

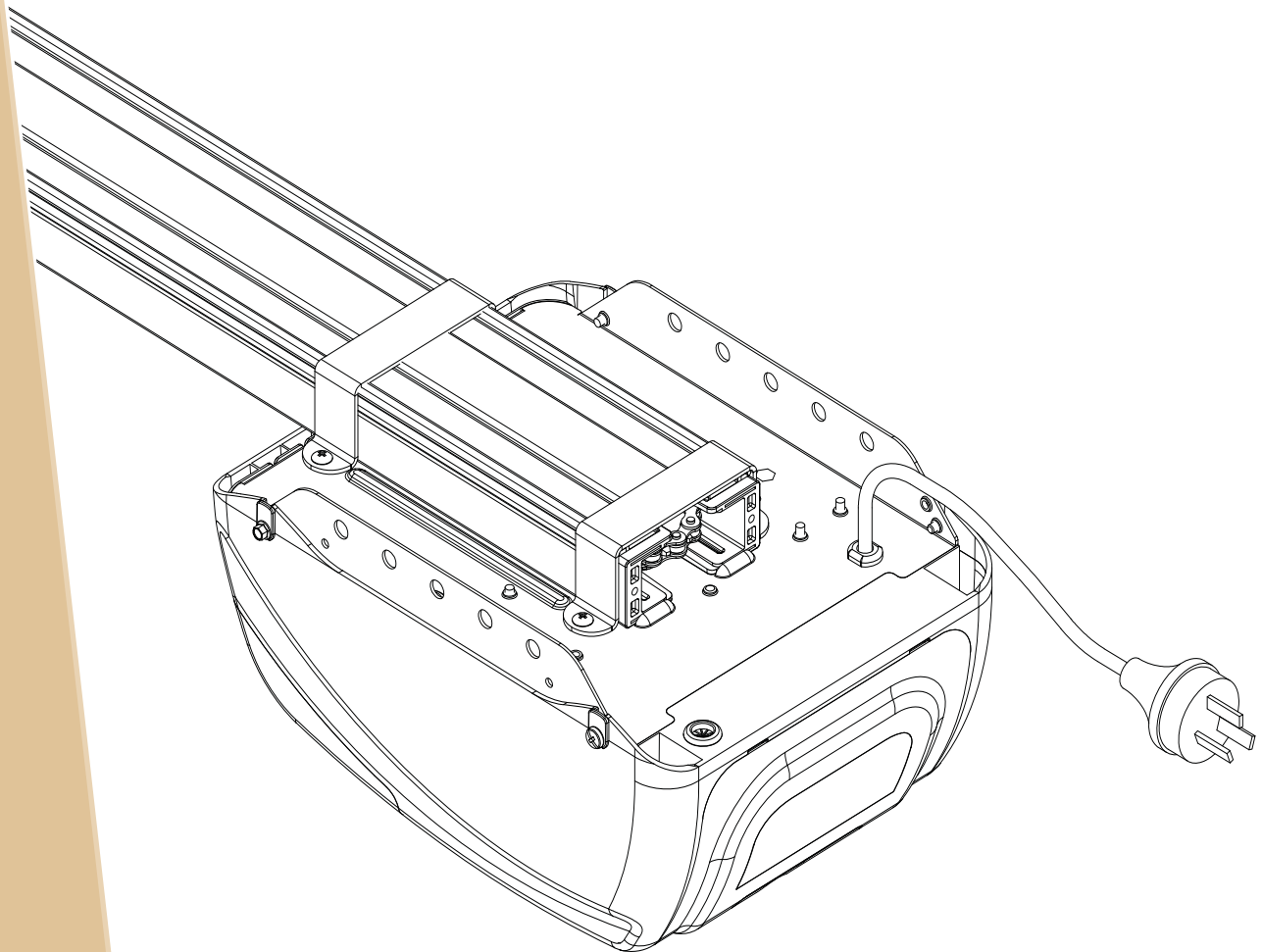


Controll-A-Door® P

DIAMOND

Controll-A-Door® P Diamond

Sectional Door Opener SDO-2v2 Instruction Manual



Technical Document
Installation Manual
v 1.01
04 June 2012
English
Part # 79073 (Manual)



N1854

B&D Doors is a division of B&D Australia Pty Ltd
ABN 25 010 473 971



Controll-A-Door® P Diamond

Sectional Door Opener SDO-2v2

Safety Rules	03	Battery Back Up Installation	26
Risk Assessment	04	How To Use Your Opener	27
Default Settings & Specifications	05	Transmitter	27
About Your Opener	06	Transmitter Battery	28
Operating Controls	07	Locking	28
Kit Contents	09	Manual Release	28
Installation	10	Power Failure	28
C-Rail Assembly	10	Safety Beam	29
Determine Door Type	11	Auto-Close	29
Mounting - Track Type Door	12	Courtesy Light	29
Mounting - Non-Track Type Door	13	Auxiliary Output	29
Mounting Door Bracket & Arms	14	Vacation Mode	29
Programming the Opener	15	Pet Mode	29
Setting Speed and Limits	15	Maintenance	30
Testing Safety Obstruction Force	17	Troubleshooting Guide	31
Coding Transmitters	18	Parameters	32
Door	18	Parts List	33
Courtesy Light	18	Warranty	34
Vacation Mode	19	Optional Accessories	36
Auxiliary Output	19		
Pet (Pedestrian) Mode	20		
Erasing Transmitter Codes	20		
Mounting Wall Transmitter	20		
Wireless Safety Beam Installation	21		
Wired Safety Beam Installation	24		
Accessories	25		
Terminal Block	25		
Remote Aerial	25		



Safety Rules

Please read these important safety rules



These safety alert symbols indicate a personal safety or property damage instruction exists. READ THESE INSTRUCTIONS CAREFULLY.



This automatic garage door opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the following safety rules. Failure to comply with the following instructions may result in death, serious personal injury or property damage.

-  **CAUTION:** If your garage has no pedestrian entrance door, an emergency access device should be installed. This accessory allows manual operation of the garage door from outside in case of power failure.
 -  Position the Garage Door Opener so that the power plug is accessible when inserted into the power outlet (EN 60335-1).
 -  This opener should be installed in accordance with relevant Australian Standards.
 -  Do not allow children to play with door controls.
 -  Keep transmitters away from children.
 -  Watch the moving door and keep people away until the door is completely opened or closed.
 -  Activate the opener only when the garage door is in full view, free of obstructions and with the opener properly adjusted.
 -  Keep the garage door balanced. Sticking or binding doors must be repaired. Garage doors, door springs, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt any garage door adjustment. Do not use if repair or adjustment is needed. Call for professional garage door service.
 -  Install the optional wall transmitter in a location where the garage door is visible, but out of the reach of children at a height of at least 1.5m.
 -  Disconnect electric power to the garage door opener before removing covers.
 -  Doors requiring over 400N of force to move must have Safety Beams fitted.
 -  Do not wear rings, watches or loose clothing while installing or servicing a garage door opener.
 -  This opener is not suitable for commercial, industrial or common entry applications.
 -  To avoid serious personal injury from entanglement, remove all unnecessary ropes or chains and disable any equipment such as locks which are not needed for powered operation.
 -  Installation and wiring must be in compliance with your local building and electrical codes. Connect the power cord only to properly earthed mains. If an extension lead must be used, make sure it is a 3-core lead and approved to 7 amp capacity.
 -  If the power cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard.
 -  When using optional Auto-Close mode, a Safety Beam (Part No 062734) must be fitted correctly and tested at regular intervals. Extreme caution is recommended when using Auto-Close mode. All safety rules must be followed.
 -  This opener is a plug in domestic appliance and is designed for indoor use only. It must be installed in a dry position that is protected from the weather.
 -  The opener is not intended for use by young children or infirm persons without supervision.
-  **WARNING! It is vital for the safety of persons to follow all instructions. Save these instructions.**

B&D Doors to the extent that such may be lawfully excluded hereby expressly disclaims all conditions or warranties, statutory or otherwise which may be implied by laws as conditions or warranties of purchase of a B&D Garage Door Opener. B&D Doors hereby further expressly excludes all or any liability for any injury, damage, cost, expense or claim whatsoever suffered by any person as a result whether directly or indirectly from failure to install the B&D Garage Door Opener in accordance with these installation instructions.

Risk Assessment

Please refer to the risk assessment table below and ensure all the necessary controls are in place.

Installation Risk Assessment

Hazard	Control
Muscular strain from incorrect lifting of opener	<ul style="list-style-type: none"> Practice correct lifting techniques (carton weighs 9 kg)
Muscular strain from incorrect lifting of door	<ul style="list-style-type: none"> Practice correct lifting techniques when required to lift the door as per installation instructions
Entanglement in operating Opener	<ul style="list-style-type: none"> Never plug in and operate prior to installation
Uncontrolled spring tension release	<ul style="list-style-type: none"> Follow the installation instructions Ensure the U-bolt on the opposite end to the motor is tight Do not conduct any door repairs or maintenance (contact professional for all door servicing)
Fall from ladder	<ul style="list-style-type: none"> Ensure ladder is the correct type for job Ensure ladder is on flat ground Ensure user has 3 points of contact while on ladder
Crush injury from unsecured door	<ul style="list-style-type: none"> Place a 2 metre exclusion zone around area under the door while it is unsecured Do not move under door while on door support (or ladder) Follow the installation instructions Fit door support (or ladder) snugly under door before removing U-bolt and bracket Ensure door support (or ladder) is on flat ground

Testing and Operation Risk Assessment

Hazard	Control
Entrapment under operating door	<ul style="list-style-type: none"> Keep children clear of operating door Ensure the garage door is in good working order Correctly set the Safety Obstruction Force Install Photo Electric Beams (recommended) Do not operate door when persons are near the door
Entanglement in moving door	<ul style="list-style-type: none"> Fit locking bar covers Keep hands and loose clothing clear of door and guides at all times
Entanglement in operating Opener	<ul style="list-style-type: none"> Never plug in and operate prior to installation
Electrocution	<ul style="list-style-type: none"> Place opener in protected area so that it does not get wet Do not spray with water Do not open the protective covers Do not operate opener if cable is damaged

Default Settings & Specifications

Factory default settings

	Default	Step	Minimum	Maximum
Maximum opener run time	60 seconds	-	-	-
Courtesy light time	4 minutes (approx.)	-	-	-
Obstruction force margin	2	1	0	14
Auto-Close time	30 seconds	-	-	-

Technical specifications

Power supply	230V - 240Va.c. 50Hz
Transformer rating	24Vd.c.
Standby power	2.2 Watts
Motor power	100 Watts
Motor type	24Vd.c. permanent magnet
Shuttle travel distance in the C-Rail	2.7m approx. (standard)
Maximum shuttle travel distance in the C-Rail	3.750 m (with one extension)
Maximum door opening:	Width: 5500mm (16.5m ²) Height: 3000mm Weight: 100kg
Minimum headroom	30mm
Short term peak force	1000N (100kg) with Chain 800N (80kg) with Timing Belt
Lift force	600N (60kg) with Chain 500N (50kg) with Timing Belt
Nominal force	150N (15kg)
Receiver type	UHF Multi-frequency FM Receiver
Receiver code storage capacity	14 X 4 button Transmitter Codes
Transmitter frequency	UHF Multi-frequency FM Transmitter
Coding type	Code Hopping
Number of code combinations	Over 4.29 billion random codes
Code generation	Non-linear encryption algorithm
Transmitter battery	CR2032 (3 Volts)
Courtesy light	LED (Light Emitting Diodes)
Controller fuse	10A slow blow

*The actual travel of the door depends on configuration of the connecting arms.

Note: Intermittent operations may occur in areas which experience very strong winds. The strong wind puts extra pressure on the door and tracks which may in turn intermittently trigger the safety obstruction detection system.

About Your B&D Opener

Thank you for choosing a Controll-A-Door® P Diamond automatic garage door opener, designed and developed in Australia by B&D Doors.

The technically advanced construction of this opener ensures you enjoy the following benefits:

Warranty

Five (5) year/10,000 cycles full parts and labour warranty on motor, electronics and mechanical components of the opener when installed by an Approved B&D Dealer (conditions such as annual garage door servicing apply).

Tri-Tran Frequency Hopping Technology

Every time a transmitter is used, it simultaneously sends a signal over three different frequencies, reducing the chance of interference from other radio frequency sources.

Code Hopping Technology

Every time a transmitter is used a new security code is generated from over 4.29 billion possible code combinations. This greatly enhances the security of the system and makes "code grabbing" a thing of the past!

Multi-Channel Transmitter

Multi-channel transmitters allow you to operate other devices such as an adjoining garage door or automated gate from the same handy unit.

Safety Reversing System

The automatic safety reverse system significantly reduces the risk of death or serious injury if trapped by a closing door. The safety reverse force can be adjusted for environmental conditions such as windy areas.

LED Courtesy Light

Using the latest Light Emitting Diode (LED) technology, the opener features two light modules. These modules produce a brilliant white light that illuminates the garage upon activation.

The LED courtesy light automatically switches on for approximately four (4) minutes (time programmable) when operating the door. This can also be programmed to turn on and off from a transmitter.

Battery Back Up

Optional Battery Backup power is available.

Memory Retention

In case of a power failure the opener does not lose the transmitter codes or limit settings.

Soft Start/Soft Stop

The opener eases into and out of each cycle making for smoother and quieter operation, as well as reducing wear and tear on the door and opener.

Manual Release

The manual release handle allows the door to be operated by hand in the event of a power failure.

Self Locking

There is no need to manually lock your garage door, as the opener 'positively' locks the door when closed.

