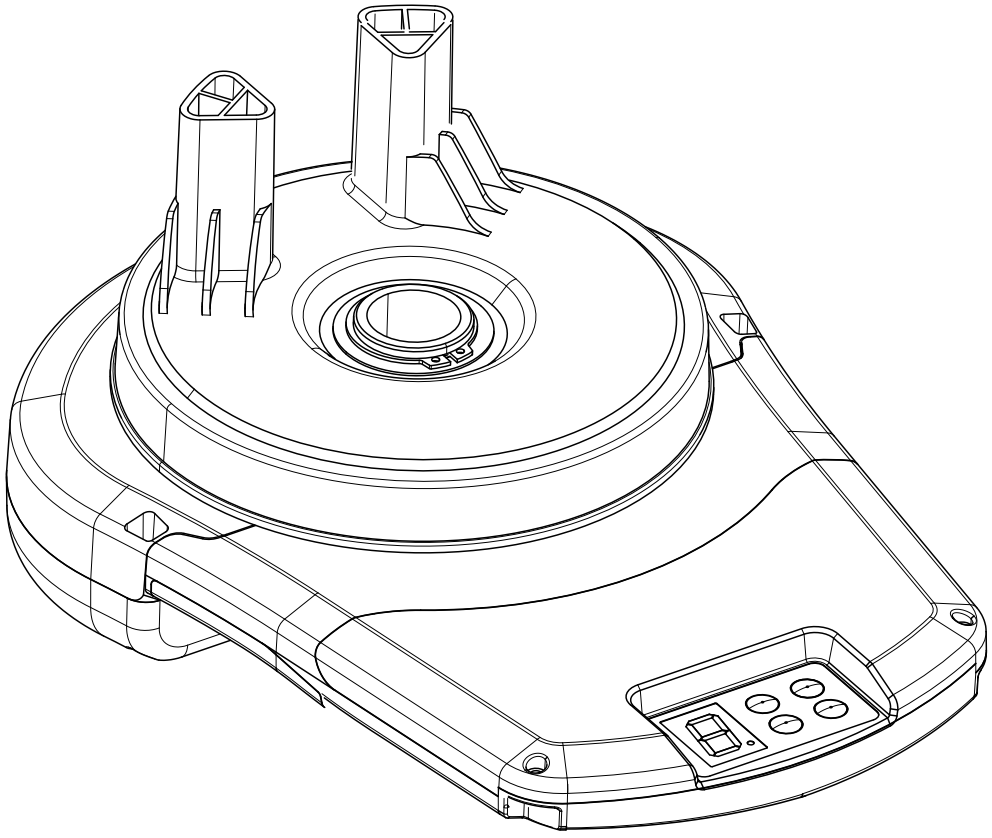
AUTOMATIC
REMOTE
ACCESS

ARA RDO-v5 Elite Drive GARAGE ROLLER DOOR OPENER

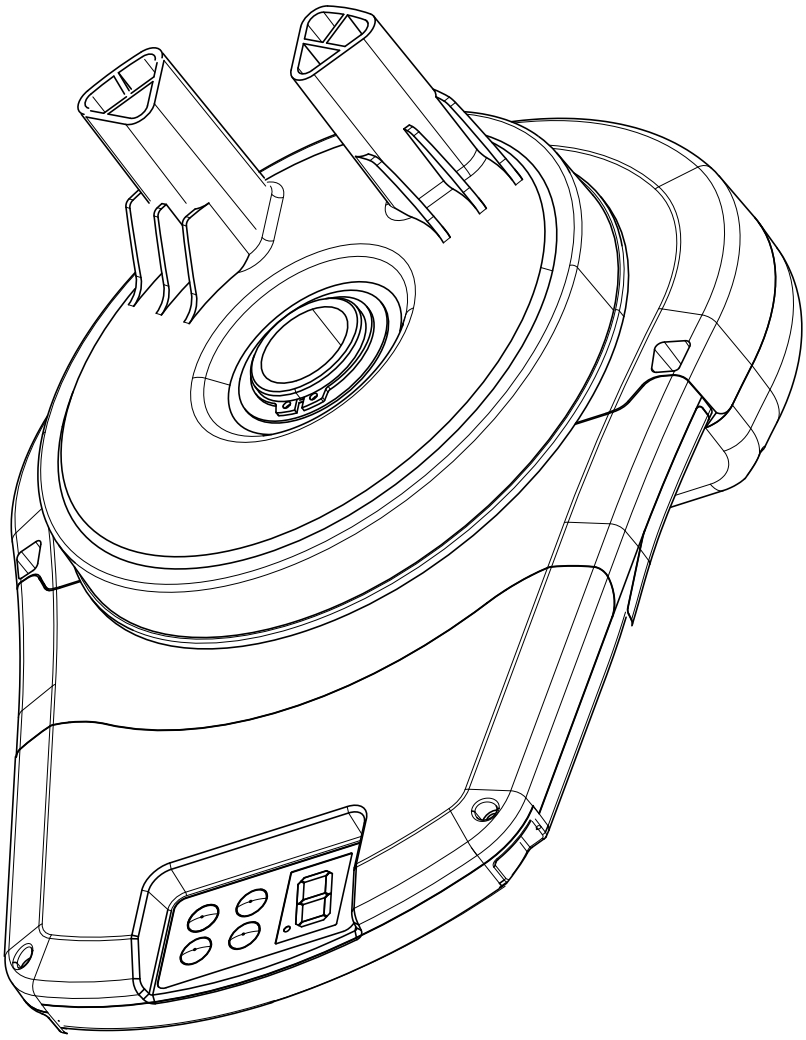


Features:

- Safety Obstruction Sensor
- Photo Beam Protection System
- Rolling Code Technology
- Soft Start / Stop Function
- Automatic Close Mode

