



 AUTOMATIC SAFETY REVERSE SYSTEM

 AUTOMATIC COURTESY LIGHT

ROLLING CODE

IMPORTANT USER SAFETY INFORMATION

⚠We strongly recommend the use of a safety beam device for more protection.

⚠ DO NOT operate the Garage Door Opener unless the Garage Door is in full view and free from objects such as cars and children or adults.

Δ	DO NOT operate the Garage Door Opener when children/persons are near the door. Children must be supervised at all times when near the garage door and when the Door Opener is in use.
Δ	Keep the remote control away from children.
Δ	Ensure that the SAFETY REVERSE SYSTEM (FORCE) is working correctly and is TESTED and set strictly according to the Installation Instruction Manual. This test must be carried out every month and adjustment made if necessary.
Λ	DO NOT disengage the Door Opener to manual operation with children/persons or and other objects including motor vehicles under the doorway.
Λ	Install the wall switch or wall mounted transmitter in a LOCATION/POSITION where the garage door is visible and out of reach of children.
Λ	Connect the opener power cord ONLY to properly earthed mains. Installation and wiring must be in compliance with relevant local requirements.
A	DISCONNECT electrical power connected to the door opener before undertaking any repair on/or removal work of the cover. Only experienced professional service personnel can remove the cover.
Δ	Keep hands or other parts of the body and loose clothing CLEAR of the door and door opener AT ALL TIMES while operating and servicing.
Δ	When using auto close mode, a SAFETY PHOTO BEAM device must be fitted and tested for correct operation at regular intervals. EXTREME CAUTION is recommended when using auto close mode. ALL safety rules must be observed.
⚠	The SAFETY REVERSE SYSTEM is only activated when a certain level of FORCE is exerted onto both the object / person and the door. As a result, the object / person / door may suffer DAMAGE OR INJURY. The SAFETY BEAM device is strongly recommended for more protection.
\triangle	Ensure that the door is fully opened before passing into or out of the garage. Ensure that the door is fully closed before leaving the driveway.

MAIN FEATURES

EASY OPERATION

To operate the door, simply press the programmed transmitter button once for two seconds. The door can be stopped during opening or closing by pressing this button again. The next activation will move the door into the opposite direction. Wall mount transmitter or wall switch (optional) can also activate the opener.

AUTOMATIC SAFETY REVERSE SYSTEM

If the door encounters object(s) during the closing cycle, it will automatically reverse. It will automatically stop while encountering object(s) during the opening cycle. The amount of force that the door should encounter before reversing or stop is adjustable and should be decided initially when the opener is first installed. The safety obstruction force test should be tested once a month (Refer to Installation Instruction on how to test).

COURTESY LIGHT

Courtesy light on the control panel automatically switches on for approximately 3 minutes when operating the door.

IN-BUILT BUZZER SOUND INDICATOR

For additional safety pre-caution, factory default see sound (low level sound) can be heard every time when the opener is activated. The sound could also be deactivated by following specific instruction.

TOTAL OPERATING TIME PROTECTOR

The opener has an in-built protection system. If the door does not fully open within 40 seconds, the opener will stop automatically. Otherwise, the opener will reverse if the door does not close fully in 40 seconds.

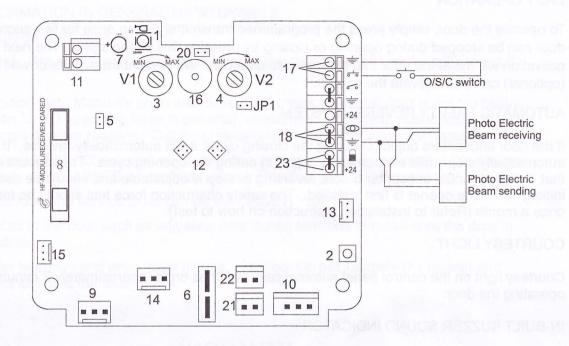
MANUAL RELEASE HANDLE

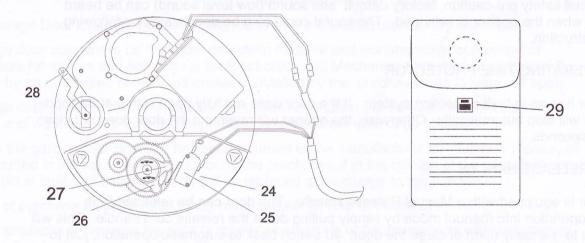
The opener is equipped with a Manual Release Handle. The door can be released from automatic operation into manual mode by simply pulling down the release cord handle. This will enable you to manually open or close the door. To switch back to automatic operation, just to push the handle up to the end to re-engage the unit.

