



## **FlowMax Elite In-Line Extractor Fan Kit with LED Light**

Model # ATFMEL-LT

### **User Manual**

Installation and Operation Instructions



SAVE THIS MANUAL FOR FUTURE REFERENCE

## Table of Contents

Section	Page
1. Safety	3
2. Kit Overview	5
3. Physical Installation	7
4. Wiring	11
5. Operation & Maintenance	14

## 1. Safety

Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information.

### Warnings

- Do not connect power supply until product is completely installed. Make sure electrical service to the product is locked in off position
- For general ventilating use only. Do not use to exhaust hazardous, corrosive or explosive materials and vapours
- Do not use in kitchens

### General Safety Information

- When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to person, including the following:
- Read all instructions before installing or using product
- Check that the product is in good condition while unpacking. Any fault or damage caused in origin is covered by the Airtech-UK guarantee. Please make sure that the product coincides with the product you have ordered
- The product should be stored in a dry place in its original packaging, protected from dust and dirt until it is installed in its final location
- Do not place heavy weight on the packed product and avoid knocking or dropping it
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact Airtech-UK
- Before servicing or cleaning the unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire related construction
- Do not operate fan in the presence of explosive and/or flammable fumes. Do not place the fan or any parts near an open flame, cooking or other heating appliance
- Precautions must be taken to prevent backflow of gasses into the room from the open flue of gas or other fuel-burning appliances
- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the local Build Code, and the local council regulations
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities

- Make sure there are no loose elements near the product during installation or operation, as they could run the risk of being sucked up by it. If it is going to be installed in a duct, check that it is clean of any element that could be sucked up by the ventilator
- When installing the product, make sure that all the fittings are in place and that the structure which supports it is resistant enough to bear its weight at full functioning power
- This product has rotating parts and safety precautions should be exercised during installation, operation and maintenance
- Guards must be installed when fan is within reach of personnel or within 2.3 meters of working level or when deemed advisable for safety
- Never place a switch where it can be reached from a tub or shower
- Do not insert or allow fingers or foreign objects to enter the motor
- Dangerous high voltages are present inside the motor enclosure. To avoid electric shock, do not open the motor enclosure. Refer all servicing to qualified personnel only
- To protect against fire, electrical shock and injury to persons, do not immerse the product, plug or cord in water, expose this appliance to rain, or spray it with liquids
- No naked flames sources, such as candles, should be placed on the product
- Ventilation should not be impeded by covering the ventilation openings. Slots and opening are provided for ventilation to ensure reliable operation of the product and to protect it from overheating
- Only connect to a suitable AC 220-240V-50Hz power source
- Check that the mains supply voltage and frequency values coincide with the stipulations on the characteristics plate
- The electrical installation must include a double pole switch with a contact clearance of at least 3 mm, correctly sized and in accordance with the electrical standards of the country of installation
- Please follow the connections diagram for the electrical connections
- If an earth connection is necessary, check that it correctly connected and that adequate thermal and overloading protection has been connected and adjusted to the corresponding limits
- Do not operate the fan with a damaged cord or plug, after a malfunction or if there is dropped or damaged in any manner
- 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 product
- Switch the product off when it is not in use, when moving product from one location to another and before cleaning

