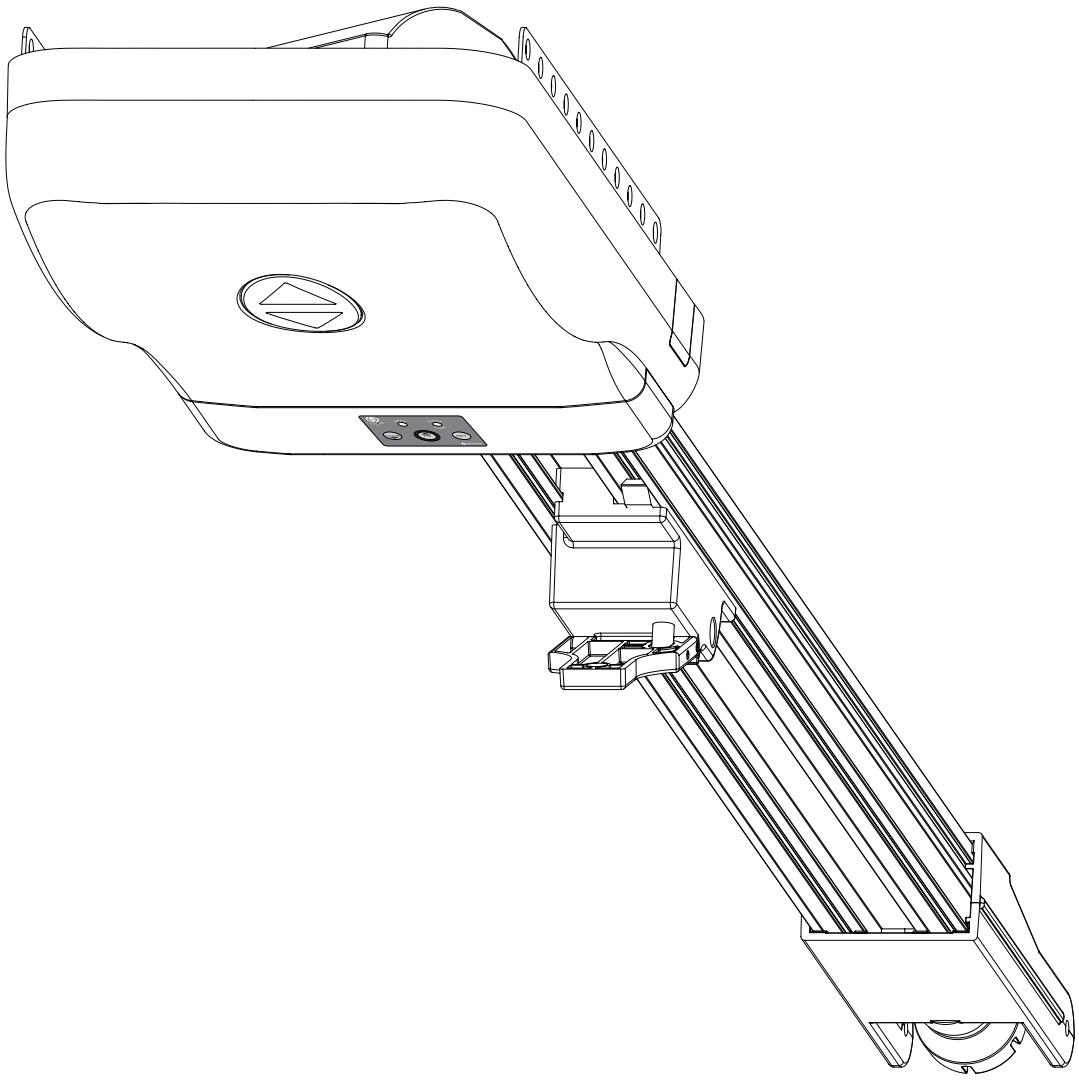
Smart Lifter ECO

Sectional Door Opener



WARNING: IT IS VITAL FOR THE SAFETY OF ALL PERSONS INSTALLING AND USING THIS OPENER TO FOLLOW THE INSTALLATION INSTRUCTIONS AND SAFETY WARNINGS. FAILURE TO COMPLY MAY RESULT IN SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE AND FAILURE OF THE OPENER SYSTEM.

INSTALLATION MANUAL

Contents

No	Package	Part			
1	Motor	No	Description	Qty	Remark
		1	Motor	1 Set	
		2	Transmitter	2 Pcs	4 Button
		3	Remote Wall Switch	1 Pc	2 Button
		4	Remote Wall Switch Bracket	1 Pc	
		5	Disengagement Cord	1 Pc	
		6	Bracket – Wall	1 Pc	For Track
		7	Bracket – Door	1 Pc	For Hockey Stick
		8	U-Bracket	2 Pcs	For Track/Motor Assy
		9	Hockey Stick	2 Pcs	
		10	Strapping	2 Pcs	For Rail
		11	Bolts/Nuts	1 Set	
		12	Installation Manual	1 Pc	
		13	Owners Manual	1 Pc	
		14	Quick Start Guide	1 Pc	
		15	Risk Of Entrapment Label	1 Pc	
2	Rail	1	Extrusion With Chain	1 Set	

Important Safety Warnings

The Smart Lifter ECO garage door opener described in this manual is designed for the automation of residential sectional overhead and tilt doors to a maximum size of 18m^2 that are properly balanced and operating smoothly. Any other use is considered improper and will void the warranty.

WARNING:
You are carrying out operations on machine systems classified in the automatic gates and doors category and as such failure to comply with the relevant safety rules may result in serious personal injury and/or property damage. Reference to the safety rules can be found on pages 2-4 of the owners manual and should be read and understood prior to installation.

Only qualified personnel should install and service the equipment. It is the responsibility of the installer to adhere to all relevant safety standards.

The Smart Lifter ECO garage door opener is designed and manufactured to meet all current Australian standards and it is essential that the installer also installs the equipment in accordance with all local and Australian regulations.

Unqualified personnel or those who do not know the occupational health and safety standards applicable to the automatic gates and doors category must under no circumstances carry out installations or implement systems.

Persons who install or service the equipment without observing all the applicable safety standards will be held responsible for any damage, injury, cost, expense or claim whatsoever suffered by any person as a result whether directly or indirectly from failure to install the system correctly and in accordance with the relevant safety standards and installation manual.

For a more detailed list of the Safety Warnings and Safety Issues associated with the installation and use of a Smart Lifter ECO garage door opener refer to the safety warnings in the OWNERS MANUAL.