AUTO CLOSE MODE AND SAFETY BEAM DEVICE (Optional)

The opener has an input terminal for provision of SAFETY BEAM device to be connected for additional safety protection. The door/opener could be set to close itself automatically when using in conjunction with an optional Safety Beam Device.

MAIN OPERATING FEATURES



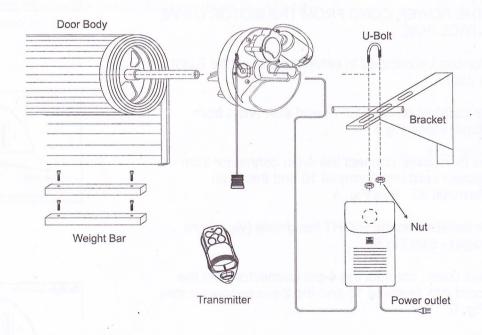


- 1). Transmitter Program button
- 2). Open/stop/close Control button
- 3). Force Margin Set Trim Pot
- 4). Safety Obstruction Force Set Trim Pot
- 5). Jumper Terminal: for Auto Close Time set
- 6). Fuse (7.5A/32V)
- 7). Coding indicator light
- 8). Receiver Board
- 9). Power input
- 10). Power output for motor
- 11). Antenna shocker
- 12). Courtesy light socket
- 13). Control button line connection
- 14). Terminal: for backup battery input
- 15). Terminal: for Alarm connection

- 16). In-built BUZZER sound
- 17). Terminal: external switch O/S/C
- 18). Terminal: Safety Beam Device
- 20). Jumper Terminal: for removal of BUZZER
- 21). Terminal: for Right hand side installation
- 22). Terminal: for Left-hand side installation
- 23). Terminal: for ALS
- 24). Open limit micro switch
- 25). Close limit micro switch
- 26). Open limit cam
- 27). Close limit cam
- 28). Engage/disengage lever
- 29). Open/stop/close Control button

ITEM	QUANTITY
Drive Unit	1
4 Channel Transmitter	2
U-Bolt Assembly	1
Safety Fuse 10A/32V	bit menous ed 1
Manual Release Handle	guid To constat L1 a source
Wire Clip	6
Self Drilling Screw	2
Plastic Wall Plugs	2
Installation Manual	nou at est of sur 1 hours o
Alex Clamp	1

INSTALLATION DIAGRAM



INSTALLATION REQUIREMENTS

SIDE ROOM REQUIREMENTS

Fig 1 shows the minimum side room that is required between the face of the drum wheel and the edge of the door mounting bracket. Fig 2 shows the maximum distance between the face of the drum wheel and the door mounting bracket. The ideal distance should be between 85-135mm.

1. CHECK DOOR OPERATION

Before beginning the installation of the Opener, check the operation of the door. The door must be well balanced and be in reasonable condition. It should stay open around 900mm to 1200mm above the floor. The door should not stick or bind in the guide tracks. The ideal operational effort in raising or lowering the door should not exceed a force of 15kg.

2. FIXING OF WEIGHT BARS

Weight bars are generally only required on very light weight or badly worn doors. Their main purpose is to eliminate the possibility of the door curtain ballooning on initial start-up (from the door fully open position). After installing your new Opener, if your door balloons on initial start-up then we recommend that you fit one or two weight bars to the bottom edge of your door (total weight 5-7kg) as detailed below.

Move the door manually to the mid open position. Place the weight bars equally apart on the bottom rail of the door and secure them with the fasteners provided see Fig 3. Once the weight bars have been fitted the door should have a natural tendency to lightly free fall from the mid open position.

