

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

1. Pre-Installation and Component Check
2. Prepare the Opening
3. Prepare the Guide Rails
4. Fix Guide Rails & Axle Assembly
5. Tensioning the anti-fall back spring
6. Fit Emergency Overrides
7. Curtain Adjustment (reducing height/making repairs)
8. Install the Curtain in the Guides, Attach to Axle & Fit Stops
9. Connecting the remote Control
10. Curtain locking and setting motor limit switch
11. Commissioning
12. Repairing and dismantling instructions
13. Remote control trouble shooting guide

ROLLER GARAGE DOOR COMPONENTS

1. REMOTE CONTROL UNIT
 2. MOTOR (fitted into axle)
 3. 70mm OCTAGONAL AXLE
 4. 4 or 5 Pairs COMPACT LOCKING COLLARS (fitted on axle)
 5. AXLE CAP or Spring (fitted into axle)
 6. R/H END PLATE
 7. 4 or 5 No. COMPACT LOCKING SPRINGS AND ATTACHMENT BRACKETS * (and hinge pins)
 8. 8 or 10 No. RETENTION CLIPS *
 9. L/H END PLATE
 10. GUIDE RAILS (UPH 75) 75mm or (UPH250) 90mm
 11. BRUSH INSERT (fitted to guide)
 12. CURTAIN
 13. END LOCKS (fitted to curtain)
 14. BOTTOM SLAT (fitted to curtain)
 15. RUBBER SEAL (fitted to bottom slat)
 16. OVERRIDE EYE *
 17. 6 No. M8 x 21mm PENNY WASHERS *
 18. 2 No. DOOR STOPS *
 19. 2 No. M6 NUTS (inserted in bottom slat for securing stops) *
 20. 10 No. 4mm x 8mm RIVETS * (for securing endlocks)
 21. 3 No. CABLE CLIPS *
 22. CRANK HANDLE CLIP *
- * Supplied in accessory pack.

CONTROLS & ACCESSORIES

23. CRANK HANDLE
24. 1 No. HAND TRANSMITTER & COVER

Guides, axle assembly and the crank handle will be wrapped together in one bubble wrapped parcel and strapped together. The curtain is individually packed. A separate accessories box is packed with the installation and end user instructions, the attachment/locking arms, the accessory pack and a box containing the electrical items.

Recommended Fixings (not supplied):

- 12 x 1" Self Tapping Screws for Steel
- 12 x 2 1/2" Countersunk Screws for Masonry and Wood

JULY 2011

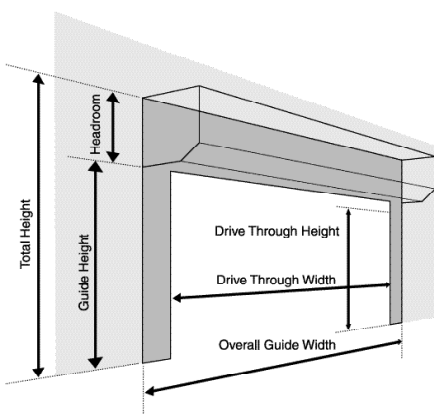
1. PRE-INSTALLATION AND COMPONENT CHECK:

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.



Widths

Manufacturing Width =
Over Guide Width

Drive Through Width = Over Guide Width
less 150mm for 75mm guides

Curtain Width = Over Guide Width less
100mm excluding endlocks

Axle Width = Over Guide Width less
79mm if spring on or 115mm without spring

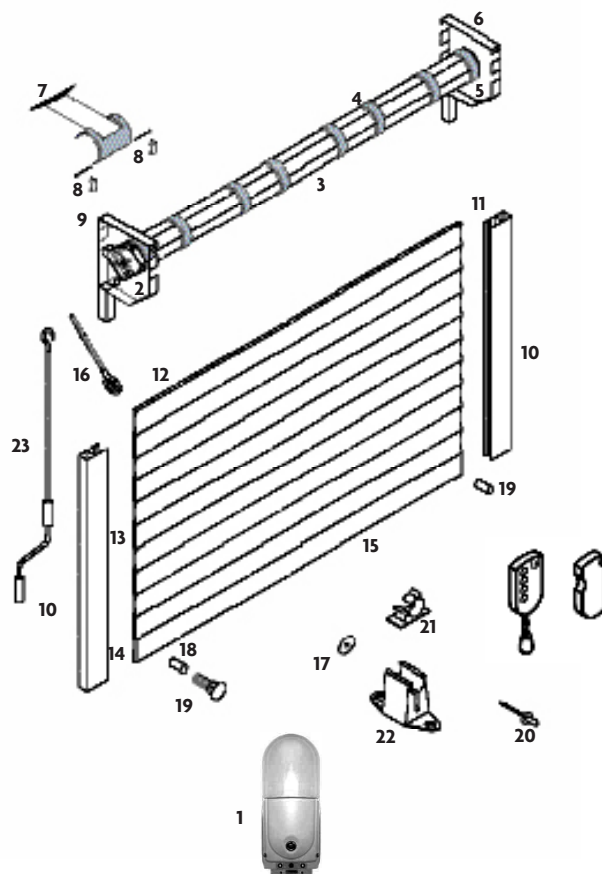
Heights

Manufacturing Height =
Guide Height

Total Height =
Guide Height + End Plate

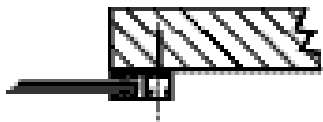
Headroom/End Plate up to 2.5m Guide
Height = 300mm