Periodic Maintenance Indicator

Opener will flash and beep after certain number of cycles to indicate the door requires servicing. Contact your dealer/installer for service.

Service Fault Indicator

Flashing LEDs on the control panel easily identify operational problems or service requirements.

Dynamic Door Profiling

Changing door characteristics are automatically compensated for and "learnt" with each operation of the door.

Auto-Close

The Auto-Close option can be programmed to close the door approximately 30 seconds after the door has opened. PLEASE NOTE - Safety Beams must be installed for this option to function.

External Aerial

An external aerial can be connected for sites where radio reception is a problem.

Vacation Mode

A transmitter can be programmed to disable the garage door opener radio receiver. This is ideal if the door is to be left idle for prolonged periods.

Pet (Pedestrian) Mode

A transmitter can be programmed to open the door partially to allow pets access to the garage. The door opening height is adjustable via a handheld programmer.

Auxiliary Output

You can program a spare button on your transmitter to operate this output, which can control items that use a momentary close switching mechanism.



Operating Controls

01. Terminal Block.

V+ is used to power devices such as Wireless Safety Beam, external receiver etc.

EB1 input is used to connect to Safety Beam.

0V (Input) is a 0 volt connection for Safety Beam, external receiver, osc, aux etc.

EB2 input is used to connect to second Safety Beam..

0V (Input) is a 0 volt connection for Safety Beam, external receiver, osc, aux etc.

O/S/C is used for the connection of a wired switch (momentary contact). This switch can then be used to open, stop or close the door. Install the wall switch in a location where the switch is out of reach of children and the garage door is visible.

AUX This function allows the opener to operate an alarm system via the garage door remote control.

02. **OPERATE button (Blue)** is used during installation to test the open, stop and close cycles for the opener. The opener has to be initialised by the LIMIT SET button to make the OPERATE button operable.

03. **SERVICE LED (Yellow)** indicates when the opener requires service or repairs.

04. **LIMIT SET button (Blue)** is used during installation, together with the PLUS (+) and MINUS (-) buttons, to set the door limit positions.

05. **FORCE MARGIN SET button.** The obstruction force margin is set automatically during installation. The margin can be adjusted manually using the FORCE MARGIN SET button (White). Holding the FORCE MARGIN SET button and pressing PLUS (+) or MINUS (-) buttons will increase or decrease the amount of force. The FORCE MARGIN SET button should only be used if environmental factors, such as high winds, affect the door's operation.

06. **CODE SET LED (Red)** flashes when a transmitter button is stored.

07. **MINUS (-) button (Red)** is used during installation to set the close limit position. Pressing and holding this button will move the door in the close direction. Movement stops when the button is released. This button is also used for storing or erasing the transmitter button you wish to use to command the door to open, stop or close.

NOTE: The safety obstruction system is inoperable whenever the MINUS (-) button is used to move the door.

08. **CLOSE LIMIT LED (Red)** is used during installation to help set the close limit position. It also illuminates and flashes as the door closes, and remains on when the close limit position has been reached.

09. **PLUS (+) button (Green)** is used during installation to help set the open limit position. Pressing and holding this button will move the door in the open direction. Movement stops when the button is released.

NOTE: The safety obstruction system is inoperable whenever the PLUS (+) button is used to move the door.

10. **OPEN LIMIT LED (Green)** is used during installation to help set the open limit position. It also illuminates and flashes as the door opens, and remains on when the open limit position has been reached.

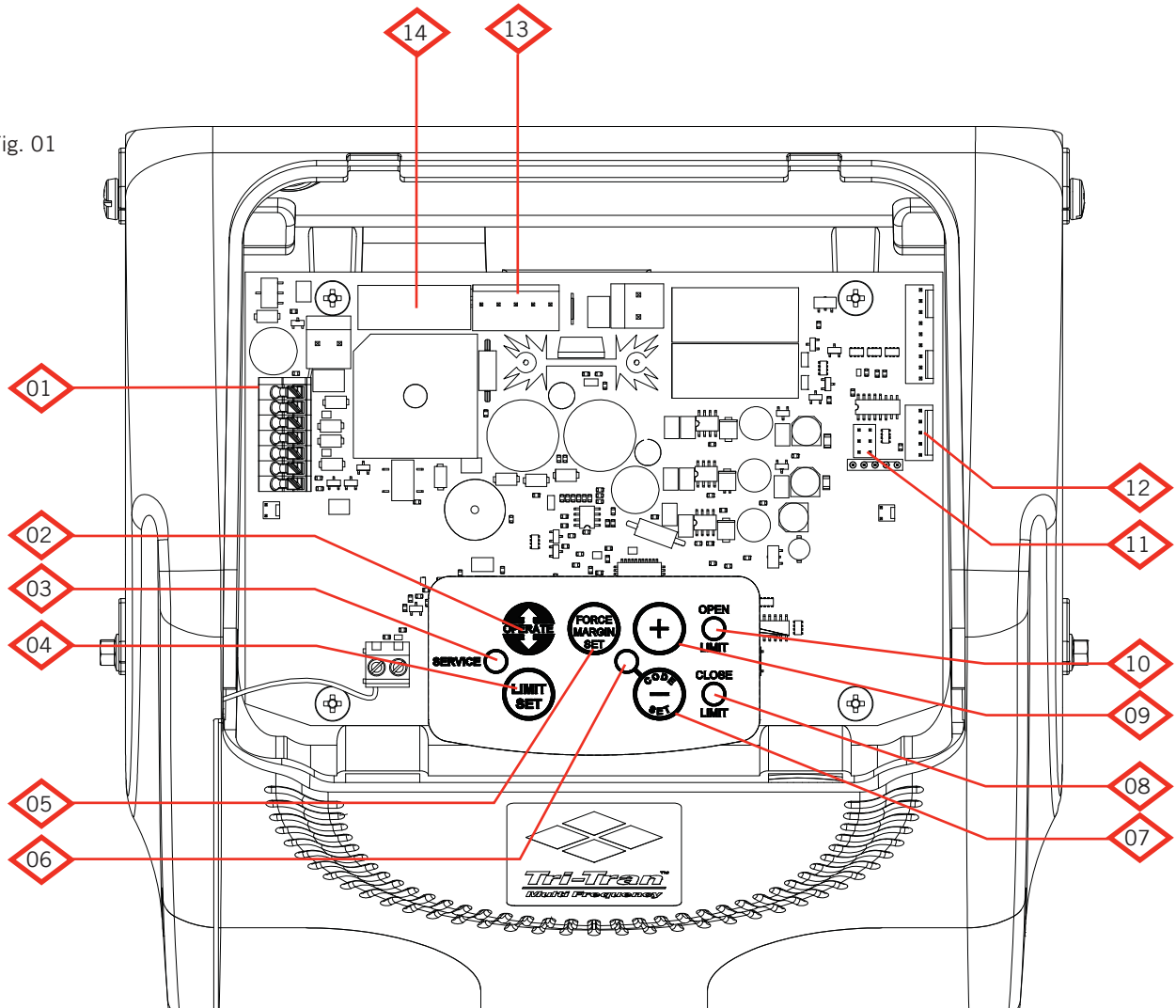
11. **AUTO CLOSE JUMPER** fit the shunt on both pins to enable Safety Beam triggered auto close

12. **PROG INPUT** is used to connect the Automatic Technology Handheld Programmer 'PG-3' for editing control and receiver functions, accessing diagnostic tools, and activating special features and operating modes.

13. **SBCO-2 Battery Charger connector** to attach a Battery Back Up kit.

14. **10 Amp fuse** to protect the electronic circuit board.

Fig. 01



Kit Contents

Powerhead Unit (Fig. 02)

- 1 x Controll-A-Door® P Diamond powerhead
- 1 x Transmitter pack
(Pack includes two keyring transmitters and batteries)
- 1 x Wall mount transmitter with battery
- 2 x Door attachment arms
- 1 x Accessory and hardware pack
- 1 x Installation Manual

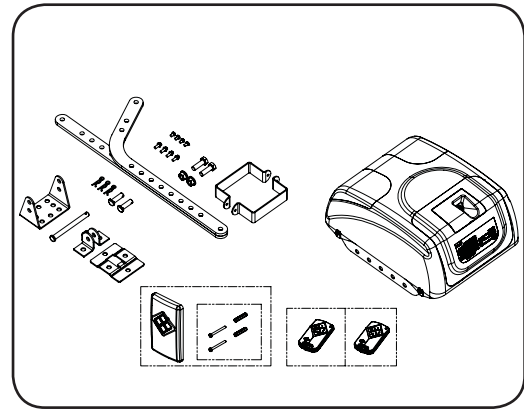


Fig. 02

PLUS

Single Piece C-Rail with Pre-Assembled Chain (Fig. 03)

NOTE: Chain in one piece rail has been tensioned by the factory. Do not adjust the tension of the chain.

IMPORTANT NOTE: If a modification to the length of the track is required, the adjustment must be made from the powerhead end only.

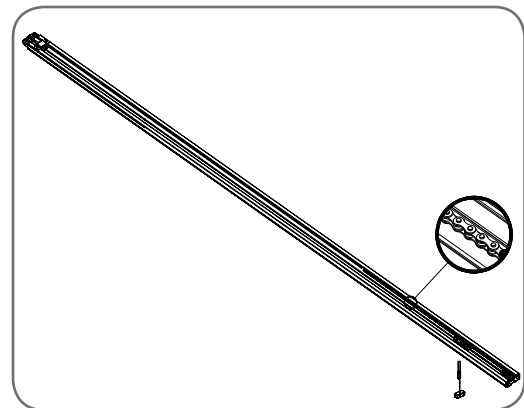


Fig. 03

OR

Single Piece C-Rail with Pre-Assembled Timing Belt (Fig. 04)

Note: timing belt in one piece rail has been tensioned by the factory. Do not adjust the tension of the timing belt.

IMPORTANT NOTE: If modification to the track length is required, adjustment must be made only from powerhead end.

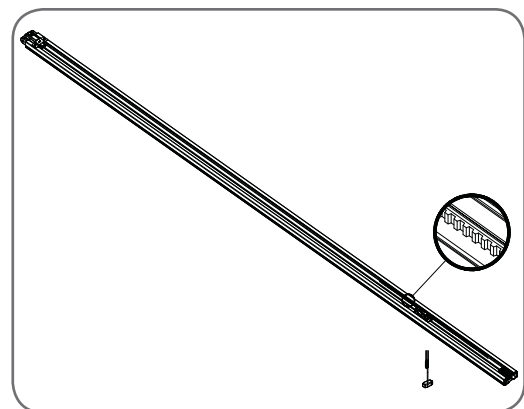
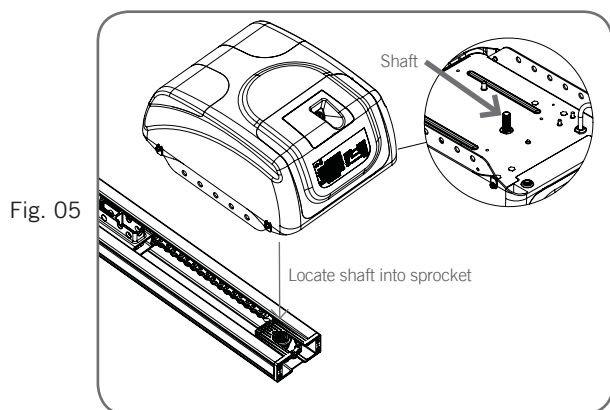


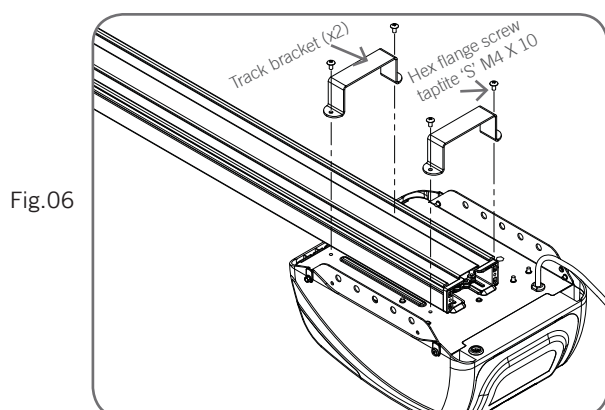
Fig. 04

C-Rail Assembly



Step 1 - Attach C-Rail to Powerhead

Locate and insert the powerhead's shaft into the C-Rail's sprocket as shown in **(Fig. 05)**.



Step 2 - Secure C-Rail to Powerhead

Fix the two track brackets as shown in **(Fig. 06)**. Fix with the four screws supplied in accessory pack.

Determine the Door Type

Step 3 - Determine the Door Type

Determine which type of garage door you have as illustrated in **(Fig. 07)** to **(Fig. 09)**.

For a sectional (panel) door on tracks **(Fig. 07)** proceed with the installation from Step 4.

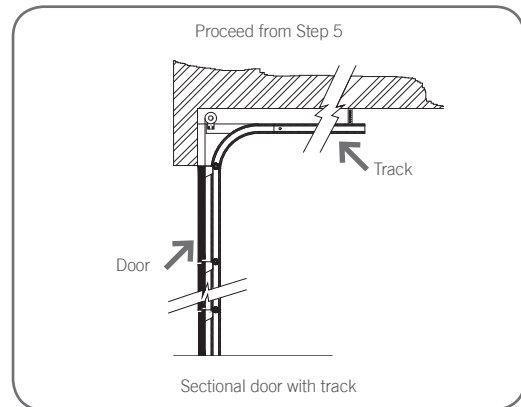


Fig. 07

For a one piece door on tracks **(Fig. 08)** proceed with the installation from Step 4.

