

# Electric Roller Garage Door Installation Instructions

Note: Due to ongoing development some of the information and procedures may not exactly correlate to the product received. If in doubt, please ask your supplier.

**ALWAYS CHECK ON DELIVERY THAT THE ORDER DETAILS ARE CORRECT AND THE DOOR IS UNDAMAGED; AND ESPECIALLY BEFORE REMOVING ANY EXISTING DOORS.**

## Sequence of Installation & Contents

1. Pre-installation and component check
2. Installation options and criteria for compliance with LPS 1175
3. Prepare the opening
4. Prepare the guide rails
5. Fit end plates, guides & axle (& optional fascia)
6. Fit emergency overrides
7. Curtain adjustment (reducing height/making repairs)
8. Install the curtain in the guides, attach to axle & fit stops
9. Connect motor and controls
10. Curtain locking & setting motor limit switches
11. Connecting hold to run switches (optional)
12. Commissioning
13. Maintenance, repairing and dismantling instructions
14. SeceuroSmart technical specification

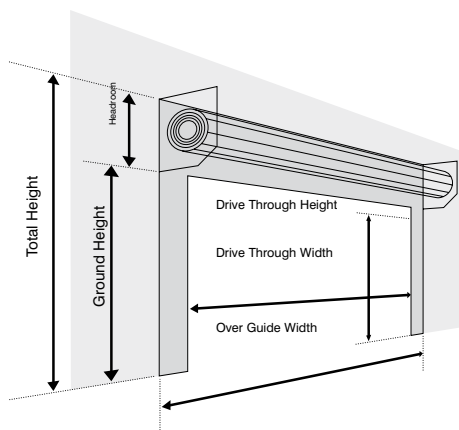


## 1. PRE-INSTALLATION AND COMPONENT CHECK:

Check:

- i) delivery note
- ii) order sheet
- iii) door dimensions/colour
- iv) opening dimensions \clearances
- v) components
- vi) Check for any damage to the guide rails or the outside roll of the curtain

Do not proceed further with the installation unless you are sure that the door is the correct size, and all components are present.



### Heights

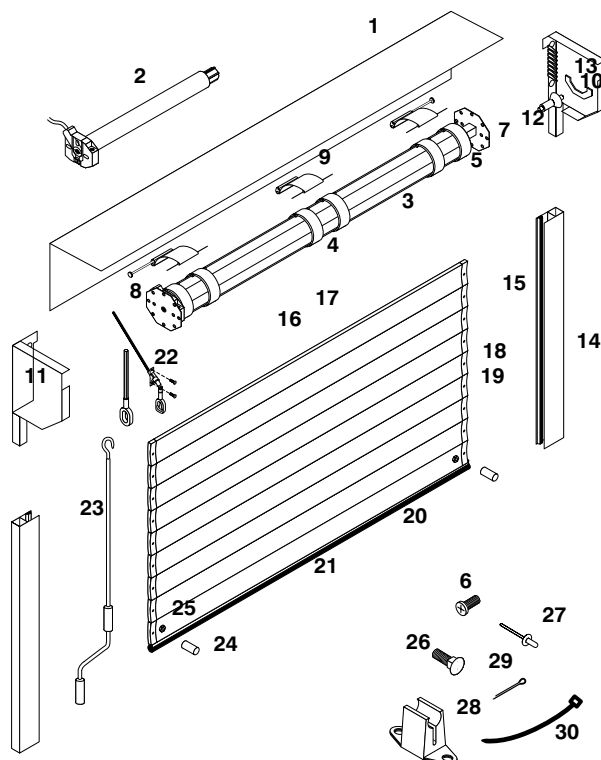
Order Height = Guide Height  
**Total Height** = Guide Height + End Plate  
**Headroom/End Plate**  
up to 2.5m Guide Height = 300mm  
up to 3.5m Guide Height = 350mm  
**Drive Through Height** = Guide Height less 55mm

### Widths

Order Width = Over Guide Width  
**Drive Through Width** = Over Guide Width less 150mm for 75mm guides  
Drive Through Width = Over Guide Width less 180mm for 90mm guides  
**Curtain Width** = Over Guide Width less 90mm  
**Axle Width** = Over Guide Width less 90mm (without spring)  
= Over Guide Width less 73mm (with spring)

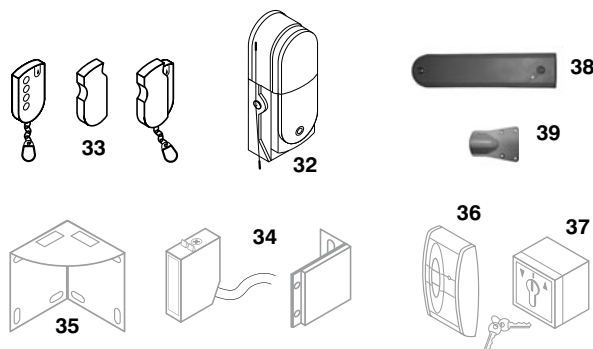
# ELECTRIC ROLLER GARAGE DOOR COMPONENTS

- 1 OPTIONAL 90 DEGREE FASCIA
  - 2 MOTOR (fitted into axle)
  - 3 102mm ROUND AXLE
  - 4 LOCKING COLLARS (fitted to axle 6 No. up to 2.5m, 8 No. up to 3.5m 10 No. over 3.5m)
  - 5 DUMMY END or SPRING
  - 6 6 x No. 8 x 38 PAN HEAD SCREWS \* (for securing octagonal fixing plates in mounting bracket, see component 7)
  - 7 DUMMY END OCTAGONAL FIXING PLATE (secured to shaft by split pin - see component 29)
  - 8 MOTOR OCTAGONAL FIXING PLATE (bolted to motor)
  - 9 ATTACHMENT/LOCKING ARM (1 No. L/H 1 No. R/H complete with locking bolt and lock nut, 1 - 3 No. intermediate)
  - 10 R/H END PLATE
  - 11 L/H END PLATE
  - 12 GUIDE ROLLER (fitted to end plates with star clinch lock washer)
  - 13 MOUNTING BRACKET (fitted to end plates)
  - 14 GUIDE RAILS
  - 15 BRUSH INSERT (fitted to guides)
  - 16 CURTAIN
  - 17 TOP SLAT (fitted to door curtain)
  - 18 POLYESTER WEBBING STRIP (fitted to curtain)
  - 19 RIVET (securing brush strip to curtain)
  - 20 BOTTOM SLAT (fitted to curtain)
  - 21 RUBBER SEAL (fitted to bottom slat)
  - 22 RIGID OVERRIDE EYE (inc. allen cap screw & washer) or DROP EYE JOINT (if 350mm end plates are required) \*
  - 23 CRANK HANDLE
  - 24 STOP BLOCKS \* (for fitting to bottom slat)
  - 25 2 No. M6 NUTS (inserted in bottom slat for securing stop blocks)
  - 26 2 No. M6 X 30 BOLTS \* (for fixing stop blocks)
  - 27 10 No. 4.8mm x 9.3mm x 12mm POP RIVETS \* (for securing webbing and axle collars)
  - 28 CRANK HANDLE CLIP \*
  - 29 1 x 60mm SPLIT PIN (to secure the octagonal fixing plate to the dummy end/ spring shaft)
  - 30 3 x CABLE TIES \* (for securing motor cable to end plate)
- \* Supplied in accessory pack.



## CONTROLS & ACCESSORIES

- 32 RADIO RECEIVER & CONTROL UNIT
  - 33 2 No. SINGLE CHANNEL OR 1 No. MULTI CHANNEL HAND TRANSMITTERS & COVERS
  - 34 PHOTOCELL AND REFLECTOR (optional)
  - 35 2 No. PHOTOCELL COVERS (optional)
  - 36 STANDARD SWITCH (Optional)
  - 37 KEY SWITCH (Optional)
  - 38 BOTTOM SLAT TRANSMITTER (fixings supplied)
  - 39 2 No. MAGNET HOUSINGS (magnets and fixings included)
- Recommended Fixings (not supplied)  
 12 x 1" Self Tapping Screws for Steel  
 12 x 2 1/2" Countersunk Screws for Masonry and Wood



## PACKAGING METHOD:

1. Axle, guides, crank handles, fascias (if the door is 3.5m wide or greater) and if applicable the external override kit will be wrapped together in one bubble wrapped parcel and strapped together.

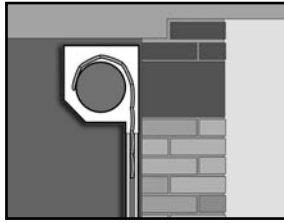
2. The curtain and aluminium fascias (if the door is less than 3.5m wide) will be packed together.

3. A separate accessories box is packed with the installation and end user instructions, the two end plates, the attachment /locking arms, the accessory pack and a box containing the electrical items.

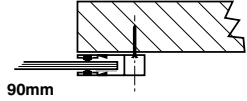
## 2. INSTALLATION CRITERIA FOR COMPLIANCE WITH LPS 1175: ISSUE 5

### Internal installation only

The garage door must be installed internally and the end plates must be face fitted above the opening

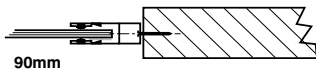


### Face fit



If the guide rails are face fitted they must not protrude into the opening and they must be 90mm.

### Reveal fit



If the guide rails are reveal fitted they must be 90mm guide rails complete with steel reinforcement plates to protect the base of the guide rails.

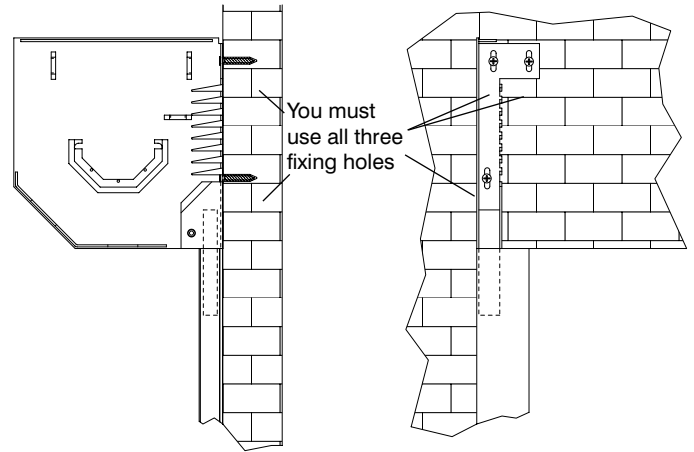
### Minimum number of fixings per guide rail

Height of guide rails	Minimum no. of fixings required
less than or equal to 1000mm	3
1001mm to 1500mm	4
1501mm to 2500mm	5
2501mm to 3500mm	6
3500mm +	7

### Proximity of holes to the end of the guide rails

The first and last holes at the ends of the guide rails must be drilled 120mm from the ends of the guide rails.

### Minimum number of fixings per end plate



All three fixing holes in each end plate must be used

### Minimum required fasteners

#### Brick / Blockwork

No. 12x2" screw with suitable plastic plug

#### Timber frame

No. 12x2" screw

#### Steel fixing (any of the following)

- 5 x 25mm Tec screws
- No. 10x1" Pozi Pan head screws
- M8 x10mm hex head or dome head bolts tapped in to the steel work (minimum 5mm thick steel)
- M8 bolts and nuts

All fixing heads must be spoiled for compliance with LPS 1175.

All switches, key switches and remote control equipment must be installed on the inside of the garage for compliance with LPS 1175

The label supplied, stating the manufacturer, the product, the security rating and the certificate number must be attached to the door.