Drive Through Height = Guide Height
less 100mm

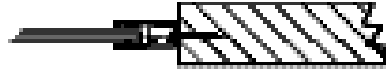


INSTALLATION OPTIONS

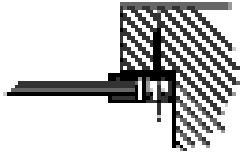
Internal Face Fit



Reveal Fit



Undersize Face Fit



Combination of Face and Reveal Fit



Fitted to existing or New Timber Frame

SET BACK FACE FIT

2. PREPARE THE OPENING:

Check:

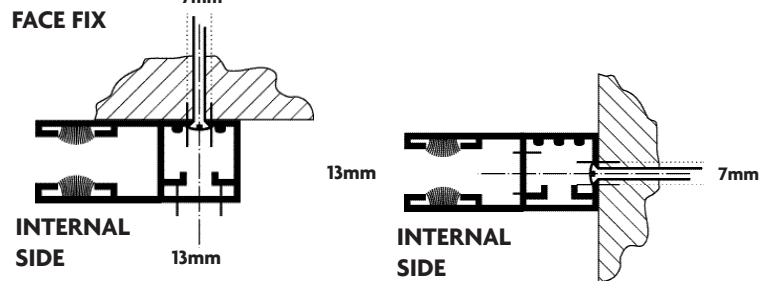
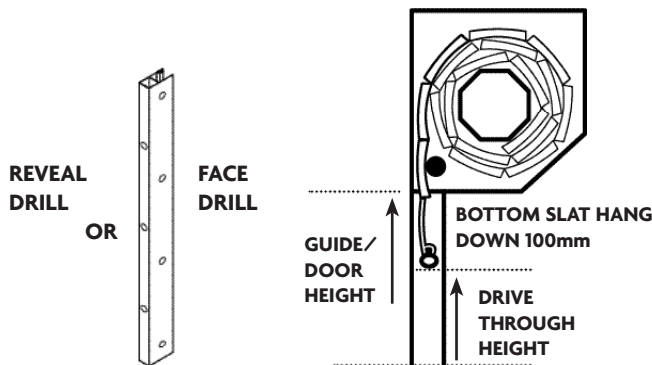
- structure is sound/even & can carry the weight of the door
- no obstacles in fitting footprint eg. no sharp objects, pipes, cables, bumps etc. sticking out from the pillars, lintel or header to twist the guides, distort the fascia or catch on the curtain
- floor is flat/level

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

3. PREPARE THE GUIDE RAILS:

If the guides require cutting down refer to the 'Widths and Heights' information in section 1. If face fixing where possible set the guide height at least 100mm above the structural opening height to maximise drive through height. **The top of the guide rails have been opened up to aid the movement of the door into and out of the guide rails. If you need to reduce the length of the guide rails you must cut from the bottom of the guide rails.**

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



N.B. Guides are handed. If cutting guides cut excess length from bottom of guide.

4. FIX GUIDE RAILS & AXLE ASSEMBLY

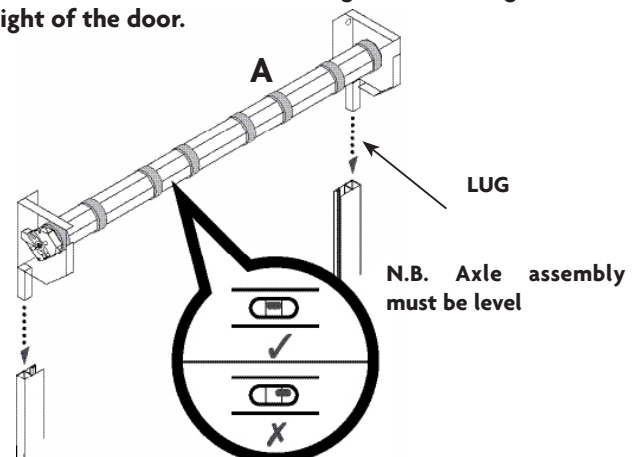


N.B. Before positioning check that there are no sharp objects or bumps sticking out from the pillars, lintel or header to twist the guides or that will catch the door during operation.

IF IN DOUBT PACK THE GUIDES AND END PLATES OUT BY AT LEAST 10mm.

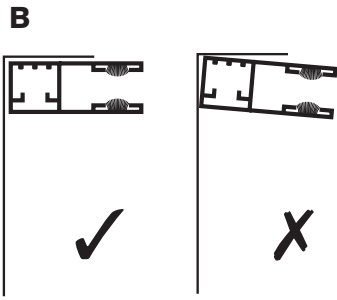
- slot end plate lugs into guides (see drawing A) remembering the guides are handed
- position guides and end plates against opening
- hold or prop securely the assembly in position
- drill fixing holes (min 4 in guides and 2 in each end plate)
- fix guides/end plates with minimum No. 12 x 2 1/2" countersunk screws (and plugs) to masonry/timber or 12 x 1" self tapping screws to steel.

N.B. Extreme care should be taken while manoeuvring the door into place to avoid the possibility of snapping the end plate lugs. It is imperative that fixings are put through the end plates into the wall as the aluminium lugs are not designed to carry the weight of the door.