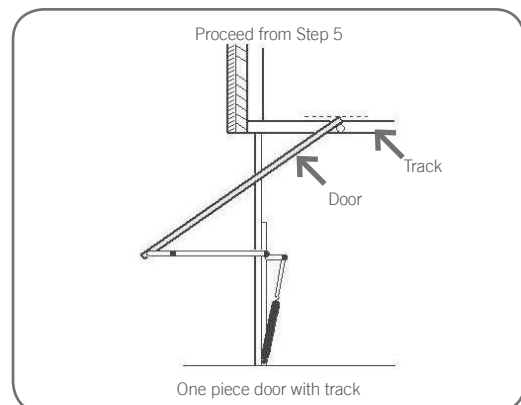


Fig. 08

For a one piece door without tracks (on springs) **(Fig. 09)** proceed with the installation from Step 8 (page 13).

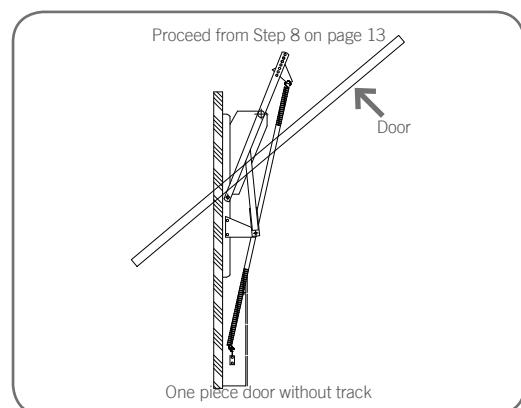


Fig. 09

Mounting on a Track Type Door

Fig. 10

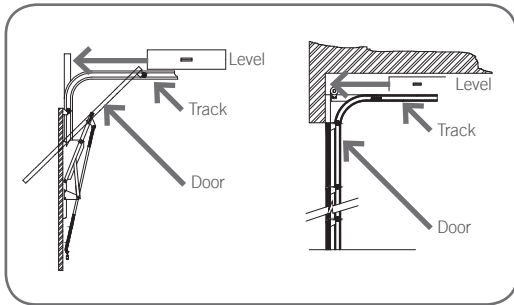


Fig. 11

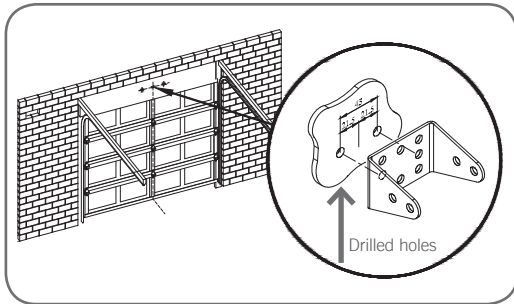


Fig. 12

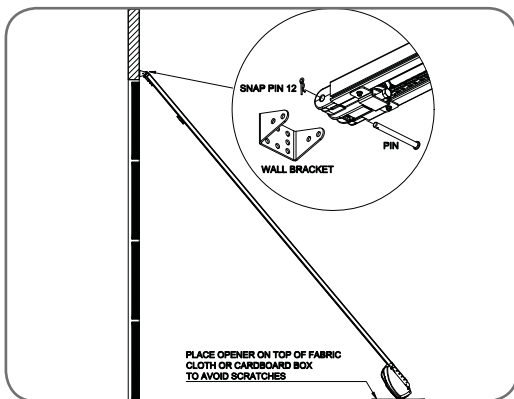
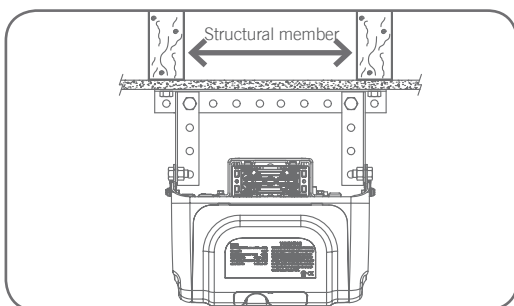


Fig. 13



Step 4 - Determine Bracket Position

- Open the door and find the highest point of travel of the top door panel.
- Using a level, transfer this height to the wall above the door (**Fig. 10**) and mark a line 60mm above it.
- Determine the centre point on the wall above and on top of the door. Then draw two (2) lines extending 21.5mm from each side of the centre point. (**Fig. 11**)

Step 5 - Mounting the Wall Bracket

- Centre the bracket over the intersection of these two lines. Mark centres for at least two holes (**Fig. 11**).
 - Ensure a solid mounting point is behind these holes.
- Drill holes into the wall with an appropriate sized bit.
- Secure bracket to the wall using:
 - IF CONCRETE OR BRICK - 8mm or 5/6 loxins or dynabolts.
 - IF TIMBER - wood screw #20 or equivalent (minimum 50mm long).



WARNING: Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.

Step 6 - Attach the C-Rail to the Wall Bracket

- Attach the C-Rail assembly to the wall bracket with the 90mm long clevis pin and secure with the supplied snap pin (**Fig. 12**).
- Leave the powerhead in its packing box for protection during installation.

Step 7 - Securing the Powerhead to the Ceiling

- Raise the powerhead from the packing box and support it in the horizontal position with a step ladder.
- Open the garage door. Rest the opener on the open door and use a scrap piece of wood to bring it to horizontal level.
- Line up the track perpendicular to the wall.
- Secure the perforated angle (not supplied) to the ceiling above where powerhead's mounting holes will be once fully installed. A representative mounting is shown (**Fig. 13**).
- Connect the powerhead to the ceiling mounted perforated angle with M8x20mm screws and nuts. Strips should not extend more than 18mm below centre of powerhead mounting holes (**Fig. 13**).

For an alternative mounting option, go to Step 11.1



WARNING: The opener must be securely fastened to structural supports, otherwise opener failure may ensue causing serious personal injury and/or property damage.

Mounting on a Non-Track Type Door



WARNING: Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.

Step 8 - Determine the Door's Centre

- Find the centre of the door and mark this location both above the door and on top of the door.
- Draw two lines 21.5mm either side of this (**Fig. 14**).

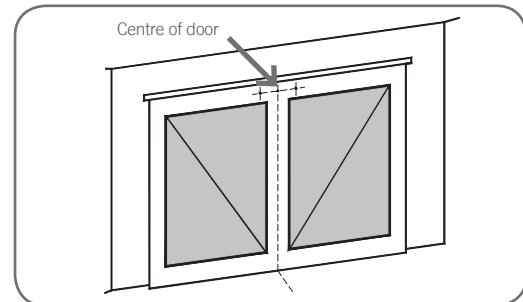


Fig. 14

Step 9 - Prepositioning the Opener

- Raise the door to open position.
- Rest the opener on the top edge of the door with end of the C-Rail against the wall (**Fig. 15**).
- Support the powerhead level with the lowest point of the open door (**Fig. 15**).

NOTE: Do not slide C-Rail along the face of the door.

Step 10 - Mounting the C-Rail

- Close the door slowly. The C-Rail will be elevated by the top edge of the door as it moves.
- Stop the door when it is at its highest point of travel. Allow 25mm additional height for clearance between the door and the track (**Fig. 16**).
- Support the C-Rail in this position and close the door.
- The height determined in Step 11(b) will be the height at which to mount the wall bracket.
- Centre the bracket along the line determined in Step 9.
- Using the bracket as a template, mark a minimum of two holes and drill with appropriate size bit. For a more secure fitting, the wall bracket can be anchored using more than two holes.
- Secure the bracket to the wall using:
 - IF CONCRETE OR BRICK - 8mm or 5/6 loxins or dynabolts.
 - IF TIMBER - wood screw #20 or equivalent (minimum 50mm long).
- Attach the wall bracket to the C-Rail with the 90mm long clevis pin (**Fig. 17**) and secure by a snap pin.

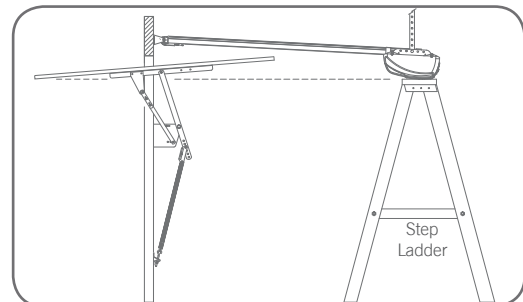


Fig. 15

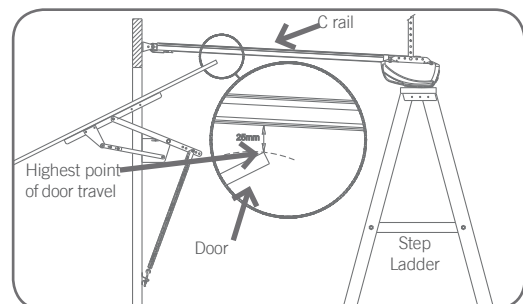


Fig. 16

Step 11 - Securing the Powerhead to the Ceiling

- Secure the perforated angle (not supplied) to the ceiling above where powerhead's mounting holes will be. See (**Fig.13**) for a representative mounting.
- Connect the powerhead to the ceiling mounted perforated angle with M8x20mm screws and nuts. Strips should not extend more than 18mm below centre of powerhead mounting holes (**Fig. 13**).



WARNING: The opener must be securely fastened to structural supports, otherwise opener failure may ensue causing serious personal injury and/or property damage.

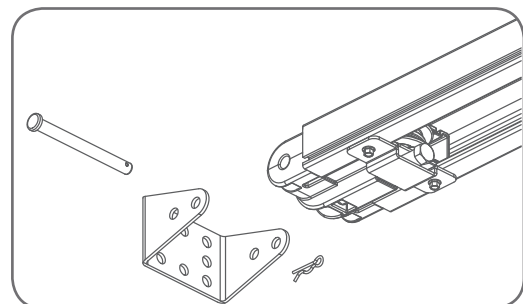


Fig. 17

Mounting Door Bracket and Arms

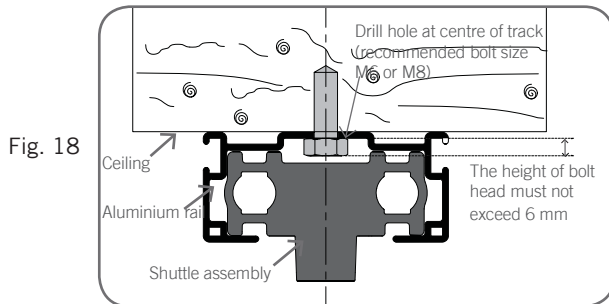


Fig. 18

Step 11.1 - Alternative Mounting Option

The opener can be fastened to the roof by driving a bolt through the C-Rail into a structural timber support. The bolt head's height must not exceed 6mm (**Fig. 18**).

Step 12 - Mounting Door Bracket

The door bracket comes in two parts. The bottom plate with two mounting holes is used on its own for one piece doors. For sectional doors, the top plate is placed over the bottom plate and is fixed with four (4) screws (**Fig. 19**).

- Mount the door bracket, or bracket assembly, on the door's centre line one-third down the top panel (**Fig. 19**) using M6 or equivalent screws (not supplied),
- STEEL DOORS ONLY:** Bracket can be welded in place.

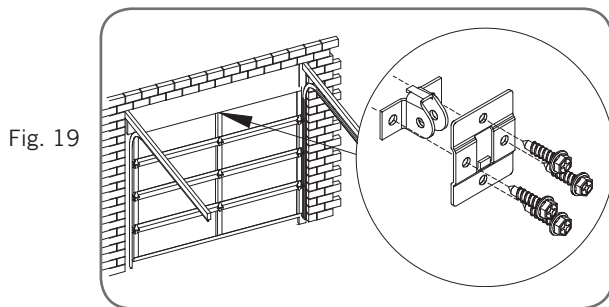


Fig. 19



NOTE: If in doubt about the door's strength, reinforcement may be added to the door's frame where necessary. Door damage may occur if the bracket is installed on a panel with insufficient strength. The opener's warranty does not cover damage caused to the door and/or door panels.

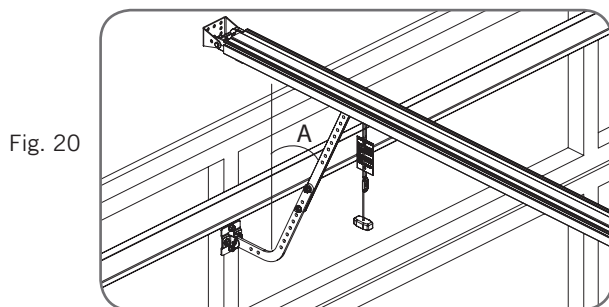


Fig. 20

Step 13 - Attaching the Arms

FOR SECTIONAL AND ONE PIECE DOORS WITH TRACK:

- Assemble the bent and straight arms with bolts and nuts supplied in the accessory pack (**Fig. 20**). Always use both bent and straight arms.
- Connect the assembled arm to the bracket and the disengaged trolley with clevis and snap pins. The angle "A" must be more than 10° (**Fig. 20**).



WARNING: Connecting the bent arm other way around may damage the door.

FOR ONE PIECE DOORS WITHOUT TRACK

- Assemble the bent and straight arms as shown in (**Fig. 21**) with bolts and nuts supplied in the accessory pack. Always use both the bent and straight arms.
- Connect the assembled arm to the bracket and the disengaged trolley with clevis and snap pins.
- If installing on a door with a bad wave action, lengthening the arm will assist in reducing this effect.