3. CONNECTING THE POWER CORD FROM THE MOTOR DRIVE INTO THE CONTROL BOX

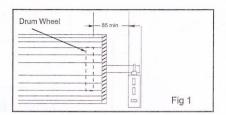
The opener/motor can be installed in either the Left or the Right hand side of the door.

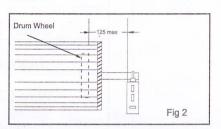
3.1. When motor installed on the LEFT-hand side (view from inside of the garage) - See Fig 4

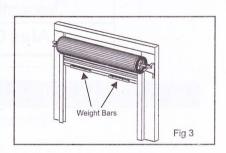
Open the Control Box cover, connect the 4-pin connector from the motor drive power cord into Terminal 10 and the 2-pin connector into Terminal 22. See Fig. 4.

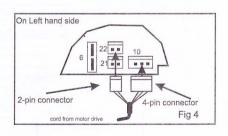
3.2. When motor installed on the RIGHT hand side (view from inside of the garage) - See Fig 5

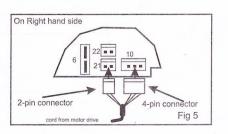
Open the Control Box cover, connect the 4-pin connector from the motor drive power cord into Terminal 10 and the 2-pin connector into Terminal 21. See Fig. 5.











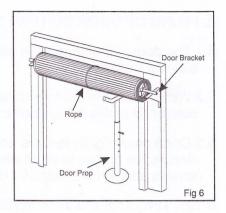
4. FITTING DRIVE ASSEMBLY TO THE DOOR (RIGHT HAND INSTALLATION)

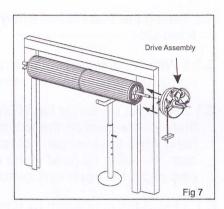
The door drive assembly can be fitted to the door in a variety of ways. Below we will describe one method of fitting. Make sure there is enough side room (135mm from end of door shaft to the wall) to slide drive assembly onto shaft. PLEASE NOTE: THE INSTRUCTIONS SHOWN HERE ARE FOR RIGHT HAND INSTALLATION.

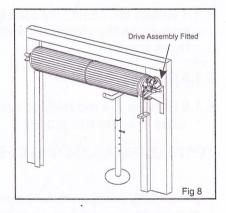
- 4.1 Check that the door shaft U bolt is securely tightened on the left hand side of the door.
- 4.2 Raise the door out of the door guides and tie a rope around the center to secure the roll. Fig 6.
- 4.3 Support the right hand end of the door with a suitable prop, e.g. Step ladder and soft padding to protect door surface. Fig 7.

WARNING: DO NOT ALLOW CHILDREN/PERSONS NEAR THE DOOR DURING INSTALLATION. SERIOUS PERSONAL INJURY AND OR PROPERTY DAMAGE CAN RESULT FROM FAILURE TO FOLLOW THIS WARNING.

- 4.4 Check that step 4.3 was completed. Carefully loosen and remove the right hand door shaft U bolt.
- 4.5 Make sure that the door supporting prop is secure. While the door is supported remove the right hand door mounting bracket from wall.
- 4.6 Remove the drive assembly from packaging. Try to rotate the drive gear by pushing the fork. If the gear does not rotate then manual mode has to be selected. To select pull the red handle downwards. The drive gear should now rotate.
- 4.7 Slide the drive assembly over the door axle making sure that one spoke of the door drum wheel sits in between the 2 drive forks of the drive assembly. Push the drive assembly into the door so that the face of the drive assembly wheel rests against the face of the door drum wheel.
- 4.8 Refit the door mounting bracket to the wall. In some cases the bracket may have to be re-positioned. Fit the specially supplied U-bolt Fig 8 over the axle/drive assembly and tighten firmly. Remove the door supporting prop and untie the rope from the curtain.
- 4.9 Check the manual operation of the door by raising and lowering the door. The door should run smoothly and not catch on any part of the drive assembly.







INSTALLATION INSTRUCTIONS

5. FIXING OF DOOR CURTAIN TO DRUM WHEEL

- 5.1 The door curtain has to be secured to the drum wheel with suitable fasteners.
- 5.2 With the door in the fully closed position mark the curtain on both ends of the door at points (A) and (B) Fig 9.
- 5.3 Open door slightly to have access to the marked positions. Secure the curtain to drum wheel using self drilling screws. The screws should be at least 90 degrees apart as per Fig 9.

