

## Para PM1. Wiring instructions

Basic Tube motor Controller for Low Voltage Keyswitch and Remote controller use on window Shutters

**Warning-** Read these instructions fully before use.  
Installation should only be carried out by a COMPETENT Installer

### Before Connecting the PM1 read these instructions Carefully

Mains Supply : 230v/1ph/50 hz/6amp  
Operating Temperature -10 deg C to +50 deg C

Transmitter is RF 433 MHz and is not compatible with the RF 315MHz Range.

#### Safe Mounting of the PM1 Controller

- 1- Install the Controller with the cable entries at the bottom to prevent water ingress, note this is an IP??
- And not designed to be used in wet areas or areas where water is likely to be present
- 2- Do not install where Steelwork can cause interference with the RF signal
- 3- Minimum Distance between finished floor level and PM1 is 1500mm
- 4- Minimum Distance between Roof and PM1 is 300mm
- 5- Minimum distance Between 2no PM1 units (or other similar units) is 200mm.

#### Connection of the PM1

The PM1 is compatible with most Tube motors, Basic Cable connections are shown on the drawing Fig 1.

- 1 - **Always** disconnect and isolate safely the mains supply before carrying out any electrical work.
- 2- Avoid areas of Static electricity that could cause damage to the electronic components.
- 3- Use Suitable flexible cables.
- 4- Always connect a suitable earth.

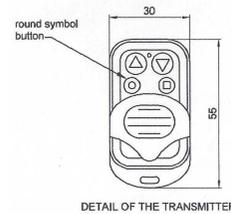
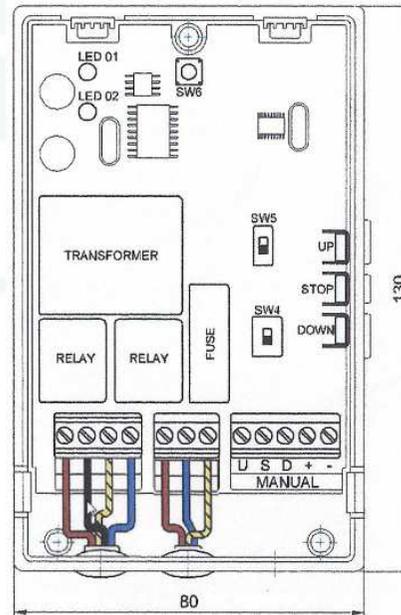
#### Continuous and Deadman function

Use of the Continuous function should only be used if conditions of regulation BS EN 13241-1:2003 are met, Use of an upgraded Starter would be recommended in most circumstances

Press the Setting button (SW6) until (LED2) starts flashing, Press the "Stop" Button on the handset until (LED2) flashes 3 times. The Deadman Mode is Now Set.

#### Photocell

This Controller is not designed to be connected to a photocell.



### Transmitter instructions

#### Programming Transmitter

Press (SW6) on the receiver until (LED2) flash's Rapidly. Now press the Round symbol on the Transmitter. The LED will now flash rapidly and then stop. Programming now complete (if no action in 10 seconds LED Stops and programming will need to be started again).

#### Deleting all Stored Transmitters From PM1

Press and Hold (SW6) for approx 4 seconds until (LED2) Flashes quickly, then Release (SW6), within 6 seconds Press (SW6) until (LED2) flash's quickly then stops. All Transmitters are now Deleted form Receiver.

#### Deleting any single Transmitter from PM1 (You need the Transmitter for this)

Press the round button on the transmitter you wish to delete. Now press (SW6) on the receiver unit (LED2) starts flashing. Press the down button on the transmitter until (LED2) stops flashing, This has now deleted this transmitter from the RM1

#### Replacing the battery

Open the back cover of the transmitter with a small screwdriver, Remove the old battery and replace with a new (12v 27A) battery and close the back. Tighten the retaining screws and Dispose of the

### Troubleshooting

The light on the PM1 is working but when the transmitter is pressed nothing happens	If the Transmitter light is not working change the battery.
Neither Transmitter or PM1 work from either set of buttons	If (LED1) is not lit, check mains voltage is present, Check Fuse and replace if needed, possible PM1 unit fail ed and needs to be replaced.
Neither Transmitter or PM1 buttons work, but a click can be heard when buttons are pressed	Check that when the 'Up' Button is pressed there is voltage between L&N or R&N, if power is present the motor is faulty (or at limit)
The motor runs in the same direct irrespective of which button is pressed	Move (SW4) to the opposite position, try operating shutter again.

### Wiring

Motor	Ac In	Manual (push button wiring)
L= Up/Down to motor, R = Down / Up to Motor, E = Earth to Motor, N- Common to motor (If Motor operates in wrong direc-	L= Live (Brown) N = Neutral (Blue) E= Earth From Isolator (Green/Yellow)	U=Up S= Stop D=Down + / - = Dc 12v