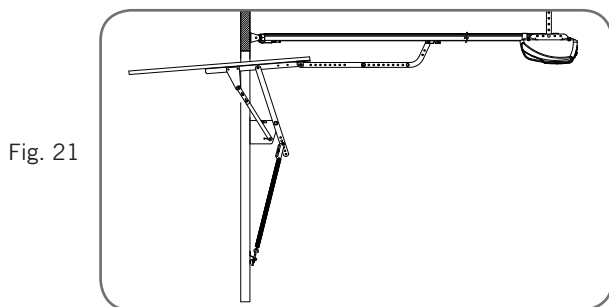


Fig. 21



IMPORTANT NOTE - If the manual release handle is more than 1.8 metres from floor level when the opener is installed, extend the handle to a height less than 1.8 metres.

Setting Speed and Limits

Step 14 - Setting Speed Mode

The default speed of the opener has been set to suit the majority of applications. However, there are 3 speed modes available if required:-

1. Slow - to suit one piece door without tracks
2. Medium (default) - suits majority of applications
3. Fast - to suit some sectional applications

The speed settings can only be changed before setting the travel limits. If the opener speed needs to be changed please complete the steps below. If medium (default) mode is appropriate skip straight to step 15.1 setting travel limits. Pressing the operate button will cycle through all three speed modes. To change the speed setting:-

- a. Engage the C-Rail's trolley (attached to the door via the arms) with the chain index by moving the door.
- b. If the trolley does not "click" firmly onto the chain index, ensure that the manual release cord is not in the disengaged position by pulling it backwards.
- c. Turn on the power to the opener. The Close Limit LED will be flashing.
- d. Remove the button cover with a blade screwdriver (**Fig.22**).
- e. Press operate button once, twice or three time to select slow, medium or fast speed mode.

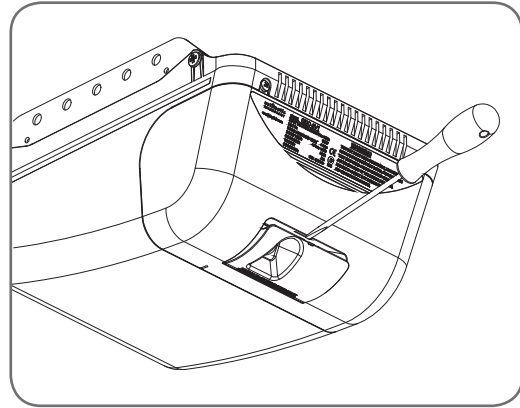
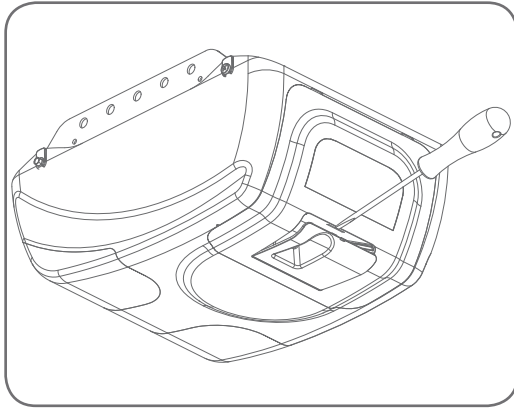


Fig. 22

Door Opener Speed Mode	Open LED (Green)	Close LED (Red)	Beeper
Medium (Default)	On	On	2 beeps
Fast	On	Off	3 beeps
Slow	Off	On	1 beep

Setting Travel Limits

Fig. 23



IMPORTANT NOTE: The OPERATE button will not function until the open and close limit positions are set.

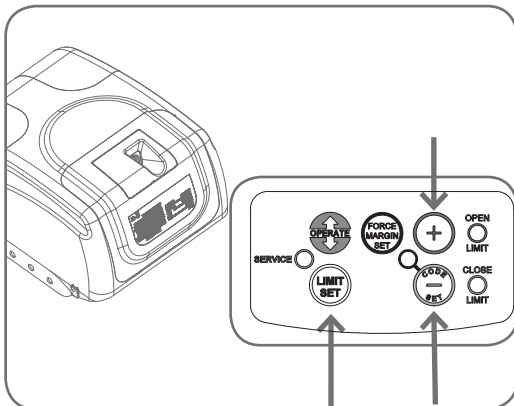


NOTE: The door and shuttle must be engaged into the chain index. The door should be open approximately half way.

Step 15.1 - Setting Limits Positions

- Remove the controls cover as shown in (Fig. 23). Replace it when setup is completed.
- Press and hold the MINUS (-) button to start the door closing. Release the button once you have reached your desired closed limit position (Fig 24).
- Press the LIMIT SET button. This action will store the close limit position into memory.
- Press and hold the PLUS (+) button to start the door opening. Release the button once you have reached your desired open limit position.
- Read the WARNING below.

Fig. 24



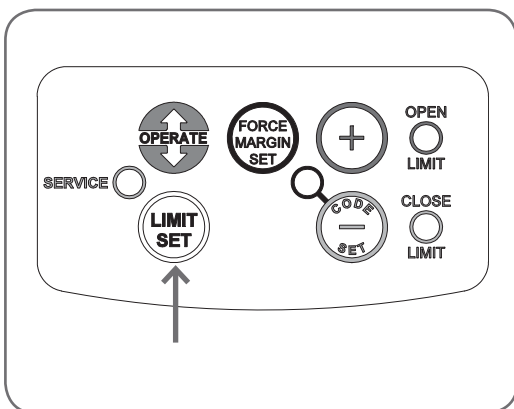
IMPORTANT WARNING: The garage door will automatically close, open and close again once the LIMIT SET button is pressed. Ensure there are no persons or objects in the door's path before pressing the LIMIT SET button.

- Press the LIMIT SET button to store into memory the open limit position. The door will now automatically close to its limit position then fully open to calculate the Safety Obstruction Forces

BE AWARE OF THE ABOVE WARNING.

The opener can now be operated via the OPERATE button.

Fig. 25



Step 15.2 - Resetting Door Limit Positions

To enter new limit positions the existing settings must be deleted as follows:

- Press and hold the LIMIT SET button (Fig. 25) for six (6) seconds, until you hear three beeps and the CLOSE LIMIT LED starts to flash.
- Release the button.
- Follow Step 15.1 to set new limit positions.

Testing Safety Obstruction Force

CAUTION: Take care when testing the safety obstruction force. Failure to follow this warning can result in serious personal injury and/or property damage.

16.1 Test the Close Cycle

- Press the OPERATE button to open the door (Fig. 26).
- Place a piece of timber approximately 40mm high on the floor directly under the door (Fig 27).
- Press the OPERATE button to close door.
- The door should strike the object and re-open.

16.2 Testing the Open Cycle

- Press the OPERATE button to close the door (Fig. 26).
- Press again to open the door.
- When the door reaches approximately half way, firmly grab the door's bottom rail - the door should stop.

If the door does not reverse readily when closing, or stop when opening, the force may be excessive and need adjustment, refer to Step 16.4.

IMPORTANT WARNING: If the door is closing and is unable to re-open when obstructed, discontinue use. Do not use a door with faulty obstruction sensing. Repair fault and re-test before using.

Adjusting Safety Obstruction Force

The safety obstruction force is calculated automatically and normally does not require adjustment. The only time the force may need to be adjusted is due to environmental conditions, such as areas that are windy, dusty or have extreme temperature changes that affect the operability and movement of the door.

WARNING: Doors requiring over 400N of force to move must have Safety Beams fitted for safety

Step 16.3 - To Increase Force Pressure

- Press and hold the FORCE MARGIN SET button (Fig 28).
- While holding down the FORCE MARGIN SET button, press the PLUS (+) button.
- Each press will increase the force margin one step. The OPEN LIMIT LED will flash each time the PLUS (+) button is pressed to indicate an increase in force.
- Test the force again as per Steps 16.1 and 16.2.
- If the OPEN LIMIT LED flashes continuously when the PLUS (+) button is being pressed, this indicates that the maximum force setting has been reached.

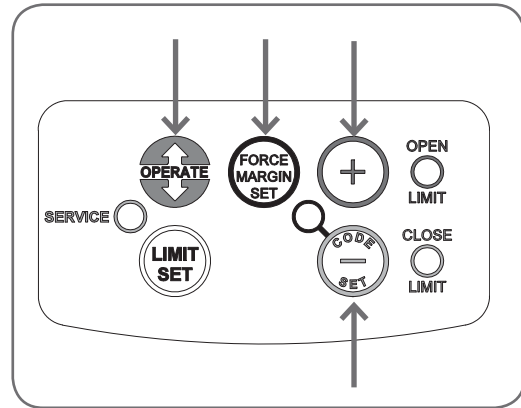


Fig. 26

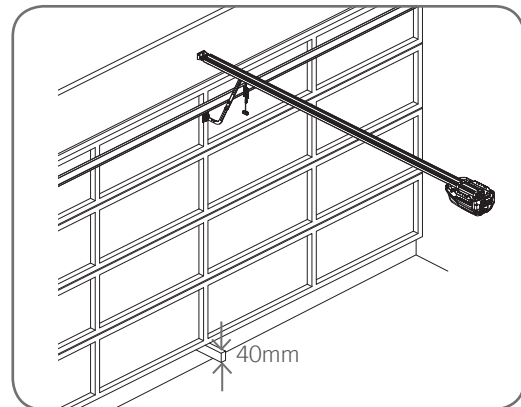


Fig. 27

Step 16.4 - To Decrease Force Pressure

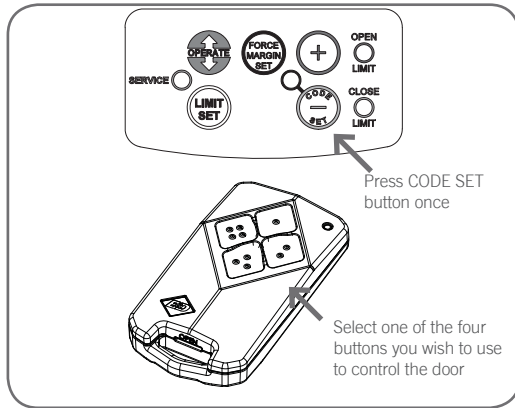
- Press and hold the FORCE MARGIN SET button (Fig 26).
- While holding down the FORCE MARGIN SET button, press the MINUS (-) button.
- Each press will decrease the force margin one step. The CLOSE LIMIT LED will flash each time the MINUS (-) button is pressed to indicate a decrease in force.
- Test the force again as per Steps 16.1 and 16.2.
- If the CLOSE LIMIT LED flashes continuously when the MINUS (-) button is being pressed, this indicates that the minimum force setting has been reached.

Step 16.5 - To Recall Factory Set Force

- Holding down the FORCE MARGIN SET button and the LIMIT SET button for two seconds.
- Release both buttons. The default setting should now be recalled.

Coding Transmitters

Fig. 28

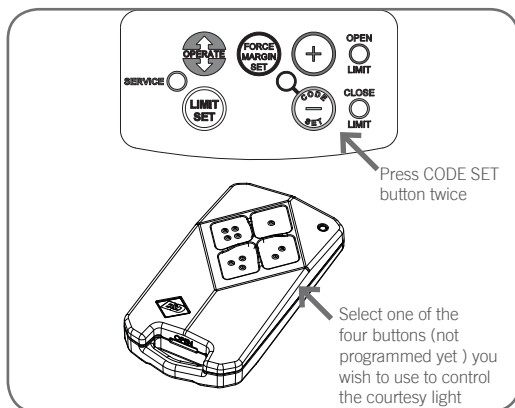


Step 17.1 - Storing the Transmitter Code

The opener can only operate from transmitters that have been programmed into its receiver. The receiver needs to learn the codes of any transmitter that will be used with the operator. Up to fourteen (14) codes can be stored in the receiver's memory.

- Ensure that the battery is inserted into the transmitter.
- Press the CODE SET button and release. The CODE SET LED will illuminate to indicate the opener is in Code Learn mode. If a valid code is not stored within 15 seconds the opener will exit Code Learn (**Fig. 28**).
- Press the transmitter button (one of four) that you want to control the door. The CODE SET LED will begin to flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second and then go out.
- The transmitter is now coded to operate the door - press the button to test.

Fig. 29



Step 17.2 - Setting the Transmitter to Operate the Courtesy Light

Although the courtesy light comes on with each operation of the opener, it may also be controlled by a transmitter without operating the door.

- Press the CODE SET button twice. The CODE SET LED will illuminate and the courtesy light will turn on to indicate that the light code learning is active (**Fig. 29**).
- Choose a transmitter button not already coded into the receiver. Press this button and the CODE SET LED will begin to flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second and then go out.
- The transmitter is now coded to operate the light - press the button to test.

Coding Transmitters

Step 17.3 - Setting the Transmitter to Operate Vacation Mode

The opener can be programmed into a "Vacation Mode" where the opener will not respond to any transmitter except one preprogrammed unit.

- Press CODE SET button three times. The CODE SET LED will illuminate and the courtesy light will flash slowly (once every two seconds) to indicate Vacation learning mode is active. **(Fig. 30)**
- Choose a transmitter button not already coded into the receiver. Press this button and the CODE SET LED will begin to flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second and then go out, and the courtesy light will also switch off. This indicates the code has been stored **(Fig. 30)**.
- To activate Vacation Mode, close the garage door and press the coded button transmitter for 5 seconds. The CODE SET LED will illuminate to indicate that the opener is in Vacation Mode.
- To exit Vacation Mode press the transmitter button momentarily until the CODE SET LED turns off.