6. SETTING THE DOOR TRAVEL LIMIT

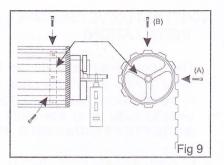
- 6.1 Setting the Travel Limit when motor is installed on the RIGHT hand side
- 6.1.1 With the drive assembly in manual mode FIG 13 move the door up by hand to the desired open position.
- 6.1.2 Remove the cover Fig 10 and slightly loosen the three screws that lock the cam (to the extent that you can rotate the cam by hand while the cam can not rotate itself). Rotate the open limit cam clockwise by hand in the direction of the limit switch until the cam clicks the open limit switch Fig 11.
- 6.1.3 Move the door down by hand to the desired closed position.
- 6.1.4 Rotate the close limit cam by hand anti-clockwise until the cam clicks the close limit switch (Fig.12). Slightly re-tighten the three screws.
- 6.1.5 Connect power lead.
- 6.1.6 Engage the red release handle and the Opener is ready to be used in automatic mode.

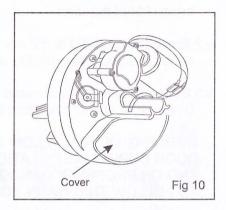
TESTING AND ADJUSTING OPEN LIMIT

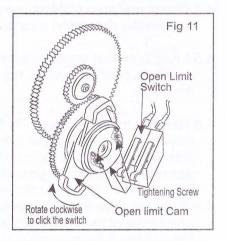
Press O/S/C button to fully open the door. If the door does not stop at the desired open position, slightly loosen the three tightening screws, slightly moving the Open Limit Cam anticlockwise to raise the open position or clockwise to lower it (see Fig. 11). Tighten the screws after the adjustment.

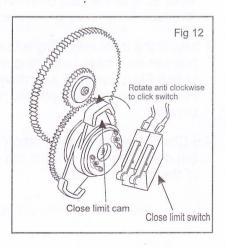
TESTING AND ADJUSTING CLOSE LIMIT

Press O/S/C button to fully close the door. If the door does not stop at the desired close position, slightly loosen the three tightening screws, slightly moving the Close Limit Cam anticlockwise to raise the close position or clockwise to lower it (see Fig. 12). Tighten the screws after the adjustment.









- 6.2 Setting the Travel Limit when motor is installed on the LEFThand side
- 6.2.1 With the drive assembly in manual mode (Fig. 13) raise the door by hand to the desired open limit position.
- 6.2.2 Remove the cover Fig. 10 and slightly loosen the three screws that lock the cam (to the extent that you can manually rotate the cam while the cam can not rotate itself). Rotate the Open Limit Cam by hand anti-clockwise until the cam clicks the Open Limit Switch (Fig. 14).
- 6.2.3 Move the door down manually to the desired closed position.
- 6.2.4 Rotate the Close Limit Cam manually clockwise in the direction of the Limit Switch until the Cam clicks the Close Limit Switch (Fig 15). Slightly re-tighten the three screws.
- 6.2.5 Connect power lead.
- 6.2.6 Pull the red release handle (Fig. 13) to switch the door to automatic operation mode.

TESTING AND ADJUSTING OPEN LIMIT

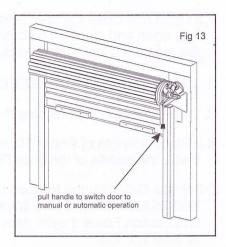
Press O/S/C button to fully open the door. If the door does not stop at the set open limit position, slightly loosen the three tightening screws, slightly move the Open Limit Cam anticlockwise to lower the open position or clockwise to raise it (see Fig. 14). Tighten the screws after the adjustment.