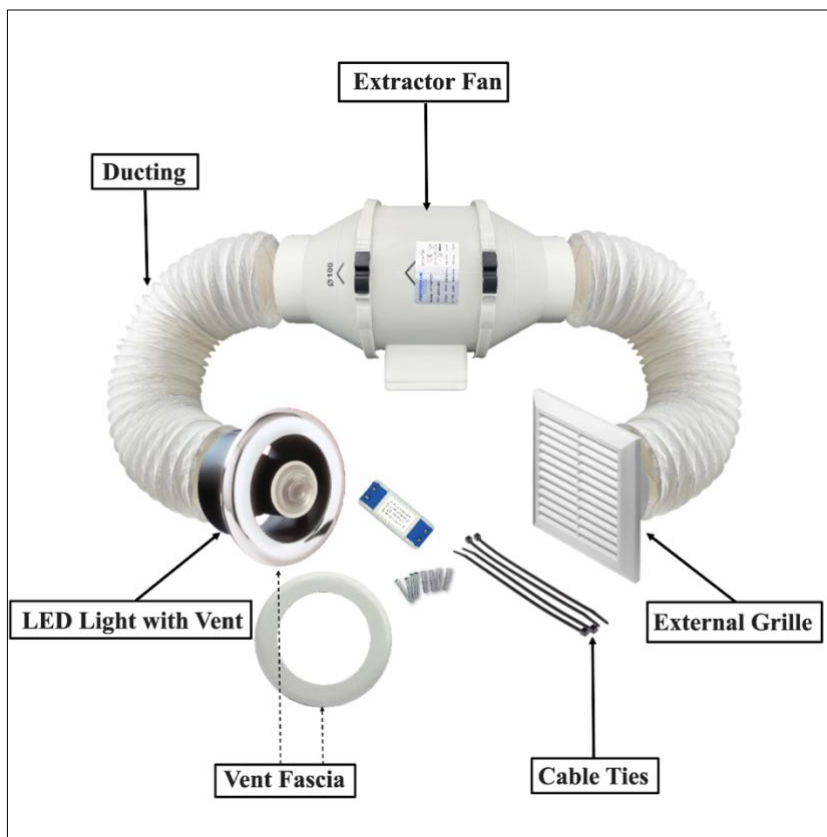
- Do not attempt to repair, disassemble or modify the appliance. There are no user-serviceable parts inside

## 2. Kit Overview

Available models:

- Airtech-UK Elite
- Airtech-UK Elite T (with Timer)
- Airtech-UK Elite L (with LED Light)
- Airtech-UK Elite TL (with Timer and LED Light)

### AirTech-UK FlowMax Elite L and Elite TL models

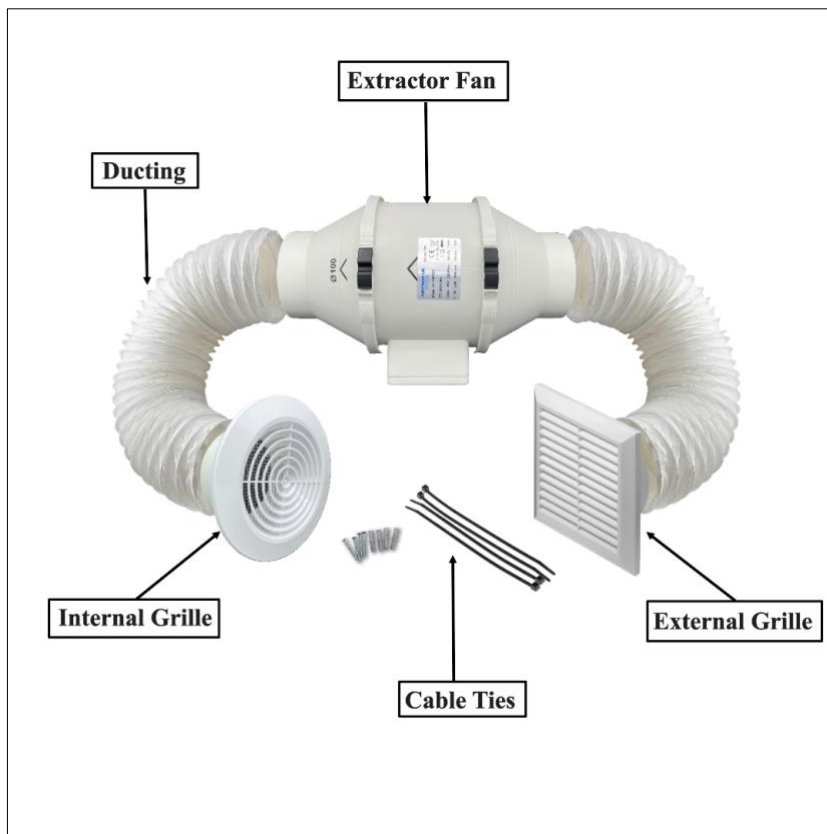


Included in kit:

- 1x Inline Extractor Fan
- 1x LED Light (3W CE or 5W CE, depending on style) with Vent, Chrome Fascia and Transformer (pre-wired)
- 1x White Fascia for Vent (to replace Chrome Fascia if desired)

- 1x External Grille (various styles available)
- 1x Duct, heavy duty double layer (PVC and aluminium), 5 meter length
- 4x Cable Ties