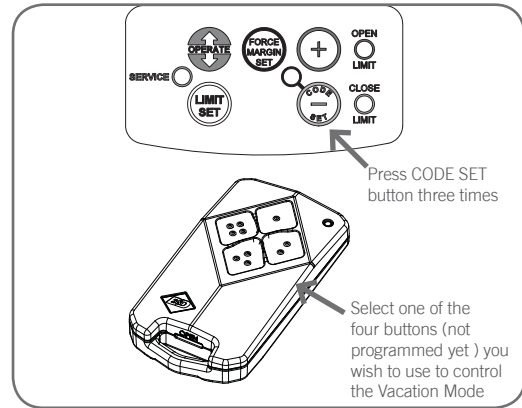


Fig. 30

Step 17.4 - Setting the Transmitter to Operate the Auxiliary Output

It is possible to operate other devices (e.g. alarm systems) using one of the spare buttons of a multi-channel transmitter coded into the Auxiliary Output feature.

- Press CODE SET button four times. The CODE SET LED will illuminate and the courtesy light will flash quickly (twice per second) to indicate that learning mode for the Auxiliary Output is active.
- Choose a transmitter button not already coded into the receiver. Press this button and the CODE SET LED will begin to flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second and then go out, and the courtesy light will also switch off. This indicates the code has been stored **(Fig. 31)**.

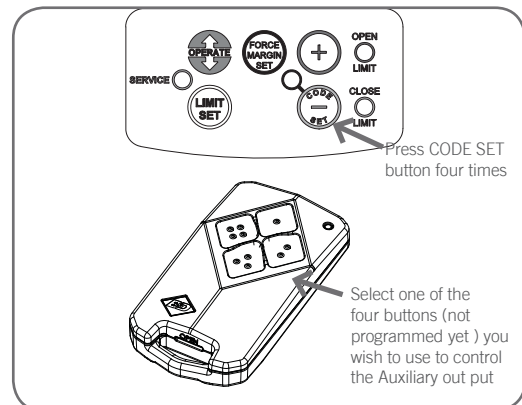
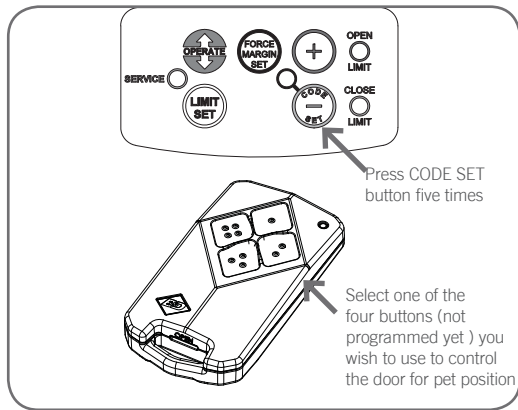


Fig. 31

Coding Transmitters

Fig. 32

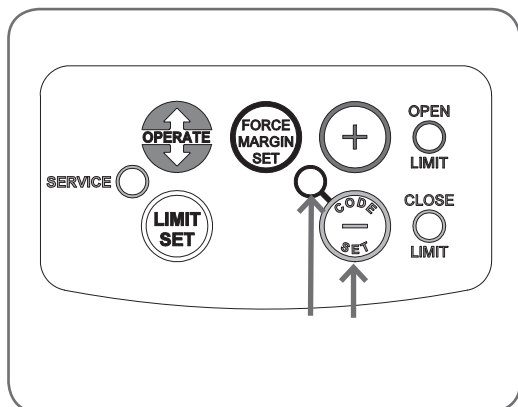


Step 17.5 - Setting the Transmitter to Operate Pet (Pedestrian) Mode

The opener can be programmed into a “Pet Mode” where the door opens partially to allow pets to enter/exit the garage:

- Press the CODE SET button five times, the CODE SET LED will illuminate and the courtesy light will flash quickly (twice per second) to indicate learning mode for Pet Mode is active.
- Choose a transmitter button not already coded into the receiver. Press this button and the CODE SET LED will begin to flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second and then go out, and the courtesy light will also switch off. This indicates the code has been stored. This indicates the code has been stored (**Fig. 32**).

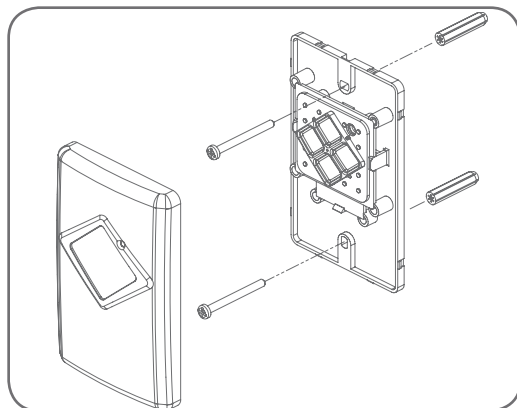
Fig. 33



Step 17.6 - To Erase Programmed Codes

If the CODE SET button is pressed and held for 6 seconds the CODE SET LED will blink rapidly for one second to indicate that all programmed codes have been erased. (**Fig. 33**)

Fig. 34



Step 18 - Installation of the Wall Mounted Transmitter

- Mount the transmitter in a convenient location, yet out of reach of children and at least 1.5m off the ground (**Fig. 34**).
- Make sure the door is visible from this location.
- To set the transmitter codes refer to Step 17.1.

Wireless Safety Beams Installation

⚠ WARNING: Safety beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg force). This is in compliance with AS/NZS 60335-2-95

Step 20.1 -Wireless Photo Electric (PE) Beams (optional)

A photo electric (PE) Beams extends across the door opening. This Safety Beam is designed to detect an obstruction while the door is closing and to send a signal to the door opener to reverse or stop the door movement. The wireless Safety Beam consists of:

1. Base Station Assembly
2. Receiver Assembly
3. Transmitter Assembly
4. Safety Beams Mounting Kit
5. Base Station Mounting Kit

The base station connects to the opener with the cable supplied. The receiver and base station has a wireless link. The receiver must be coded into the base station before fixing it to its position. Four C-type batteries are supplied in the kit for receiver and the transmitter.

Step 20.2 -Installation

Remove the front cover from receiver, transmitter and the base station. To remove the front cover:

Hold the box in both hands and push in the front cover by applying the pressure at shown points in **Fig.39**
Pull the front cover apart

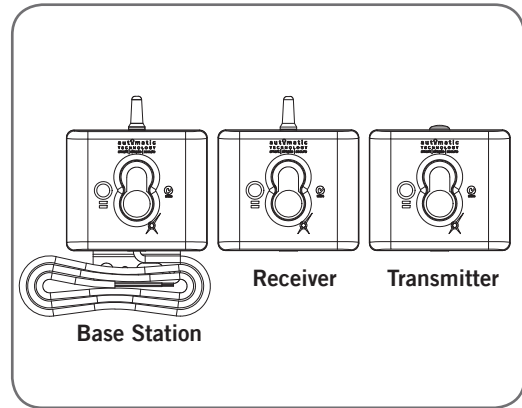


Fig. 38

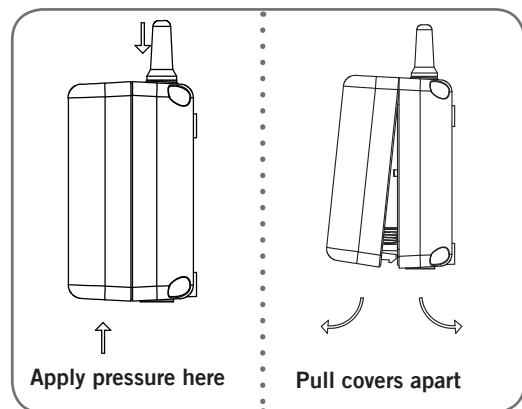


Fig. 39

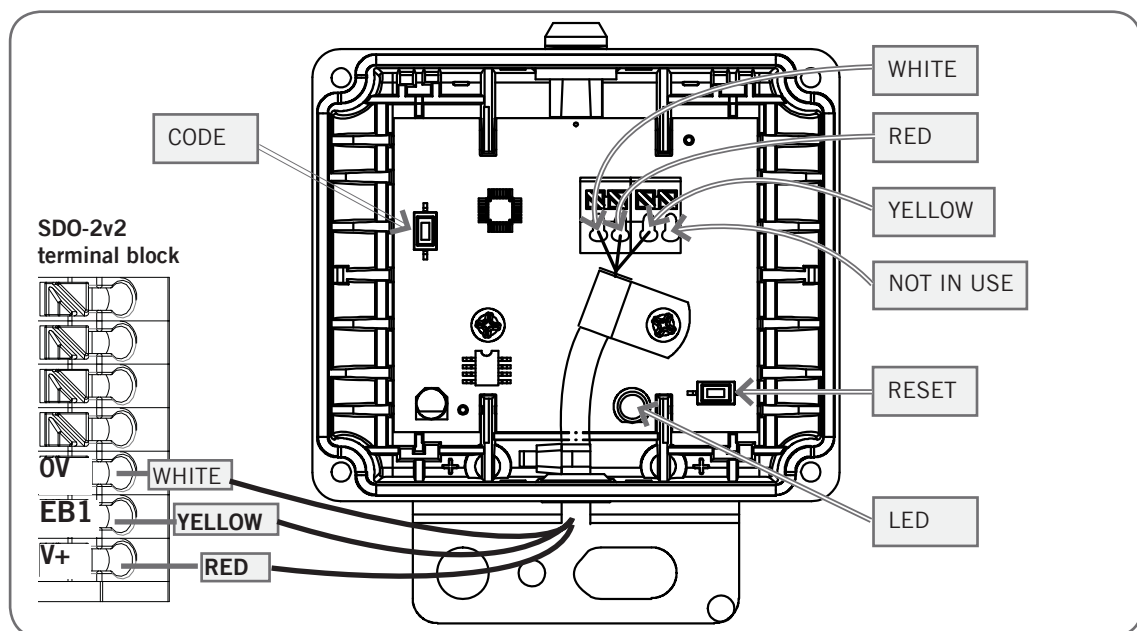
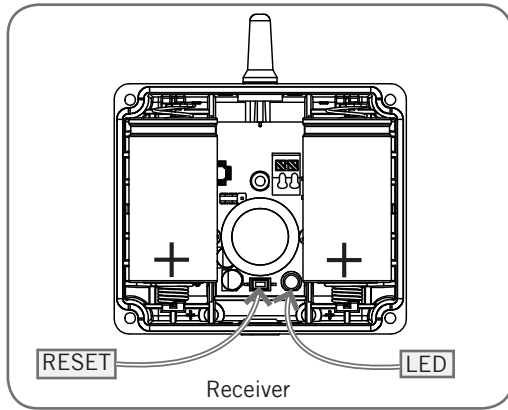


Fig. 40

Wireless Safety Beams Installation

Fig. 41



Step 20.3 -Connecting The Base Station To The Opener

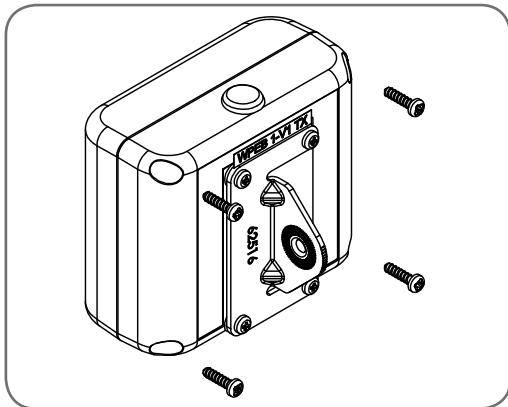
- Connect WHITE wire from base station to 0V on the terminal block of the opener
- Connect RED wire from base station to V+ on the terminal block of the opener.
- Connect YELLOW wire from the base station to EB1,EB2 or EB3 on the terminal block of the opener. See **Fig. 40**. Please note the exact position of these terminals will vary by opener type.

Step 20.4 -Coding The Receiver Into The Base Station

Base station can only hold one receiver in the memory. Coding a new receiver will replace the old one from the base station memory.

- Power up the opener, the LED on the base station will light up and remains on constantly **Fig. 40**.
- Insert two C-type batteries in the receiver. The LED on the receiver will also lightup and remains on constantly **Fig. 41**.
- Press and hold CODE push button on the base station. Keep holding until step.e.
- While holding CODE push button, press and release RESET button on the base station. The LED on the base station will start flashing.
- Press RESET button on the receiver for two (2) seconds, the LED on the base station will start to flash faster. Pause for two (2) seconds, then press reset button on the receiver again for two (2) seconds. The LED on the base station will stop flashing.
- Release the CODE push button from the base station and wait for the LED's on the base station and on the receiver to turn off.
- The LED on the receiver will now start to blink.
- put the covers back on the base station and receiver and secure with the 4x #6 x 25 screws (black) supplied. (**Fig. 42**)

Fig. 42



Wireless Safety Beams Installation

Step 20.5 -Fixing The Base Station To Wall/ Opener

The base station can be attached directly to a sectional opener using the M8 bolt and nut supplied. The wire can be fed through the top gromet of the opener (**Fig. 43**)

Note: The bracket may also be rotated so the base station hangs above the power head.