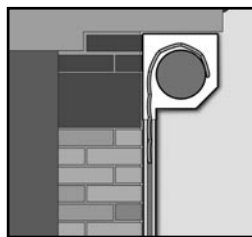
Please note: The validity of the LPCB certification is contingent upon the roller garage door being installed in accordance with the requirements of LPS 1175

## ALTERNATIVE INSTALLATION OPTIONS (not compliant with LPS 1175)

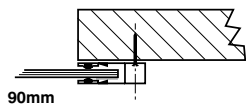
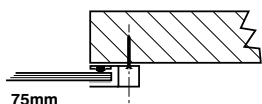
### External installation

The door can be installed externally if compliance with LPS 1175 is not required.

Please note the remote control receiver unit and the bottom slat safety edge transmitter must be installed internally and not exposed to the elements



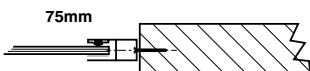
### Face fit



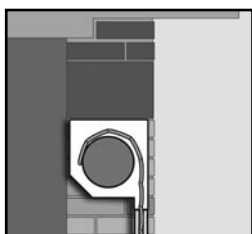
75mm guide rails can be used if compliance with LPS 1175 is not required.

### Reveal fit

If the end plates are fitted in the opening rather

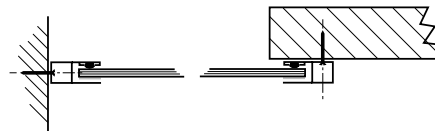


than above the opening the door will not be compliant with LPS 1175. If compliance with LPS 1175 is not required 75mm guide rails can be fitted within the reveal.



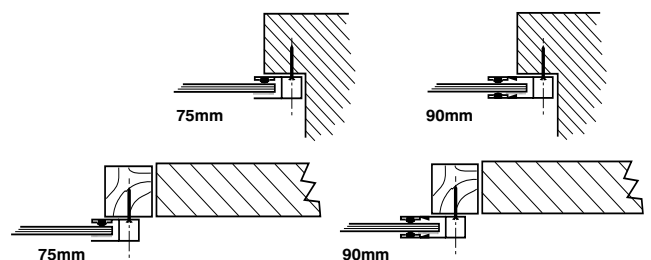
### Combination of face and reveal fit

In this situation one guide rail is reveal fitted and the other guide rail is face fitted.



### Undersize face fit

In this situation the guide rails are face fitted but they will protrude into the opening. This installation will not be compliant with LPS 1175.



### 3. PREPARE THE OPENING:

Check:

- structure is sound/even & can carry the weight of the door (curtain weight is approximately 5kg/m<sup>2</sup> and allow an extra 15kg for the guides, end plates and axle assembly).
- no obstacles in fitting footprint e.g. no sharp objects,

pipes, cables, bumps etc. sticking out from the pillars, lintel or header to twist the guides, distort the fascia or catch on the curtain

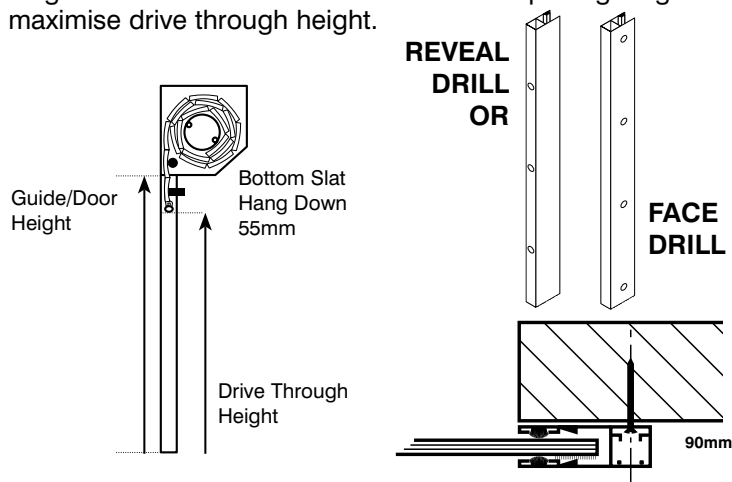
- floor is flat/level

If necessary install a sub-frame to ensure secure, flush and level fixing. (Recommended minimum 70 X 70 PAR)

### 4. PREPARE THE GUIDE RAILS:

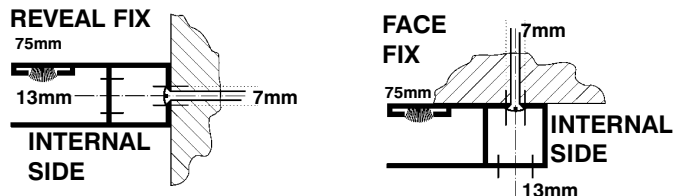
**Please note: The validity of the LPCB certification is contingent upon the roller garage door being installed in accordance with the requirements of LPS 1175 (see section 2 for further details).**

If the guides require cutting down refer to the information at the start of Section 1 and also section 6 for reducing the curtain height. If face fixing where possible set the guide height at least 55mm above the structural opening height to maximise drive through height.



- position guides

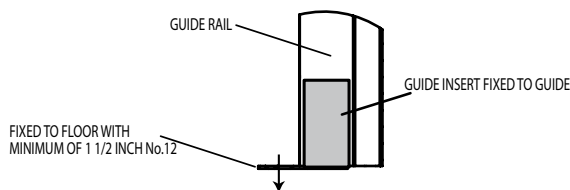
- drill guide fixing holes 7mm pilot hole 13mm outer hole (min 4) avoid mortar joints and edges of bricks etc.



### LPS 1175 compliant doors

Doors which are compliant with LPS1175 will be supplied with a bottom slat anchor system prefitted to the bottom slat and guide rails.

Once the guide rails have been fastened in place the bottom slat anchor guide insert **must** be fastened to the floor as shown below.



### 5. FITEND PLATES, AXLE ASSEMBLY, GUIDES (& OPTIONAL FASCIA):

N.B. When fitting doors with 300mm end plates and the guide height is more than 2300mm it is important that you check that the lintel does not bow inwards or have any projections that may catch on the curtain. If in doubt pack the guides and end plates out by at least 10mm.

- slot end plates into guides (and fix optional fascia if supplied) - **see drawing A**  
If using 90mm guides make sure the back face of the end plate is in line with the back of the guide.

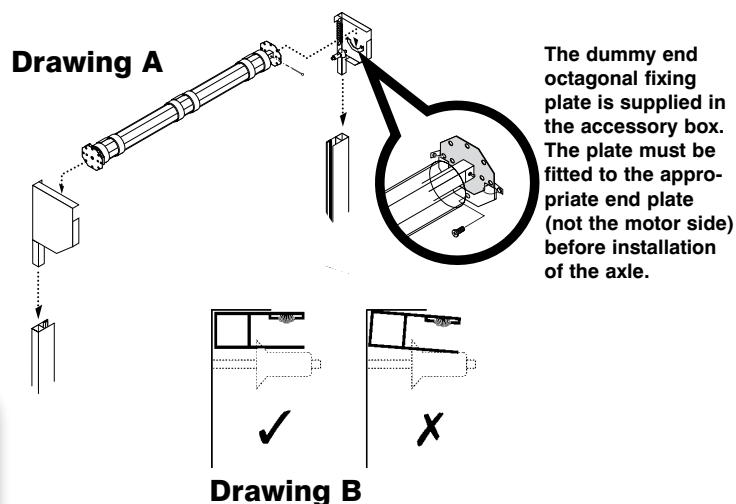
*If using the optional fascia we recommend that you rivet the end plates to the fascia then slot the end plates into the guide rails.*

- position guides, end plates (and optional fascia) against/in opening
- hold or prop securely in position

#### Before proceeding any further check:

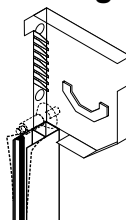
- back faces of guides and end plates are flush and untwisted - **see drawing B**
  - that the distance between the outside edges of the guides is 90mm more than the curtain width
  - ensure that the distance between the outer edges of the end plates is equal to the stated overall width of the door.
- drill fixing holes (minimum of 4 in guides and 2 in each end plate if not LPS 1175 compliant)
  - fix guides/end plates with minimum No. 12 x 2 1/2" countersunk screws (and plugs) to masonry/timber or 12 x 1" self tapping screws to steel. Fix fascia every metre with minimum 12 x 1" screws. Penny washers must be used to spread fixing load on fascia. If there is nothing to fix to, 50 x

20 box section should be ordered to reinforce the fascia and prevent deflection which may damage the curtain. Drill and pop rivet from inside the fascia ensuring that the rivet leaves a smooth surface.

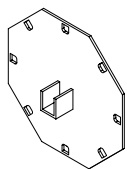


- ease open top of guides - **see drawing C**

#### Drawing C



- vii) The dummy end octagonal fixing plate is supplied in the accessory box. The plate must be fitted to the appropriate



Dummy end octagonal fixing plate must be this way up

end plate (not the motor side) before installation of the axle. Offer up the axle assembly to the end plates inserting the octagonal plate attached to the motor into the end plate mounting bracket and the dummy end/spring shaft into the U cup on the dummy end octagonal fixing plate. Secure the shaft using the 60mm split pin provided. Make sure the motor and override hole are correctly orientated and the limit switches are accessible from below - **see motor drawings 1 to 3 - Section 6.**

- viii) secure axle by inserting the No. 8 x  $\frac{3}{8}$  pan head screws supplied into the holes in the mounting brackets (give the axle a tug to make sure it is securely retained) – **see bubble detail drawing A**

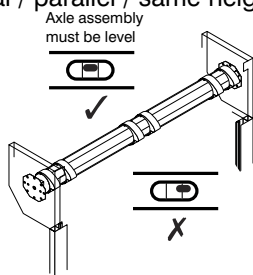
If end plate fixing is secure enough or if fitting into a reveal, firmly knock in with a punch deformable locking tabs into slots in octagonal fixing plate.

Lock dummy end shaft securely in place, hard up against the dummy end, with clip provided so as to prevent the axle from moving from its correct position.

Check:

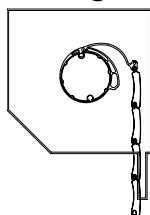
- a) guides are vertical / parallel / same height and axle is

**Drawing D**



level – **see drawing D**

**Drawing F**

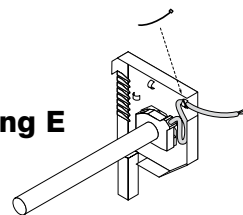


- b) collars are the correct way around – **see drawing F**

**N.B.** In the event that the screw does not hold, drill a new pilot hole through the mounting bracket and octagonal fixing plate and try again.

For safety reasons it is essential that the fixing plate is secured with three fixings.

**Drawing E**



- ix) secure motor POWER LEAD with CABLE TIES so that it is tight against THE end plate – **see drawing E**  
Alternatively you may drill a hole in the end plate to pass the cable through in order to keep it clear of the locking bolt.

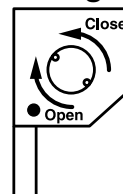
**N.B.** This may not be possible with tight reveal fixes.

**You must ensure that you allow for a drip loop in the motor cable** to prevent water from running down the cable and into the motor. Spare cable ties can be attached to the motor cable to act as drip loop to prevent water entering the motor.