Description

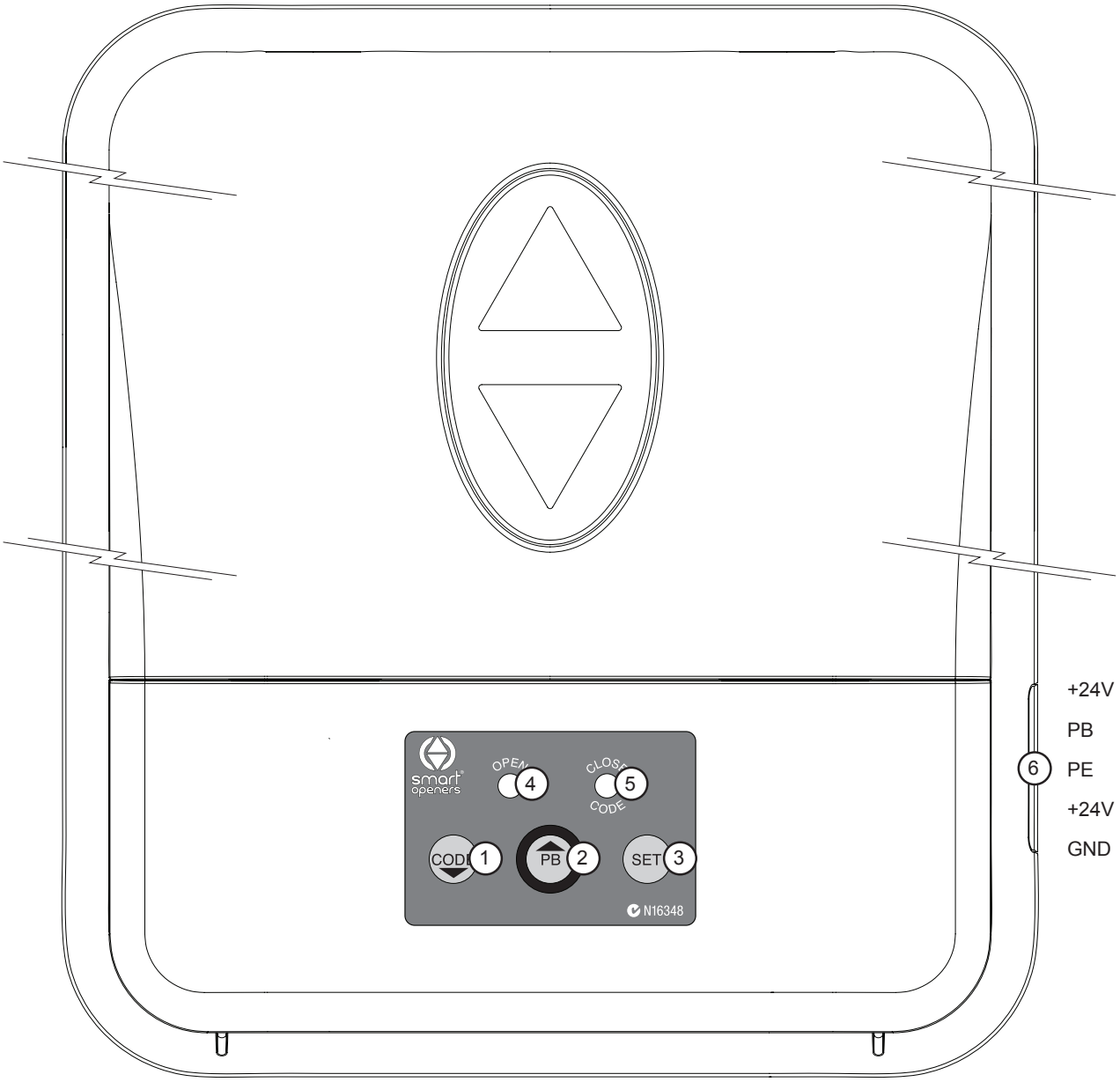
The Smart Lifter ECO garage door opener requires a 240VAC 50Hz power input and has a 24V DC motor and can provide remote control and automatic modes for operation. When the door is in operation, movement can be interrupted by activation of the safety inputs: transmitter, wall button (if fitted) and photo beams (if fitted).

Limits set open and close positions and braking during the end of the travel cycle reducing speed and noise.

A 433.22MHz radio receiver is built into the circuit board and the rolling code is memorised via the self-learning technique. As an alternative to the built-in receiver the opener will accept any of the range of stand alone radio receivers. The opener has been designed to provide maximum reliability, safety and flexibility of use.

IMPORTANT:
Before commencing installation please read all of the instructions carefully and make sure you are familiar with the safety warnings included in this manual and in the OWNERS MANUAL.

Operating Controls



1 **CODE Button** - used to store transmitter code.

2 **PB (Push Button)** - used to open/stop/close the door.

3 **SET Button** - used to set limits and save settings.

4 **Yellow LED** - Flashes during open cycle and indicates photo beam mode during set up.

5 **Red LED** - Flashes during close cycle and indicates force margin sensitivity during set up.

6 **Input Terminal Block** - used for connecting photo electric safety beam or external push button trigger.

Before Installation

1 Read the instructions carefully.

2 Make sure the door structure is solid and suitable to be motor driven.

3 Make sure that when the door is moving there are no friction points.

4 The door must be properly balanced and must be easily lowered and raised by hand.

5 A 240V, adequately protected 3-pin power outlet must be near where the Smart Lifter ECO opener is going to be installed.

Remember there are specific standards that have to be strictly followed regarding the safety of electrical installations for automatic gates and doors.

As well as the legal requirements and standards that must be adhered to, please take note of the following points to ensure maximum safety and reliability of your installation.

6 Prior to installing check the surrounding environment. Carefully evaluate any hazards there could be from physical damage (transiting vehicles, parts of trees falling etc.), possible contact with foreign bodies (insects, leaves, etc.), flooding hazards or any others exceptional events.

7 Check that the main voltage is the same as that given on the rating plate and in this manual.

8 Check there is suitable electrical protection against short circuits/power spikes and proper earthing on the mains supply.

Remember the unit has mains voltage running through it (electrocution hazard, fire hazard).

9 Take care with the opener; parts may be subject to damage if abused.

10 Make sure you have all the necessary installation materials and that they are suitable for this kind of use.

11 Read all the instructions thoroughly and make sure they are understood before attempting to install the Smart Lifter ECO.