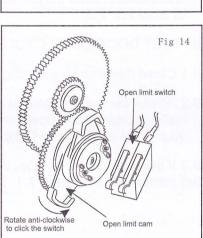
TESTING AND ADJUSTING CLOSE LIMIT

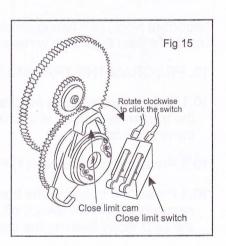
Press O/S/C button to fully close the door. If the door does not stop at the set close limit position, slightly loosen the three tightening screws, slightly move the Close Limit Cam clockwise to raise the close position or anti-clockwise to lower it (see Fig. 12). Tighten the screws after the adjustment.

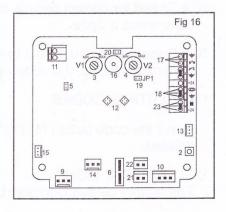
7. SETTING SAFETY OBSTRUCTION FORCE

- 7.1 Turn the Force Margin set V1 (3) anti-clockwise to the minimum (see Fig. 16).
- 7.2 Turn the Safety Obstruction Force trim port V2 (4) clockwise to the maximum (see Fig. 16).
- 7.3 Press O/S/C button to operate the door. If the door does not operate, slightly turn the Force Margin set V1 (3) clockwise 10 degree each time until the door can operate normally. Afterwards while the door is closing, slowly turn V2 (4) anti-clockwise until it stops and then reverse, or while the door is opening until it stops before reaching the set open limit/position. You may need to repeat this step.
- 7.4 Turn the trim pot V2 (4) clockwise 10 degrees.



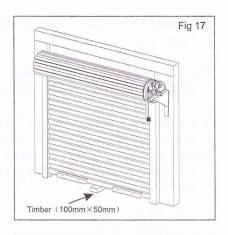


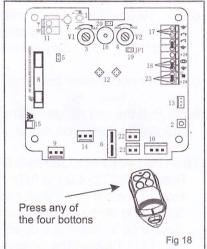




INSTALLATION INSTRUCTIONS

- 7.5 Open and close the door several times to see if the door can fully open and close. If it does not, turn the trim pot V2 (4) 10 degrees each time until it works properly.
- 8. TESTING SAFETY OBSTRUCTION REVERSE FORCE
- 8.1 Open the door by pressing the O/C/S button 2. Fig 13
- 8.2 Place a length of timber 100mm×50mm on the floor directly under the middle of the door Fig 17
- 8.3 Press O/S/C button to close the door. The door must reverse back when striking on the timber. If it does not, the Safety Obstruction Force maybe excessive and needs adjustment, refer to Step 7.1 7.5.
- 9. TEST DOOR OPEN CYCLE
- 9.1 Close the door by pressing O/S/C button. Fig 13
- 9.2 Press the button again to open the door. Once the door is halfway open, push down firmly on the bottom rail of the door with your hand and it should stop.
- 9.3 If the door does not stop, the force may be excessive and needs adjustment, refer to Step 7.1 7.5.





Important Note: (On hitting an obstruction) If the door Stops on the Down Cycle and Reverses on the Up Cycle then the motor wires are wrongly connected and must be reversed!

10. PROGRAM THE TRANSMITTER CODE

- 10.1 Before commencing ensure that the red indicator lamp on the hand transmitter illuminates when the transmitter button is depressed. The memory in the openers receiver can store up to 6 different transmitter codes.
- 10.2 Press the code button (1) Fig 18 -release it once the led (7) illuminates. (Fig 18)
- 10.3 Press one button of the transmitter (which ever one you want to control the door) for about 2 seconds-led (7) will switch off. Release the button for 2 seconds -led (7) will begin to flash. When the LED stops flashing the coding sequence is complete.
- 10.4 To test for correct coding, press the coded button on the transmitter and the door should commence a cycle.
- 10.5 Repeat steps 10.1-10.3 to code the remaining transmitters. The system can store up to 6 transmitter codes. If 6 codes are exceeded, the last code will substitute the first code.

11. DELETING CODES

Press the code button (1) Fig 18 for 5 seconds. When led 7 switches off all of the stored codes are deleted.

12. COURTESY LIGHT

The factory default Courtesy Light will stay on for about 3 minutes each time opener is operated.