**If an anti-fall back spring has been supplied fitted in the axle you must now tension the spring as follows:**

- 1) Connect the motor to either a test lead or the remote control. The remote control must be in commissioning mode **see section 8.**
- 2) Remove and retain the limit cover cap from the motor. Fully press in the limit switches on the motor. Using either the test

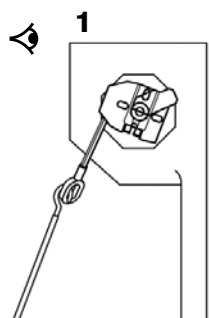
**Drawing G**



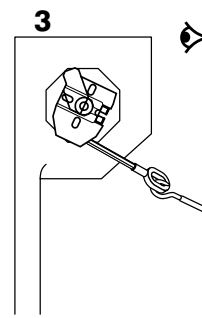
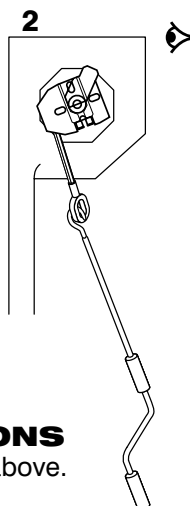
lead or remote control rotate the axle in the close direction (**see drawing G and label on axle**).

- 3) The number of turns required will be clearly stated on a label.
- 4) When complete the axle will be fully tensioned and will be ready for installation and attachment of the curtain in the fully closed position.
- 5) Replace the limit cover cap.

## 6. FITTING EMERGENCY OVERRIDES:



Left Hand viewed from centre of door



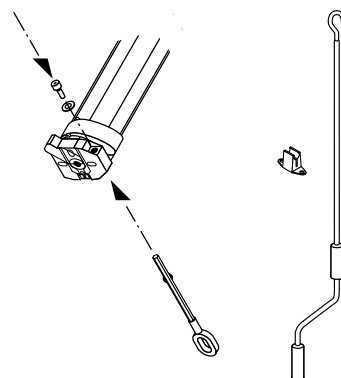
Right Hand viewed from centre of door

### POSSIBLE OVERRIDE EXIT OPTIONS

**N.B.** We recommend override exits 1 or 2 shown above.

## A) Standard Manual Override

- insert override eye through hole in motor adjacent to limit adjusters
- insert and tighten the holding screw and washer from above
- hook crank handle to eye
- secure clear of shutter with crank handle clip



**Standard Manual Override**

## B) Optional external low level override

Detailed installation instructions are supplied in the low level override kit.

The external low level override is not compliant with LPS 1175, a battery backup must be ordered when required.

## 7. CURTAIN ADJUSTMENT (REDUCING HEIGHT/MAKING REPAIRS)

**DO NOT CUT THROUGH THE SAFETY EDGE!** If the door needs to be reduced in width it will need returning to the supplier.

The curtain needs to be the correct height for the door to lock properly (if too tall remove slat(s) - If too short notify supplier). The optimum curtain height finishes midway up the end plate to ensure the locking mechanism engages.

Check you have the correct number of slats in the curtain for the guide height (particularly if you have shortened the guide height) and adjust the curtain accordingly.

The number of slats shown is the number of foam filled slats only. The curtain height shown includes the bottom slat and the extruded top slat.

SLATS	CURTAIN HEIGHT	END PLATE
21	1823	300
22	1902	300
23	1980	300
24	2059	300
25	2137	300
26	2216	300
27	2294	300

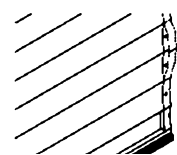
SLATS	CURTAIN HEIGHT	END PLATE
28	2373	300
29	2451	300
30	2530	300
31	2608	300
32	2687	350
33	2765	350
34	2844	350

SLATS	CURTAIN HEIGHT	END PLATE
35	2922	350
36	3001	350
37	3079	350
38	3158	350
39	3236	350
40	3315	350

SLATS	CURTAIN HEIGHT	END PLATE
41	3393	350
42	3472	350
43	3550	350
44	3629	350
45	3707	350
46	3786	350

Roll out the curtain on a flat and protected surface, such as bubble wrap and/or cardboard packaging in which the curtain was delivered.

Working from the bottom slat up, drill out the rivets in the bottom slat and also every slat, which needs to be removed to obtain the correct curtain height.

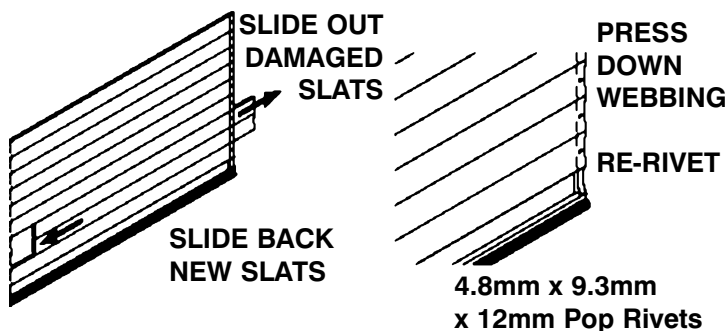


**DRILL OUT RIVET**  
**LIFT WEBBING**  
**DRILL OUT RIVET**

Gently lift the webbing away from the slats to be removed.

Replace the bottom slat and cut webbing so that there is an extra slats length of webbing left below the bottom slat.

Fold over the end of the webbing so that the two pre punched holes line up and rivet to the bottom slat.



## PRODUCT UPDATES MAY 2007

### New smaller extruded top slat

A new extruded top slat which is only 24mm tall, supplied in a silver anodised finish, will replace the 78.5mm extruded top slat. This enables an additional standard foam filled slat to be added to the top of the curtain improving both the colour match and insulation at the top of the curtain.

The number of slats shown is the number of foam filled slats only. The curtain height shown includes the bottom slat and the extruded top slat.

SLATS	CURTAIN HEIGHT	END PLATE
21	1769	300
22	1847	300
23	1926	300
24	2004	300
25	2083	300
26	2161	300
27	2240	300

SLATS	CURTAIN HEIGHT	END PLATE
28	2318	300
29	2397	300
30	2475	300
31	2554	300
32	2632	300
33	2711	350
34	2789	350

SLATS	CURTAIN HEIGHT	END PLATE
35	2686	350
36	2946	350
37	3025	350
38	3103	350
39	3182	350
40	3260	350

SLATS	CURTAIN HEIGHT	END PLATE
41	3339	350
42	3417	350
43	3496	350
44	3574	350
45	3653	350
46	3731	350

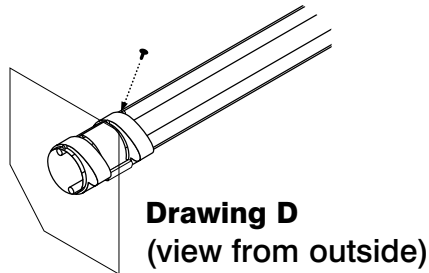
### Webbing fastened to the curtain with screws

Screws will replace the rivets currently used making it easier to adjust the curtain height and carry out repairs to damaged doors.

Screws - 4.2 x 13 Pozi flange self tappers

## 8. INSTALL THE CURTAIN IN THE GUIDES, ATTACH TO AXLE & FIT STOPS

- i) Check that there are at least 3 pairs of collars on the axle and that they are facing the correct direction – **see drawing D**.



The outside collars **must be** right at the ends of the axle and the third pair in the middle.

If 4 or more pairs are fitted then two of the additional pairs need to be fitted approx. 700mm in from the outside pair. (N.B. the outside collars are held in place by the motor collar at one end and the dummy end at the other. Intermediate pairs will have one collar pre-positioned at the factory with a securing rivet already in place).

It is recommended that the locking bolt position is checked prior to installing the curtain.

Temporarily position attachment arms in correct place on axle, wind the axle towards the 'shut' position and adjust locking bolt so that it will mesh with the locking comb and clear the motor cable and override eye. If the locking bolt hits one of the comb teeth bend the tooth slightly so that it will mesh with the locking comb.

After a door has been installed, during normal operation, the the door will settle causing the fully open and fully closed positions to move slightly from the original positions.

To allow for this the teeth directly above and below the opening, where the locking bolt engages, should be bent a little further than is required during the installation.

Remove attachment arms, wrap bubble wrap around the axle to protect the curtain and continue with remaining instructions.

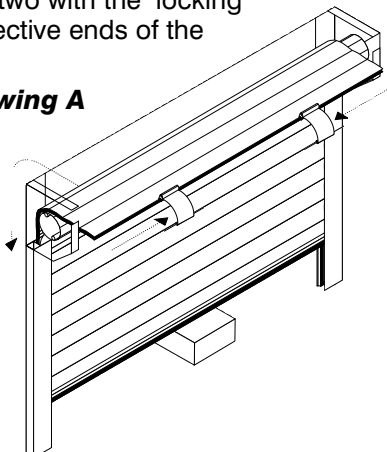
- ii) Lift coiled curtain up level with axle and feed bottom of curtain into guide
- iii) Slowly unroll curtain and gently lower onto a tool box or block

**N.B.** Do not allow the curtain to free fall over the axle as this will result in damage to the curtain

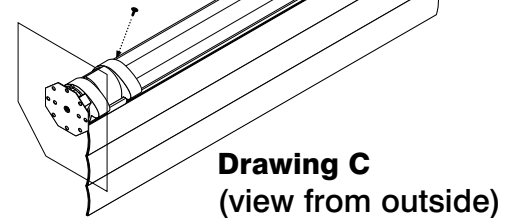
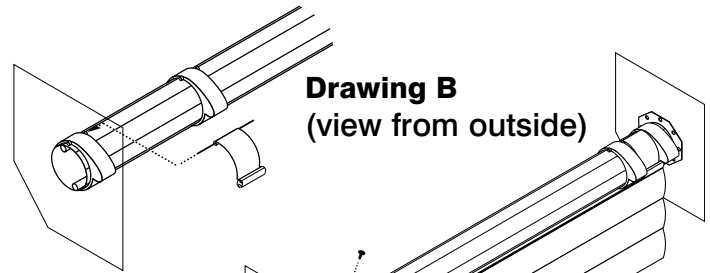
- iv) slide the locking/attachment arms on to the top slat making sure that the two with the 'locking bolt' are at their respective ends of the curtain

**For the above see drawing A**

**Drawing A**  
(view from inside)

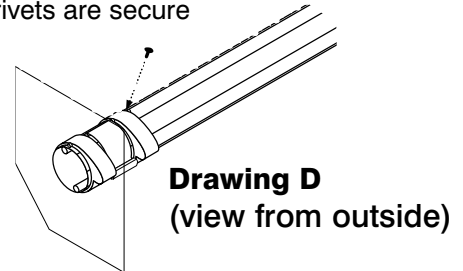


- v) position unattached end of locking/attachment arm so that the fixing bolt line up with locating holes in the two collars (rotate axle with override if necessary) and slide collars together making sure pre-positioned collar is tight against rivet – **see drawings B & C**



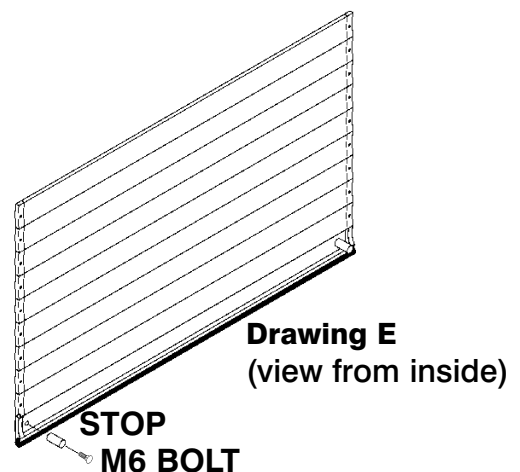
- vi) fix 'loose' collars in position by placing a **4.8mm x 9.3mm x 12mm pop rivets** tight up against the outside edge of the collar in the rounded cut-out in the axle. There is no need to drill a hole – **see drawing D**

**N.B.** Make sure rivets are secure



- vii) use override to raise door sufficiently to remove toolbox/ block. Leave door in partially open position
- viii) secure stops to captive nuts in bottom slat with bolts provided – **see drawing E**

**N.B.** It is essential to fit stops for health and safety reasons



### LPS 1175 Compliance

All doors which have been ordered to comply with LPS 1175 will have been supplied with a **silver label** stating the product name, the manufacturer and the security level the door achieved.