12 Before starting the installation, carefully analyse all the risks relating to automating the door. Verify that the door to be automated is in a sound condition and that the mechanisms are in good working order; observe the safety margins and minimum clearances.

13 Evaluate with particular care the safety devices to be installed and where to install them; always install an emergency stop device for interruption of power to the opener if required.

14 Once the risks have been analysed, install the Smart Lifter ECO opener and relative safety devices, emergency stop and/or photo electric cells.

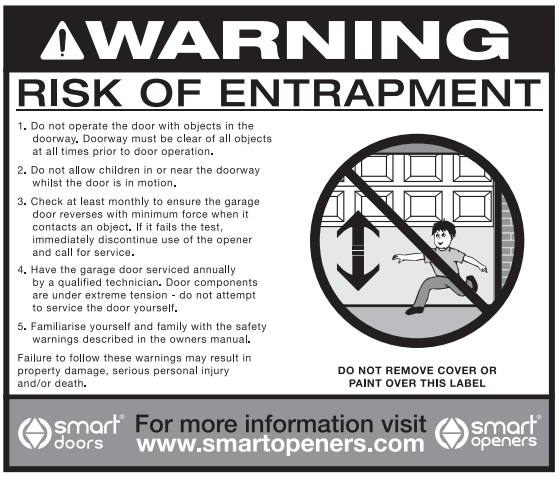
Important: For additional safety Smart Openers Pty Ltd strongly recommends the fitting of photo electric safety beams on all installations.

15 When installing the Smart Lifter ECO opener, strictly follow all the instructions given in the instruction manual. If some points or procedures in this manual are not very clear do not install the unit until all doubts have been cleared up with our technical department.

Risk Of Entrapment Label

1 The Risk of Entrapment Label must be attached to the door in a suitable, prominent location so as to inform all users of the dangers involved in owning and operating an automated garage door. We provide this label for everyone's safety and it only takes seconds to install. So as a responsible garage door installer please make sure this is completed before leaving the job.
THE FITTING OF THIS LABEL IS MANDATORY.

2 Once set up is complete and the safety obstruction margin test is carried out (see page 10), please ensure that this warning and all safety warnings described in the owners manual are explained to the user to ensure that they are clearly understood and followed.



Headroom Requirement

The Lifter ECO requires a minimum headroom of just 52mm (42mm for the rail plus an extra 10mm clearance) between the top of the door's highest point of travel and the ceiling.

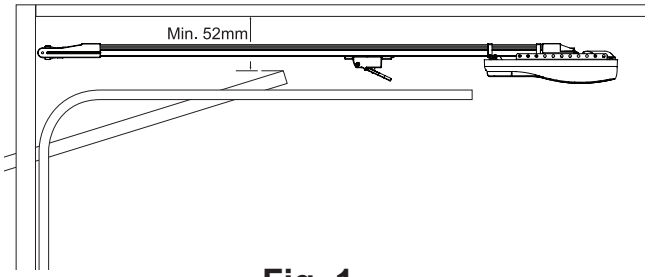


Fig. 1

Track Assembly

The track is preassembled in the factory with the chain lubricated and pretensioned. Before mounting the opener confirm that the chain is correctly tensioned.

1 Insert shuttle into slot in track ensuring that shuttle is facing the correct way - the red disengagement lever should point towards the power head not to the door (Fig. 2).

2 Insert anchor bolts for mounting straps into both sides of track and slide forward at least 300mm (Fig. 3).

Note: Anchor bolts must be inserted before the track is fitted to the power head.

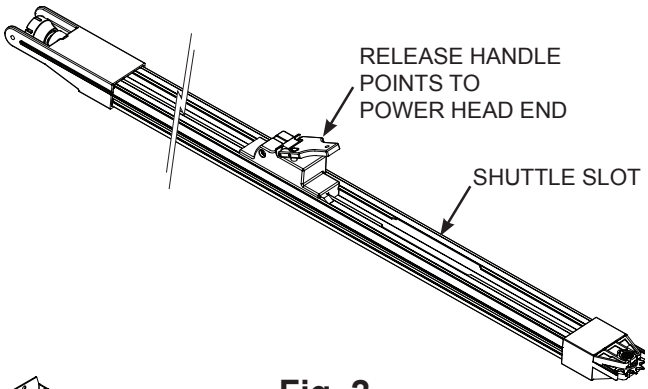


Fig. 2

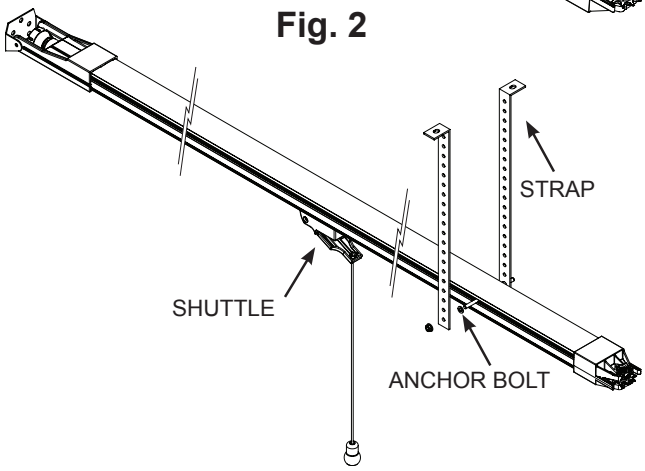


Fig. 3

Installation

1 Locate the centre of the door and mark position.

2 Move the door by hand and note the highest point of travel. Make a mark 30mm higher than this position on the lintel Fig. 4.

3 Fix wall bracket in place with appropriate fasteners - use loxins or dynabolts for brick work Fig. 6.

4 Connect track to wall bracket with bolt and split pin.

5 Raise track into position and rest on ladder or similar support.

6 Fix track to ceiling using strap or other appropriate material ensuring that the track is level.

7 Cut off any excess strap.

Note: Make sure that track is supported in the centre to prevent flexing which may cause phantom reversing.

WARNING: Make sure the opener is affixed to noggins in ceiling and not just plasterboard. Failure to have a safe and secure fixing will lead to opener falling causing serious personal injury and/or property damage.