RDO-v5 Elite Drive

GARAGE ROLLER DOOR OPENER



SAFETY PRE-CAUTIONS

- WARNING: Its vital to ensure safety is prioritised through the process of garage door automation, whether that be through retro-fitting or on new homes across the world. It is always recommended that additional steps are taken to ensure the safety of everything that comes into contact with the automatic roller door, and certain additions make the use of the door safer, such as infra-red photo beam sensors. Please dont hesitate to contact Automatic Remote Access - headoffice for additional information on the product - via the contact details on the back page.
- While operating the rolling door opener, always keep the moving door in sight, and ensure that no people or vehicles cross the garage door line while the door is in operation. Ignorance of this warning can lead to severe personal injury or damaged goods.
- Please do not operate the opener while a children/ people/ animals/ pets are standing by the door. During the process of operating the opener, in the case of a child nearby, all children should be under supervision. Serious personal injury to humans/ animals can be the result of failure to follow the recommendations.
- Ensure regular tests are done on the safety force settings. Refer to **picture 13** set out below and following the instructions set out. Failure to do so can result in serious personal injury and/ or damage to any obstructions in the way of operation, or nearby. Tests must be conducted at various stages of the operation cycle and setting adjustments made appropriately to ensure the safety of children/ people and any property.
- DO NOT under any circumstamces disengage the opener while any people, animals or objects are nearby or underneath the garage door.
- In the case of installing a wall mounted transmitter, the location of the unit should be beyond out the reach of children.
- The opener should be installed to ensure its protected from the natural elements, such as water/ rain. The door is to be well balanced. In the case that sticking or bending, it is crucial to ensure you seek professional guidance by a qualified garage door repairer/ installer.
- Frequently examine the installation, the garage door and all its moving parts. Should there be signs of wear or imbalance, seaze operation of the garage door and its opener. Seek professional guidance. Failure to do so can result in serious bodily harm.
- Remove or disengage all locking mechanisms before commencing the installations of the door opener
- The opener is to be earthed suitably to suit general purpose 220v mains power outlet by a professional.
- The power cord must be disconnected from the power supply before the cover is removed. The cover is to only be removed by experienced service personnel.
- Hands and loose clothes are not to interfere with the door during operation under any circumstances at any time.
- When utilising the auto-close mode, infra-red (IR) photo beam sensors must be correctly fitted and tested for operation. Extreme caution and care is required when setting up the sensors in conjunction with the Auto-Close Mode.
- In order for the RDO-v5 Elite drive opener to sense obstruction or interference in its course of operation, some force must be exerted on the object. As a result, the object, door, person or animal may incur some injury/ damage.
- Make sure the garage door is fully open before driving in or out. Travel is not to be undertaken during operation. Ensure all remote transmitters are kept out of reach of children.

FEATURES

Easy Operation

- Press the buttons of the handheld transmitter paired from factory to the RDO-v5 Elite Drive opener. He door will open or close automatically. While the door is closing, simply press the button, then the door will stop moving down and open reversely. When opening, simply press the button, then the door will stop moving. Also, the above function can be achieved by wall-mounted transmitter or wall switch (optional) or the button on the cap of main control board.

Encryption Coding

- Every time the remote control transmitter works, the encryption coding will change once. The possible password combination can vary in the 4.29 billion different configurations. This enhances security tremendously and makes “code-pirating” near impossible.

Intelligent Barrier Detection System

- While the door is in the closing cycle, if its interferes with an obstacle or becomes restricted in its operating cycle, the door will reverse automatically. Likewise, while the door is opening and encountering an obstacle, the door will close automatically. The force of resistance can be adjusted on the main control board during the initial installation. The force of resistance should be checked monthly, more details please refer to installation instructions.

Security Code Storage of Transmitter

- The latest advanced technology is applied in the encryption coding stored in the transmitter. Up to 30 different codes of transmitters can be stored. To store any new code, simply press the CODE button on the opener and press the transmitter button twice, the transmitter code will be stored immediately. The code can be deleted at any time, by doing a master reset. Please ensure the same button that operates another opener isnt coded.

Manual Operation

- The Opener is equipped with a manual disengaging system. If the power to the Opener is ceased, the door can be shifted to manual mode by pulling down the red string handle, in this situation manual open and close is allowed. When the power is restored, pull down the green string handle then the opener is back to the automatic mode.

Photo Beam Sensor(optional)

- The Opener has an input for IR (infra-red) photo beam sensors, which is to be connected for extra safety protection. The photo beam sensor must be installed if auto closing mode is enabled. Disable is essential if no IR Photo Beam sensors are present.

Automatic Courtesy Lights

- The courtesy light on the Opener turns on automatically whenever the opener is activated. Upon completion of an opening or closing cycle, the courtesy light will stay on for approximately three minutes then turns off automatically.

Automatic Closing Mode

- The Opener can be programmed to automatic close after a vehicle has passed through the open garage or after a certain period of time. The function of automatic delay closing can be opted via the jumper on the opener. If this mode is selected, a photo beam sensor must be installed.

Multiple Protection

- Overtime protection; Low voltage protection; Rotating speed fluctuation protection are all components that assist with protecting the opener.

RDO-v5 Elite Drive - OPERATING CONTROLS

1. Function Setting Button (Set)
During installation, please set the upper and lower limit, left and right installation, operating power and auto closing time.

2. Remote control learn button (Code)
Add or delete code of transmitter.

3. Increase (Open) Button (▲)
During installation, please set the button value to Increase, otherwise known as Open.

4. Decrease (Close) Button (▼)
During installation, please set the button value Decrease, otherwise known as Close.

5. Open/Stop/Close Button (OSC)
The opener operates in the cycle of Open, Stop. Close, Stop.

6. Digital Display Menu
During the installation and using, the digital menu displays current value and status.

7. Courtesy Light
Illumination and Fault Indicator.

8. Interface to Outside Wall Switch
This interface is available for wall switch or other control devices, The opener operates in the cycle of Open, Stop. Close, Stop.

9. Connector for Photo Beam Sensor
24v DC- Normally Closed Photo Beam Sensor can be connected to this opener.

10. Input for Encoder Signal
To connect the inside encoder.

11. Motor Power Output
Connect to internal DC motor.

12. Backup Battery Input
Can connect to the 24v DC back up battery.

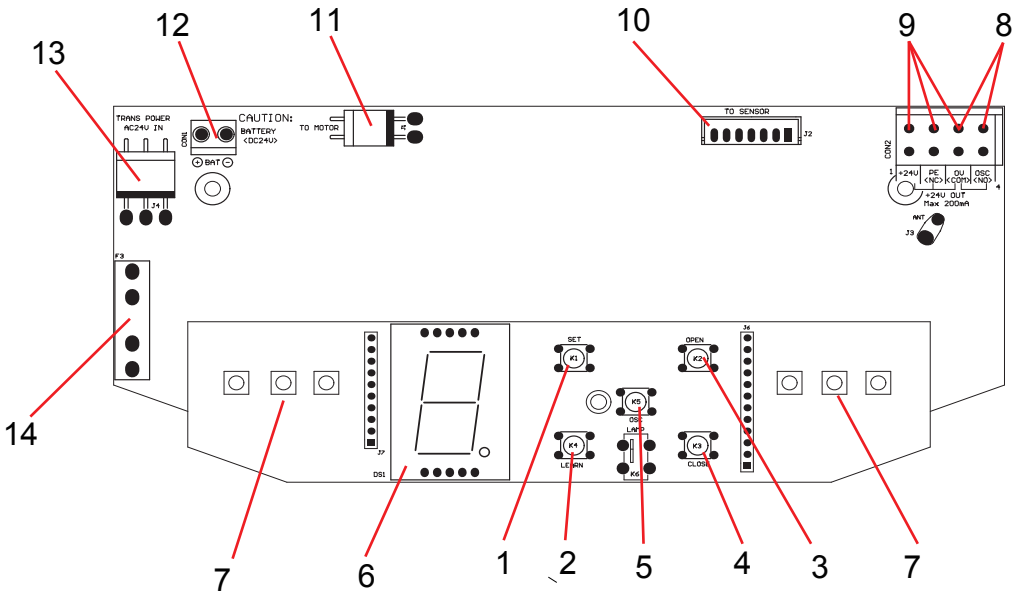
13. Transformer Power Input
Input AC 24V transformer power.

