

DT20B

Time Delay Unit

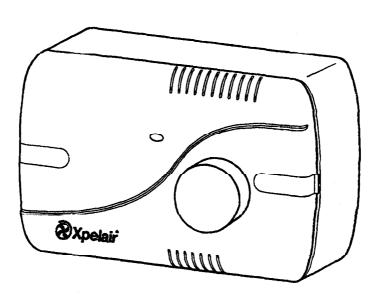






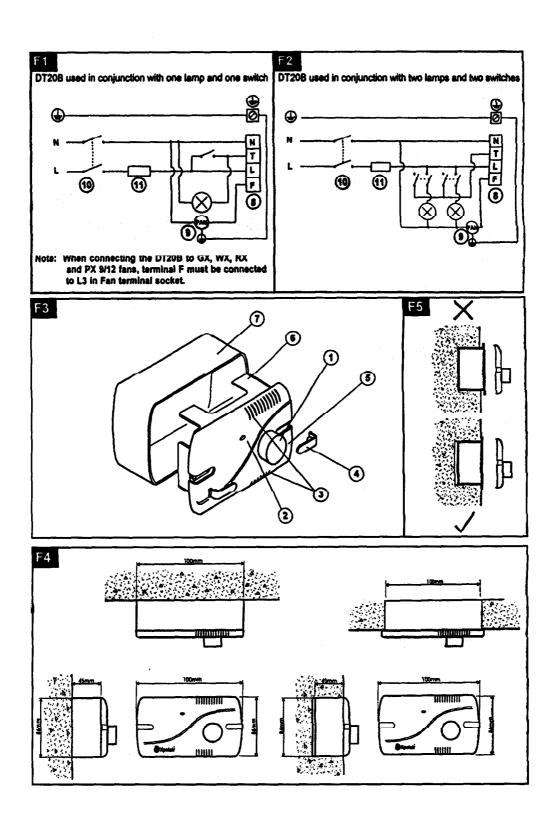






Installation and **Operating Instructions**

applied energy



Xpelair DT20B Time Delay Unit Installation and Operating Instructions

These Instructions are for the Installation and Operation of the DT20B time delay unit only. For fan or controller Installation and Operating Instructions refer to literature provided with the appropriate fan or controller.

General Information

Description

The DT20B Time Delay Unit provides an overrun period to facilitate controlled ventilation for up to 20 minutes after the room has been vacated.

The time period is adjustable and can be increased to its maximum by rotating the control knob in a clockwise direction. The red neon indicates that the fan is running.

The timer can be either surface or recess mounted using a metal box (not supplied).

The DT20B is suitable for use with Xpelair fans and will supply a maximum load of 2.5 Amps.

What the installer will need

- A double pole isolating switch with a minimum contact gap of 3mm (Wall or Ceiling mounted).
- Suitably rated 3-core cable to connect the timer to the mains supply.
- Suitably rated twin core cable to connect the timer to the
- Suitably rated alogie core cable to connect the switch (not supplied) to the trigger (T) terminal.

For recess mounting

A single gang metal wall box (min. depth 45mm), with knockouts suitably located, and integral earth stud (Refer Fig. 1 for knockout positions).

Installing the Time Delay Unit

These installation instructions are for the installation of the DT20B when used in combination with Xpelair supplied products.



The time delay unit must be installed to fixed wiring. Ensure the Main Electrical Supply matches the rating shown on the time casing. An earth parking terminal is provided In the plastic wall box supplied.

All installations must be supervised by a qualified electrician. Installation and wiring must conform to current IEE wiring regulations (UK), or local appropriate regulations (other countries).

If you have any queries either before, during or after the installation of the controller, please do not hesitate to contact the UK Xpelair hotline (number on back page).

Customers outside the UK: contact your local Xpelair distributor

if using flexible cable, suitable glands incorporating cable clamps must be fitted to the knockouts in the Controller Box. (Refer to Fig. 1).

Working with the Fan

Preparing the Fan



If wiring to an existing installation isolate mains supply and remove applicable fuses prior to any electrical procedure.