8 Position power head onto track ensuring that the chain sprocket meshes with the spline shaft.

9 Place U-brackets onto studs and secure ni-lock nuts (do not over tighten).

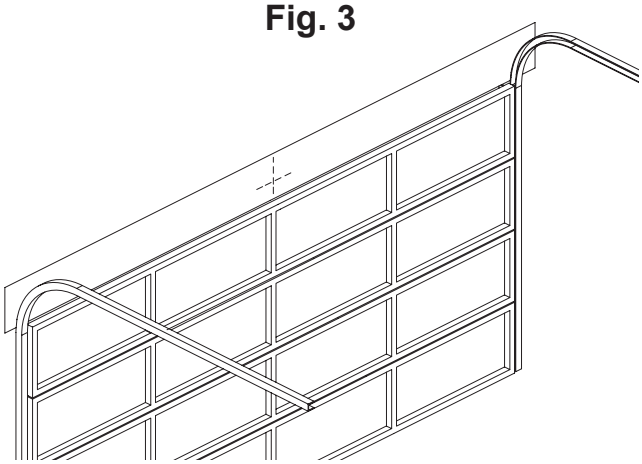


Fig. 4

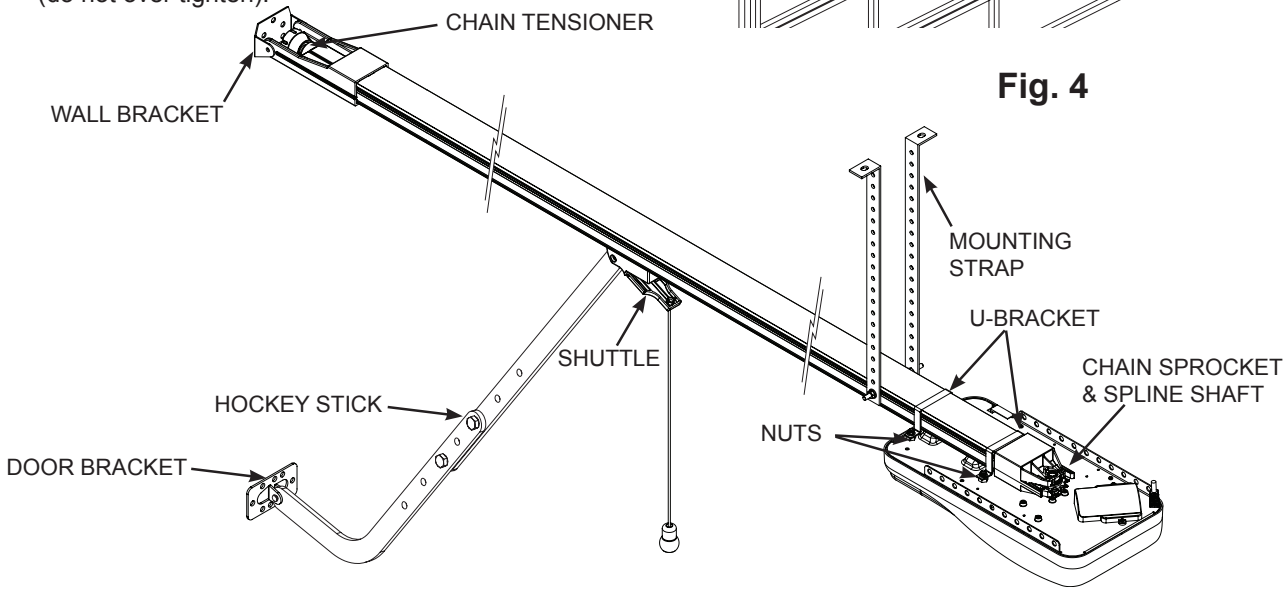


Fig. 5

Hockey Stick & Door Bracket

1 Determine the door type - see below.

2 Attach door bracket to top rail of door using Tek screw or appropriate fasteners Fig 6.

3 Assemble hockey stick as per Fig. 6 using bolts and nuts provided and connect to shuttle. Connect other end to door bracket as required for particular door type.

Sectional Door

a) Fit the hockey stick with curved end at door bracket.

b) Ensure hockey stick is at 10º from perpendicular.

c) Position that door bracket approximately 1/3 distance (160-200mm) from the top of the door panel.

One-Piece Track Tilt Door

a) Fit the hockey stick with curved end at shuttle.

b) Ensure hockey stick is as long as possible.

c) Position that door bracket as close as possible to the top of the door frame.

One-Piece Tilt Jamb Type Door

a) Fit the hockey stick with curved end at shuttle.

b) Ensure hockey stick is as long as possible. If practical extend the hockey stick by as much as 1000mm to accommodate the door's wave action.

c) Position that door bracket as close as possible to the top of the door frame.