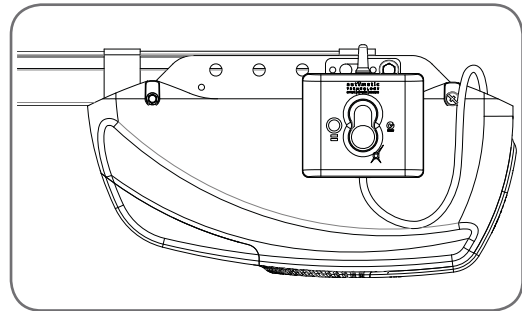


Fig. 43

Step 20.6 -Installing The Receiver And Transmitter

- Insert two C-type batteries in the transmitter (**Fig. 44**).
- Attach the front cover on the transmitter and secure it with four self tapping #6 x 25 screws (supplied).
- Attach the mounting bracket to the adjustment bracket with one pan head screw M5 x 10. (**Fig. 45**).
- Place the pe bracket on the back of the receiver/transmitter and secure it with four (M3x5) screws.
- Attach the receiver/transmitter to the adjustment bracket with one pan head screw M5 x 10.
- Mount the receiver to the side of the door closest to the base station and transmitter on the other side in line with receiver. The mounting surface should be rigid. In domestic applications ATA recommends the transmitter and receiver are placed in line of sight, with the beam 100mm above ground level (as per AS60335). This can be achieved by ensuring the bottom of the receiver and transmitter are 65mm above ground level. They should also be placed as close as possible to the door opening (**Fig. 46**). In industrial applications it is recommended that multiple Safety Beams are fitted.

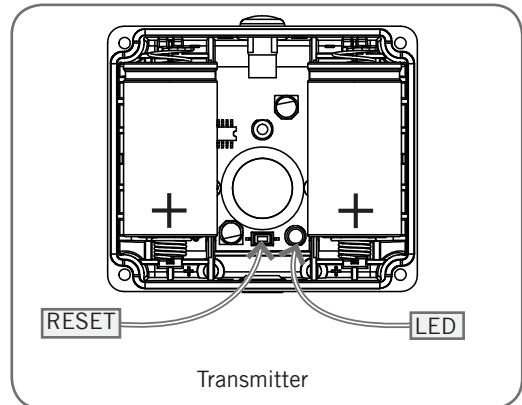


Fig. 44

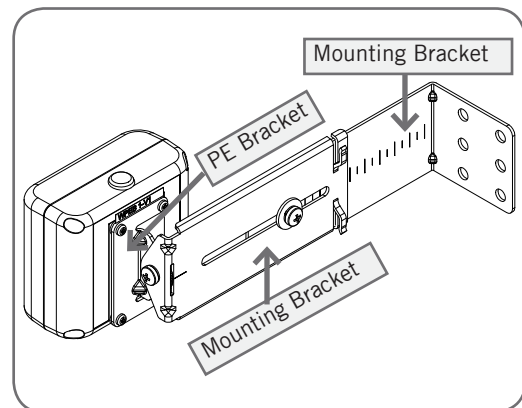


Fig. 45

Step 20.7 -Optical Alignment

- Make horizontal and/or vertical adjustment on the transmitter until the red LED on the receiver stays on, this indicates alignment.
- Make horizontal and/or vertical adjustment on the receiver until the red LED on the transmitter stays on, this indicates alignment.
- Setup the limits of the door opener as per instruction manual.

⚠ WARNING: When using Safety Beams, the doorway must be clear of all obstructions and persons at all times. The location of the beams and manner in which it is installed might not give safety protection at all times. Check to make sure that the height of the beam and type used give maximum protection possible.

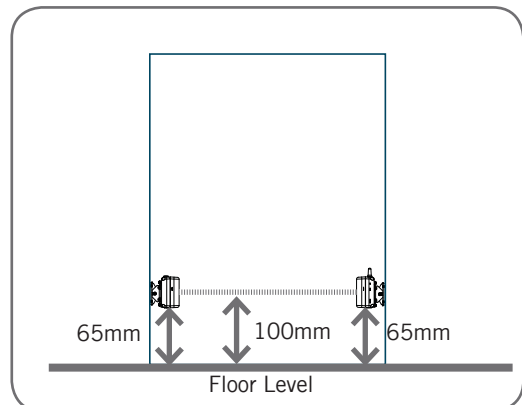
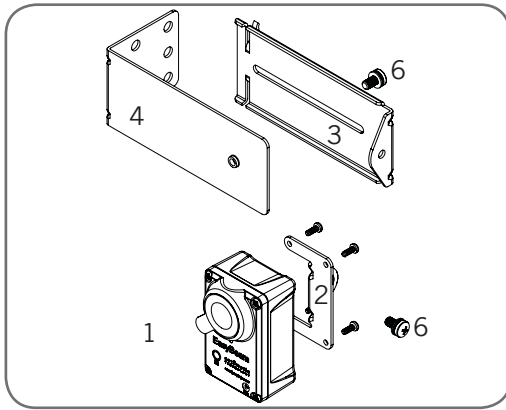


Fig. 46

Wired Safety Beams Installation

Fig. 35



WARNING: Safety beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg force). This is in compliance with AS/NZS 60335-2-95

Step 19 - Safety Beams (optional)

Safety Beams extend across the garage door opening. The Safety Beam is designed to detect an obstruction while the door is closing and to send a signal to the garage door opener to reverse or stop the door movement. One or two sets of Safety Beams can be connected to SDO-2v2 opener.

Step 19.1 - Fitting the Safety Beam

- Attach the mounting bracket (4) to the adjustment bracket (3) with the pan head screw (6) (supplied). (**Fig. 35**)
- Attach the bracket (2) to the Safety Beam transmitter with four taptite screws (m3x5) and attach the other side to the adjustment bracket (3) with the pan head screw (6). (**Fig. 36**)
- Repeat steps a and b to assemble the Safety Beam receiver.
-
- Mount the receiver to one side of the door and transmitter on the other side in line with receiver. The mounting surface should be rigid. ATA recommends the transmitter and receiver are placed in line of sight, with the beam 100mm above ground level (as per AS60335). They should also be placed as close as possible to the door opening. Connect as per the wiring diagram (**Fig. 37**).

Fig. 36

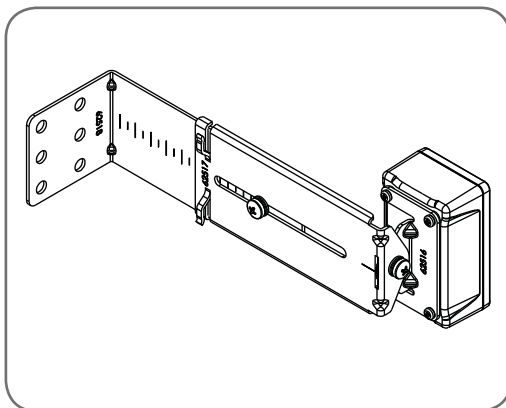
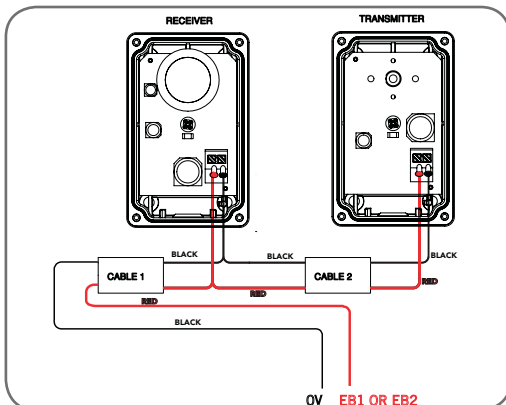


Fig. 37



Step 19.2 - Alignment

- Power up the opener with the Safety Beam connected. The green LED on the transmitter should turn ON to indicate power is present.
- If the receiver is connected to power and the red LED is flashing while the green LED on the transmitter is on, the transmitter and receiver are not aligned.
- Make horizontal and/or vertical adjustment on the transmitter and/or receiver until the red LED on the receiver turns on, indicating alignment.



NOTE: The sensors need to be 100mm above the floor level however, The exact position must be chosen in such a manner that it suits the application, the environmental conditions and provides maximum safety protection.

Note: Three wire Safety Beam is not compatible with SDO-2v2 opener.

Accessories

Terminal Block

A variety of wired accessory items can be connected to the terminal block such as Safety Beams, electric key switch, and more (**Fig. 47**).

Terminal connections from top down are as follows:

1. V+
2. EB1 (Safety Beam input)
3. OV (OV for Safety Beam)
4. EB2 (Safety Beam input)
5. OSC (Open/Stop/Close trigger)
6. AUX OUT (Auxiliary output trigger)

Remote Aerial (Part No 062177)

Some sites cause poor radio reception. Particularly problematic areas are those where there is a large amount of metal, like an all steel garage, or an underground car park with large masses of steel reinforced concrete. These issues, and others, can create radio reception issues.

Poor radio reception will be noticed by a reduction in the operating range of the transmitters.

You can evaluate whether fitting an external aerial will benefit as follows:

- test the maximum operating range of the transmitter with the garage door closed; then
- test the maximum operating range of the transmitter with the garage door open.

If the range improves when the door is open you can install a remote aerial kit to improve reception.

Mount the aerial to a suitable location on the outside of the garage. Similar to a television aerial, the better the mounting position the better the reception will be. Where possible, mount the aerial as high as possible, away from masses of metal and in a line of sight position to where you normally use your transmitter.

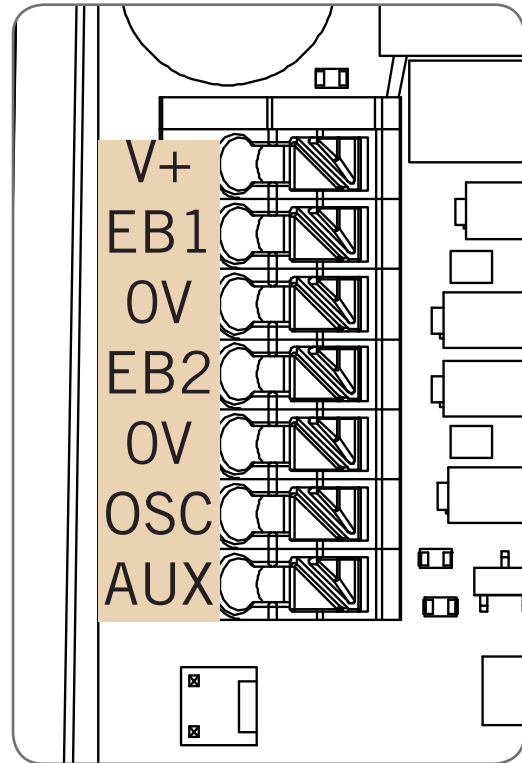


Fig. 47

Battery Back Up Installation

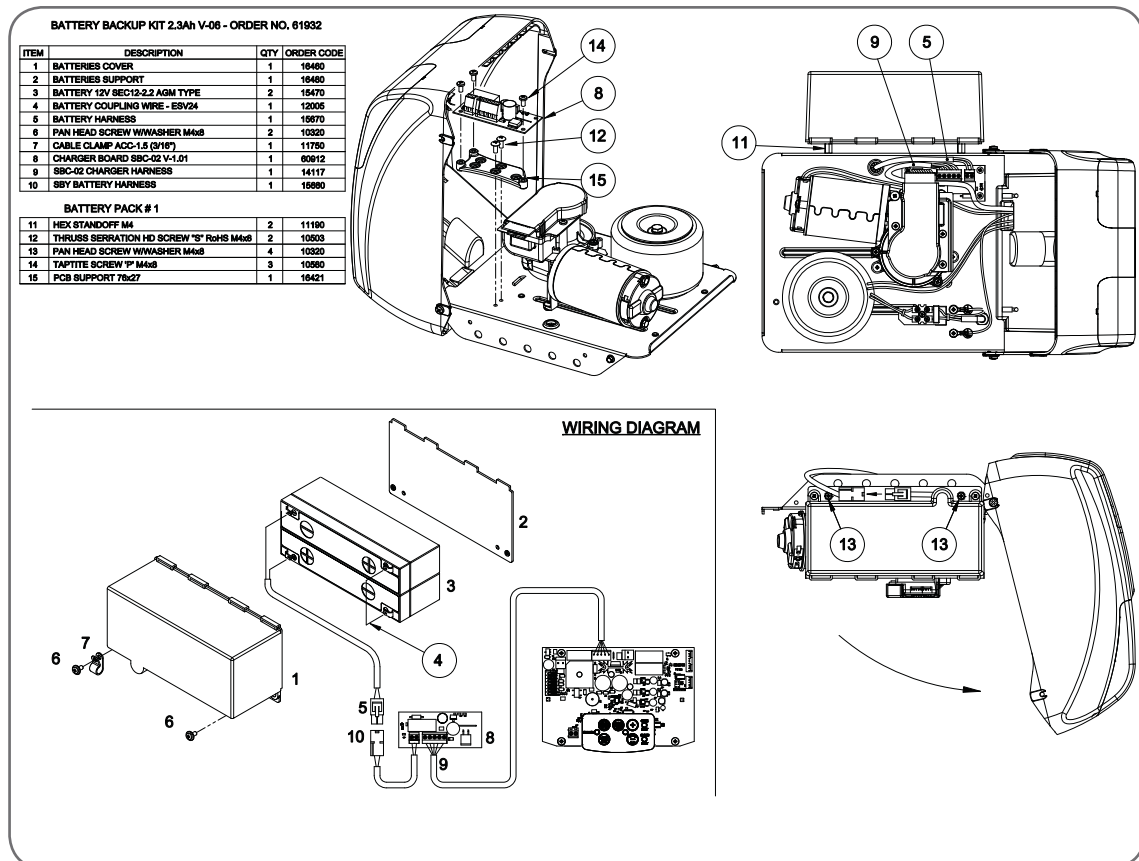


Fig. 48

Battery Back Up (optional)

The opener has provision for a Battery Back Up kit that allows continued operation of the door in the absence of mains power.

Installation

1. Disconnect power to the opener.
2. Remove screws and swing open the cover (**Fig 48**).
3. Mount the PCB support with two screws item # 12. Secure the SBC0-2 Charger Board onto the PCB support with three (3) screws item #14.
4. Feed the 2-wire battery harness item # 5 through the grommet on the base plate and connect to SBC0-2 battery charger board.
5. Feed charger harness from SBC0-2 battery charger board to the control board and plug onto the 5 pin connector marked "SBC0-2" on the control board.
6. Mount Battery Backup and secure with item 11 and 13.



Warning: After the next step the opener may become active (even when power is off) due to a residual charge in the batteries.

7. Connect item 5 and 10 together (**Fig 48**).

8. Reconnect power.

Testing Battery Back Up

1. Press either the OPERATE button or transmitter to activate the opener.
2. Whilst the door is in motion disconnect mains power - the opener should continue to operate.



Note: Wait for the door to complete its travel before proceeding to the next step

3. Press either the OPERATE button or transmitter to activate the opener.
4. Whilst the door is in motion re-connect power. The door should complete the cycle as normal.

Troubleshooting

If door stops or moves very slowly under battery power, then the batteries may have little to no charge.

To remedy this connect mains power and leave the batteries to charge. The batteries may take 24 to 48 hours to reach their maximum charge capacity.

How to use your opener

For maximum efficiency of your opener, your garage door must be in good operating condition.

An annual service of your garage door by an Approved Dealer is recommended.



CAUTION - Activate the opener only when the door is in full view, free of obstructions and with the opener properly adjusted. No one should enter or leave the garage while the door is in motion. Do not allow children to play with or near the door.



WARNING! This opener is a mains voltage plug-in domestic appliance and there are no user serviceable parts inside this opener.

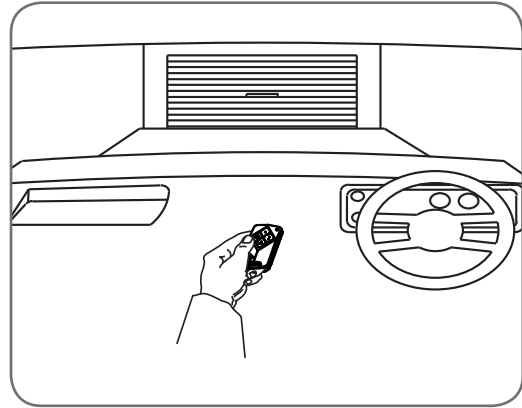


Fig. 49

Transmitter

- To operate the opener, press the programmed transmitter button until your door begins to move (usually 2 seconds). Make sure you can see the door when you use the transmitter.
- If you are in a vehicle you should aim the transmitter through your windscreen (Fig. 49).
- Check that the door is fully closed before you drive away.
- If you press the transmitter whilst the door is moving the door will stop. The next press of the transmitter will move the door in the opposite direction.

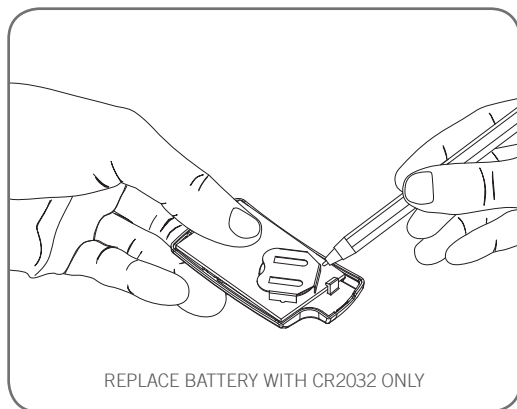
The transmitter may also be programmed to operate the following features (see Pages 18 to 20 for full details):

- to turn the courtesy light on and off without operating the door,
- to activate the Auxiliary Output,
- to put the door into "Pet Mode" where it opens partially to allow pet access to the garage, and/or
- to put the garage door opener into "Vacation Mode" where it will not respond to any transmitters.

NOTE: Additional transmitters may be purchased at any time.

How To Use Your Opener

Fig. 50



Removing the Battery From the Transmitter

(Battery Type: 3V Lithium Battery CR2032).

Use a non-metallic object (e.g. pen) to remove the battery.

(Fig. 50)

Inbuilt Locking Facility

DO NOT lock your door when your opener is engaged as it has inbuilt locking facility. With the opener engaged your door will be locked whether the power is on or off.

Manual Door Operation



CAUTION: when operating the manual release while the door is open. The door may fall rapidly due to weak or broken springs, or due to being improperly balanced. (AS3350)



CAUTION! Do not disengage the opener to manual operation with children/persons or any objects including motor vehicles within the doorway.

To disengage the opener from the door (preferably with the door in the closed position), pull down on the string handle on an angle towards the door. This will allow you to manually open or close the door. To re-engage the opener pull the string handle away from the door.



WARNING! When the opener is manually disengaged, the door is no longer locked. To lock the door manually, re-engage the opener after the door is closed.

Power Failure

When there is a power failure, the opener will be unable to automatically open or close your garage door. To use your door whilst there is no power you will need to disengage the opener and use the door manually – see Manual Operation above.

How To Use Your Opener

Safety Beam

A Safety Beam Kit (Part No 062734) may be fitted to this opener.

- When this option is fitted, the operation of this device is such that if an object (i.e. car, child, etc.) blocks the Safety Beam, then the garage door opener will not close the door automatically.
- If the Safety Beam is fitted but not operating correctly, then the door once opened automatically, will not close automatically. The door may be closed by reverting to manual operation – see Manual Operation.

Auto-Close Option

To have the Auto-Close option functional you must also have a Safety Beam (Part No 062734) fitted and functioning. To enable the Auto-Close function, place the AUTO-CLS jumper on both pins

When this option is selected the garage door opener will attempt to close the door automatically 30 seconds after opening.

If the Safety Beam is interrupted whilst the door is closing (e.g. by a person walking through the doorway), the door will reverse to the fully open position.

If the door does not close automatically, you may close the door using the Manual Operation.

Courtesy Light

The Courtesy Light will illuminate for approximately four (4) minutes each time the door is operated automatically.

Spare buttons of a multi-channel transmitters can be programmed to turn the light on and off by remote control.

See Step 17.2 for more information.

Auxiliary Output

This function allows the opener to operate other devices such as external lights or an alarm system.

To use this function, a spare button of a multi-channel transmitter must be programmed to operate the Auxiliary Output feature.

See Step 17.4 for more information.

Vacation Mode

The radio receiver of the garage door opener can be turned off to all but one transmitter via Vacation Mode. Whilst in vacation mode the opener will not respond to any transmitter.

To activate the Vacation Mode facility, see Step 17.3.

NOTE - program only one button to control "Vacation Mode". This will reduce the possibility of accidental activation of this feature.

Pet (Pedestrian) Mode

A transmitter can be programmed to open the door partially to allow pet access to the garage.

To activate Pet Mode press the transmitter button that has been programmed for Pet Mode - the door will open partially.

See Step 17.5 for more information.

Service

While the door opener does not require regular servicing, to function correctly the door must be in good operating condition. As a reminder the SDO-2v2 has a built in maintenance counter. This counter has a factory default of 3000 cycles, which is the recommended service interval.

When this counter expires the yellow SERVICE LED will light up and opener beep three times at the start of each cycle. In addition the courtesy light will flash and opener beep five times at the end of open cycle (when the door is fully open).

These warning signals will self extinguish after 30 cycles. **When this service counter is triggered it is strongly recommended you contact your garage door dealer to arrange a door service.**

However, if you choose not to have your door serviced the counter can be reset simply by pressing the LIMIT SET button.

Maintenance

Maintenance

Whilst your opener does not require any periodic maintenance, the door that it is fitted to, does. Your garage door is a large, heavy, moving object and should be tested regularly to ensure it is in good condition. A poorly maintained door could cause fatal or serious injuries or serious damage to property.

SDO-2v2 has a built in maintenance counter. From factory this is loaded with 3000 cycles. When this counter expires, the service yellow LED will lit , beeper will sound three times at the start of open or close cycle and the courtesy light will flash and beeper will beep five times just after fully opening the door. B&D suggests that you contact your nearest Approved Dealer to perform a door service. When maintenance counter indicate service is due it can be reloaded with 3000 cycles by press and holding the SET button on the console.

To ensure a long and trouble free life for your opener the following is recommended:

Monthly

- Disengage the opener and manually operate the door: The door must be smooth to operate by hand. An operating force on the bottom rail should not exceed 150N (15kg) force.
- Each month check that the opener reverses when the door contacts a 50mm high object placed on the floor (AS3350). Refer to Testing the Safety System (Step 16).

NOTE: If the door does not operate smoothly, call your nearest Approved Dealer.


Service Record

Record any maintenance in the following table to assist in any warranty service.

Date	Service by	Signature	Invoice No.	Amount


Yearly

B&D suggests that you contact your nearest Approved Dealer to perform an annual door service.



CAUTION: Frequently examine door, particularly cables, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced door may cause injury. (AS3350)

Adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures.



WARNING! Failure to maintain your garage door may void the warranty on your garage door opener.

Service

SDO-2v2 has a built in maintenance counter. For more details please see page 29.



Troubleshooting Guide

Symptom	Possible cause	Remedy
The opener does not work from the transmitter	Garage door in poor condition e.g. springs may be broken	Check the door's operation - see monthly maintenance (Page 30)
	The opener does not have power	Plug a device e.g. a lamp, into the power point and check that it is OK
	The battery in the transmitter is flat	Replace the battery (Page 28)
	The opener has been put into "Vacation Mode"	Turn off "Vacation Mode" (Page 19)
	The transmitter code has not been set	See coding transmitter procedure (Page 18)
The motor runs but the door does not move	The opener is disengaged	Re-engage the opener (Page 28)
The transmitter range varies or is restricted	Variations are normal depending on conditions e.g. temperature or external interference	See instructions for correct use of transmitter (Page 27)
	The battery is flat or faulty	Replace the battery (Page 28)
	Position of the transmitter in the motor vehicle	Change the position (Page 27)
The light does not work	Light module is not inserted/ connected properly	Check for correct connection otherwise contact your dealer for support
The door reverses for no apparent reason	This may occur occasionally from weather changes	The opener automatically adjusts to compensate for changes, to adjust the force see (Page 17)
The door opens but will not close	Safety Beam not operating correctly	Check the installation (Page 21-24) otherwise contact your dealer for support
The unit has started to beep and flashing	The service reminder has been triggered	Contact your dealer and arrange a door service. Alternatively press LIMIT SET button to reset the service counter.

If You Need a Service Call

If the opener needs service please call the dealer who installed the garage door opener (for product assistance contact 13 62 63 within Australia).

BEFORE CALLING you should have the following information to assist in providing the appropriate service:

1. Has anything happened since the opener last operated OK, e.g. a storm, a jolt to the door etc.?
2. How easy is it to manually open and close the door?
3. What model is the opener?
4. Who installed the opener?
5. When was it installed?

Fault Indicator

When a fault is detected the SERVICE LED will start to flash and a number of beeps will sound to indicate that there is a fault. The fault will be active each time an attempt is made to operate the door.

Pressing the LIMIT SET button will reset the opener. If the fault continues to be tripped contact an Approved Dealer for assistance.

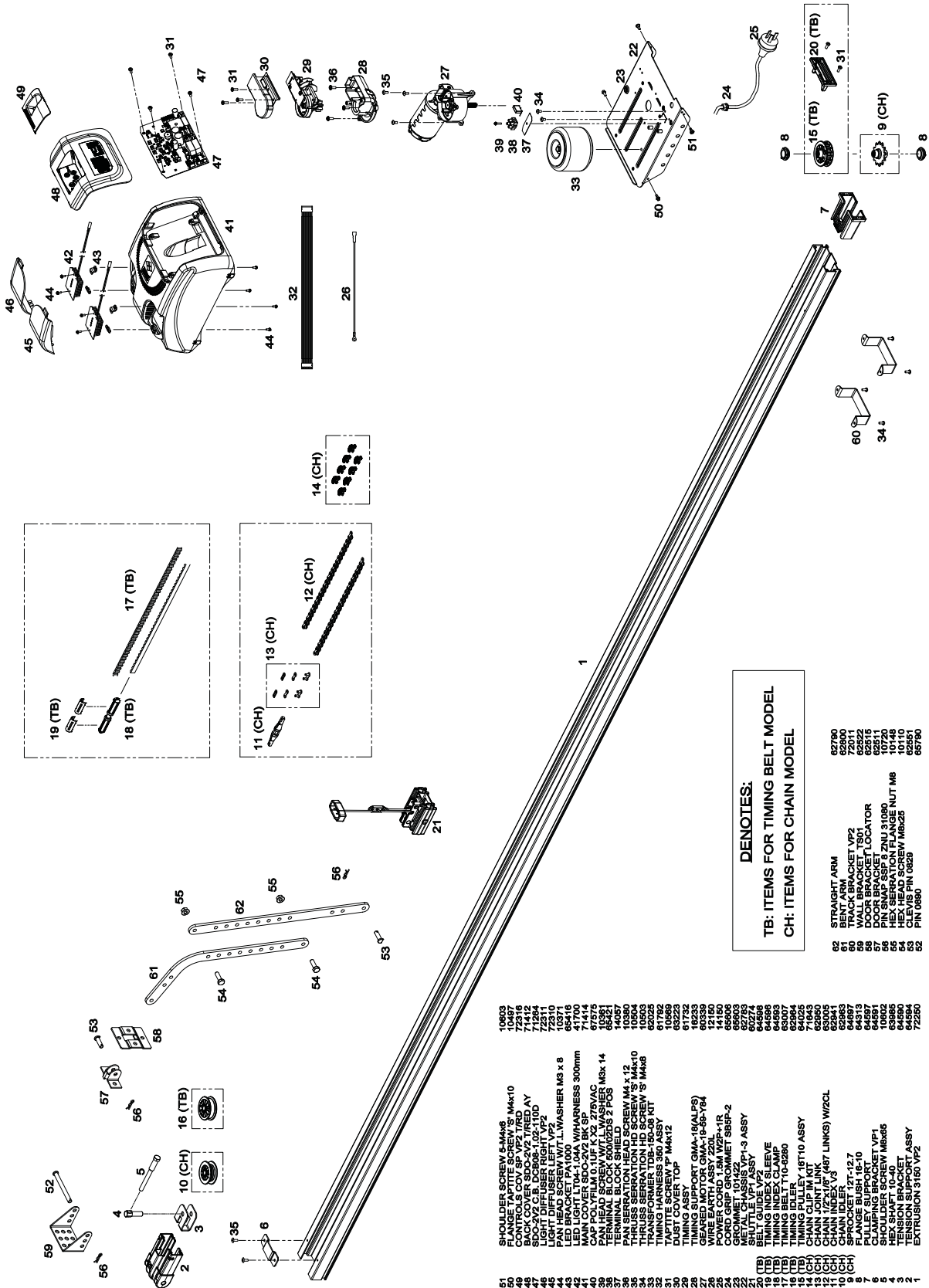
Parameters

Door status indicators

Door opener state	OPEN LED (green)	CLOSE LED (red)	Beeper
Open	On		
Close		On	
Opening	Flashing		
Closing		Flashing	
Door travel stopped	Flashing	Flashing	
Door obstructed when opening	Flashing		
Door obstructed when closing		Flashing	Beeps while door is moving
Opener overloaded	Alternating flashes	Alternating flashes	
Door in open position with Auto-Close mode selected	One second flashes		
Mains power interrupted	Rapid flashes		