- 13. INSTALLING A SAFETY INFRA RED BEAM PROTECTION DEVICE (OPTIONAL)
- 13.1 Read the Installation Instruction inside of the Safety Infra Red Beam Protection Device packing carefully and mount the Device (normally closed contact type) in a correct position across the doorway.
- 13.2 Connect the beam device into the outlet (18) in Fig 19, while disconnecting the existing connection in the outlet 18.
- Caution: Strongly recommend that the device to be installed by a door professional!

14. AUTO CLOSE TIMER

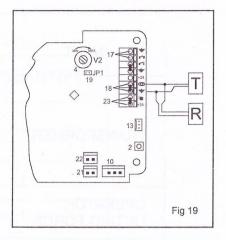
Caution: an option Infra Red Protection Device has to be installed before activating to Auto Close Mode!

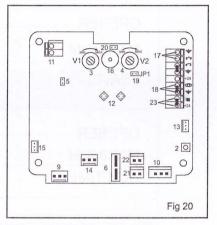
Removing the Shunt (5) in Fig 20 can activate the Auto Close Timer and the door will close automatically for about 60 seconds after it is fully opened.

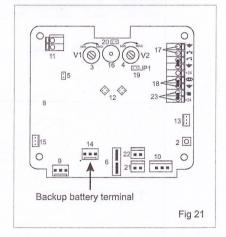
The Auto Close Mode will only work when the door is at a fully opened position and the Safety Protection Device does not detect any obstructions in its protection path.

15. INSTALLING AN OPTIONAL BACKUP BATTERY

15.1An optional backup battery could be added on by connecting to Terminal 14 on the ECB, refer to Fig 21. For more details on how to connect, please refer to the installation instruction inside of the backup battery packing.







TECHNICAL SPECIFICATIONS

INPUT	220-240V,AC50-60HZ	
TRANSFORMER	Primary Voltage Secondary Voltage Control Voltage	240VAC 24VAC100VA 24VDC
OPERATOR LIFTING FORCE	380N	get same a ard with the recommon year. If the common transfer is a common transfer in the
OPENER MAXIMUM TRAVEL	6 Turns of Door Drum Wheel	The Shart Commission Devices to
OPENER MAXIMUM RUN TIME	40seconds	na ili ili ili ili ili ili ili ili ili il
RECEIVER TYPE	UHF433.92MHZ Code Storage Capacity	6X4Button Transmitter Code
TRANSMITTER	Frequency Coding Type Number of Code Combinations Code Generation Battery Voltage	433.92MHZ Hopping Code Over 4.29Billion Non-linear Encryption 6Volts
MOTOR TYPE	Permanent Magnet Direct Current	24VD
LED	Festoon	0.25W 24V DC

TROUBLE SHOOTING GUIDE

SYMPTOMS	POSSIBLE CAUSE	SOLUTION
Opener does not operate at all with any control devices	No power supply to the opener	Check and make sure power is properly connected and switched on
Door reverses before reaching the floor or stops before reaching the fully opened position	 Door becomes sticky, spring broken & not properly balanced from time Possible obstruction stops the door Close and Open Limit is set incorrectly Door becomes too heavy to the preset closing and opening force margin 	 Operate door manually to ensure that the door operating force is less than 15 Kg, maintenance and service the door is necessary Remove the possible objects Re-adjust the open & closing limits (section 6.) Re-set the door force margin (section 7.)
Door only operates from door control outton but not from a transmitter	 Flat battery Transmitter is not programmed correctly Transmitter is damaged 	Re-program the transmitter (section 10) Try another transmitter
Door only operates from door control button but not from a transmitter	 Battery is weak Metal obstacles in the path of signal, radio (including citizen band transmissions) or other electronic interference 	Re-position the opener antenna aerial toward the direction of the transmission signal Extension of an antenna aerial (optional) to the door
Door opens but will not close	 Optional Infra Red Protection Device is activated Closing force margin set incorrectly 	• Re-adjust the close force margin (section 7)
Door opens or closes automatically when not in Auto Close Mode	Transmitter button is stuck and always is on	Check transmitter and use another push button or change a new one
The motor runs when activated, but the door does not move	The opener is disengaged in the manual operating mode	Pull the handle once to renegade the opener to the automatic mode

IMPORTANT INFORMATION IN GENERAL MAINTENANCE

The following should be conducted MONTHLY

Safety Reverse Test. Repeat the test as per Installation Instruction (See 2.3), make adjustment if necessary.