This label must be attached to the bottom slat for the door to be compliant.

## 9. CONNECTING THE REMOTE CONTROL

You will need to connect the motor to either a momentary switch or a control unit. Power should be supplied via a 13 amp switched fused spur or a 13 amp switched plug socket. Plugs and spurs should be fitted with a 3 amp fuse.

Ensure power is switched off before any electrical connections are attempted. Please note the remote control should be connected to mains power. If connected to a generator on dip switch block 2 you must switch dip switch 2 on.

**WARNING! If a safety edge has been supplied with this product it will not be active until it has been commissioned and tested by the installer.**

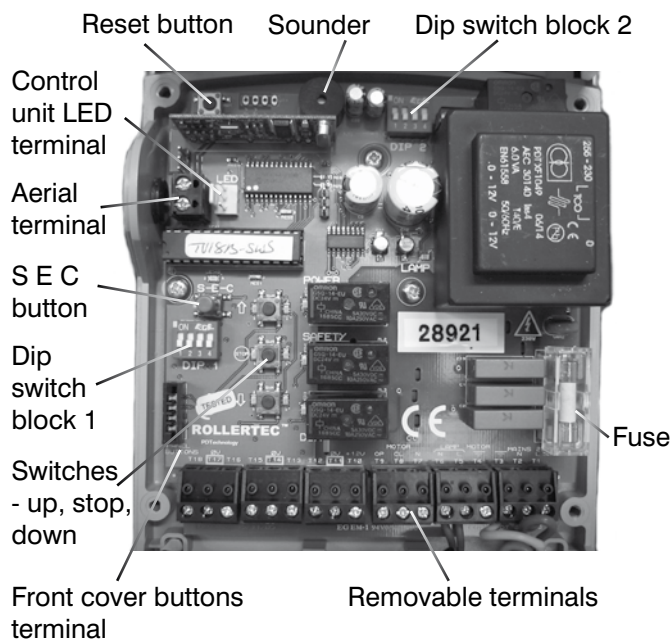
### REMOTE CONTROL

**N.B.** Do not fit the control / receiver unit externally (unless in a waterproof box), to structural steelwork, touching other power cables or fluorescent lights as the radio controls may

not function correctly. Some components are pre-wired at the factory. The optional photocell & key switch are suitable for external fitment. If the door operates in the opposite direction to that expected reverse the black and brown motor wires. Ensure that any key switches etc. are set to the static position.

#### Installation of control / receiver unit

- Mount control box, with the light on top, on a flat surface so as to prevent twisting and damage to the PCB. (Mark fixing holes and move the unit out of way to prevent debris fouling PCB when drilling holes).
- Fit both aeriels** and set parallel to wall. **The aeriels must not touch.**
- Wire motor to control unit making sure a 'drip loop' is incorporated into any cables coming into the unit from above.
- Connect to the mains supply.



### WIRING OF TERMINAL CONNECTORS

REMOVABLE TERMINALS	T1	Mains live (brown/red)	<b>N.B.</b> The Control Unit indicator LED connects to the white three-pin terminal block on the PCB
		T2 Mains neutral (blue/black)	
	T3	Mains earth (yellow & green)	
		T4 Motor earth (yellow & green)	
	T5	Lamp live	<b>Please note the photo electric cell is optional</b>
		T6 Lamp neutral	
	T7	Motor neutral (blue)	
		T8 Motor down close (black r/h motor or brown l/h motor)	
	T9	Motor up open (brown r/h motor or black l/h motor)	
		T10 Photo electric cell + 12V (brown)	
	T11	Photo electric cell OV (blue)	
		T12 Link always required	
	T13	Push button	
		T14 Push button	
	T15	Push button	
		T16 Photo electric cell auto test (black)	
	T17	Link removed only if photo electric cell is installed	
		T18 Photo electric cell safety input (white)	

## MAINTENANCE & SETTING OF MOTOR LIMITS

[Dip switch block 1] Dip switches 1, 2, 3 ON and 4 OFF



This mode is used when tensioning the anti-fall back spring in the axle, maintenance and setting the motor and limit switch positions.

All safety inputs and transmitters are ignored, only the switches mounted on the circuit board, control box lid or any external switches wired into it remain active. They operate on a 'dead man' / hold to run basis.

This allows motor limits to be set, without the need for a dedicated test lead. **Turn to section 10 for instructions on setting the motor limits.**

**Once the motor limits have been set you can continue with setting up the remote control.**

The lid mounted signal LED on the front of the control unit will indicate the current position of the door as detailed below:

**GREEN** with off flicker; door open/open limit activated  
Flashing **GREEN**; door opening

**RED** with off flicker; door closed/close limit activated  
Flashing **RED**; door closing

**YELLOW** with off flicker; door stationary between limits

### MAINTENANCE

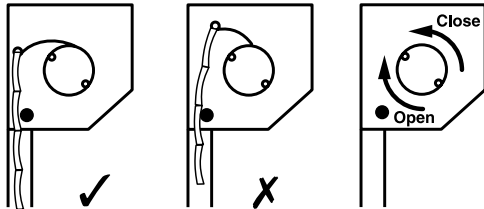
Selecting the commissioning mode during maintenance isolates any key fobs loaded on to the system.

This enables the service engineer to carry out maintenance without having to spend time recalling key fobs from members of staff, it also covers both the service engineer and the servicing company from prosecutions should an accident occur from a rogue fob operating the door which was not handed in prior to the maintenance commencing.

## 10. CURTAIN LOCKING & SETTING MOTOR LIMIT SWITCHES

Before you operate the door electrically you may want to operate the door slowly using the manual override provided to ensure that the door will not catch on any protrusions as it travels up and down.

Your garage door is manufactured with the curtain height to suit the length of guide supplied. The door will not lock down properly if the curtain is either too tall or too short. (If too tall remove slat(s) – if too short notify supplier). For best results the top of the curtain should be as near as possible in line with the centre of the axle. The locking bolt must not be above or below the locking comb on the end plate (see below).

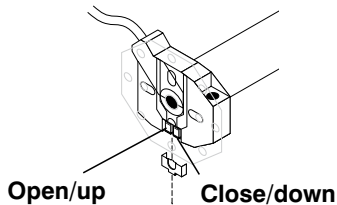


Both limits require setting along with a final adjustment of the locking arms/ bolts.

**We recommend the use of the manual override to set the limits and to make final adjustments as you will have far greater control of the door as it travels up and down.** To set the limits remove the cap covering the white/yellow limit switches, fully press in both switches (they will lock into position) and then proceed as follows.

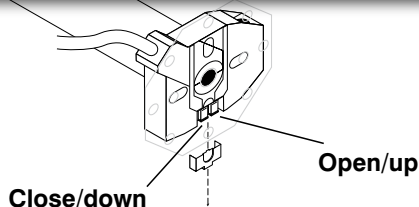
**N.B.** Incorrect setting of the limits risks damage to the motor and curtain.

Fully press in to set limits.  
Release limit when set



### Left Hand Motor

Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the OPEN/UP limit. The white limit switch activates the CLOSE/DOWN limit.



### Right Hand Motor

Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the CLOSE/DOWN limit. The white limit switch activates the OPEN/UP limit.

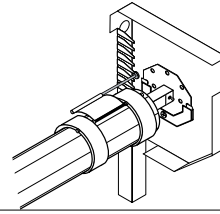
## Closed / down limit setting and locking section adjustment:

The cable and locking bolt position must be checked before proceeding – see instruction iii)

- wind door down with override handle until the curtain is touching the floor but stop just before the top of the curtain closes against the 'shut' face.
- Check that the locking bolt will 'mesh' with the locking

comb attached to the end plate (slightly bend the comb tooth if necessary) – see **drawing A**

### Drawing A

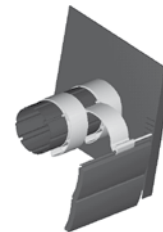


After a door has been installed, during normal operation, the the door will settle causing the fully open and fully closed positions to move slightly from the original positions.

To allow for this the teeth directly above and below the opening, where the locking bolt engages, should be bent a little further than is required during the installation.

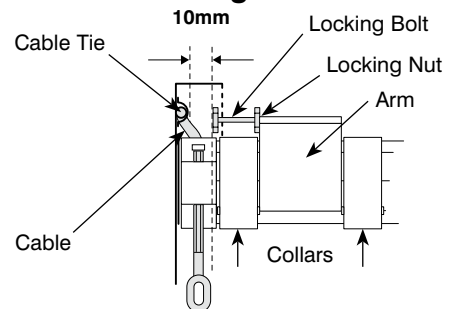
- Continue to wind door down until the curtain is tight against 'shut face' but not over tight as the locking of the curtain is provided by the locking bolt being securely located into the comb – see **drawing B** (the arms will deform if you force the top slat too hard into the lintel)

### Drawing B



The head of the locking bolt needs to project beyond the comb by at least 3mm but by no more than 10mm. **ON THE MOTOR SIDE SUFFICIENT CLEARANCE MUST BE KEPT TO PREVENT THE HEAD OF THE LOCKING BOLT CUTTING THROUGH THE MOTOR CABLE OR HITTING THE OVERRIDE EYE BAR – see drawing C**

### Drawing C



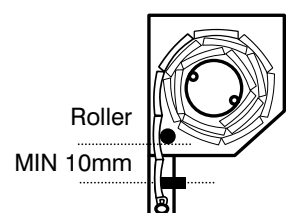
The locking nut must then be firmly locked against the locking/attachment arm. Caution – do not over tighten as this may strip the threads in the arm.

- set the motor closed/down limit by releasing limit switch.

### Open/Top Limit Setting:

- Wind the door with the hand crank to open / up position and stop (50mm of curtain should still be in guide. Stops should be min. 10mm below guide rollers)
- press and release the open/up limit switch

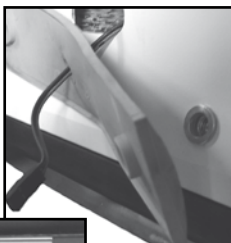
**N.B.** Always replace the yellow limit switch cover cap once limits are set.



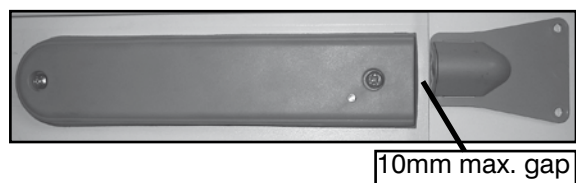
**N.B.** To prevent damage to the motor make sure the door is stopped by reaching the limit switch. Do not allow stops to come into contact with guide rollers.

## ATTACHING THE BOTTOM SLAT TRANSMITTER

Feed the wire through the bottom slat transmitter rubber seal then attach to the connector.