If the fan is aiready installed

- Ensure the power supply is isolated.
- Disconnect the mains connections from the fan's terminal socket or from the terminal block.
- 3 Remove the existing wiring and make it safe.

Location of the Time Delay Unit

- Not where ambient temperatures are likely to exceed
- If installed in a kitchen the Timer must not be
- mounted immediately above a cooker or eye level grill.
 When intended for use in possible chemical corrosive atmospheres, consult our Technical Service
 Department (Outside the UK contact your local Xpelair
- distributor).
 If installed in a shower room or bathroom the timer and isolating switch must be situated so that they cannot be touched by persons making use of the bath or shower.

If the fan is not yet installed.

- Check that the fan electrical rating matches the power supply.
- 2 Route the 2-core cable from the fan to the timer position.
- Wire one end of the cable into the fan connections as shown, refer diagrams F1 & F2.
- Leave the other end ready to be connected to the Controller.
- 5 Route the single core cable from the switch position to the timer position.
- 6 Route the three core cable from the timer position to the isolator position.

Mounting the Timer

Remove the Cover and Mounting Frame

- Detach the Fascia and the Mounting Frame by removing the screw covers and two screws (Refer to Fig. 2a&b).
- Check that the electrical rating shown inside the Timer matches the power supply.
- Make cable entry holes in the plastic or metal box by removing suitable knockouts (Refer to Fig. 1).

Mounting the Wall Box



Eye protection must be worn during all drilling & chiselling operations.



Check there are no buried Pipes or Cables in the wall or obstructions on the outside e.g. Electricity, Gas, Water.



If metal switch boxes are used, earthing regulations must be applied.

If surface mounting

- Insert suitable glands into the knockouts.
- 2 Feed both cables through the glands.
- Fix the Plastic Wall Box to the wall, using the mounting holes provided.
- 4 Connect the earth lead to the parking terminal.

- If recess mounting

 1 Make a hole in the wall big enough to take the metal wall box. Discard the Plastic Surround.
- 2 Insert suitable glands into the knockouts.

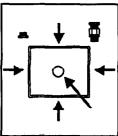
- 3 Feed both cables through these glands.
- 4 Fix the Wall Box to the wall. Ensure that the flange of the mounting frame fits flush to the finished surface of the wall (Refer diagram F5).
- 5 Connect the earth lead to the metal wall box.

Wire the Controller electrical connections

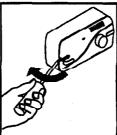
- Mount the Isolation Switch in accordance with the manufacturers instructions
- 2 Wire the Timer to the Isolation Switch and to the fan switch as shown in the appropriate diagram. Refer to diagrams F1 & F2.
- 3 Refit Fascia and Mounting Frame to Wall Box.
- 4. Refit the Screw Covers.

Connect to Power Supply

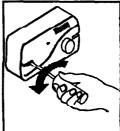
- 1 Ensure power supply is isolated and fuses are
- 2 Route the Cable from the Isolating Switch to the point of connection to the power supply.
- Make all connections within the Isolating Switch in accordance with the manufacturers instructions.
- 4 Following all current IEE & local regulations make connection at point of power supply.
- Make a final check to ensure all earth points are connected and all covers have been correctly replaced on the Fan, Timer and Isolating Switch.
- 6 Replace all fuses, and switch on the power supply.



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Using your Time Delay Unit

Operating the Time Delay Unit

The Timer has the following features: (Refer to diagrams F1-F3).

- 1 Tio
- 2 Indicator light
- 3 Ventilation stats
- Screw cover
- 5 Fascia
- 6 Mounting 7 Wall Box unting Frame
- 8 Timer Terminal Block
- 9 Fan Terminai Block
- 10 Double Pole Isolator switch
- 11 Fuses

Looking after the Timer

Cleaning

- Before cleaning isolate the Controller completely from the power supply.
- Wipe the Cover carefully with a damp cloth.
- 3 Dry thoroughly.
- 4 Ensure ventilation slots are free from obstuctions at all



- ever immerse the Controller in water or other liquids.
- Never use solvents to clean the
- Controller. Apart from cleaning, no other maintenance is required.