Door manual operation test. Manually open and close door, check to ensure door is not too heavy (should be less than 15 KG operating force in general), unbalanced or binding, due to loss tension of the spring/s or other reasons. Call for professional garage door service if necessary.

Check open and close LIMIT. Check and make sure door is fully opened and closed at the desired open / close position. Adjust LIMITS as per Installation Instruction (See 2.2) if necessary.

We recommend the following service to be carried out ONCE A YEAR

Professional services to the door such as adjusting door spring tensions to make sure the door in good working condition.

Lubricate door roller bearings and arms, door hinges. Caution: Do not lubricate the opener and its rail track. Do not lubricate the door tracks.

WARRANTY

Boss Garage Door Operator hereafter referred to as the Manufacturer hereby warrants:

- 1. Garage door operator to be free from defects in material and workmanship for a period of five(5)years for motors and one (1)year for Electronics and Mechanics from date of purchase, if installed by an authorised reseller, otherwise if installed by the purchaser one (1)year will apply.
- 2. Garage door operator (Commercial and Industrial Application) to be free from defects in material and workmanship for a period of three(3)months from date of purchase.
- 3. Where the garage door operator has been returned to the manufacturer for Warranty repairs, all costs incurred in the return will be paid for by the purchaser, if in the opinion of the manufacturer the product is faulty, all defective parts will be replaced at no charge to the purchaser.
- 4. Proof of purchase must be given to the manufacturer at time of Warranty claim.
- 5. The manufacturer reserves the right to modify any existing or future products without incurring any obligation to incorporate such modification to products already manufactured or to which this Warranty may relate.
- 6. Warranty only applies if this product has been installed to the Manufactures recommendations(in the opinion of Boss Garage Door Operators).
- 7. This Warranty is only for goods installed in Australia.
- 8. This warranty does not apply to any defect, loss or damage arising or caused directly or indirectly by or as a result of:
- (I) Any defect (including defects in component parts or accessories) arising from or attributable to the failure to carry out normal preventive maintenance or adjustment itself.
- ii) To any additional damage or deterioration arising from or attributable to the operation of Operator after it is known to be defective.
- 9. Exclusions to warranty period:
- (i) Repair or Warranty Work-three(3)months warranty

10. Not including in warranty
(i) Batteries
(ii) Fuses
(iii) Globes
(iv) Sensitivity adjustment
(v)Hand Transmitters and receiver range
11.Note:All Warranties will be void subject to:
(I) Water damage and condensation
(ii) Power supply black out or surge
(iii) Act of God
(iv) Modification or adjustment by unauthorized person
(v) Any interference from radio (including citizen band radios or and other electronic device.)
(vi) Preventative maintenance as per garage door manufacturers recommendation and regular servicing not undertaken.
(vii) Account not paid in full by the purchaser
12. Subject only to the provisions of the Trade Practices Act and any legislation of the States or Territory wherein the doors of the Manufacturer shall have been sold or installed (which may confer certain rights on consumers of goods and those rights by such legislation may be rendered incapable of exclusion) this Warranties supersedes and all representations, warranties and conditions whether expressed or implied by law and the Manufacturer shall have no liability or otherwise than herein provided for any loss and damage (including consequential loss and damage, loss of use or profits) by reasons of delay, defective or faulty material or workmanship, negligence or any act, matter or thing done permitted or omitted to be done by the manufacturer.
WARRANTY
THIS WARRANTY FORM SHOULD BE COMPLETED AT TIME OF INSTALLATION
This warranty form should be retained by the purchaser at all times and produced with the purchase docket by the purchaser as proof of the purchase date
PURCHASERS NAME:
PURCHASERS ADDRESS:
PURCHASERS FROM:
INSTALLED BY:
INSTALLER'S ADDRESS:
INSTALLER'S SIGNATURE:

Boss Garage Door Operators
Unit 1/23 Perivale Street, Darra Qld 4076 Ph: (07) 3713 3200 Fax: (07) 3713 3230

DRIVE UNIT SERIAL NO:

