
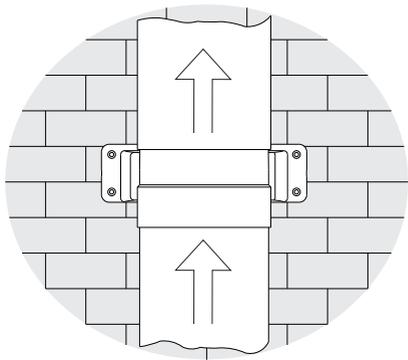
Sales/Spares Hotline: +44 (0) 844 372 7750

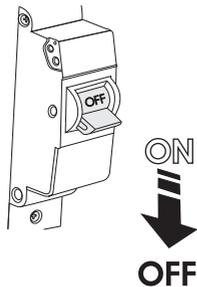
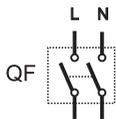
Sales/Spares Faxline: +44 (0) 844 372 7760

www.xpelair.co.uk

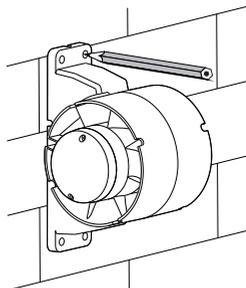
International:

- Guarantee: Contact your local distributor or Xpelair direct for details
- Technical Advice and Service: Contact your local Xpelair distributor

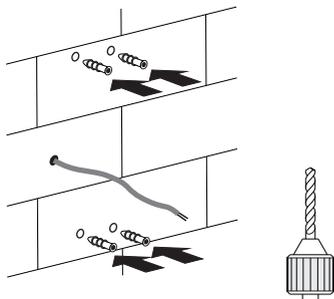




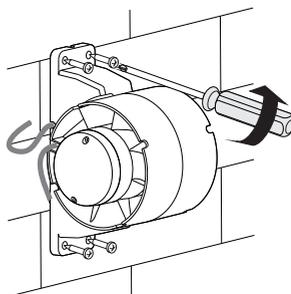
2



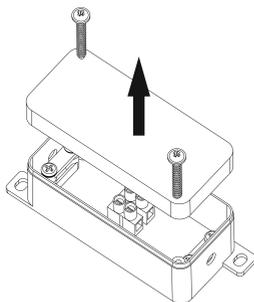
3



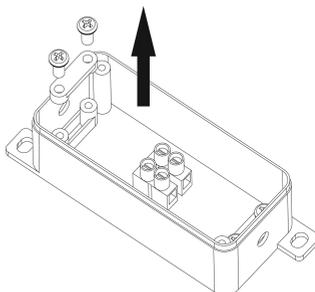
4



5



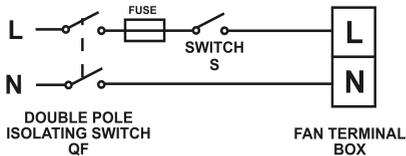
6



7

AL100

220-240V
1 phase
50Hz



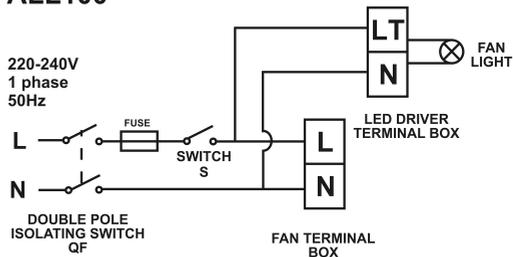
DOUBLE POLE
ISOLATING SWITCH
QF

FAN TERMINAL
BOX

8

ALL100

220-240V
1 phase
50Hz



DOUBLE POLE
ISOLATING SWITCH
QF

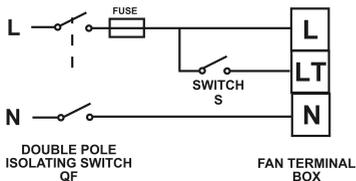
FAN TERMINAL
BOX

LED DRIVER
TERMINAL BOX

FAN
LIGHT

AL100T

220-240V
1 phase
50Hz



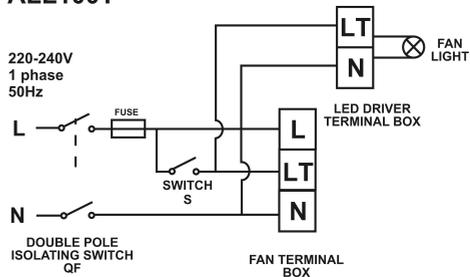
DOUBLE POLE
ISOLATING SWITCH
QF

FAN TERMINAL
BOX

9

ALL100T

220-240V
1 phase
50Hz

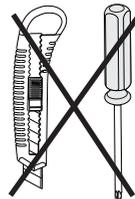
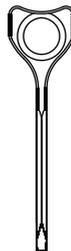
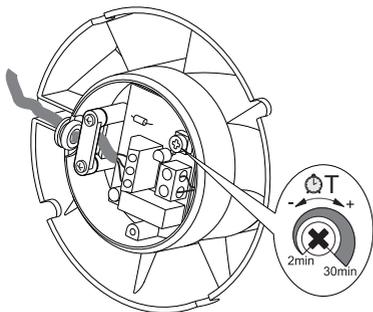


DOUBLE POLE
ISOLATING SWITCH
QF

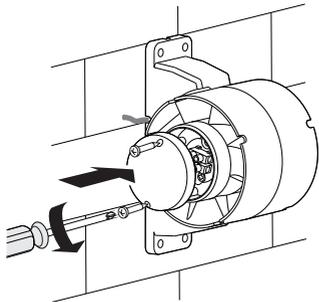
FAN TERMINAL
BOX

LED DRIVER
TERMINAL BOX

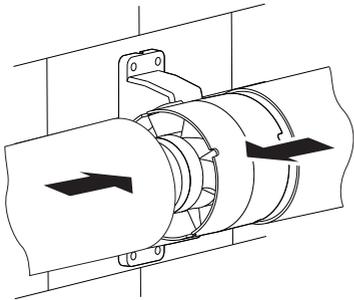
FAN
LIGHT



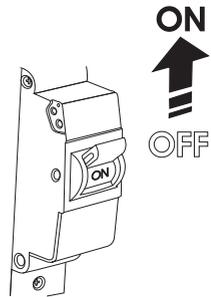
10



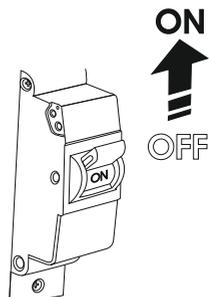
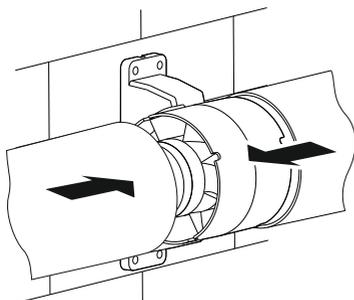
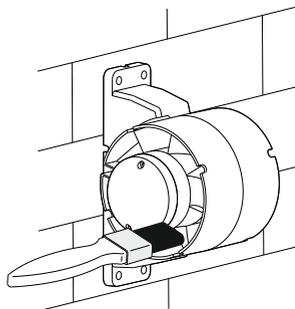
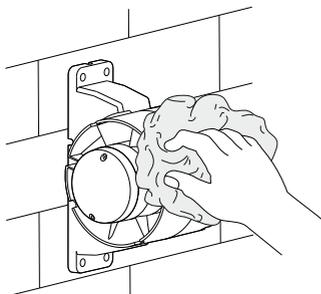
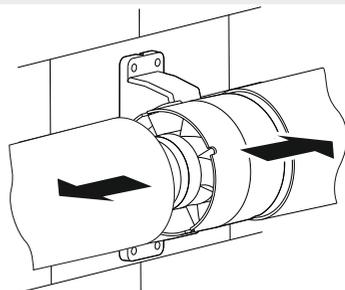
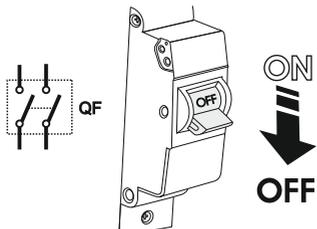
12



13



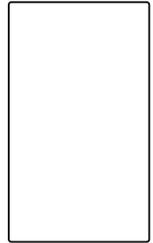
14



Approval mark



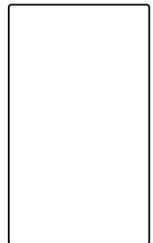
Sold
**(name and stamp of the
trade company)**



Manufacturing date



Date of sale



Acceptance certificate

AirLine AL100

Standard

AirLine LED ALL100

Timer

The fan is duly recognized as serviceable.