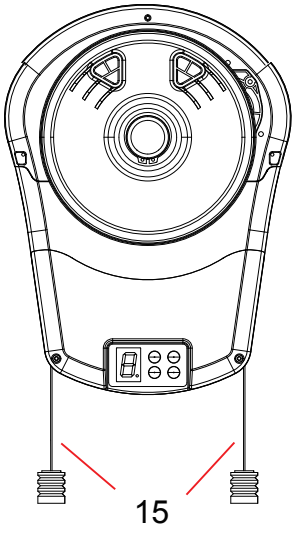
14. 24V Power Supply Fuse
T15A/250V Fuse utilised in the opener. In the case of excessive power resulting in a blown fuse, please replace it with the same model.

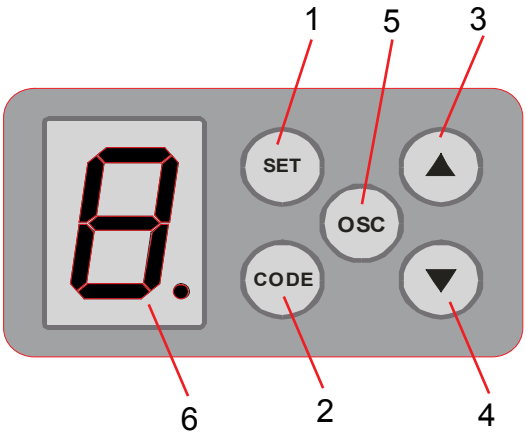
15. Manual Clutch Handle
When power is off, pull down the red handled string. To shift the unit into automation mode again, pull down the green handled string.

Restrictions on Use

1. In the case of power off and manual mode is applied, OPEN/CLOSE limit should not exceed 20cm of the learning time, otherwise malfunction may occur when power on.





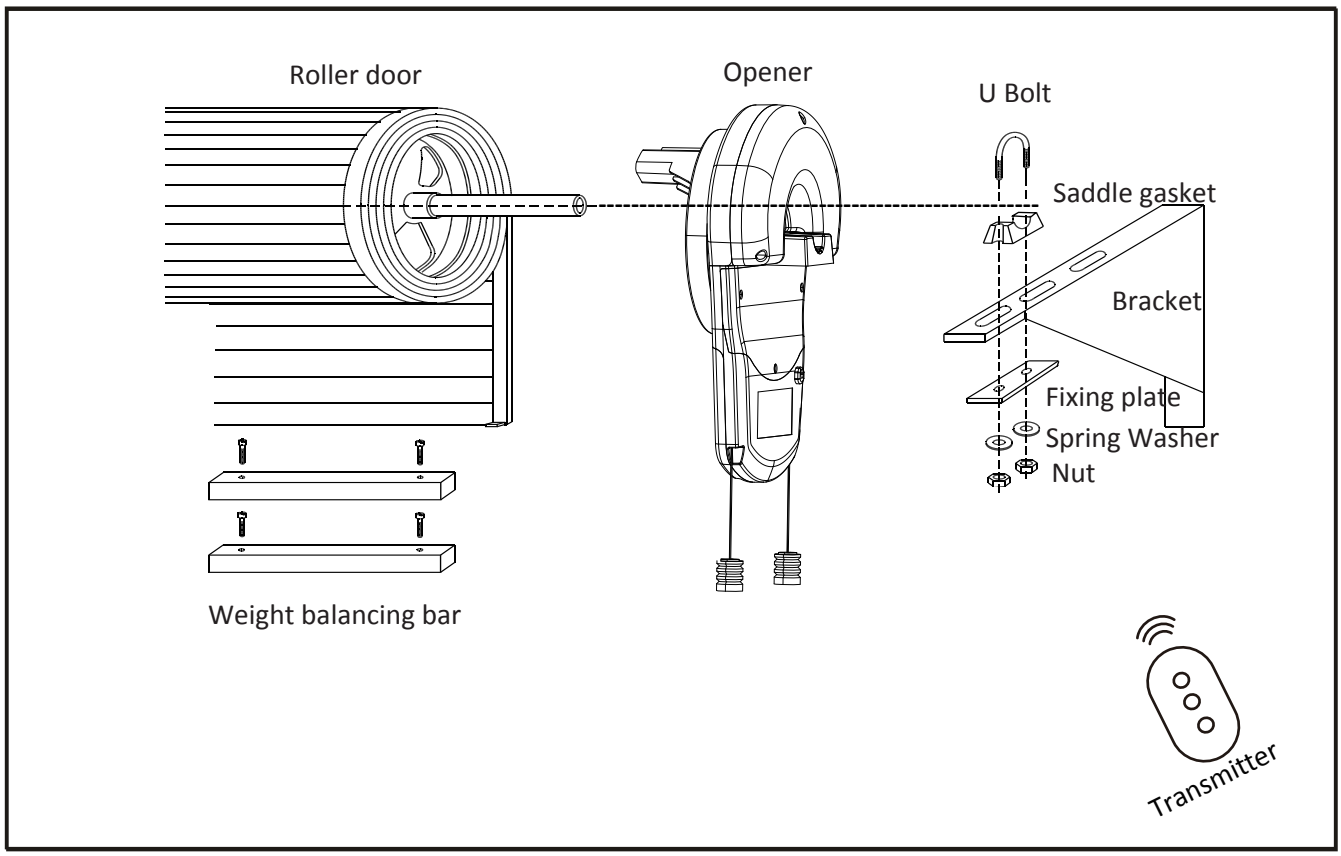


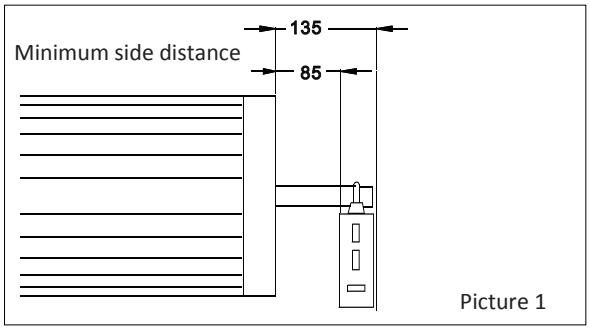
1. Function setting button
2. Remote control learn button
3. Up (Open) button
4. Down (Close) button
5. Open/Close/Stop button
6. Digital display tube
7. Courtesy light
8. Interface to outside wall switch
9. Interface to outside photo beam sensor
10. Input for encoder signal
11. Output for motor power
12. Interface to outside backup battery
13. Input for transformer power
14. 24V power fuse
15. Disengaging Green/ Red handle

PACKING CONTENTS

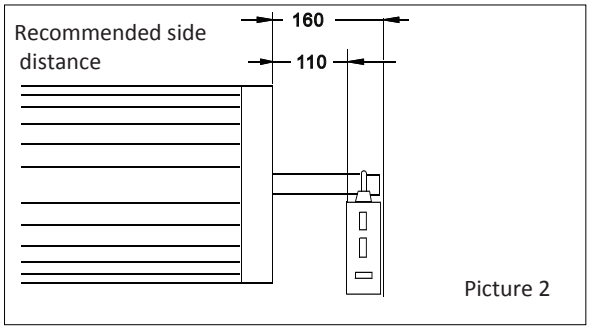
ITEM;	QUANTITY
Driver	1
Transmitter	2
U-Bolt	1
Installation instruction Manual	1

INSTALLATION

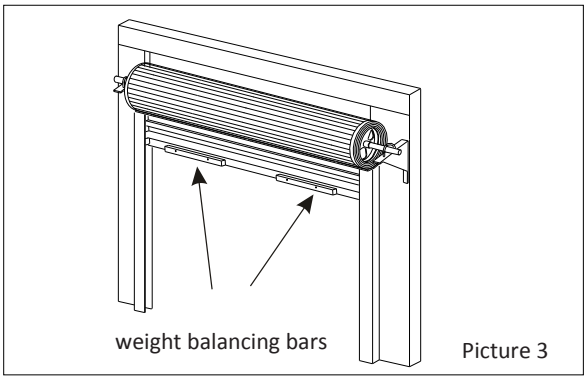




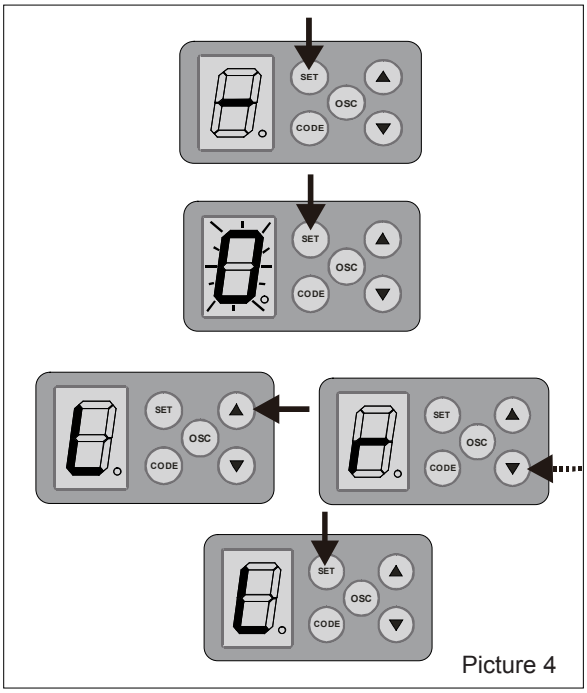
Picture 1



Picture 2



Picture 3



Picture 4

Side Room Requirements

Picture 1 shows the minimum side room that is required: The distance between the edge of the door curtain and the inside of the bracket should be 85mm.; the distance between the edge of the door curtain and the outside of the bracket should be 135mm.

Picture 2 demonstrates the recommended side room: The distance between the edge of the door curtain and the inside of the bracket should be more than 110mm; the distance between the edge of the door curtain and the outside of the bracket should be more than 160mm.

1. Check the door carefully

Before the installation of door opener, please check the door opener carefully, in addition, ensure the roller door is well balanced and in a good condition. Therefore, the door can move smoothly in the guide rail and can stay at around 90cm—120cm above the ground. The force of door lifting or downing should not over 20kg.

2. Fixing the door weight balancing bars

Move the door manually to half open position and place the weight balancing bars equally apart (if more then one is used) on the door bottom, then fix them with the fasteners provided. (see picture 3) Check the door again, if the door moves heavily in the guide rail, it may require extra tension to be added to the door springs. In this case, please refer to the door installation instructions from door manufacturer on how to adjust the door spring.

3. Door opener on the right or left

The RDO-v5 opener is set to be install on the right side, in the case of left side installation, please reset the function setting button from 8. to 8. Operating as follows, see picture 4: 8.

3.1 After the power is on; press the function setting button (SET) for 4 seconds and then release, when the digital display shows 8. press SET button again if the digital display tube shows 8. , which indicates to right side installation press UP (▲ or ▼ button when the digital display tube shows 8. , that means left side installationr the press SET once more, then check and store.

4. Door Opener Installation (Right side installation)

There are several methods to successfully install a door opener, One of which is described below.

First of all, ensure theres sufficient room for opener, the distance between the end of the door shaft and the wall should be 135mm at least (Attention: this method only suitable for right side installation). For specific installation, please refer to picture 5, picture 6, picture.

4.1 Check carefully to see whether the U bolt on the left side is tightly fixed on the door shaft.

4.2 Lift up the door, tie up the door firmly with a rope in middle position.

4.3 Use support to sustain the right part of the door curtain. (Attention: A padded support is recommended to ensure no damage is done to the curtain).

Warning: During installation, minors should remain completely distant from the space in which is being occupied for the installation process. Failure to adhere to the suggestion may result in severe personal injury or property loss

4.4 Release the U bolt on the right side of the door and take it remove it with caution.

4.5 After the removal of the U-Bolt, the L-shape bracket is to be removed from the wall. Its imperitive to ensure that the support of the door is safe and reliable.

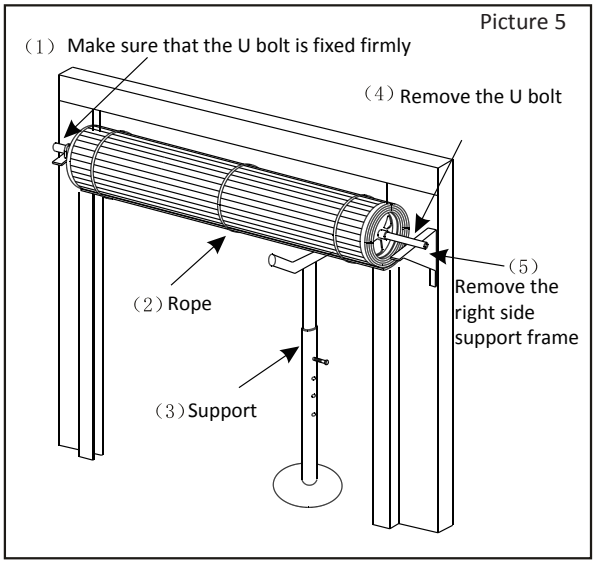
4.6 Take out the opener from the package, manually turn the forks on the opener to make the gear spin, if the gear do not spin, it is engaged into auto mode and needs to be disengaged as per instructions listed above.

4.7 Push the opener along the door shaft to roller door wheel drum which is a plastic plate, and make sure that the double forks of the gear is in the narrowest spoke and stretch into the plastic plate.

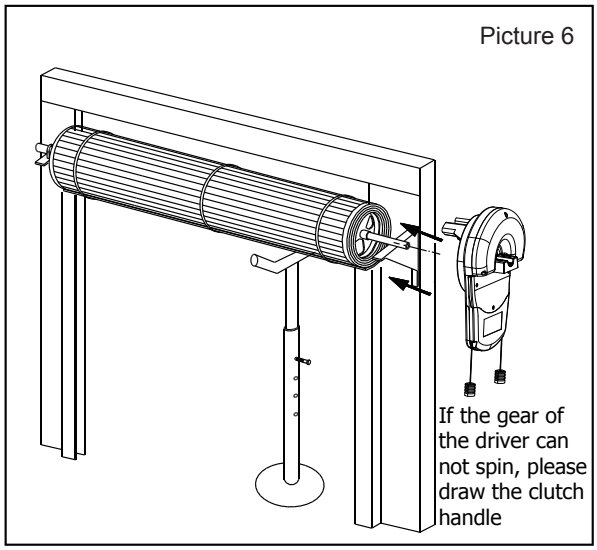
4.8 Reinstall the right side L-shape bracket (door support bracket). If insufficient sideroom is available with the bracket in its original position, the L-shape bracket should be relocated. Re-tighten the U bolt, remove the support below the door and the bundled rope.

4.9 Move the door up and down with the hands to see if the door operates well. The door should operate in a smooth manner. If not, the vertical guides the door runs within need to be adjusted.

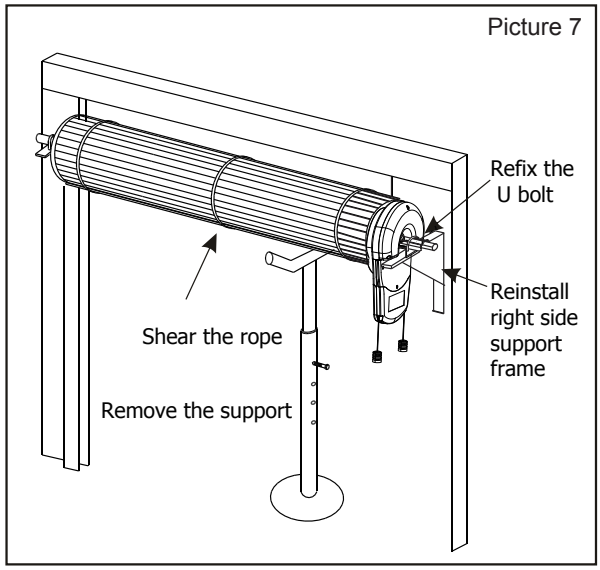
Picture 5



Picture 6

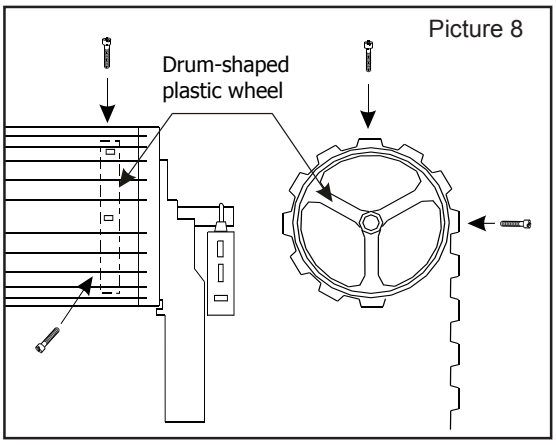


Picture 7



5. Please fix the door curtain on the drum-shape plastic wheel

The door curtain must be fixed firmly on the drum-shape plastic wheel.
5.1 Close the door completely, make marks on the both sides towards the plastic wheel.
5.2 Please find the marks when door is slightly open, use two self-tapping screws on every side of the door curtain on plastic wheel.
Attention: the position of the two screws should be in the 90 degree direction, see picture 8.



Picture 8

6. Set up and down travel position

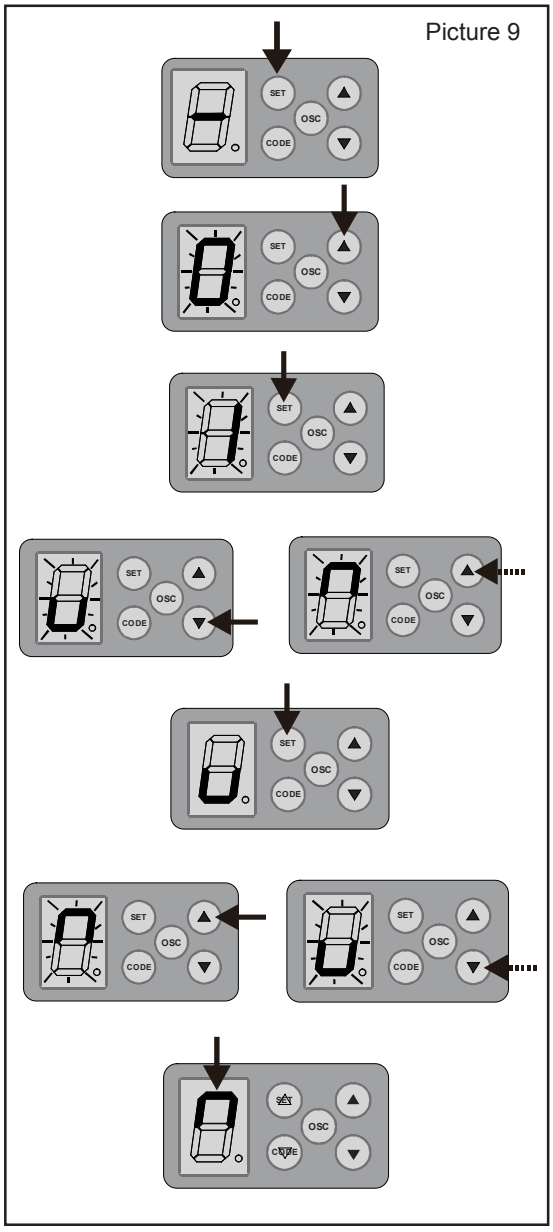
6.1 In the case of right side installation: Please move the door to the middle position manually, and draw the disengaging handle (the green handle) once to make sure the door opener is in auto mode.
6.2 Put on the power plug, the digital display tube change from 8. to 8. . Finally 8. , see picture 9.

6.3 Press SET button for 4 seconds, the digital display should then change from 8. to 8. then flicker. Once this occurs press the UP (▲) button once, the digital display should then change to 8. and flicker again. Press SET one time and the digital display will adjust to 8. , which indicates that setting the close limit is ready to be adjusted.

6.4 Press CLOSE (▼) continuously and the digital display will flicker the symbol 8. , while the door is closing.
When the door has reached the ideal closed position let go of the close button. The door will then stop. If the door opens at this time, that means the wrong setting of left side installation and right side installation has been selected, and step 3 needs to be adjusted. In this case, disconnect the opener from the power point, hold for 10 seconds then reconnect and begin the process of setting limits again.the opener should be power off then power on again. After the door is totally closed, release the CLOSE (▼) button. If the door is not in its ideal closed position, utilise both CLOSE (▼) or OPEN (▲) buttons until the door reachs its ideal closed position then press SET once again. The digital display will then alter its symbol to 8. , which means to set the proper position after door totally opened.

6.5 Press and hold (▲) continuously, the digital display will show 8. then start to flicker, at the same time the door will proceed to open. Once the door is in its ideal opening limit/ position release (▲). Press the SET button once again. The Opener will then close the door immadiately and complete the setting of limits process. The digital display will then change the symbol shown to icon - 8. This completes the process.
Attention: After the ideal place for the door has been set (referring to the open and closing limit)

Attention: The opener is suitable for doors of a maximium opening height of 3000mm. The drum wheel rotation of the opener will not exceed 6x rotations equivalent to between 2700 - 3000mm. If the motor doesnt accept open/ close limits set, the opening height capacity exceeds the heigh restrictions and will need to be re-programmed.



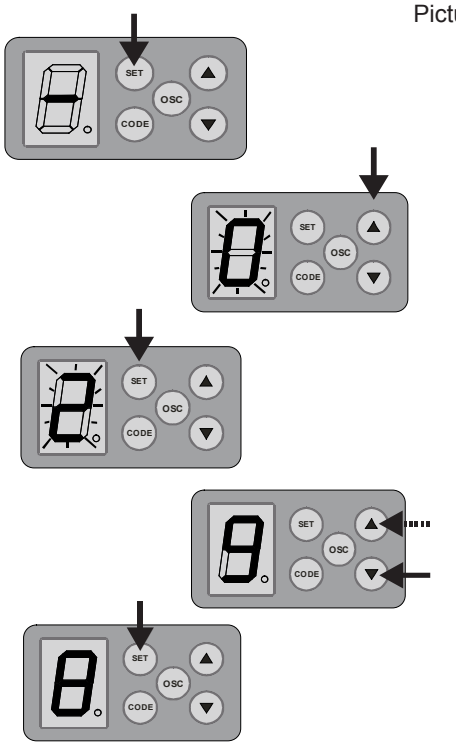
Picture 9

6.7 Setting of left side installation: the same as the right side installation, please **refer to 6.1.**
Please refer to 3.1 and change symbol “ ” to“ ” .
Follwing, all the settings are the same as the right hand side installation process.

7. Set Operating Force

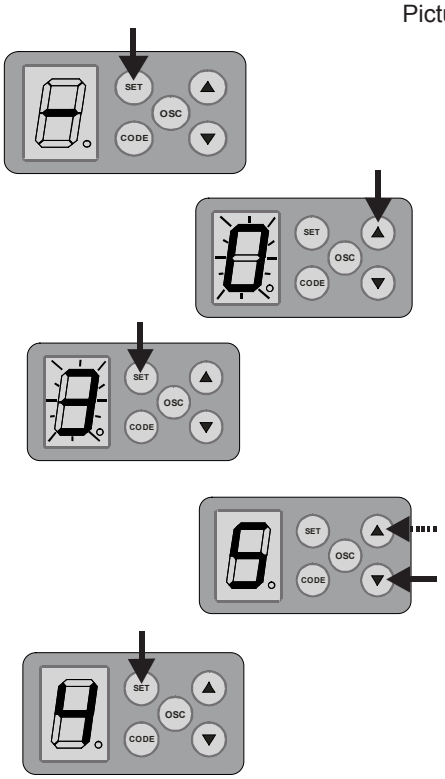
7.1 Set force for opening door operation (force level 1-9, see picture 10)
7.2 Press SET for four seconds, the digital display will then change from to and then will flash. Once released, then press (▲) twice, the digital display will then change and display followed by further flashsing. At this moment press SET once, the digital display tube shows which means opening door operation force Class 9 (Factory default).
7.3 Press (▼) once, the digital display shows which means lowering one class of the force for opening door operation. Press (▲) the digital display adjusts displaying , which indicates increase one class of the force for opening door operation. After setting the appropriate class, press SET once again, the digital display will adjust accordingly, and store new setting value and then return to standby mode.

Picture 10



7.4 Set Force for Closing Door operation.
Force level adjustment 1-9, see picture 11.
Press and hold SET for four seconds. The digital display will change from to then flash. Once released press (▲) three times where the digital display will change to display . Following this, press the SET button once, the digital display will then adjust to display This means that the closing door operation force level is set to 5 (being the factory default.
7.5 Press (▼) One time, the digital display will show This refers to the doors closing operation force, lowering by one level. By pressing (▲), the foce level will increase becoming . Once the appropriate force setting has been adjusted press SET once again. will appear showing the new force level has been adjusted and stored. The motor then returns to its standby mode.

Picture 11



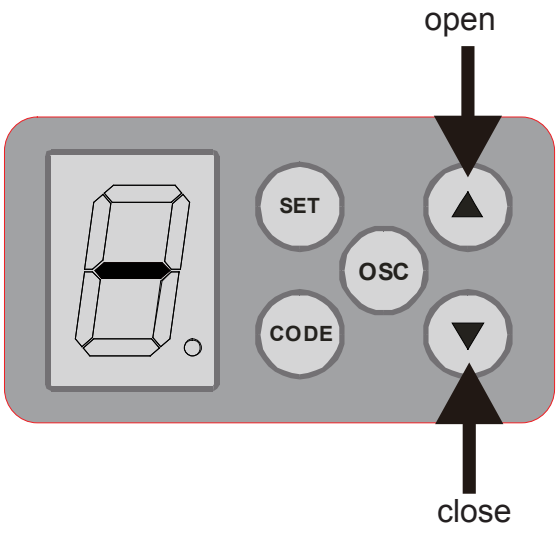
8. Checking door Closing Force

8.1 Press OPEN button (▲) until door raises upto the highest position, see picture 12.

8.2 Place a 100mm x 50mm block below the door, see picture 13.

8.3 Press CLOSE (▼) to close the door until the door hits the block and begins moving reversely until the door is opens.

Picture 12



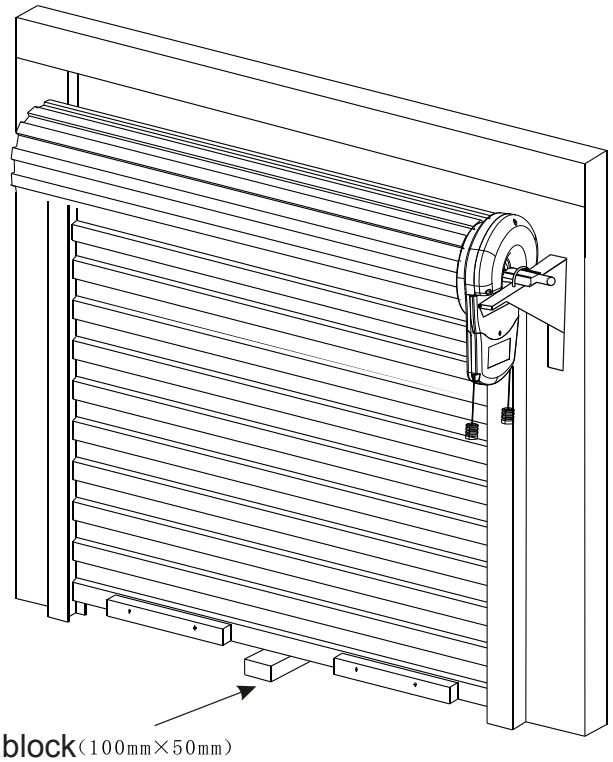
9. Checking door opening force

9.1 Remove the block, press CLOSE (▼) until the door is completely closed, see picture 12.

9.2 Press OPEN (▲) until the door moves to midway though cycle. Use hands to firmly grasp the bottom rail of the door. The door should stop moving up.

In the case that the door does not backtrack easily when closing, or in the case that the door stop suddenly with little resistance when opening, both these two cases demonstrates that the force is not well adjusted. Please then repeat steps 7, until the operation is appropriately adjusted.

Picture 13



Warning:

When door is closing, if there is something wrong with torque testing system, please adjust and retest until everything meets the desired requirements of the door and motor.

10. Setting of Remote Control Transmitter

Please Note: By pressing the CODE button, if the symbol 8 appears, the opener has stored 30 transmitters and is considered full. To delete memory follow step 10.4

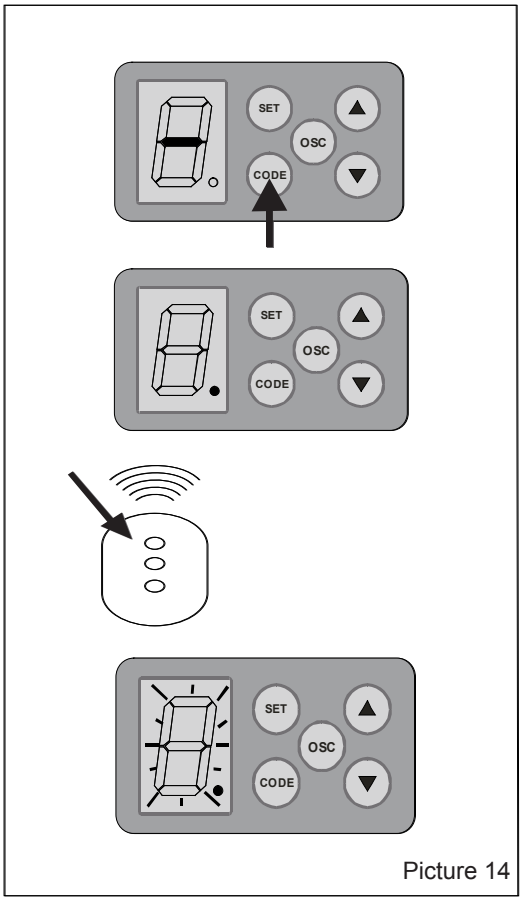
10.1 Pairing a transmitter, see picture 14.

10.2 Press CODE once, the digital display will change from 8. to 8. The symbol indicats the opener is in learning/ pairing mode. Follwing this step, press the desired button on the transmitter twice. The digital display will flash the icon 8. This signals the motor has paired with the transmitter.

10.3 Press the desired, previously paired button on the transmitter to ensure the pairing process was successful.

10.4 Delete of remote control transmitters

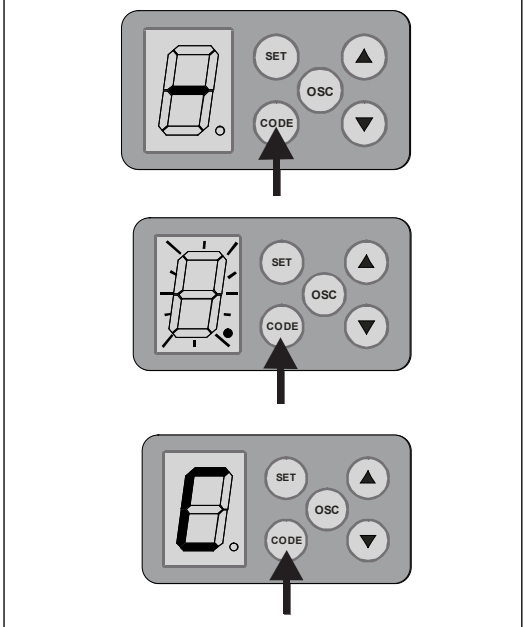
Press and hold CODE until the digital display changes from 8. to 8 . This will then flash. After approx. 8 seconds the digital display will then symbolise - 8. referring to memory cleared. 8. will then appear showing the opener is in standby mode and ready to have new transmitters paired.



Picture 14

11. Courtesy Light Auto Turn off Time

The timer from factory is set to turn off in approximately three minutes from any type of activation.

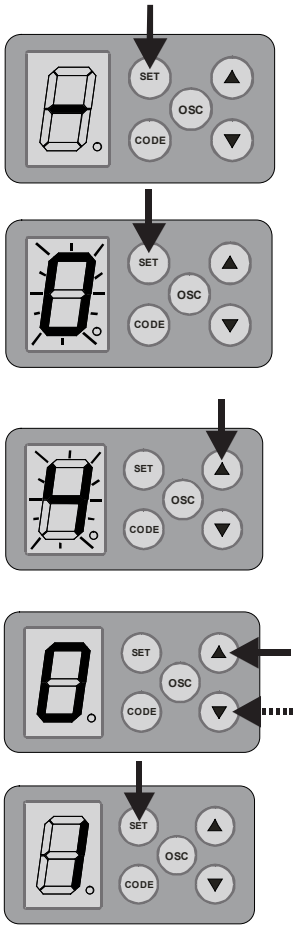


Picture 15

12. Auto Close Set

12.1 Auto close time setting (class 0, 1—9, see picture 17)
12.2 Press and Hold SET for four seconds, the display will change from 8 to 8. then flash. At that moment release the SET button. Press (▲) four times, the digital display will then show symbol - 8 again, this will flash. Following, press the button SET once, the display will then indicate icon - 8, indicating the auto close mode is in factory default being 0 - inactive.
12.3 By pressing (▲) once, the digital display will show 8 which indicates the auto close time increases one stage. (one stage is equivilant to one minute). If you press (▼) once, the display will show 8, ultimately decreasing one level. After setting the appropriate class, press SET once. Again the opener will go back to standby mode indicated by symbol - 8.
The timer for the auto-close function will begin from the moment the door is opened to its full capacity. The auto-close function will not close the door if the Infra-red photo beam sensors are blocked or mis-aligned.

Please Note: Auto Close function is not to be set without (IR) Photo Beam sensors. Failure to follow this can lead to serious injury or damage to objects. The space utilised by the sensors should not be cluttered or creating any obstruction to the beam, which will hinder the operation and functionality of the photo beam sensors.

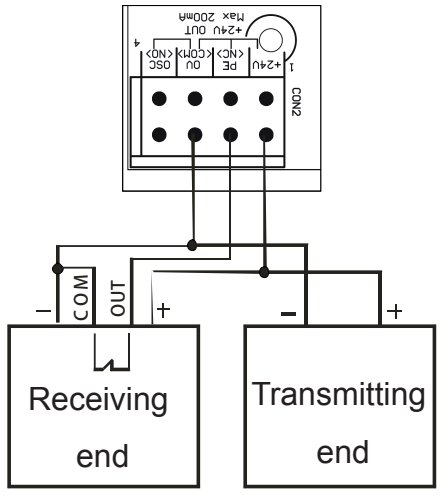


Picture 16

13. Photo Beam Sensor (Optional)

13.1 A normal closed photo beam sensor is recommended to install at a suitable place beside the door with the wiring connected into the CON2 PCB board terminal. (See picture 18)

Please refer to the circuit diagram for the (IR) photo beam sensors for any diagnostics or trouble shooting.



Picture 17

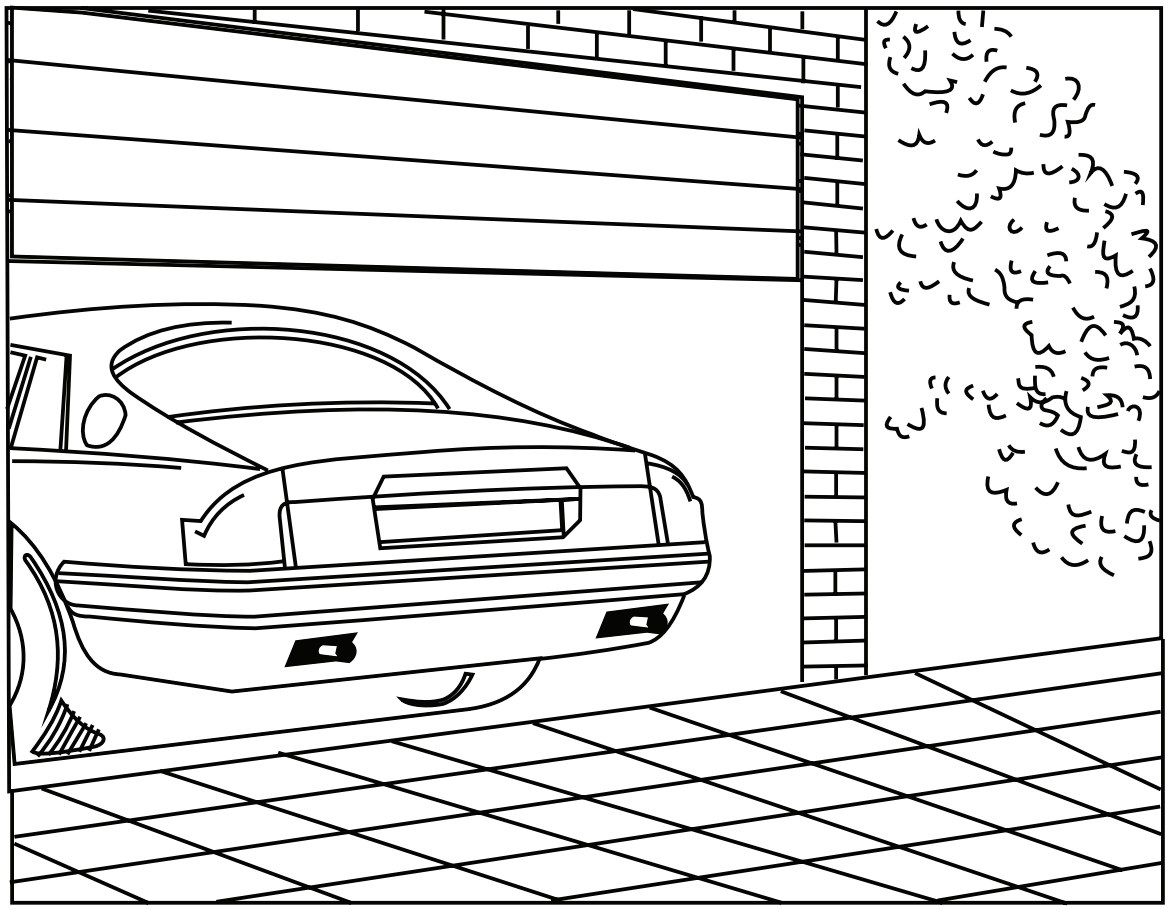
TECHNICAL SPECIFICATIONS

INPUT VOLTAGE		220-240VAC 50HZ
TRANSFORMER	**PRIMARY VOLTAGE**	220V/240V AC
	SECONDARY VOLTAGE	24V AC 100VA
	CONTROLLER VOLTAGE	24V DC
RATED LOAD		800NM
OPEN/ CLOSE LIMIT TRAVEL CAPACITY		Six complete Rotations of Roller Door Drum wheel
OPEN/ CLOSE CYCLE TIME		60secs
RECEIVER TYPE		UHF 433.22MHZ AM Receiver
RECIEVER STORAGE CAPACTIY		30 Transmitters
TRANSMITTER	**FREQUENCY**	433.22MHZ
	CODING FORM	Rolling Code Technology
	POSSIBLE COMBINATIONS	4.29 Billion Possible Combinations
	CODE GENERATION	Non-Linear Encryption Algorithm
	BATTERY VOLTAGE	12v
MOTOR TYPE		24v DC - Permanent Magnet Direct Current
GLOBE		LED Lighting

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Opener not operate	No A/C Power Supply	Turn the power switch on
	Door is obstructed	Remove obstruction
Door is locked or motor is stuck	Door locked manually	Unlock locking system of the door
		Check motor for damage
Door fails to travel the full distance	Operating force is too weak	Follow the setup instruction, re-adjust force Check door Spring tension
Door opens automatically when door is closing	Door Guides Deteriorated	Follow the setup instructions, re-adjust force
	Door springs are too tight	Check door Spring tension
Door operates from drive unit but not from handheld transmitter.	Indicator on transmitter do not light	Battery is not well connected
	Transmitter Battery	Replace Transmitter Battery
	Driver Unit Antenna is not extended	Extend the Antenna
	Transmitter not paired	Pair Handheld Transmitter
Auto close function does not work	Photo beam sensor is broken or the power is off	Amend photo beam sensor and turn on power
	Photo beam sensor is blocked	Re-align the IR sensors and remove any obstructions
	Auto Close is yet to be set.	Refer to installation instruction to programme the motor for IR sensors and Auto close function
Soft stop time too long, or too short, or not set at all.	Motor programming not yet completed.	See installation instruction and re-programme opener limts.

TECHNICIAN NOTES :



AUTOMATIC
REMOTE
ACCESS

14 Mason Drive Braeside Victoria
Melbourne
PH: 1800 27 22 27
www.araccess.com.au