Button	Function
OPERATE	Opens/stops/closes the door
CODE SET	Codes a transmitter button for operate function
FORCE MARGIN SET & PLUS (+)	Increases the obstruction force margin setting
FORCE MARGIN SET & MINUS (-)	Decreases the obstruction force margin setting
FORCE MARGIN SET (then) LIMIT SET	Reloads the factory set default obstruction force margin setting
LIMIT SET (for 6 seconds)	Clears the door limits set positions. Limits then need to be reset
LIMIT SET (then power on) and hold until all LEDs are off	Deletes control parameters excluding transmitter storage memory
CODE SET press and hold until DOOR CODE LED starts flashing	Deletes all transmitter storage memory
LIMIT SET & CODE SET (the power on) and hold until all LEDs are off	Deletes all control parameters and transmitter storage memory

Spare Parts List



Denotes:
 TB: ITEMS FOR TIMING BELT MODEL
 CH: ITEMS FOR CHAIN MODEL

ITEM NO.	DESCRIPTION	ORDER CODE
51	SHOULDER SCREW 5-M4x8	10603
52	FLANGE TAPITTE SCREW 'S' M4x10	10487
53	BACK COVER SDO-2V2/TRED AY	71412
54	SDO-2V2 C.B. DCR68-1.02-1100	71284
55	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
56	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
57	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
58	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
59	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
60	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
61	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
62	LED LIGHT L104-1.04A W/HAIRNESS 300mm	72310
1	MAIN COVER SDO-2V2 BK SP	10371
2	MAIN COVER SDO-2V2 BK SP	10371
3	MAIN COVER SDO-2V2 BK SP	10371
4	MAIN COVER SDO-2V2 BK SP	10371
5	MAIN COVER SDO-2V2 BK SP	10371
6	MAIN COVER SDO-2V2 BK SP	10371
7	MAIN COVER SDO-2V2 BK SP	10371
8	MAIN COVER SDO-2V2 BK SP	10371
9	MAIN COVER SDO-2V2 BK SP	10371
10	MAIN COVER SDO-2V2 BK SP	10371
11	MAIN COVER SDO-2V2 BK SP	10371
12	MAIN COVER SDO-2V2 BK SP	10371
13	MAIN COVER SDO-2V2 BK SP	10371
14	MAIN COVER SDO-2V2 BK SP	10371
15	MAIN COVER SDO-2V2 BK SP	10371
16	MAIN COVER SDO-2V2 BK SP	10371
17	MAIN COVER SDO-2V2 BK SP	10371
18	MAIN COVER SDO-2V2 BK SP	10371
19	MAIN COVER SDO-2V2 BK SP	10371
20	MAIN COVER SDO-2V2 BK SP	10371
21	MAIN COVER SDO-2V2 BK SP	10371
22	MAIN COVER SDO-2V2 BK SP	10371
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33	MAIN COVER SDO-2V2 BK SP	10371
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41	MAIN COVER SDO-2V2 BK SP	10371
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60	MAIN COVER SDO-2V2 BK SP	10371
61	MAIN COVER SDO-2V2 BK SP	10371
62	MAIN COVER SDO-2V2 BK SP	10371
7	STRAIGHT ARM	62760
8	BENT ARM	62800
9	WALK BRACKET VP2	72821
10	DOOR BRACKET LOCATOR	82816
11	DOOR BRACKET ZHU 31080	92511
12	DOOR BRACKET ZHU 31080	10148
13	HEX SERRATION FLANGE NUT M8	10110
14	HEX HEAD SCREW M8x25	10128
15	PIN Ø8x6	85790
16	FLANGE BUSH 18-10	64315
17	PULLEY SUPPORT	64487
18	SHOULDER SCREW M8x85	10062
19	HEX SHAFT 10-40	63885
20	TENSION SUPPORT	64480
21	EXTRUSION 31.60 VP2	72250



Warranty

Product: CAD P

Purchased from: _____ Purchaser: _____
(described as "you" below)

Address: _____ Installed by: _____

Installed on (date): _____ Invoice No: _____

1 Making a claim - To make a warranty claim you must:

- (a) produce a copy of the receipt of purchase, together with this warranty certificate with the above details completed; and
- (b) where the Product has been sold by B&D, make all warranty claims directly with B&D by sending it to B&D at the relevant address set out in paragraph 2 below; or
- (c) where the Product has been sold by an approved distributor, make all warranty claims directly with the approved distributor. If you are unsure of the correct address of the approved distributor from which you purchased the product, you can send your claim to B&D with the rest of the above details completed, including the original invoice number, and we will forward it to the distributor.

You are responsible for the expense of making a claim under this warranty.

2 B&D or approved distributors only - This warranty is in addition to any statutory, non-excludable guarantees or warranty rights under Australian or New Zealand laws (as applicable). This warranty applies only to Products sold by B&D or its approved distributor. "B&D" means in Australia - B&D Doors of 34 – 36 Marigold St, Revesby NSW 2212 and in New Zealand - B&D Doors (NZ) Limited of 30C Allens Road, East Tamaki Auckland. "Approved distributor" means an approved reseller of B&D products purchasing on open account, from B&D, for the purpose of supplying those products to end users.

3 What the warranty covers - B&D warrants, subject to paragraph 4, that it will, at its option, either repair or replace (in a manner B&D considers reasonable) any proven defects:

- (a) in installation for a period of one year from the date of installation where the CAD P (Product) has been installed by B&D or its approved distributor;
 - (b) in materials, manufacture or workmanship in the Product, as follows:
 - (i) for all components of the Product that make up the power head (including any track assembly) that is attached to a garage door and that are installed by B&D or an approved distributor, the warranty will be valid for a period of five years or 10,000 cycles, which ever occurs first, provided that the Product is serviced annually by B&D or its approved distributor;
 - (ii) for all components of the Product that make up the power head (including any track assembly) that is attached to a garage door and that are not installed by B&D or an approved distributor, the warranty is valid for a period of one year, provided that all costs of disconnection, reinstallation and return freight are to be borne by you;
 - (iii) for all other components of the Product the warranty is valid for a period of one year; and
- in each case the warranty applies from the later of the date of purchase, delivery or installation by B&D or an approved distributor (as applicable).

4 What the warranty does not cover - This warranty does not cover:

- (a) batteries or globes - B&D will not be liable for any defect or failure in them;
- (b) adjustments - (as described in the Instruction Manual provided with the Product) which are not defects - you will need to pay for any service calls for adjustments;
- (c) model modifications - B&D will not be required to incorporate modifications made to existing/future Product models;
- (d) travel expenses - incurred by B&D or its approved distributor in either travelling to and from or transporting the Product to/from areas outside a capital city metropolitan area - you will need to pay for these expenses; or
- (e) additional access expenses - incurred by B&D or an approved distributor in obtaining access where the Product is not readily accessible - you will need to pay for those additional expenses.

5 What voids the warranty - Subject to paragraph 6, this warranty does not extend to, and B&D will be relieved of, all obligations, responsibilities and liabilities in the event that defects in the Product are directly or indirectly, in the opinion of B&D, due to or resulting from:

- (a) unreasonable use - the Product not being used correctly in accordance with the Instruction Manual or other unreasonable use;



Warranty

- (b) instructions - failure to observe any instructions or directions (including "warning" notifications in the Instruction Manual), provided with the Product or given to you;
- (c) other devices - the Product being fitted to any door or other closing device which is not of the type or condition defined in the Instruction Manual as suitable for installation of the Product;
- (d) installation or adjustment - faulty installation or adjustment of the Product or door to which the Product is connected where such installation or adjustment is not carried out by B&D or its approved distributors;
- (e) unauthorised acts - modifications or repairs made or attempted to be made by you or any unauthorised person;
- (f) service - lack of proper maintenance, service or care of the door and Product;
- (g) outside control - events or acts beyond the reasonable control of B&D;
- (h) settings - use with doors locked or operation of the Product with excessively high opening or closing force settings
- (i) wiring - faulty electrical wiring of structures to which the Product is affixed;
- (j) interference - radio (including citizen band transmissions) or other electronic interference;
- (k) water damage - including effects from rust and corrosion);
- (l) salt - salt corrosion or damage to the surface coatings or base materials due to environmental conditions (such as proximity to the sea-front or similar corrosive conditions).
- (m) continuous operating time - maximum continuous operating time exceeding 1 minute in 10;
- (n) maximum operating force – the operating force exceeding 15kg* (150 Newton) when moving the door manually to the open or closed position;
- (o) door size – the door surface area exceeding 16.5m²;
- (p) modifications - any unauthorised modification to the Product;
- (q) insects damage - damage caused by insects; or
- (r) non-residential use – installation of a residential garage door opener in a commercial or industrial premises or in a dwelling other than a single-family dwelling.

6 Statutory guarantees or warranties – Australia

If you are a consumer under the Australian Consumer Law, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. This warranty certificate and other statements contained in this document or other B&D documents given to you do not exclude, restrict or modify the application of all or any of the provisions of the Australian Consumer Law.

New Zealand

This warranty certificate and other statements contained in this document or other B&D documents given to you do not exclude, restrict or modify the application of the New Zealand Consumer Guarantees Act (collectively defined as the "Act"); or the exercise of rights conferred by other statutory provisions which cannot be excluded, restricted or modified, provided that to the extent that the Act or other statutory provision permits B&D to limit its liability for a breach of a statutory guarantee or warranty, B&D's liability for such breach is limited to the payment of the cost of replacing the Product or acquiring an equivalent Product or repairing the Product.

In Australia, this warranty is given by B&D Australia Pty Limited (ABN 25 010 473 971) of B&D Doors of 34 – 36 Marigold St, Revesby NSW 2212, phone 13 62 63 and email enquiries@bnd.com.au. In New Zealand, this warranty is given by BD Doors (NZ) Limited of 30C Allens Road, East Tamaki, Auckland, phone 09-273 8600 and email enquiries@bnd.co.nz

This warranty document is not intended to create a contract between B&D and the purchaser.

NOTES:

1. * The door that the Product is used with should be balanced in such a way that the user is able to open or close the door manually using a force not greater than 150 Newton (15 kg), other than to initially cause the door to start moving, which may require force in excess of that specified in this paragraph.

Optional Accessories

There is a range of additional accessories for your added convenience and security.

- **Safety Beams** - Part No 062734. Gives additional protection if the door is closing onto your property or person. Simply breaking the beam “stops” the door! Must be fitted if the Auto-Close feature is operational.
- **Keyring Transmitter** - Part No 062731. Ideal for personal use when entry into the house may be via the garage.
- **Transmitter Wall Button** - Part No 062733. Allows you to operate the opener within 10 metres of the door. Ideal for mounting inside the house.
- **Combo Access Kit** - Part No 062738. Keyswitch function will open the door without a transmitter. Can be used to manually disengage the opener, and recommended when the garage door is the only access to the garage.
- **Remote Aerial Kit** - Part No 062177. For sites where radio range may be reduced.

Contact your Approved Dealer for installation of these accessory items.



When installing any accessories, always follow the instructions included with the product.



Only B&D accessories purchased from an Approved Dealer offer the highest quality and assure you of trouble free opener operation.



QLD Office: 17 Oasis Court, Clontarf 4019. Ph: (07) 3883 0200
NSW Office: 34-36 Marigold St, Revesby 2212. Ph: (02) 9722 5555
VIC/TAS Office: 147-153 Canterbury Road, Kilsyth 3137. Ph: (03) 9237 7766
SA Office: 23 Frederick Road, Royal Park 5014. Ph: (08) 8440 4747
WA Office: 96 Mulgul Drive, Malaga 6062. Ph: (08) 9247 8777
www.bnd.com.au
NZ Office: 70 Allens Road, East Tamaki, Auckland. Ph: (09) 273 8600
www.bnd.co.nz

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