

## Door Uninterruptible Power Supply – DUPS 2010

The Technical Solutions Door Uninterruptible Power Supply (DUPS) is designed for the Dorma ED200, CD80 and ED100 door actuators. Unlike simple backup power supplies, this system manages the energy supplied to the actuator. The result is a reliable system that will give over 50 open/close cycles, with over ten hours run time using your normal remote control, keypad and intercom system without mains power. (With a fully charged battery in good condition.)

Status lights constantly show the status of the DUPS.

**GREEN STEADY** = Normal Operation

**GREEN FLASHING** = Power Fail Mode

### NORMAL OPERATION

The normal indication is a green lamp, which flickers approximately twice a minute. This shows that mains power is available. When a door open push button switch signal is received, a red lamp lights for the duration of the switch press.

*[Hint: If the red light stays on, make sure a switch is not held on, or stuck under a pillow.]*

### **Open Modes**

Switches keypads or other 'door open' devices can be wired in to either Latching or Timed switch inputs which operate as follows:

1. **Latching** If you activate any switch that is connected to this input the door will change state – if it is open, it will close, and if closed, it will open. The door will remain in this position until the next switch operation. *[Hint: If the door is kept open for a long time, the motor may occasionally operate briefly to ensure the door remains fully open.]*
2. **Timed** If you activate any switch that is connected to this input the door will open for a timed period, after which it will close automatically.

### **Operation via Radio Remote can access both modes**

1. Activating the remote briefly (Pressing button for 1 to 2 seconds) will toggle the state of the door as described above. i.e. Press once to open the door, then press again to close
2. A longer sustained 3 second Press will open the door for a timed period, after which it will close automatically.

*Note: A low battery in the transmitter can cause a weak signal to be received which may be interpreted as several button presses, causing the door to appear to behave erratically. If in doubt, try installing a fresh 9 Volt alkaline battery in the transmitter.*

### **Operation via Keypad or Intercom**

Activating the keypad or intercom will normally trigger the timed open, auto close mode as above

## SETTING DOOR OPEN TIME

The door **Hold Open** timed period can be set as follows:

1. Locate the two small recessed push buttons (1 & 11) adjacent to the LED indicators on the cover of the DUPS control box. You will need two matches, small screwdrivers or similar to press these buttons.
2. Press both buttons at the same time and hold them pressed for the desired **Hold Open** period. The unit beeps and the red light flashes while the buttons are held.
3. Release both buttons after your desired time has elapsed and this time will be stored in permanent memory.

## POWER FAIL MODE

If mains power is not available, the DUPS will **flash the Green lamp**. The DUPS will supply power to the door in a power saving mode. In this situation, the DUPS will keep the accessories such as keypads, radio receivers and intercoms functioning.

When a switch signal is received, the DUPS will open the door, and hold it open for a about 30 seconds, after which the door closes automatically. There may be a delay of approximately 20 seconds before the door opens while the motor initialises. Towards the end of this period, a beeper will sound. After this time, the door will close, and the DUPS will enter its power saving mode – and be available for the next opening. Note that if you want the door to stay open longer than 30 seconds, pressing your button again before it closes will restart the 30 second timer.

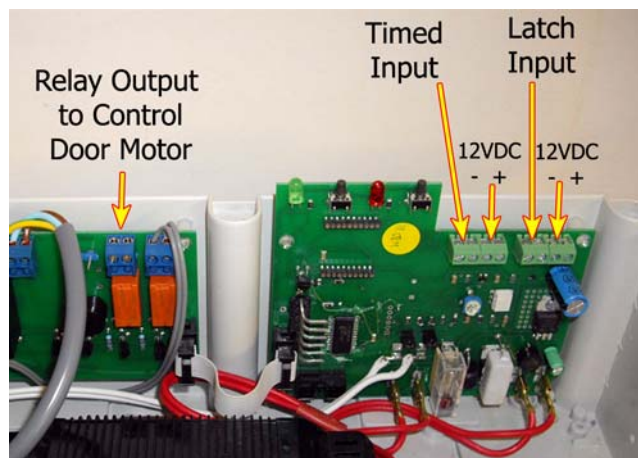
During a power fail situation, you cannot keep the door open indefinitely.

*NOTE: If you are going away, and want to turn the door off, you must also turn off the switch on the DUPS, so no indicator lights are showing. Turning off the power point on its own will set the DUPS into power fail mode - And possibly damage the battery.*

## **WIRING OPTIONS**

The following is our preferred setup for controlling Dorma ED200 and CD80 door openers. Other brands of actuator can usually be connected in a similar fashion.

- **Relay Output** - to Control Door Motor.  
Run fig 8 to door open input on Door actuator control board
- **Latch Input** – Usually used for wall mounted ‘door open’ push buttons
- **Timed Input** – Usually used for the ‘door open’ function of various devices such as
  - external keypad
  - Intercom
- **12VDC Terminals** – Supplies no break power to supply Keypad controller, TSA intercom, Radio receivers, etc.



## **DOOR UPS – TEST CHECKLIST**

- When the UPS is plugged into 240V check that there is 13.6 – 13.7V at the battery output without the battery connected. Make sure the battery toggle switch is on.
- Short out Latch Input, the door will open and the red light will flash twice every few seconds. Short Input again to close.
- Short out Timed Input, door will open for the timed period then close automatically; red light will flash three times every few seconds during the timed period.
- Test the radio receiver, the door will open, green light will turn off and blink three times every few seconds.
- With the battery toggle switch on, disconnect the power. After a few seconds the green light will start flashing. Trigger any activation input - and the door will open for a timed period (rather than the normal latched mode), and the controller will beep before it auto closes the door.

NOTE: Please carefully align the program switches in their holes in the cover before doing up the fasteners. Forcing the cover over the switches will damage them.