### **AirTech-UK FlowMax Elite and Elite T models**

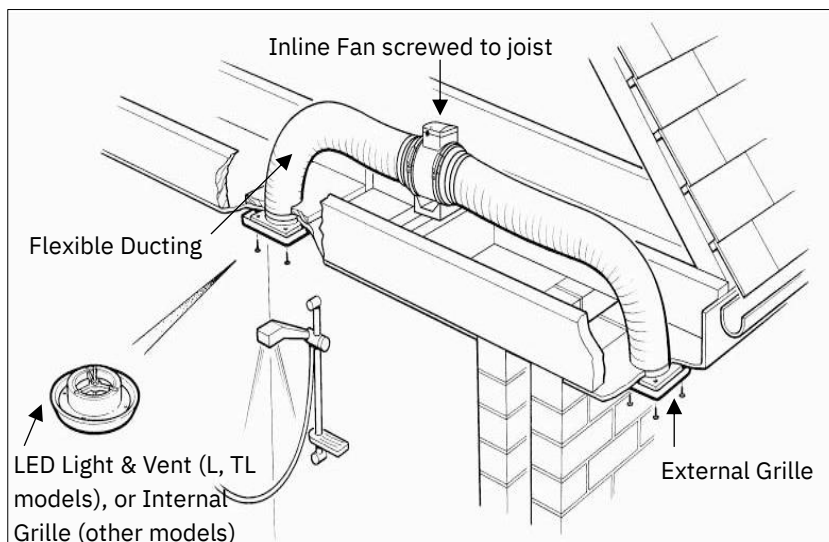


Included in kit:

- 1x Inline Extractor Fan
- 1x Internal Grille (various styles available)
- 1x External Grille (various styles available)
- 1x Duct, flexible heavy duty double layer (PVC and aluminium), 5 meter length
- 4x Cable Ties

### 3. Physical Installation

#### Installation Overview



For best performance, the location of the Vent / Internal Grille and External Grille should be within 6 meter in duct length.

#### Inline Extractor Fan Installation

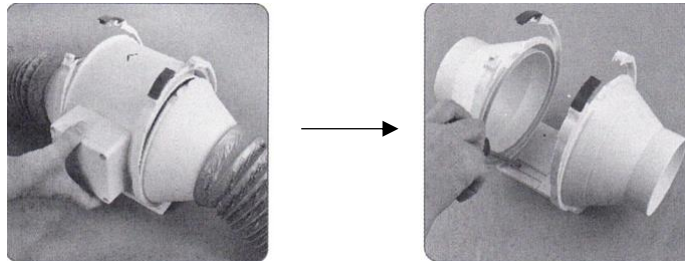
##### 1. Preparing for Fan installation

Fan mounting can be at any point along the duct. When selecting fan mounting location, the following criteria should be considered:

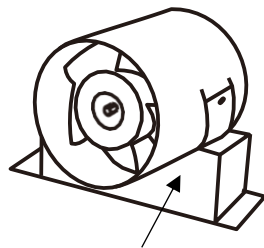
- Mounting to minimize noise generated by fan operation. Mounting the fan as far as possible from the Vent / Internal Grille will minimize fan operating noise from being transmitted back through the duct work. If the fan is to be used as a booster for moving the air between two rooms, a central point along the duct may be optimal
- Proximity to power. Make sure the supply cable is within reach of the mains socket outlet
- Service accessibility. Fan location should allow sufficient access for service
- Tips
  - If the outlet is in another room, the Fan should be in the middle of the duct to reduce fan noise. If the External Grille is to outdoor, position the Fan near the outlet to prevent back draw of outdoor air
  - For best performance, place the fan motor as close to the outlet as possible

## 2. Installing the Fan

- a. Undo the clamping brackets, and remove the central cartridge holding the motor and impeller



- b. Using the screws provided, secure the Fixing Plastic Bracket to a suitable surface, joist, or structure. The bracket is low profile, making installation in restricted spaces easy. Ensure the direction of the airflow is correct when securing the Fan



Fixing Plastic Bracket

- c. Cut the provided Duct into 2 lengths as required to connect Fan to Vent / Internal Grille, and Fan to External Grille. Connect the Ducts and secure with provided Cable Ties. It is recommended the duct be used in a fully extended position and with minimal bends or turns. This will reduce any unnecessary friction pressure resulting in reduction of airflow