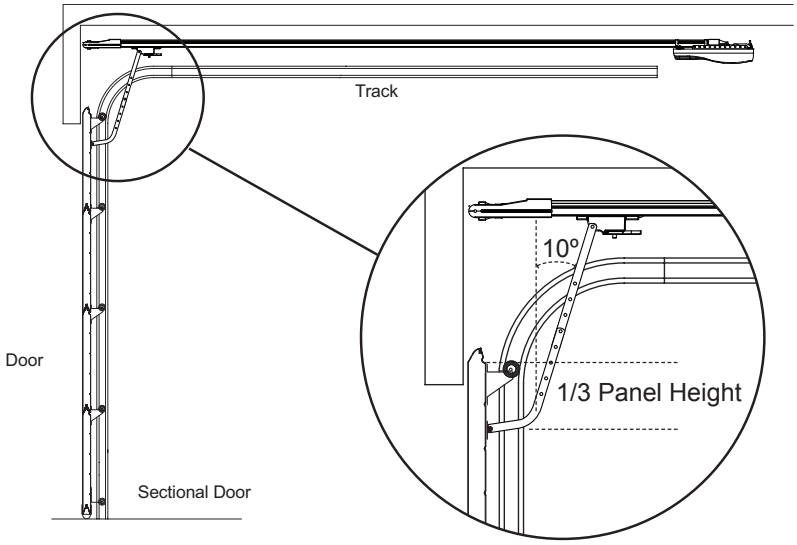


Fig. 6a

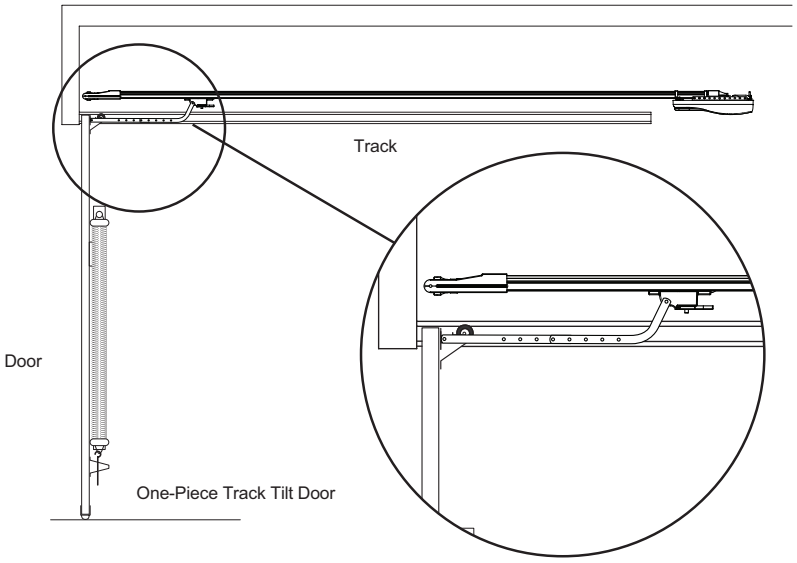


Fig. 6b

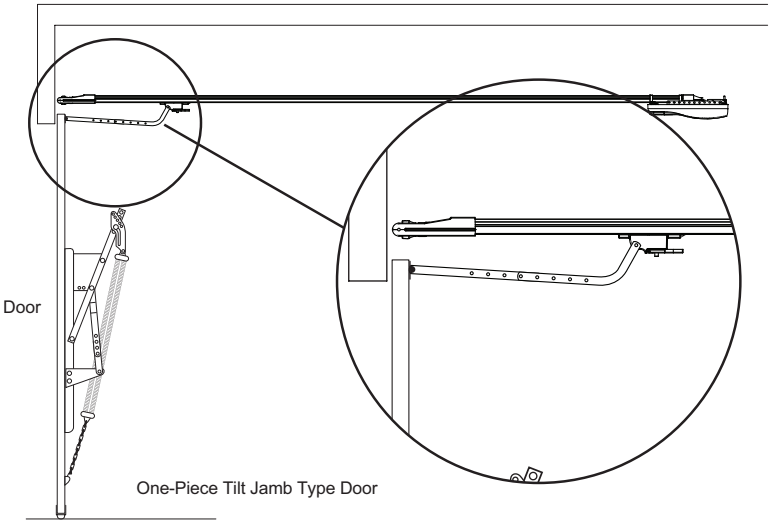


Fig. 6c

Shuttle Stop

A shuttle stop must be fitted to prevent the door contacting the opener when in manual mode. Failure to fit the shuttle stop will void the warranty.

1 Locate shuttle stop just in front of power head and secure the bolts as per Fig. 7

IMPORTANT: If the only entry to the garage is via the garage door, Smart Openers strongly recommend the fitting of an external key release device.

Powering Up

1 Inspect the power cable for damage. Ensure that the cable will not interfere with the moving door or the opener.

2 Connect to power. The opener will perform a software check and LEDs will flash to indicate ready for set up.

Button Function

CODE Button	Learn transmitter code.
PB Button	Open/Stop/Close and used during limits set up.
SET Button	Limits set up and save settings.

Coding Transmitters

Note: The button you choose (1-4) for the **first** TX you code will be the same button for all subsequent transmitters. Up to twenty TXs can be stored into memory. If more than twenty are stored the system will disregard any attempts to code new TXs.

1 Press the **CODE** button for 2 seconds the courtesy LEDs will flash to indicate Code Learn (Fig. 9).

2 Choose which transmitter button will operate the door and press that button twice.

3 Test the transmitter - the opener will beep to confirm.

Repeat the above steps to code additional transmitters.

REMOTE TRANSMITTER CODING

It is possible to code new transmitters via an already coded remote without being in contact with the control panel. This is useful if more than one device is operated by the transmitter. This also takes the guess work out of button allocation as this is done automatically.

1 Press **TX BUTTON 3 + 4** together for 2 seconds. The opener will beep and light will flash once to signal Code Learn Mode.

2 Press any button on new transmitter twice (Fig. 10). The opener will beep and light will flash twice to confirm code learned. Test new transmitter.

DELETING ALL TRANSMITTERS

1 Press and hold the **CODE** button for 10 seconds.

2 The courtesy LEDs will flash 3 times to confirm memory cleared.

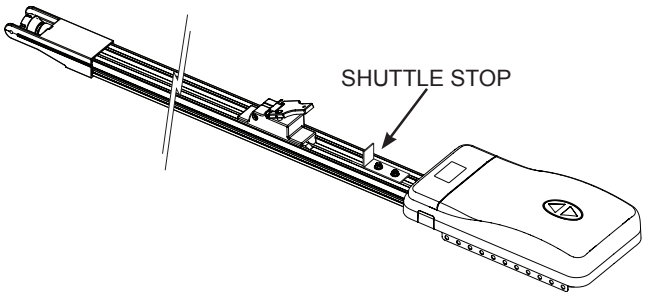


Fig. 7

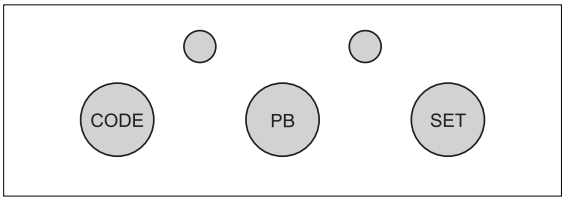


Fig. 8

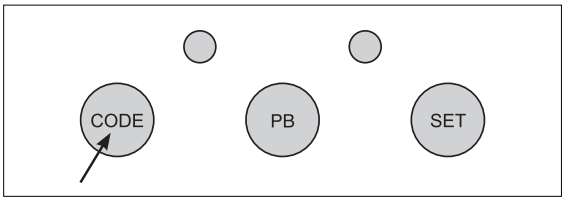


Fig. 9

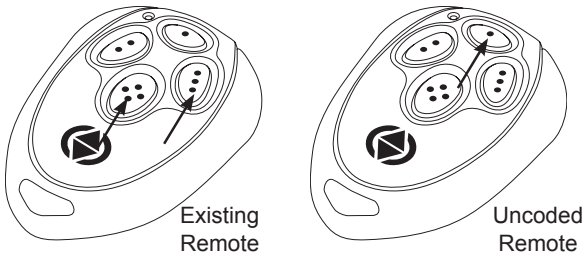


Fig. 10

Transmitter Button Allocation

The button chosen on the first transmitter that was coded into memory determines which button becomes the default for **all** subsequent transmitters to be coded into this opener. This is useful for sites where there are multiple openers so that Hands Free Learning via a pre-coded remote will automatically allocate all buttons to their function in one action.

Note: You cannot change the button allocation without clearing the receiver memory.

Setting Door Type

The Smart Lifter ECO has a specific program for one-piece (J-Type) tilt doors. In this mode the door moves slower to accommodate the shorter range of travel and wave action on a tilt door. Default = Sectional Mode

1 Press and hold **CODE** + **SET** for 3 secs. The yellow **open** LED will light up indicating Sectional Mode. (Fig. 11).

2 Press **PB** to change to Tilt Mode. The red **close** LED will illuminate.

3 Press **SET** to save setting and exit.

Note: To revert to Sectional Mode repeat steps above.

Setting Limits Via Controller

1 Press **SET** for 3 secs to enter set up mode.

2 Press and hold **PB** to move the door to the desired **open** position and release (the yellow open LED will illuminate to indicate the open cycle). If you over shoot the desired position press **CODE** to drive the door down. Fig. 12.

3 Press **SET** to confirm.

4 Press and hold **CODE** to move the door to the desired **closed** position (the red close LED will illuminate to indicate the close cycle). If you over shoot the desired position press **PB** to drive the door up. Fig. 13.

5 Press **SET** to confirm.

6 The opener will now run through a full cycle to measure the force margin required to open and close.

If no further settings or adjustments are required, the system is now ready to use.

Setting Limits Via Transmitter

You can set limits via a coded transmitter once the motor position has been set.

1 Press **SET** for 3 secs to enter set up mode.

2 Press **TX Button 1** to move the door to the desired open position. If you over shoot the desired position press Button 4 and move the door down.

3 Pause for 5 secs to set. (Fig. 15).

4 Press **TX Button 4** to drive the door to the closed position. If you over shoot the desired position press Button 1 and move the door up.

5 Pause for 5 secs to set. (Fig. 17).

If no further settings or adjustments are required, the system is now ready to use.

Resetting Limits

If you are not happy with the limits positions and you are still in the process of setting limits, pause for 10 secs to abort limits set up then press **SET** again for 3 secs and repeat initialising procedure as per above.

If limits set up and door force margin profile has been completed, to reposition limits press **SET** for 3 secs to reenter set up mode.

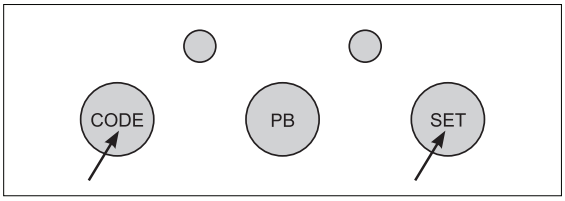


Fig. 11

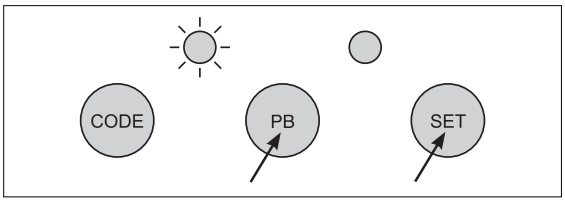


Fig. 12

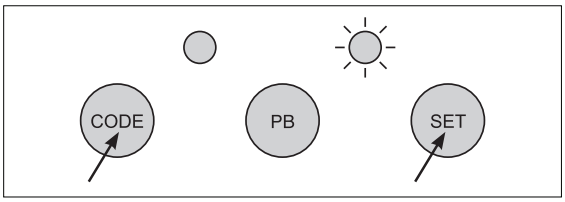


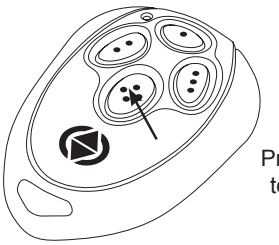
Fig. 13

Press Button 1 to open door

Fig. 14

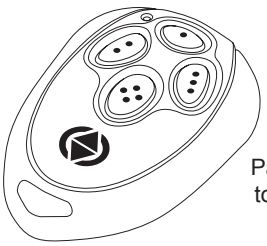
Pause for 5 secs to set open limit

Fig. 15



Press Button 4 to close door

Fig. 16



Pause for 5 secs to set close limit

Fig. 17

Setting Obstruction Margin

The Obstruction Force Margin sensitivity is extremely important for user safety. Make sure that where possible the minimum (or default) force required to allow the door to travel without phantom reversing is used. Smart Openers strongly recommend that the door is properly serviced rather than increasing the force margin to compensate (Factory Default = Light).

1 Press **SET** for 7 secs until the red LED will flash and the opener will beep to indicate the current obstruction margin setting and the yellow LED will indicate the PE Beam status.

2 Press **CODE** to change the force margin setting - the red LED will flash to indicate your new setting:

1 Flash = Light

2 Flashes = Medium

3 Flashes = Maximum

3 If you do not need to alter the photo beam setting as per below, press **SET** to save and exit.

Setting Photo Beam Mode

Note: A functioning photo electric safety beam must be installed before Photo Beam Mode set to ON.

Photo Beam Mode offers added safety protection by stopping the door from closing if the beam is tripped. Smart Openers strongly recommend the installation of a PE safety beam to protect persons and property (Factory Default = Off).

Note: If the photo beam has already been connected and you are still in set up mode from the obstruction margin procedure above continue to step 3.

1 Connect PE Beam cable to controller terminal block as per Fig. 19.

2 Press **SET** for 7 secs until the red LED will flash and the opener will beep to indicate the current obstruction margin setting and the yellow LED will indicate the PE Beam status.

3 Press **PB** to change to ON, the yellow LED will illuminate (Fig. 20).

4 Press **SET** to save and exit.

Connecting External Push Button

Note: The connection must be a voltage free dry contact.

Connect the two wires from your push button to the **PB** and **GND** terminals as per Fig. 21.

DO NOT connect to input power - this will blow the board and void the warranty.

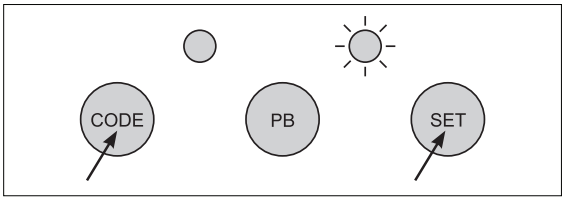


Fig. 18

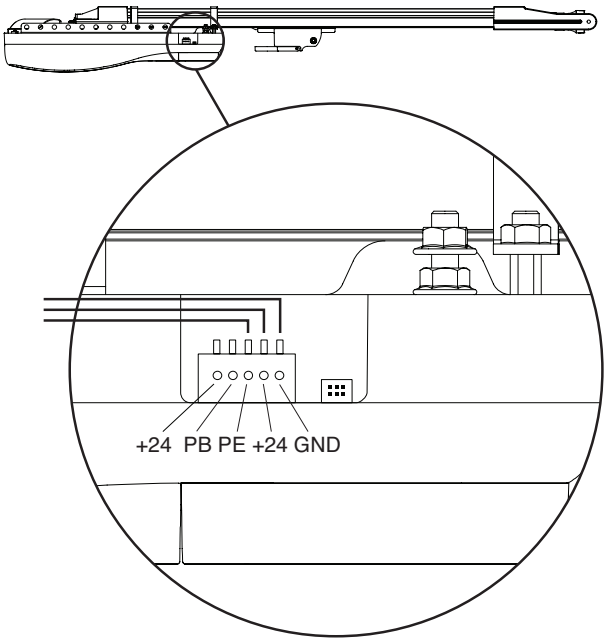


Fig. 19

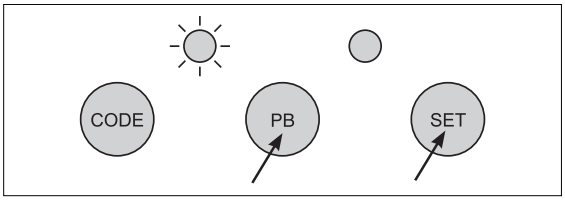


Fig. 20

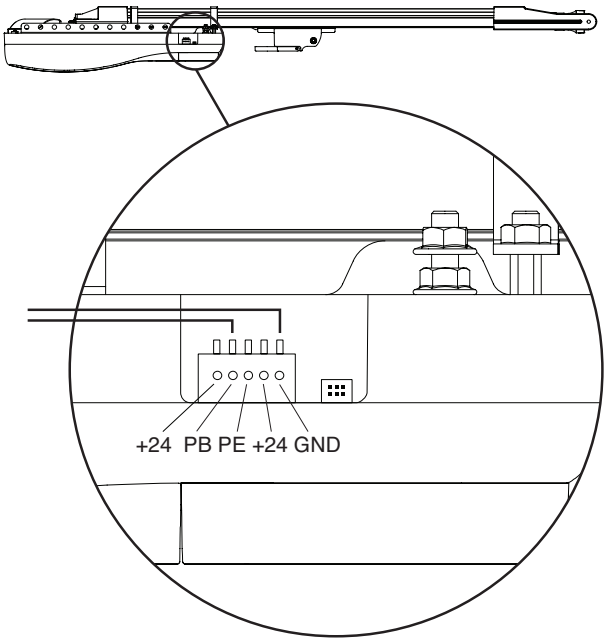


Fig. 21

Testing Obstruction Margin

1 Test the obstruction force margin sensitivity by placing a piece of timber approximately 40mm thick on the floor in the doorway (Fig. 22).

2 Close the door onto the timber. If the door does not reverse easily and attempts to continue to close adjust the force margin as per procedure on page 9.

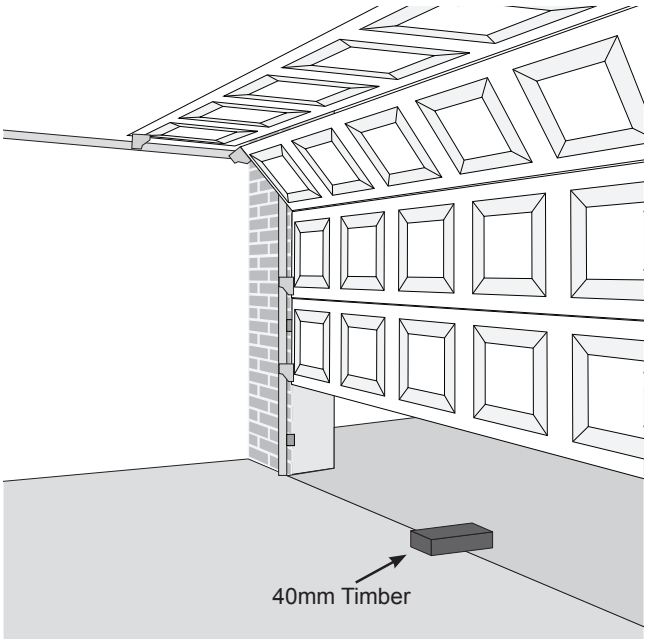


Fig. 22

Manual Release

Note: Make sure that the manual release cord extends no more than 1800mm above the garage floor.

To Disengage Door for Manual Operation

1 Pull on red cord with minimum pressure to release the shuttle.
2 While holding the cord use your spare hand to move the door panel up or down as required until the shuttle is free from the chain index.
3 Release the cord and continue moving the door panel as required.

Note: DO NOT use the cord to move the door. Excessive force on the cord may result in damage to the opener.

To Re-engage The Door

To re-engage the door for automatic operation move the door up or down as required until the shuttle clicks into the chain trolley. The door should now be in automatic operation.

Note: DO NOT use the cord to move the door.

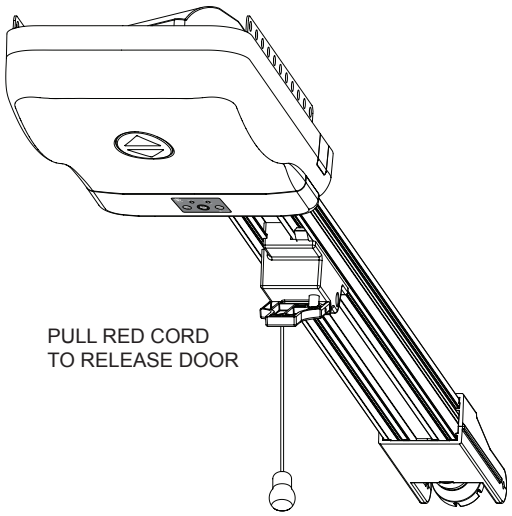


Fig. 23

Important Information for the User

Once the Smart Lifter ECO opener has been installed, the user must be informed about how it works and all the risks that can arise if it is used improperly. The user must avoid placing himself/herself in dangerous situations such as standing within the door's operating range when it is moving.

Do not let children play near the door and keep the remote controls out of their reach.

All servicing, repairs or checks must be carried out by professionally qualified personnel and noted on a maintenance register kept by the user.