Check:

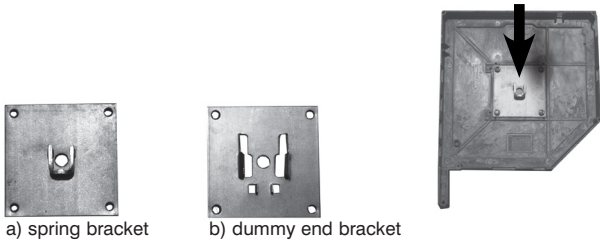
- i) back faces of guides and end plates are flush and untwisted (see drawing B)



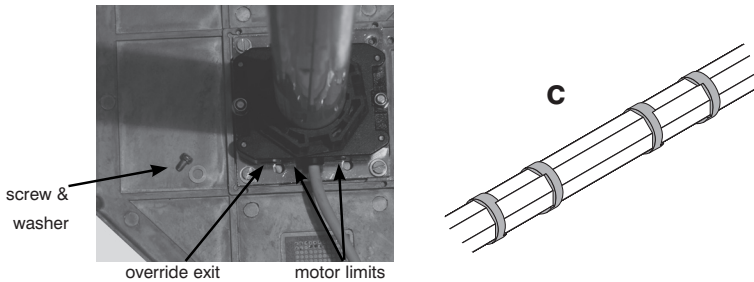
- ii) guides are vertical/parallel/same height

INSTALLATION OF THE AXLE ASSEMBLY

- i) Locate the dummy end or anti-fall back spring in to the bracket pre-fitted to the end plate.

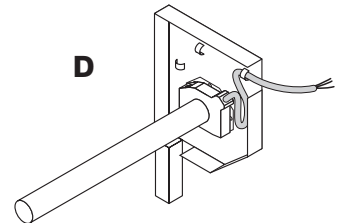


- ii) Fasten the motor end of the axle, using the bracket supplied, to the other end plate using the screws provided and the prepared tapped holes in the end plate.



- iii) Ensure that the motor limits are facing down and that the override hole is towards the chamfered front end of the end plate.
- iv) Ensure that the collars are the correct way around (see drawing C)
- v) SECURE MOTOR POWER LEAD WITH CABLE CLIPS SO THAT IT IS TIGHT AGAINST THE END PLATE – see drawing D.

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 a drip loop to prevent water entering the motor.

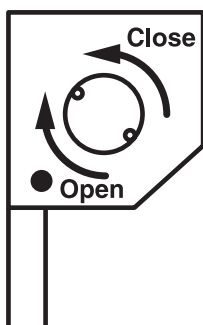


5. TENSIONING THE ANTI-FALL BACK SPRING:

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.
- 2) Using either the test lead or remote control rotate the axle in the close direction (see drawing G and label on axle).

Drawing G

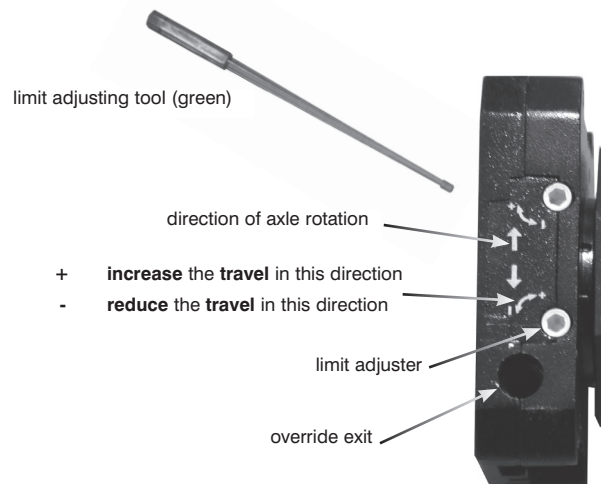


- 3) The number of turns required will be clearly stated on a label.
- 4) When complete the axle will be fully tensioned and will be

ready for installation and attachment of the curtain in the fully closed position.

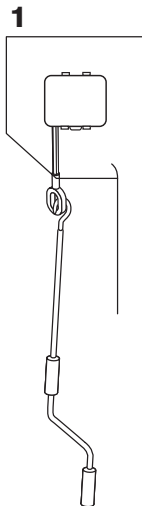
- 5) If the axle stops before it has completed the required number of turns the lower limit may need adjusting to allow the correct number of turns to be applied.

UP arrow is door closing, DOWN arrow is door opening.



6. FITTING EMERGENCY OVERRIDES:

Left Hand viewed
from centre of door

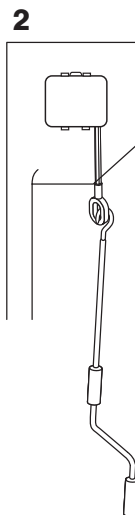


The motor limits are accessible from two sides. This enables the motor to always be fitted to the end plate so that limits are facing down and so that the override is towards the front of the end plate.

On a left hand door the motor cable will exit the motor vertically down.

On a right hand door the motor cable will exit the motor vertically up. You must ensure that you include a drip loop to prevent water from entering the motor.

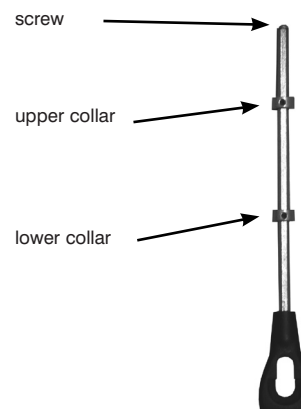
This will ensure that you do not have to cut down the roller plate to enable the override eye to be fitted.



Right Hand viewed
from centre of door

POSSIBLE OVERRIDE EXIT OPTIONS

- i) drill hole for override eye through end plate flange
- ii) remove the screw and the upper collar
- iii) insert override eye in hole in motor adjacent to limit adjusters
- iv) locate and tighten the upper and lower collars around the motor
- v) insert and tighten the holding screw and washer from above
- vi) hook crank handle in eye
- vii) secure clear of shutter with crank handle clip

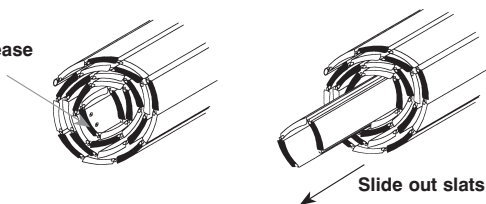


7. CURTAIN ADJUSTMENT (REDUCING HEIGHT/MAKING REPAIRS)

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). 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.

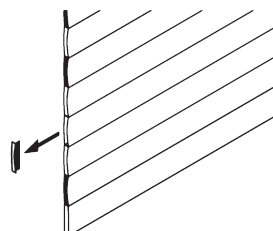
Remove slat by carefully snipping ear off end lock before sliding out slat. Preferably take slats off from the top of the curtain to save having to remove and refit bottom slat. Either roll curtain out on a flat and protected surface such as the bubble wrap and/or cardboard packaging in which the curtain is delivered, or do as below.

Snip ear off
endlock to release
slats

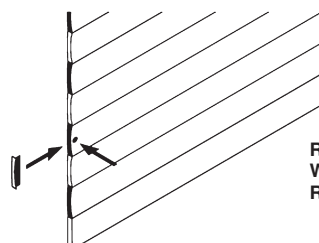


Number of slats including the bottom slat	Guide rail height
17	1426
18	1504
19	1582
20	1661
21	1739
22	1817
23	1895
24	1974
25	2052
26	2130
27	2208
28	2286
29	2365
30	2443
31	2521

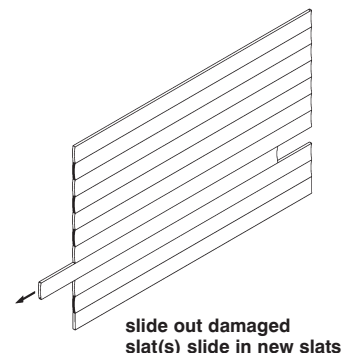
REPAIR PROCEDURE



remove end lock



RE-SECURE ENDLOCKS
WITH 2 No. 4mm x 8mm
RIVETS

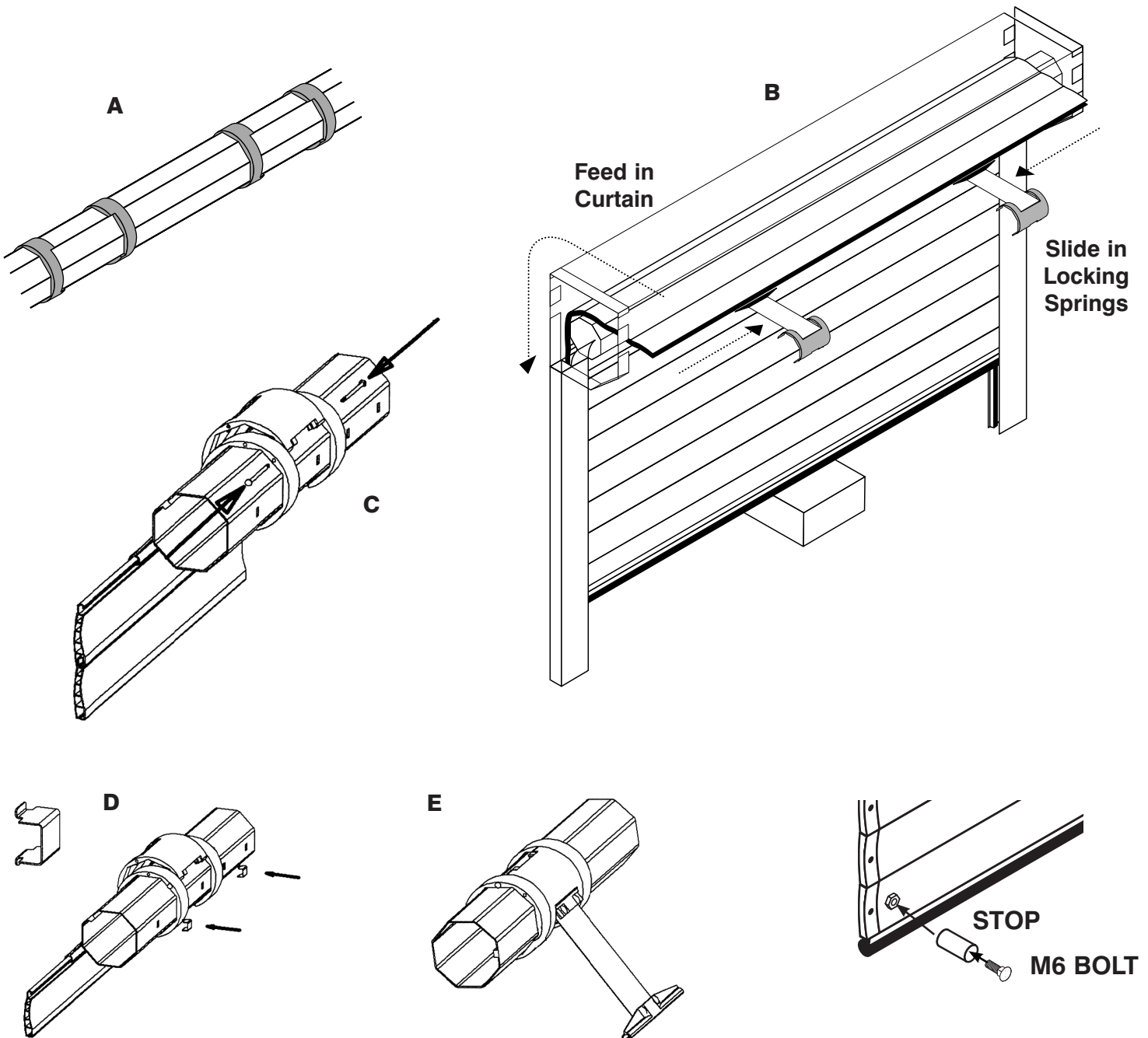


slide out damaged
slat(s) slide in new slats

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

- i) Check that there are at least 4 pairs of compact locking collars on the axle and that each pair of collars has the cut-out towards the centre and line up with other pairs of collars along the axle (see *drawing A*). One pair must be approx. 150mm in from each end of the axle and the remaining pairs evenly spaced.
- ii) lift coiled curtain up level with axle and feed bottom of curtain into guide (see *drawing B*)
- iii) slowly unroll curtain and gently lower onto a tool box or block (see *drawing B*)
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 springs with semi-circular attachment bracket onto the top slat. Rotate the axle with the manual override until the attachment holes in the collars are accessible. Use the special attachment pins as supplied to attach the semi-circular attachment bracket between the collars.
N.B. You must use the second hole. Ensure that the pin is fully engaged in the attachment bracket (it should click into place) to prevent product failure (see *drawing C*).
- v) Fit small retention clips into the cut-outs in the axle to stop the locking assemblies moving along the axle. The clips do not have to be tight up against the collar. (see *drawing D*)
- vi) Use override to raise door sufficiently to remove toolbox/block. Ensure that the semi-circular curtain attachment bracket coils up flush with the collars (see *drawing E*). Leave door in partially open position.
- vii) Secure stops to captive nuts in the bottom slat with the bolts provided.

It is essential to fit the stops for health and safety reasons



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.

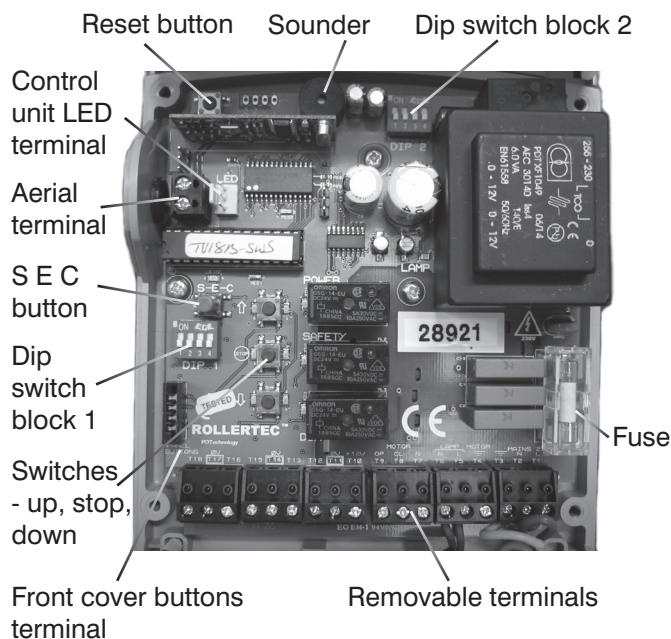
REMOTE CONTROL

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 internally, as close as possible to the door, with the light on top, and 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.



TERMINALS	REMOVABLE TERMINALS	DESCRIPTION
T1		Mains live (brown/red)
T2		Mains neutral (blue/black)
T3		Mains earth (yellow & green)
T4		Motor earth (yellow & green)
T5		Lamp live
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

The Roller 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 the guide height has been adjusted on site, check that the top of the curtain is neither below the top of the guide nor more than one slat above (see drawing A & B below). Both limits require setting along with a final adjustment of the locking springs.

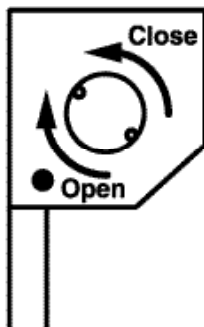
N.B: Incorrect setting of the limits risks damage to the motor, curtain and attachment devices.

WHICH LIMIT IS UP AND WHICH LIMIT IS DOWN?

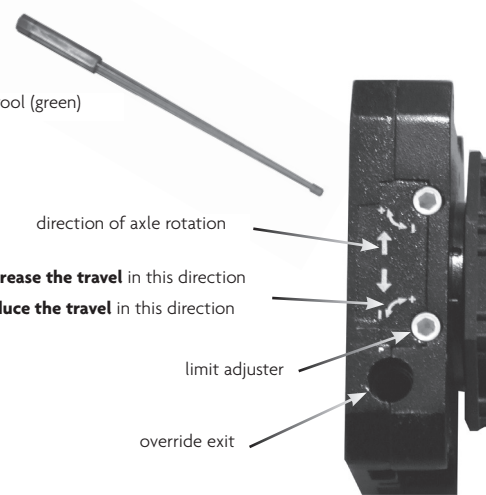
The up and down limit is determined using the direction arrows next to the limit adjusters and the direction of axle rotation to either close or open the door.

CLOSED / DOWN LIMIT SETTING AND LOCKING SPRING ADJUSTMENT

- i) Carefully close the door using either a motor test lead or the remote control unit so that the curtain is fully down and the top slat is pushed forward. The metal attachment springs should be taut but not bent or distorted (see drawings A, B & C).
- ii) Turn the down limit in the '+' direction to **increase** the **travel** of the door.
Turn the down limit in the '-' direction to **reduce** the **travel** of the door.

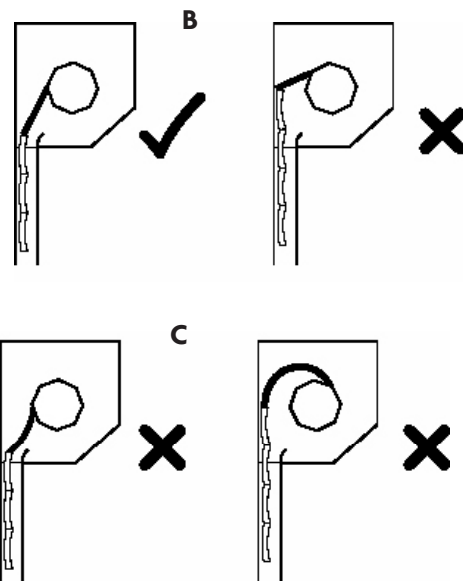
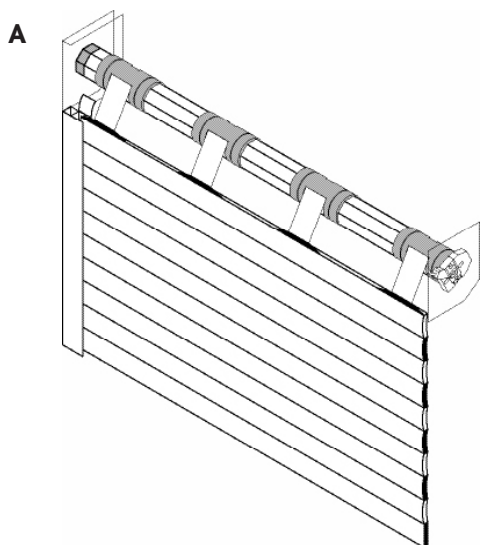


- + **increase the travel** in this direction
- **reduce the travel** in this direction

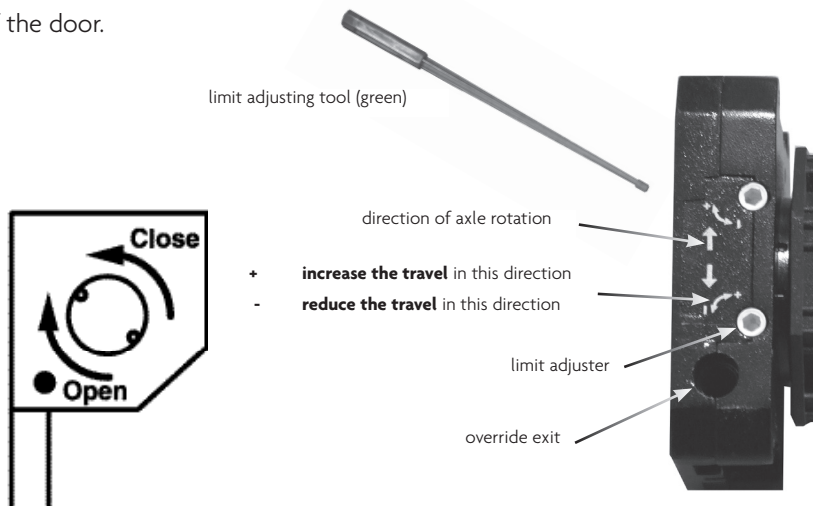


OPEN / UP LIMIT SETTING

- i) Carefully open the door using either a motor test lead or the remote control unit so that the curtain is fully open.
- ii) Turn the up limit in the '+' direction to **increase** the **travel** of the door.



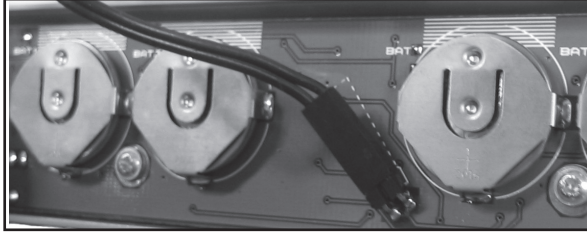
Turn the up limit in the '-' direction to **reduce** the **travel** of the door.



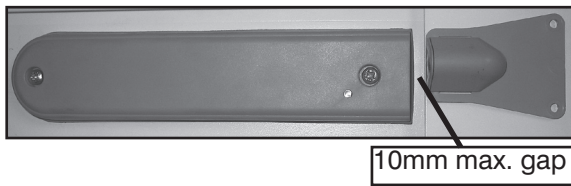
ATTACHING THE BOTTOM SLAT TRANSMITTER

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



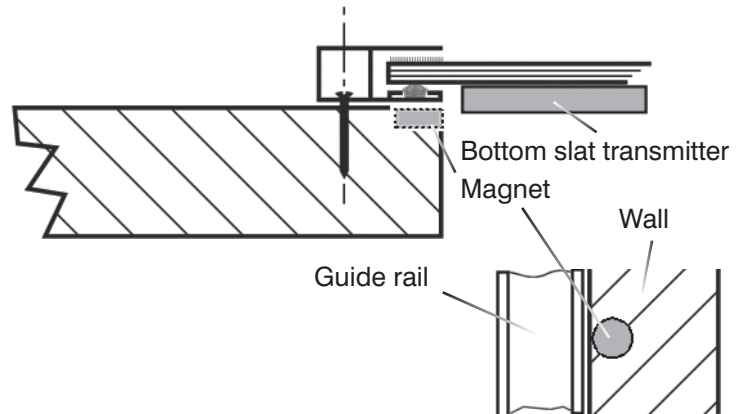
use a power operated screwdriver as it could distort and damage the printed circuit board. You must ensure that the gap between the bottom slat transmitter and both magnet housings is no more than 10mm.



FITTING THE MAGNET HOUSINGS - 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.

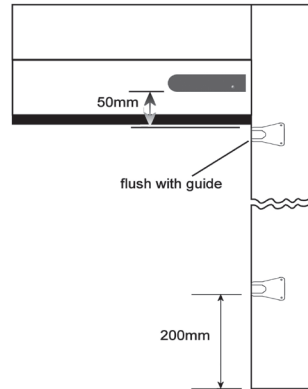


FITTING THE MAGNET HOUSINGS - INTERNALLY FITTED DOORS

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.

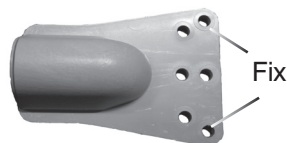
If templates (orange card) have been supplied with the remote control we recommend that they are used to ensure that the magnets are positioned correctly.



2. 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).

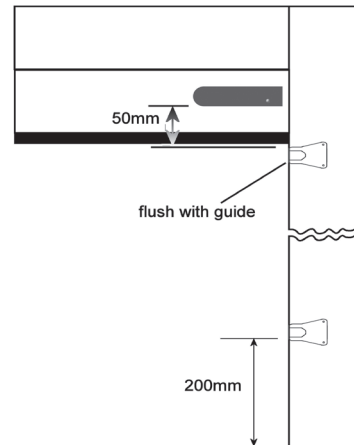
3. Attach the bottom magnet 200mm from the floor again ensuring the flat face is in line with the guide and facing the curtain.

4. 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.



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

1. 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).
2. Position the bottom magnet 200mm from the floor again ensuring the flat face is in line with the guide and facing the



curtain.

3. 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:

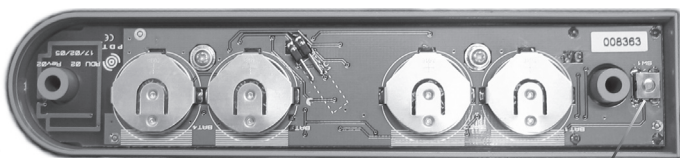
- Aerials fitted and not touching
- Magnets in correct positions
- Bottom slat transmitter passes within 10mm of magnets
- No interfering signals being emitted by local devices (PIR detectors, weather stations, TV signal boosters)
- Suitably sized screwdriver placed on the floor for stages 3 and 5 (see 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.
2. Press the button four times and on the fourth time the light will



Button

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 Somfy / 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.

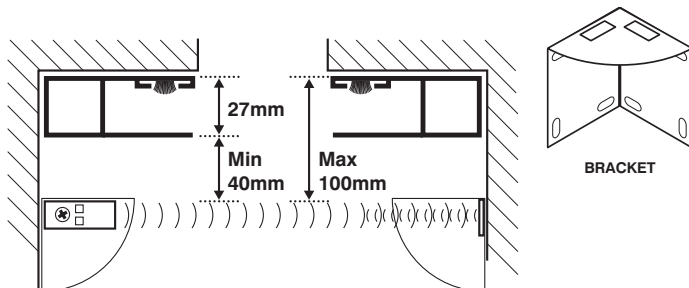
- Press and hold down the Grey button on the existing transmitter.
The lid mounted signal LED will flash YELLOW slowly, keep the button held down until it flashes YELLOW quickly.
- Release the Grey Button.
The lid mounted signal LED will continue to flash YELLOW quickly.
- Press the stop button on the 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.

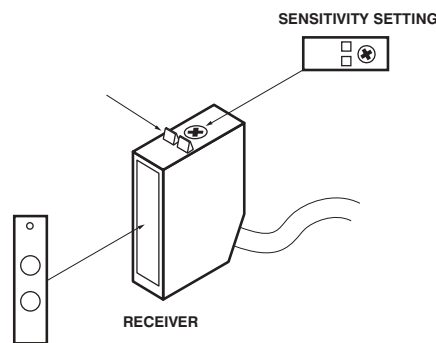
OPTIONAL PHOTO CELL

Mounting & Adjusting Photo-electric Cell

- bolt photocell and reflector to plastic brackets and fix photocell internally at car bumper height (500-700mm above floor)
- switch on the power (green LED will illuminate)



- 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

- 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 SECEUROSART 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)

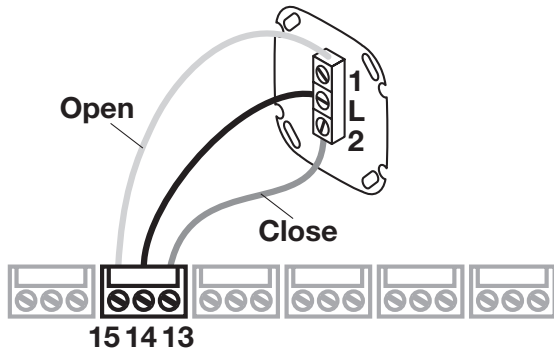
A long flash (one second) of any of the above colours indicates a zero for that count.

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.

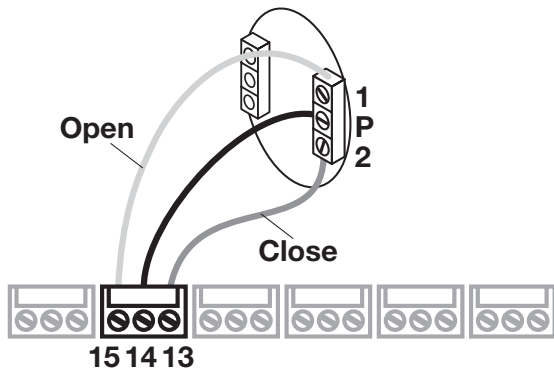
To stop the door when it is closing press the open button once.



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

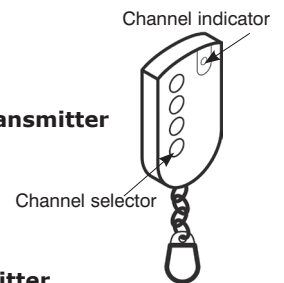
Press and hold the red button for 15 seconds until the indicator goes green then release

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
GREEN solid	open limit activated
GREEN flashing	door opening
RED solid	close limit activated
RED flashing	door closing
YELLOW 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
RED 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"> 1. Remove any obstacles which may be in the doorway (once you have removed the obstacle the signal light will change to solid yellow). 2. Ensure the photocell and reflector are clean. 3. Re-align the photo cell and reflector. 4. Turn dip switch 1 off. 5. Replace the link between terminals 17 and 18.
RED flash then two YELLOW flashes	A motor stall has been detected	<ol style="list-style-type: none"> 1. Disengage manual locking device 2. Remove any objects which may have jammed in the guide rails, curtain or roll. 3. Ensure nobody is attempting to ride up on the curtain. 4. Ensure a non-approved item has not been attached to the curtain. 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.
RED flash then three YELLOW flashes	The thermal trip has activated on the motor or the motor is not connected.	<ol style="list-style-type: none"> 1. Allow the motor to cool for approximately 30minutes before attempting to operate the door again. 2. The motor may not be connected to the remote control unit. Check wiring and re-set the motor limits.
RED flash then four YELLOW 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"> 1. Re-set the motor limits 2. If the motor limits can not be set the motor may be faulty.
A rapid RED, GREEN then YELLOW 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"> 1. Load the transmitter on to the system as per the "Adding transmitters" section.
Long YELLOW then two shorter RED flashes	PEC has failed Self Check test.	<ol style="list-style-type: none"> 1. Check the PEC wiring. 2. Replace faulty PEC
Long RED then short RED		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"> 1. Transmitter LED does not illuminate when flat and if batteries low it flashes when button pressed. Replace batteries. 2. Ensure aerals are not touching, replace aerals if they are missing. 3. The door can be closed by pressing and holding a close button. Release the button once the door is fully down and locked.
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.
	Aerals are touching or have been removed.	Ensure aerals 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 YELLOW then quick flashing YELLOW	control unit in programming mode

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

11. COMMISSIONING

FINAL CHECKS

- i) remove any protective plastic coverings
- ii) wipe curtain & guides with damp cloth
- iii) touch-up any small scratches
- iv) check all electrical & operating equipment is installed and functioning correctly (especially the safety edge) and complete CE marking label and paperwork
- v) check direction handle needs winding to open door and fit appropriate label supplied to crank handle.

N.B. Check front of curtain not rubbing on the lintel

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.

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.

12. MAINTENANCE, REPAIRING AND DISMANTLING INSTRUCTIONS

Always isolate the mains power before attempting any maintenance, repairs or dismantling.

MAINTENANCE CHECK LIST

- i) Curtain free running and clean
- ii) No debris in the guide rails
- iii) Guide rails and end plates are securely fastened to the wall
- iv) All axle collars are in the correct original position
- v) Check action of locking pins to ensure they are locking correctly
- vi) Motor cable is correctly retained has not been damaged or in danger of being damaged
- vii) 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.

CHANGING MOTOR OR REVERSING MOTOR HAND

If the door is already fitted you will need to disconnect the motor leads from the control unit and the curtain from the axle. If the door is reveal fitted or tight up against a sidewall the whole installation may need to be dismantled.

CHANGING MOTOR

- i) Remove the screws securing the motor to the end plate.
- ii) Lift out axle
- iii) Replace the motor
- vii) Replace axle assembly and attach the motor to the end plate.

REVERSING MOTOR HAND

- i) Remove the screws securing the motor to the end plate.
- ii) Lift out axle
- iii) Remove the dummy end / spring bracket from the end plate
- iv) Prepare counter sunk holes then attach the dummy end / spring bracket to the other end plate
- v) Turn axle around
- vi) Remove all collars then re slide them back on to the axle so that they are the correct way round.
- vii) Replace axle assembly and attach the motor to the end plate.

DISMANTLING PROCEDURE

- i) Lower the curtain to the fully closed position
- ii) Disconnect the curtain from the axle
- iii) 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
- iv) Remove the curtain by lifting it up and over the axle
- v) 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.
- vi) Isolate the mains power then disconnect the motor leads from the control unit.
- vii) Remove the screws securing the motor to the end plate.
- viii) Lift the axle assembly out.
- ix) Unfasten and remove the guide rails and end plates.