Attach the bottom slat transmitter to the bottom slat using the screws provided. Do not use a power operated screwdriver as it could distort and damage the printed circuit board. You must ensure that the gap between the bottom slat transmitter



and both magnet housings is no more than 10mm.

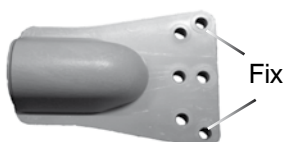
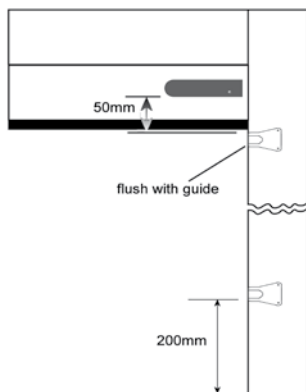
## FITTING THE MAGNET HOUSINGS - INTERNALLY FITTED DOORS

1. Prepare the surface of the guide rail before attaching the magnet holder by cleaning the relevant area with the wipe provided and then allow to dry (if required remove the magnet from the housing).

When two doors are being installed side by side, next to each other you must avoid positioning the top magnets parallel to each other. One of the top magnets must be located 20mm below the other top magnet, this will prevent the neighbouring magnet from interfering with the system.

If templates (orange card) have been supplied with the remote control we recommend that they are used to ensure that the magnets are positioned correctly.

- When the curtain is fully raised (on the top limit) attach the top magnet (50mm below the bottom slat transmitter), with the flat edge facing the curtain and in line with the inner edge of the guide (as shown on diagram).
- Attach the bottom magnet 200mm from the floor again ensuring the flat face is in line with the guide and facing the curtain.
- Push the magnets on firmly, using the attached double sided tape. The magnet holders must be fastened in place using the screws provided in the outer fixing holes once the safety edge has been successfully commissioned.

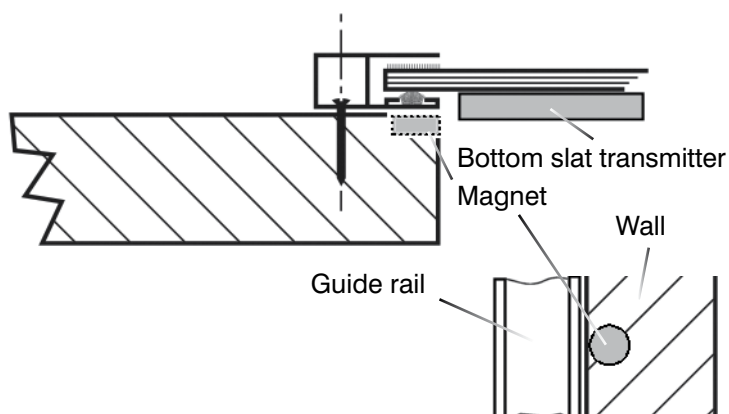


## FITTING THE MAGNET HOUSINGS - EXTERNALLY FITTED DOORS

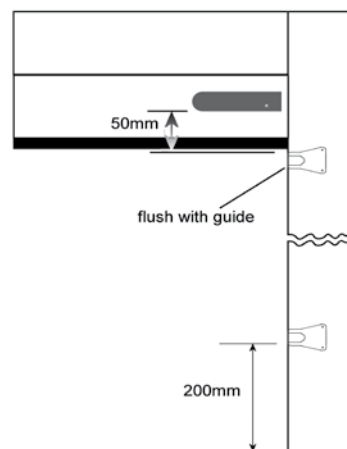
The bottom slat transmitter must always be fitted on the internal face of the bottom slat. To enable the bottom slat transmitter to detect the magnets whilst it travels up and down the magnets must be mounted on the internal face of the guide rails.

If the guide rails are face fixed they must be mounted at the edge of the openings to enable the transmitter to pass close enough to the magnets. The magnets must be sandwiched between the guide rails and the surface they are being fitted to.

The magnets can be removed from the magnet housings to reduce the size of recess hole required.



- When the curtain is fully raised (on the top limit) position the top magnet (50mm below the bottom slat transmitter), with the flat edge facing the curtain and in line with the inner edge of the guide (as shown on diagram).
- Position the bottom magnet 200mm from the floor again ensuring the flat face is in line with the guide and facing the curtain.
- We recommend that you secure the magnets into the holes using a silicone sealant.



## SAFETY EDGE COMMISSIONING

- 1 Open the door fully
- 2 Place a screwdriver shaft (between 10 and 30mm diameter) on the floor so that the door can close on to it during the commissioning process. If the floor is uneven place the screwdriver at the highest point on the floor.
- 3 Press and hold the S-E-C button (Safety Edge Commission) until the unit gives an audible beep (approx. 5 seconds). See page 10 for image of the circuit board and location of S-E-C button.



The door will now automatically cycle through the six stage commissioning sequence shown below.

STAGE	OPERATION	CONFIRMATION SIGNAL
1	The door will travel DOWN past the top magnet and stop	single BEEP and the courtesy light will FLASH ONCE
2	The door will travel UP to the fully open position and stop	single BEEP and the courtesy light will FLASH ONCE
3	The door will travel DOWN to the floor and detect the screwdriver shaft	single BEEP and the courtesy light will FLASH ONCE
4	The door will travel UP until it passes the bottom magnet and will then stop	single BEEP and the courtesy light will FLASH ONCE
5	The door will travel DOWN to the floor and detect the screwdriver shaft for a second time.	three BEEPS
6	The door will travel UP to the fully open position and stop.	

- 4 Remove the screwdriver. Now operate the door and test the safety edge to ensure that it works correctly.

If the commissioning sequence fails at any stage the door will stop and the sounder will emit a five second beep. If this occurs check the following:

- Aerials fitted and not touching
- Magnets in correct positions
- Bottom slat transmitter passes within 10mm of magnets
- No interfering signals being emitted by local devices (PIR detectors, weather stations, TV signal boosters)
- Suitably sized screwdriver placed on the floor for stages 3 and 5 (see above)
- At least one hand transmitter has been added to the receiver

If all of these are OK and the receiver still emits a five second beep delete the safety edge transmitter from the receiver and commission the safety edge again.

## DELETING THE SAFETY EDGE TRANSMITTER

To delete a safety edge transmitter you will need to remove it from the bottom slat and remove the weather seal to access the button inside.

1. Press the button once and the light on the front of the transmitter will light dimly.



Button

2. Press the button four times and on the fourth time the light will do a long bright flash and the receiver unit will beep.

## ADDING THE SAFETY EDGE TRANSMITTER

The safety edge transmitter attached to the bottom slat is automatically added to the receiver during the Safety Edge Commissioning process.

## ADDING HAND TRANSMITTERS

Transmitters can either be added using the on board dip switches or with a transmitter that is already loaded onto the control unit.



### METHOD 1 - Using dip switches [dip switch block 1]

1. Turn dip switch 4 ON, then wait 2 seconds.  
*The lid mounted signal LED will give a slow YELLOW flash.*
2. Press the open button on the board.  
*The flashing LED will change from flashing YELLOW to flashing GREEN.*
3. Now press the top green button on the new transmitter once and release.  
*The flashing LED will change to continuous for 1 second each time it accepts a new transmitter.*
4. Repeat step 3 for all other transmitters to be added on to the system.

Note the manufactures code for the transmitter must match the manufacturers' code for the receiver, if they do not match, you cannot add that particular transmitter on to the system, the LED will flash RED, GREEN then YELLOW once quickly, if they are not compatible.

If you do not select Add mode the unit will time out and flash the signal LED, RED / GREEN. To return to flashing YELLOW press the stop button on the board and continue with step 2 above.

To exit programming mode set dip switch 4 to OFF

### METHOD 2 - Existing transmitter method

1. Press and hold down the Grey button on a transmitter that is already loaded onto the control unit.  
*The lid mounted signal LED will flash YELLOW slowly, keep the button held down until it flashes YELLOW quickly.*
2. Release the Grey Button.  
*The lid mounted signal LED will continue to flash YELLOW quickly.*
3. Press the top green button on the same transmitter once.  
*The flashing LED will change from flashing YELLOW to flashing GREEN.*
4. Now press the top green button on the new transmitter once and release.  
*The flashing LED will change to continuous for 1 second each time it accepts a new transmitter.*
5. Repeat step 4 for other transmitters to be added on to the system.
6. Thirty seconds after loading the last transmitter the LED changes to flashing yellow for ten seconds and then returns to normal running mode. Alternatively you can press the top green button of a transmitter that has just been loaded, this will take it straight back to normal running mode.

Note the manufactures code for the transmitter must match the manufacturers code for the receiver, if they do not match, you cannot add that particular transmitter on to the system, the LED will flash RED, GREEN then YELLOW once quickly, if they are not compatible. Please contact PDT for further details.

## DELETING HAND TRANSMITTERS

Transmitters can either be deleted using the on board dip switches or with a transmitter that is already loaded onto the control unit.

### METHOD 1 - Using DIP switches [dip switch block 1]

Warning: - This will remove all the existing transmitters from the system.



1. Turn DIP switch 4 ON, then wait 2 seconds.  
*The lid mounted signal LED will give a slow YELLOW flash.*
2. Press and hold down the stop button on the board until the following sequence has been carried out  
*The flashing LED will change from flashing YELLOW to a fast flashing RED. After 10 seconds it will turn solid RED, after a further 5 seconds it will turn solid YELLOW and then after a further 2 seconds solid GREEN. You must release the stop button when the LED is GREEN.*

All transmitters have now been deleted from the system. The lid mounted signal LED will flash RED/YELLOW/GREEN repeatedly until dip switch 4 is turned OFF.

If you do not select Delete mode the unit will time out and flash the LED, RED / GREEN. To return to flashing YELLOW press the stop button on the board. To exit programming mode set dip switch 4 to OFF

### METHOD 2 - Existing transmitter

**Warning:** This will remove all the existing transmitters from the system except for the one it is carried out with.

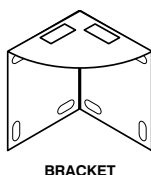
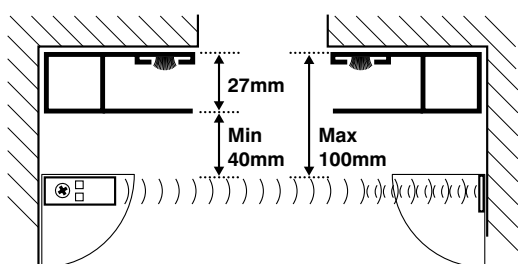
1. Press and hold down the Grey button on the existing transmitter.  
*The lid mounted signal LED will flash YELLOW slowly, keep the button held down until it flashes YELLOW quickly.*
2. Release the Grey Button.  
*The lid mounted signal LED will continue to flash YELLOW quickly.*
3. Press the stop button on the same transmitter until the following sequence has been carried out.  
*The flashing LED will change from flashing YELLOW to a fast flashing RED. After 10 seconds it will turn solid RED, after a further 5 seconds it will turn solid YELLOW and then after a further 2 seconds solid GREEN for 2 seconds.*  
You must release the stop button when the LED is GREEN.

All transmitters except the one used to carry out the delete command have now been deleted from the system and it will automatically return to normal running mode.

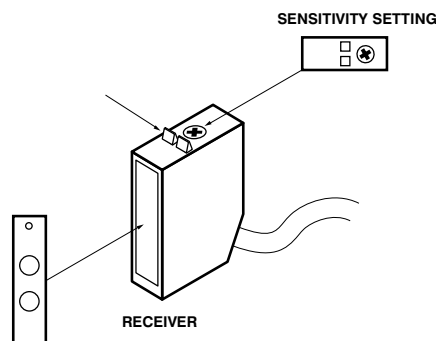
## OPTIONAL PHOTO CELL

### Mounting & Adjusting Photo-electric Cell

- i) bolt photocell and reflector to plastic brackets and fix photocell internally at car bumper height (500-700mm above floor)



- ii) switch on the power (green LED will illuminate)



- iii) ensure visible red beam is centred on reflector (yellow LED will illuminate) and move reflector left and right, up and down, marking point LED goes out to locate centre
- iv) Fix reflector kit using the bolts and screws provided. Using other fixings will damage the internal parts of the photocell unit.



When a photo cell is fitted the DIP switches should be set to 1 ON and 2, 3 and 4 OFF [dip switch block 1]. This activates the Photo Electric Cell self check test which will monitor the safety device. If there is a fault with the safety device or the wiring the door will automatically stop and go into hold to run mode and the LED signal light will indicate the fault.



## ADDITIONAL FEATURES OF THE SECEUROSMART

### Pin Lock & Stall Detection

When an open command is given from the **fully closed, close limit position** and pin/ground locks are left in place, SeceuroSmart detects the motor starting to stall when tension is applied to the curtain; SeceuroSmart automatically stops the door and then reverses direction sending the shutter back to the fully closed position.

If the motor starts to stall **part way through an open movement (this could occur if a person/object is drawn in to the coil or a person/object is lifted by the shutter)**, SeceuroSmart automatically stops the door and then reverses direction for approximately 2 seconds, releasing or lowering anything that was lifted or trapped by the shutter.

Every time a pin/ground lock or stall detect occurs a ten second time out disables the open command, preventing the operator from repeatedly trying to open the door with the pin/ground locks engaged.

A visual indication is given on the signal LED as detailed in the *System Status* Indication section.

Please note that during a power failure if the unit is fed from a PDT battery backup, the controls revert to 'Dead Man' operation and pin/ground lock or stall detect is disabled.

### Thermal Trip Monitoring

SeceuroSmart constantly monitors the thermal trip embedded inside the motor. If the motor is operated frequently it will over-heat and activate the thermal trip. Displaying the thermal trip activation prevents the user from calling out an engineer, only to find the shutter started working again, as the thermal trip automatically reset as the motor cooled down.

A visual indication is given on the signal LED as detailed in the *System Status* Indication section.

### Relay Weld Monitoring

SeceuroSmart monitors the power relays that switch electricity to the motor. The use of redundancy technology

(a legal requirement) ensures that the shutter can always be brought to the stop position irrespective of mechanical or electrical failure of the motor power relays.

A visual indication is given on the signal LED as detailed in the System Status Indication section.

### Service Counter

SeceuroSmart Counts the number of times the door is opened, this information can then be used to help provide the correct level of service required to maintain the door in optimum condition. The current count can be displayed on the signal LED by pressing and holding the stop button on 'power up' or 'reset'.

The count is then shown in the following format

Quick **RED** flash (1/4 sec on 1/4 sec off) indicates thousands (one flash per thousand operations)

Quick **YELLOW** flash indicates hundreds (one flash per hundred operations)

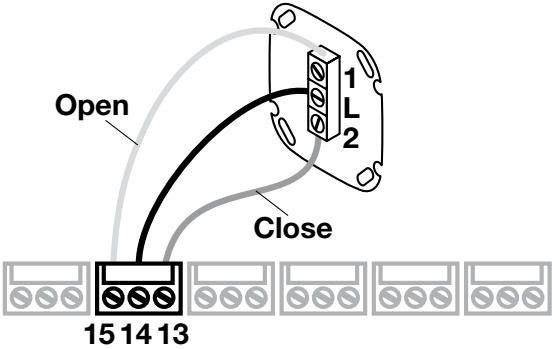
Quick **GREEN** flash indicates tens (one flash per ten operations)

Quick **RED** flash indicates units (one flash for each operation)

A long flash (one second) of any of the above colours indicates a zero for that count.

## ADDITIONAL WIRING INFORMATION

### Standard switch



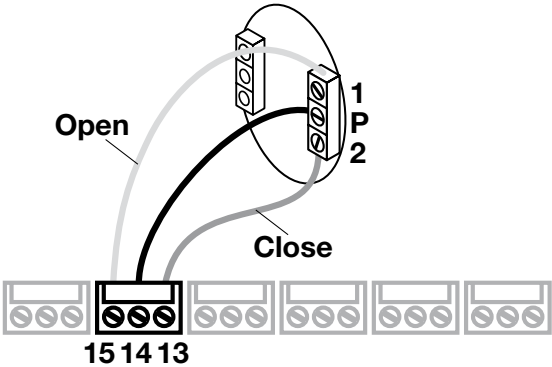
Please note the middle button on the standard momentary Somfy Inis Uno switch does not function as the open and close buttons are normally hold to run. When connected to the SeceuroSmart (RT) these buttons will adopt impulse functionality.

To stop the door when it is closing press the open button once.

To stop the door when it is opening press the close button once.

If for any reason the door is stopped when it is partially open the switch will adopt hold the hold to run function in the close direction. To reset the safety device the door needs to be fully opened.

### Key switch



## DIP SWITCHES

DIP SWITCH (up)	BLOCK 1	BLOCK 2*
1	PEC self check	Stall detect off
2	Hold to run operation when opening	Generator supply
3	Hold to run operation when closing	Any motor
4	Adding hand transmitters	Stop and then longer pause before return

\*The dip switches on BLOCK 2 are only read on power-up so if you change the dip switch positions on this block you will have to press the reset button or turn the power off then on again for the change to take effect.

## MULTI-CHANNEL REMOTE CONTROL TRANSMITTERS

The receiver unit supplied can be operated by both single channel and multi channel hand transmitters.

### Identifying the current channel selected

**Press and release the grey button**

Number of flashes = channel selected

### Changing the channel on the hand transmitter

**Consecutive presses of the grey button**

Will cycle through the available channels

### Adding a channel to the hand transmitter

**Press and hold the grey button for 10 seconds**

Channel indicator starts to **flash yellow**

**Press the grey button to scroll** through the available channels  
To **add** the channel you have selected **press** the **top green button three times**

### Deleting a channel from the hand transmitter

**Press the grey button consecutively to select the channel** which will be deleted

**Wait 10 seconds**

**Press and hold the grey button for 10 seconds**

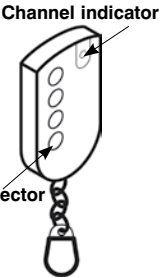
Channel indicator starts to **flash yellow**

**Press and hold the red button for 15 seconds** until the **indicator goes green then release**  
The indicator will **flash red, yellow, green four times**

### Adding multi-channel hand transmitters

Follow the instructions on page 11 for standard hand transmitters

Please note the first multi channel hand transmitter added to the receiver will determine which channel the receiver will operate on.



## REMOTE CONTROL TROUBLE SHOOTING GUIDE

**N.B.** Always isolate the power before attempting to make any adjustments or repairs. Untrained operators are advised to contact an approved installer.

### System Status Indication

The status of the control unit and/or door is indicated by the lid mounted signal LED. This is a three-colour "RED, YELLOW & GREEN" lamp (LED) mounted on the front of the control unit, as detailed below:

DOOR POSITIONS	
LED SIGNAL	STATUS
<b>GREEN</b> solid	open limit activated
<b>GREEN</b> flashing	door opening
<b>RED</b> solid	close limit activated
<b>RED</b> flashing	door closing
<b>YELLOW</b> solid	door stationary between the open and close limits

Please note: If the bottom slat of the curtain hits an object before it reaches the top magnet, whilst travelling in a downwards direction, the motor will continue to turn for a short while before stopping automatically.

SYSTEM STATUS		
LED SIGNAL/FAULT	CAUSE	SOLUTION
<b>RED</b> rapid flashing	Photo Electric Cell (PEC) beam broken. No PEC connected to the receiver. Link missing between terminals 17 and 18.	<ol style="list-style-type: none"> <li>1. Remove any obstacles which may be in the doorway (once you have removed the obstacle the signal light will change to solid yellow).</li> <li>2. Ensure the photocell and reflector are clean.</li> <li>3. Re-align the photo cell and reflector.</li> <li>4. Turn dip switch 1 off.</li> <li>5. Replace the link between terminals 17 and 18.</li> </ol>
<b>RED</b> flash then two <b>YELLOW</b> flashes	A motor stall has been detected	<ol style="list-style-type: none"> <li>1. Disengage manual locking device</li> <li>2. Remove any objects which may have jammed in the guide rails, curtain or roll.</li> <li>3. Ensure nobody is attempting to ride up on the curtain.</li> <li>4. Ensure a non-approved item has not been attached to the curtain.</li> <li>5. In extreme conditions the door may have frozen to the guide rails or floor. Try to operate the door again or defrost the frozen section.</li> </ol>
<b>RED</b> flash then three <b>YELLOW</b> flashes	The thermal trip has activated on the motor or the motor is not connected.	<ol style="list-style-type: none"> <li>1. Allow the motor to cool for approximately 30minutes before attempting to operate the door again.</li> <li>2. The motor may not be connected to the remote control unit. Check wiring and re-set the motor limits.</li> </ol>
<b>RED</b> flash then four <b>YELLOW</b> flashes	Door overrun time out; the door has been opening or closing for over 60 seconds without detecting a final end limit position.	<ol style="list-style-type: none"> <li>1. Re-set the motor limits</li> <li>2. If the motor limits can not be set the motor may be faulty.</li> </ol>
A rapid <b>RED, GREEN</b> then <b>YELLOW</b> single flash	Indicates that a signal has been received from either a transmitter that has not been loaded on to the system or the transmitters' manu-facturers code does not match with the SeceuroSmart control unit.	<ol style="list-style-type: none"> <li>1. Load the transmitter on to the system as per the "Adding transmitters" section.</li> </ol>
Long <b>YELLOW</b> then two shorter <b>RED</b> flashes	PEC has failed Self Check test.	<ol style="list-style-type: none"> <li>1. Check the PEC wiring.</li> <li>2. Replace faulty PEC</li> </ol>
Long <b>RED</b> then short <b>RED</b>		Check link between T11 and T12 on the receivers circuit board
Reduced operating range	Batteries in transmitter are flat or aerals may not be fitted to remote control unit or they may be touching.	<ol style="list-style-type: none"> <li>1. Transmitter LED does not illuminate when flat and if batteries low it flashes when button pressed. Replace batteries.</li> <li>2. Ensure aerals are not touching, replace aerals if they are missing.</li> <li>3. The door can be closed by pressing and holding a close button. Release the button once the door is fully down and locked.</li> </ol>
The door stops automatically after the bottom edge of the door has passed the top magnet when the door is closing (this only applies when bottom slat safety edge is installed).	Signal interference.	A local device (such as a PIR detector, a weather station or a TV signal booster) is transmitting a signal on the same frequency. The receiver will wait for the signal to stop before operating the door again.
	Aerials are touching or have been removed.	Ensure aerials are present and are not touching.
	The top magnet is missing or in wrong location.	If the magnet is on the guide rail ensure that it is located at least 50mm below the bottom slat transmitter when the door is fully open.
	Fault detected in safety edge circuit	If the bottom slat transmitter is flashing 6 or 8 times contact your supplier.

PROGRAMMING MODE (Using a transmitter)	
LED SIGNAL	STATUS
Slow flashing <b>YELLOW</b> then quick flashing <b>YELLOW</b>	control unit in programming mode

PROGRAMMING MODE (Using the buttons)	
LED SIGNAL	STATUS
<b>RED</b> and <b>GREEN</b> flashing alternatively	Timed out during programming you will need to press the reset button
<b>YELLOW</b> slow flashing	Receiver unit in programming mode

## 11. CONNECTING HOLD TO RUN SWITCHES

- i) mount switch box, preferably in sight of door
- ii) connect to motor/mains

For further details refer to separate wiring instructions.

**N.B.** If fitting two or more switches to the same door a Group Command control box will be required to prevent accidental damage to the motor.  
Only the key switch is suitable for external fitment

### ELECTRICAL REQUIREMENTS

- All connections should be made in accordance with the 16th edition IEE Regulations.
- 5 Amp fuse recommended for fused mains supply for door.
- Cable requirements  
Mains supply cable; 3 core 1.5 sq mm  
Motor cable; 4 core 1.5 sq mm
- There is a surge of current each time the door is operated, therefore, switches used in conjunction with any of the above motors should have contacts rated at a minimum of 16 amps to ensure trouble free operation.

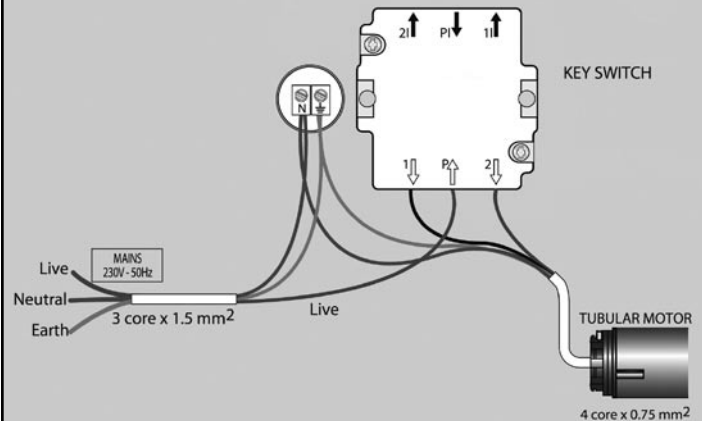
### SWITCHING REQUIREMENTS

- Disconnect power to motor before undertaking any work
- Only one motor to be attached to a single pole switch
- Sequencing relay required when operating one door by more than one switch.
- Safety measures must be provided when doors are operated from out of sight of the main switch.
- Group commands must be used where multiple motors

are to be operated from one switch.

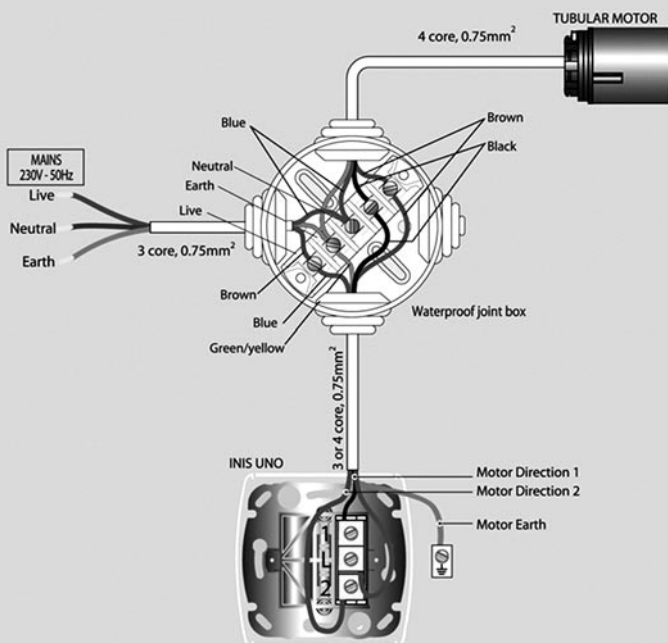
- Only approval momentary switches may be used on door installations. Otherwise all guarantees will be made null and void. Surface mounted switch are supplied as standard for all installations.
- Warranty period on switches five year.

### YZEC38102 two way momentary key switch for operating one shutter only.

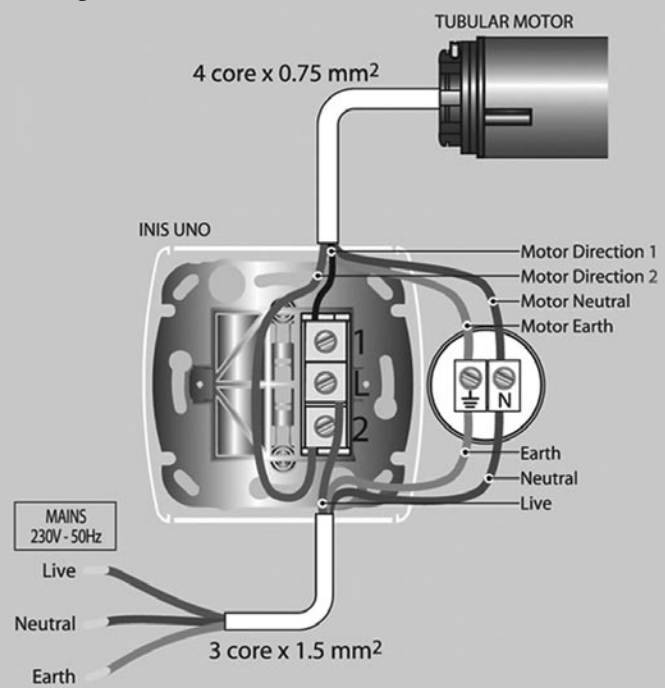


### INTEO-INIS UNO

#### Wiring via a junction box



#### Wiring direct



Either method of wiring is acceptable however the junction box method is recommended

## TROUBLESHOOTING

FAULT	CAUSE	SOLUTION
The shutter/door fails to operate when the button is pressed/key is turned.	1. There has been a power failure. 2. The wrong direction is been selected on the control equipment. 3. The thermal trip in the motor may have activated if the door has been operated several times recently.	1. Wait for power to come back on or operate the shutter/door with the manual override if installed. 2. Select the correct direction. 3. Allow the motor to cool for approximately 30minutes before attempting to operate the shutter/ door again.
The shutter/door stops before fully opening or closing, or fails to stop when reaching its final open or closed position.	The limits in the motor have failed to operate or may not have been set correctly.	Contact your installer.

## 12. COMMISSIONING

### INTERNAL FITTING

Fit optional 45 degree lid. A slot may have to be cut into the lid to pass over the override eye.

### FINAL CHECKS

- remove any protective plastic coverings
- wipe curtain & guides with damp cloth
- touch-up any small scratches
- check all electrical & operating equipment is installed and functioning correctly (especially the safety edge) and complete CE marking label and paperwork
- check direction handle needs winding to open door and fit appropriate label supplied to crank handle.
- If the door is fitted externally apply a bead of silicone around the box edge to prevent water ingress.

**N.B.** Check the front of the curtain to make sure that it is not rubbing on the fascia etc.

The manual override will not function after the door is operated, by remote control, until the power to the motor has 'timed out'. This will take a few moments to occur.

If you wish to demonstrate the manual override immediately after opening the door press either the stop button on the handset or simulate a power cut by switching off the power to the Control unit.

If a low level external override is fitted or the door is fitted externally remind customers to keep the override handle in a convenient place (not in the garage if no other way in!)

**Upon completion it is your responsibility to train the customer how to operate the door correctly and safely and provide them with the operating and maintenance instructions supplied.**

## 13. MAINTENANCE, REPAIRING AND DISMANTLING INSTRUCTIONS

Always isolate the mains power before attempting any maintenance, repairs or dismantling. If you need to use the remote control during any maintenance, repairs or dismantling procedure you must engage the commissioning mode.

### MAINTENANCE CHECK LIST

- Curtain free running and clean
- No debris in the guide rails
- Guide rails and end plates are securely fastened to the wall (check also the fascia if fitted)
- All axle collars are in the correct original position
- Split pin in octagonal dummy end fixing plate is in correct position and is not damaged or worn
- Check action of locking pins to ensure they are locking correctly
- Motor cable is correctly retained has not been damaged or in danger of being damaged
- If a remote control has been supplied check the functionality of the safety devices
- If required view the service counter on the remote control
- Check the operation of the manual override.

### RECOMMENDED SERVICE PERIOD

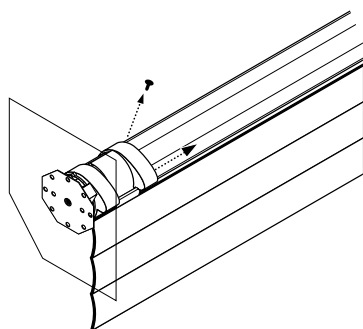
The recommended service period for a garage door, which will operate on average two cycles per day, is once every 12 months. If the garage door will perform a greater number of cycles per day the service period should be shortened accordingly. One cycle is a full open and close sequence.

### REPAIRS

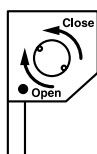
For curtain repairs please refer to section 6.

## REPLACING MOTORS / DUMMY ENDS / ANTI-FALL BACK SPRINGS:

- 1) Lower the curtain to the fully closed position.
- 2) Disconnect the curtain from the axle.



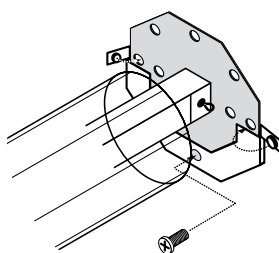
- 3) If the axle contains an anti-fall back spring the tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.



- 4) Isolate the mains power then disconnect the motor leads from the control unit.

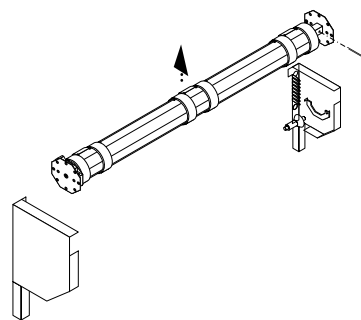
REMOVABLE TERMINALS	T1		Mains live (brown/red)
	T2		Mains neutral (blue/black)
	T3		Mains earth (yellow & green)
	T4		<b>Motor earth</b> (yellow & green)
	T5		Lamp live
	T6		Lamp neutral
	T7		<b>Motor neutral</b> (blue)
	T8		<b>Motor down close</b> (black r/h motor or brown l/h motor)
	T9		<b>Motor up open</b> (brown r/h motor or black l/h motor)
	T10		Photo electric cell + 12V (brown)
	T11		Photo electric cell OV (blue)
	T12		Link always required
	T13		Push button
	T14		Push button
	T15		Push button
	T16		Photo electric cell auto test (black)
	T17		Link removed only if photo electric cell is installed
	T18		Photo electric cell safety input (white)

- 5) Remove screws securing motor octagonal fixing plate and lever out retaining tabs with a screwdriver



- 6) Remove split pin from dummy end shaft and slide shaft free of fixing plate.

- 7) Lift the axle assembly out

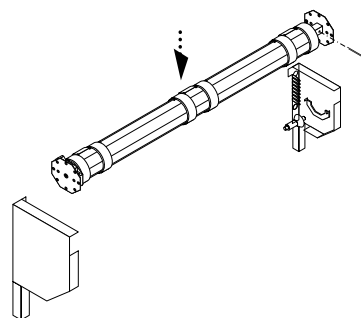


- 8) If you need to replace or remove the motor, unbolt the octagonal fixing plate and drill out rivets in the axle securing the motor, make sure that any loose drilled out rivet 'slugs' are removed from inside the axle to prevent them making an unnecessary rattling noise.

- 9) The dummy end and anti-fall back spring are also held in place by rivets and should be removed in a similar manner.

- 10) Replace the motor / dummy end / anti-fall back spring, re-rivet and refit the octagonal fixing plate to the motor end.

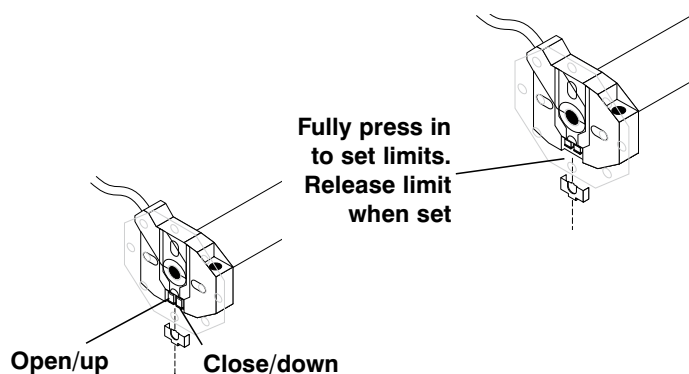
- 11) Install the axle assembly as per section 5 remembering to tension the anti-fall back spring if one is installed.



- 12) Re-connect motor lead to the control unit.

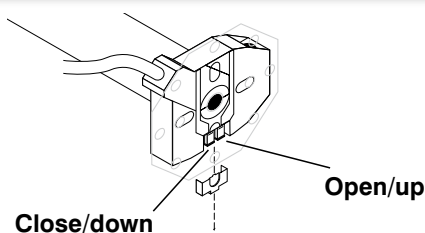
REMOVABLE TERMINALS	T1		Mains live (brown/red)
	T2		Mains neutral (blue/black)
	T3		Mains earth (yellow & green)
	T4		<b>Motor earth</b> (yellow & green)
	T5		Lamp live
	T6		Lamp neutral
	T7		<b>Motor neutral</b> (blue)
	T8		<b>Motor down close</b> (black r/h motor or brown l/h motor)
	T9		<b>Motor up open</b> (brown r/h motor or black l/h motor)
	T10		Photo electric cell + 12V (brown)
	T11		Photo electric cell OV (blue)
	T12		Link always required
	T13		Push button
	T14		Push button
	T15		Push button
	T16		Photo electric cell auto test (black)
	T17		Link removed only if photo electric cell is installed
	T18		Photo electric cell safety input (white)

**N.B.** Incorrect setting of the limits risks damage to the motor and curtain.



### Left Hand Motor

Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the OPEN/UP limit. The white limit switch activates the CLOSE/DOWN limit.



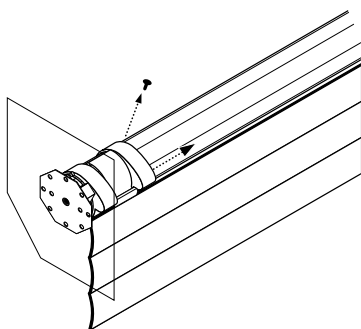
### Right Hand Motor


Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the CLOSE/DOWN limit. The white limit switch activates the OPEN/UP limit.

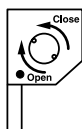
- 14) If a remote control has been supplied you will need to follow the set up procedure outlined in section 9.

## REVERSING THE MOTOR HAND:



















- 1) Lower the curtain to the fully closed position.
- 2) Disconnect the curtain from the axle.



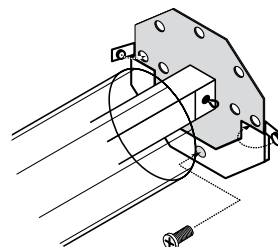
- 3) If the axle contains an anti-fall back spring the tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.
- 



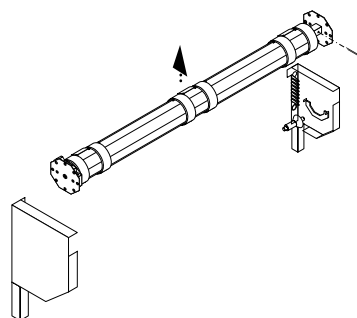
- 4) Isolate the mains power then disconnect the motor leads from the control unit.

REMOVABLE TERMINALS	T1		Mains live (brown/red)
	T2		Mains neutral (blue/black)
	T3		Mains earth (yellow & green)
	T4		<b>Motor earth</b> (yellow & green)
	T5		Lamp live
	T6		Lamp neutral
	T7		<b>Motor neutral</b> (blue)
	T8		<b>Motor down close</b> (black r/h motor or brown l/h motor)
	T9		<b>Motor up open</b> (brown r/h motor or black l/h motor)
	T10		Photo electric cell + 12V (brown)
	T11		Photo electric cell OV (blue)
	T12		<b>Link always required</b>
	T13		Push button
	T14		Push button
	T15		Push button
	T16		Photo electric cell auto test (black)
	T17		<b>Link removed only if photo electric cell is installed</b>
	T18		Photo electric cell safety input (white)

- 5) Remove screws securing motor octagonal fixing plate and lever out retaining tabs with a screwdriver



- 6) Remove split pin from dummy end shaft and slide shaft free of fixing plate.
- 7) Lift the axle assembly out.

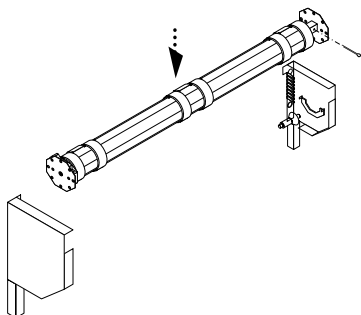


- 8) Drill out the rivet securing the dummy end / spring to the axle (hidden beneath end collar) make sure that any loose drilled out rivet 'slugs' are removed from inside the axle to prevent them making an unnecessary rattling noise
- 9) Drill out the rivets holding the collars in place or tap the rivets along the channel using a screwdriver and a mallet
- 10) Slide out dummy end / spring and remove all collars
- 11) If an anti-fall back spring has been fitted you will need to remove the spring inserts at both ends of the spring and swap them round to reverse the handing of the spring. The spring inserts are held in place with circlips.

12) Refit collars, ensuring that the 'snail' points towards the flat of the end plate (see page 3 drawing F). Replace dummy end / spring.

13) Re-rivet dummy end / spring / collars

14) Install the axle assembly following the instructions provided in section 5.

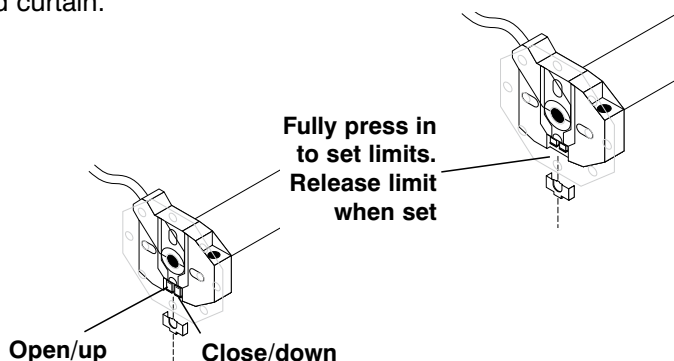


15) Re-connect motor lead to the control unit.

REMOVABLE TERMINALS	T1		Mains live (brown/red)
	T2		Mains neutral (blue/black)
	T3		Mains earth (yellow & green)
	T4		<b>Motor earth</b> (yellow & green)
	T5		Lamp live
	T6		Lamp neutral
	T7		<b>Motor neutral</b> (blue)
	T8		<b>Motor down close</b> (black r/h motor or brown l/h motor)
	T9		<b>Motor up open</b> (brown r/h motor or black l/h motor)
	T10		Photo electric cell + 12V (brown)
	T11		Photo electric cell OV (blue)
	T12		Link always required
	T13		Push button
	T14		Push button
	T15		Push button
	T16		Photo electric cell auto test (black)
	T17		Link removed only if photo electric cell is installed
	T18		Photo electric cell safety input (white)

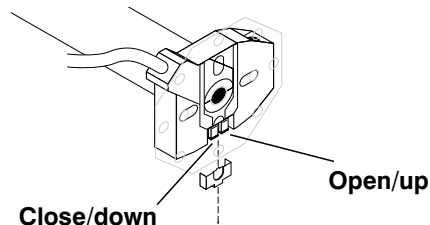
16) Reset motor limits.

**N.B.** Incorrect setting of the limits risks damage to the motor and curtain.



#### Left Hand Motor

Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the OPEN/UP limit. The white limit switch activates the CLOSE/DOWN limit.



#### Right Hand Motor

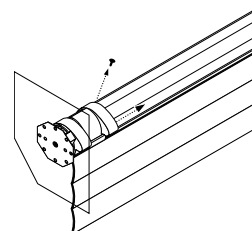
Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the CLOSE/DOWN limit. The white limit switch activates the OPEN/UP limit.

17) If a remote control has been supplied you will need to follow the set up procedure outlined in section 9.

## DISMANTLING PROCEDURE

1) Lower the curtain to the fully closed position.

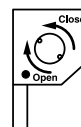
2) Disconnect the curtain from the axle.



3) If you would like to use the curtain again you should cover the axle with bubble wrap or similar packaging material to avoid damaging the curtain when you remove it.

4) Remove the curtain by lifting it up and over the axle.

5) If the axle contains an anti-fall back spring the tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.

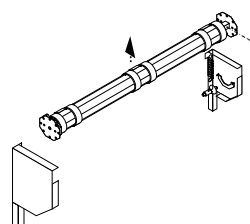


6) Isolate the mains power then disconnect the motor leads from the control unit.

7) remove screws securing motor octagonal fixing plate and lever out retaining tabs with a screwdriver.

8) Remove split pin from dummy end shaft and slide shaft free of fixing plate.

9) Lift the axle assembly out.



10) Unfasten and remove the guide rails, end plates and fascia (if supplied).

## 14. SECEUROSART TECHNICAL SPECIFICATION

TERMINAL DESCRIPTION			
T1	Live	T11	0 Vdc
T2	Neutral	T12	Stop switch input
T3	Earth	T13	Open switch input
T4	Motor earth	T14	Switch common
T5	Lamp live	T15	Close switch input
T6	Lamp neutral	T16	PEC auto test output
T7	Motor neutral	T17	Switch common
T8	Motor close	T18	PEC input
T9	Motor open	T19	Antenna
T10	+12Vdc	T20	Screen

SWITCH DESCRIPTION			
SW1	Reset	SW4	Close
SW2	DIP switches	SW5	Stop
		SW6	Open

TECHNICAL SPECIFICATION	
Supply Voltage	230 VAC / 50hZ
Supply Current	6 Amps (Max)
Transformer power	VA 6VA
Operating temperature (Centigrade)	-10 / +30
Relay	10A @ 230VAC
Triac	1A @ 230VAC
Courtesy light enclosure	40 watts maximum <small>(25 watt, round bulb with bayonet fitting supplied)</small>
Short circuit protection	6.3A 20mm HRC fuse
Auxiliary 12VDC	20mA
Photo Electric Cell Input	NPN
Self Check Output	5 VDC
Safe Edge Input	Wireless
Receiver frequency	433.92Mhz
Security (Rolling Code)	Keeloq
IP Rating	44
Dimensions (mm)	H 200 / W 134 / D 68
Connections T1 to T18	Removable