Information for the user is found in the USERS/OWNERS MANUAL included with this opener.

IMPORTANT: Please make sure the USERS/OWNERS MANUAL is passed on to the owner prior to leaving the installation.

IMPORTANT: In the case of a malfunction the user must call an authorized Smart Opener Pty Ltd installer and should not attempt to repair the opener.

Maintenance

No particular maintenance is required for the logic circuit board.

At least twice a year check that the door is properly balanced and that all working parts are in good working condition.

IMPORTANT: A poorly operating door can effect the life of the automatic opener due to incorrect loads and will void the warranty.

Check the reversing sensitivity at least twice a year and adjust if necessary.

Make sure that the safety devices are working effectively (photo beams, etc.)

Final Notes

This manual is only for use by technical personnel qualified to carry out the installation.

No information given in this manual can be considered of any interest to the end user.

No setting or adjustments contained in this manual can be carried out by the end user.

It is important for the installer to show their clients correct operational use of the Smart Lifter ECO including the use of the manual disengagement cord.

Inform the owner about the need for regular and accurate maintenance, especially regarding a regular check of the safety and reversing devices.

Technical Specifications

Power Input:	240 VAC ±10% 50Hz
Motor:	24V DC 100W
Courtesy light time:	3 minutes approx.
Working temperature:	-20° ~ 70°C
Relative Humidity:	<90%
Open and close force:	250N
Reception frequency:	433.22MHz
Storage Capacity:	20 Transmitters
Decoding:	Rolling code
Transmitter power:	27A 12V Battery
Courtesy Light:	LED Array

NOTE: Smart Openers Pty Ltd reserves the right to modify its product and product specifications at any time without prior notice.

Warranty and Exclusion of Liability

1. This warranty is an addition to any conditions or warranties that are implied by relevant statute, including the Trade Practices Act 1974 (Cth), which cannot be excluded or negated.
2. Subject to all of the matters set out below, **Smart Openers** Pty Ltd ("**Smart Openers**") warrants the Smart Lifter ECO (the Product) for twelve (12) months from the date of purchase (specified in the sales docket receipt) as free of any defects in material and workmanship.
3. This warranty applies only where the purchaser:
   (a) immediately notifies **Smart Openers** or the retailer of the alleged defect;
   (b) returns the product to Smart Openers or the retailer; and
   (c) presents the relevant sales docket and this warranty document to the retailer and, if so requires, to Smart Openers to confirm the date of purchase.
4. Defects or damage partly or wholly due to any of the following causes are not covered by this warranty:
   (a) accidental damage to any of the Product or to the Product's components;
   (b) normal wear and tear to the Product or to the Product's components;
   (c) flood, rain, water, fire, lightning , storms, any acts of God, contamination or pollution;
   (d) incorrect, improper, inappropriate or unreasonable maintenance and/or use;
   (e) installation, adjustment or use which is not in accordance with the instructions set out in installation instructions incorporated in the document;
   (f) attempted or complete modification or repairs to the Product or tampering with the Product carried out by a person who is not authorised by **Smart Openers** to carry out such modification or repairs;
   (g) faulty or unsuitable wiring of structure to which the Product is fixed or connected;
   (h) radio (including citizen band transmission) or any electronic interference;
   (i) blown fuses or damage caused by electrical surges, power surges or power spikes;
   (j) damage caused by insects or any infestation;
   (k) negligence or deliberate damage.
5. Except for this warranty, **Smart Openers** gives no warranties of any kind whatsoever (whether express or implied), in relation to the product, and all warranties of whatsoever kind relating to the product are, to the extent permissible by statute, hereby excluded and negated.
6. To the extent permissible by statute, **Smart Openers** disclaims any liability of whatsoever nature in respect of any claim or demand for loss or damage which arises out of:
   (a) accidental or deliberate damage to, or normal wear and tear to, the product or to the product's components;
   (b) any cost relating to damage resulting from wear and tear;
   (c) blown fuses, loss or damage caused by electrical surges, power surges or power spikes;
   (d) loss or damage due to theft, fire, flood, rain, water, lightning, storms, any acts of God, contamination or pollution;
   (e) door or gate not in safe and correct working order and condition;
   (f) evidence of unauthorised repairs;
   (g) any cost relating to damage caused deliberately or by misuse, negligence or failure to maintain the equipment in a proper working order, including (without limitation) due to anything described in paragraphs (d) and (e);
   (h) installation, adjustment or use which is not in accordance with the instructions set out in installation instruction manual and owners manual;
   (i) attempted or complete modification or repairs to the Product or tampering with the Product carried out by a person who is not authorised or has not been trained by **Smart Openers** to carry out such modification or repairs;
   (j) faulty or unsuitable wiring of structure to which the Product is fixed or connected;
   (k) radio (including citizen band transmission) or any electrical interference;
   (l) damage caused by insects or any infestation;
   (m) loss or damage to any property whatsoever or any loss, damage or expense whatsoever resulting or arising therefrom;
   (n) any consequential, indirect, special or incidental loss or damage;
   (o) any cost or expense arising due to manufacturer recall of any product;
   (p) any cost or expense due to negligence of the approved service provider;
   (q) installation of a residential garage door or gate opener in a commercial or industrial situation or a non-single residential dwelling.
7. **Smart Openers** liability under this warranty is limited, at **Smart Openers** absolute option, to replacing or repairing the product which **Smart Openers**, in its unfettered and absolute opinion, considers to be defective either in material and/or workmanship or to credit the dealer with the price at which the product was purchased by the dealer.
8. This warranty does not extend to cover labour for installation.
9. This warranty is limited to Return-to-Base (RTB) repair and does not cover labour for on-site attendance.
10. This warranty is void if the Product is not returned to the manufacturer in original or suitably secure packaging.
11. This warranty is only applicable for repairs to the Product carried out within Australia and for Product in Australia.
12. This warranty does not cover consumable items including globes, batteries and fuses.
13. This warranty is not transferable.
14. Where the Product is retailed by any person other than **Smart Openers**, except for the warranty set out above, such person has no authority from **Smart Openers** to given any warranty or guarantee on **Smart Openers** behalf in addition to the warranty set out above.

Notes:

1. This warranty is to be read in conjunction with the installation manual and owner's manual.

Smart Openers Pty Ltd

PO Box 6666 GCMC, Qld 9726
Tel: 1300 366 547 Fax: 1300 366 972
Email: enquiries@smartopeners.com
Web: www.smartopeners.com

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