- d. Reattach the central cartridge

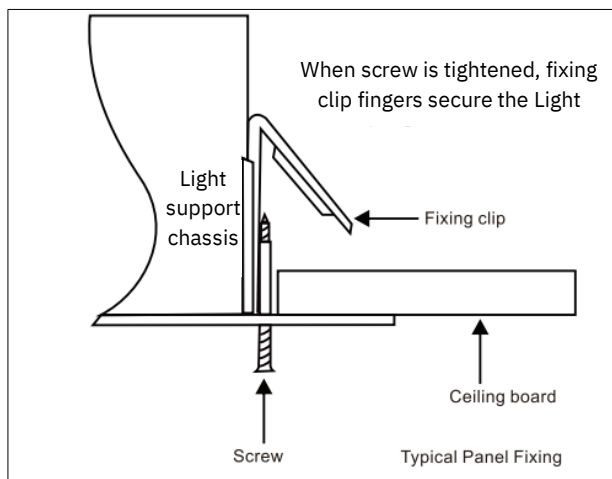


- e. [For Elite T and TL models only] Set the run on timer by opening the faceplate for the control unit located on the Fan to expose the timer, and adjusting the timer using a screwdriver to desired delay (Fan will turn off when run on time expires after manual switch operating the Kit is turned off). Can be set to 1-30 minutes delay



### LED Light with Vent Installation (for Elite L and TL models only)

1. Hold the body of the LED Light support against the wall or ceiling and mark the four screw holes and the cable entry on the side. Use the fixing clips to secure in panel type walls and ceilings



2. Place the ceiling cover (fascia) onto the Light support chassis by locating onto the 3 lugs, and twisting anti-clockwise

## 4. Wiring

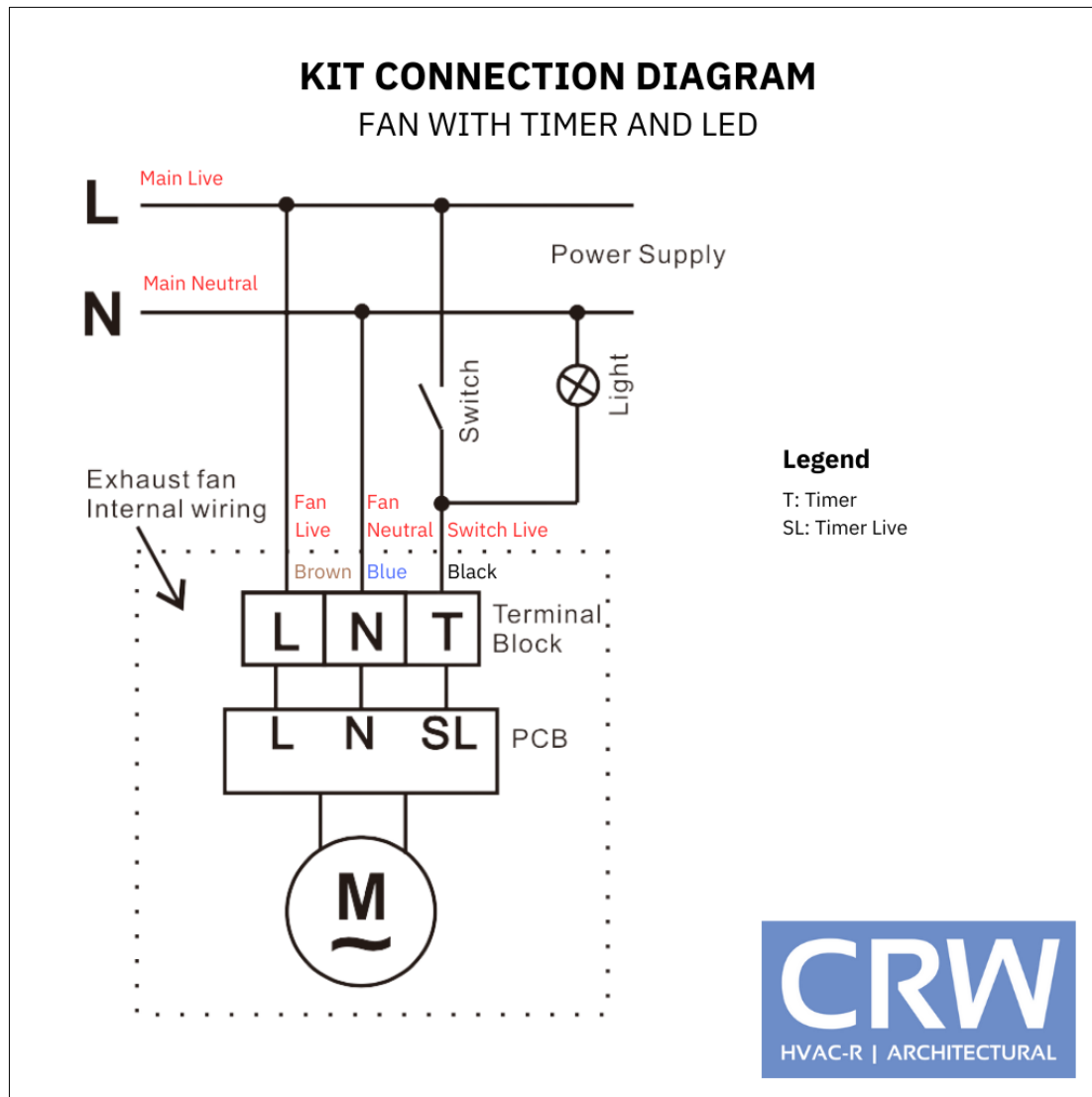
### Overview of Wiring

The below wiring diagram presents wiring for the Elite TL kit.

For other kits:

- Elite – ignore wiring for Light and Timer as shown
- Elite T – ignore wiring for Light as shown
- Elite L – ignore wiring for Timer as shown

Note that as shown in the diagram, for models with timer (Elite T and Elite TL), the wiring requires a permanent live, a switch live, and a neutral connection at the junction box.



### Fan Wiring – Supplementary Instructions

Fan comes with corded wiring – use twist-on wire connectors / nuts to join Fan wires to wires in junction box.

Colour coding for wires in Fan:

- Brown – Fan Live. Connect to Main Live in junction box
- Blue – Fan Neutral. Connect to Main Neutral in junction box
- Black – Switch Live. Connect to Switch Live in junction box

### LED Light Wiring – Supplementary Instructions (for Elite L and TL only)

1. Transformer is already pre-wired to LED Light, so no wiring for Transformer is required
2. Remove screws from Transformer faceplate



3. Remove Transformer faceplate to expose wire connection points



4. Insert Switch Live and Main Neutral wires from junction box into wire connection points (circled in red), and tighten wire connection screws



5. Reattach Transformer faceplate

LED Light Wiring additional notes:

- Transformer is CE rated
- Power input 230 volts AC 50VA
- The LED Light must not work independently of the fan. The immediate 12V power source to the down light must be short-circuit proof
- Never connect mains supply direct to the LED Light

## 5. Operation & Maintenance

### Inline Extractor Fan

- The device must be regularly inspected. These inspections should be carried out bearing in mind the device's working conditions, in order to avoid dirt or dust accumulating on the propeller, turbine, motor or grids. This could be dangerous and perceptibly shorten the working life of the device
- All maintenance and repair work should be carried out in strict compliance with each country's current safety regulations
- Before carrying out any maintenance, ensure the power is switched off from the mains power supply
- Wipe down the fascia and grilles with a wet soapy cloth only. Do not allow water to contact electrical part, such as motor
- Never use petrol, benzene, thinner or any other such chemicals for cleaning the ventilating fan
- Do not immerse resin parts into hot water over 60 C
- While cleaning, great care should be taken not to unstale the propeller or turbine

### LED Light with Vent (for Elite L and TL only)

- Extra fascia
  - Elite L and TL kits are supplied with a chrome fascia preinstalled on the vent, and an extra white fascia to allow for customization of aesthetics in line with the interior design of the room
  - To remove the preinstalled fascia, twist clockwise until it detaches from the Light support chassis
  - Install the new fascia by placing it onto the Light support chassis by locating onto the 3 lugs, and twisting anti-clockwise
- LED removal replacement
  - Disconnect the power supply before removing or replacing the LED
  - To change the LED:
    - Remove faulty LED light by pulling out of LED housing
    - Replace new LED by aligning the 2 pins with the LED holder in the housing and pushing into position