

Symptom	Possible cause	Remedy
The opener does not work	The opener does not have power	Plug a device of similar voltage (e.g. a hairdryer) into the power point and check that it is OK
One transmitter works but the others do not	Faulty transmitter	Replace transmitter
The motor is running but the door remains stationary	The opener is disengaged	Re-engage the opener
The door reverses for no apparent reason	This may occur occasionally from environmental conditions such as areas that are windy, dusty or have extreme temperature changes.	Ensure the door runs smoothly before increasing the force pressure.
The door stops or moves very slowly.	The door stops or moves partially obstructed.	Align the beam path if not obstructed. Check the garage door in poor condition e.g. springs may be broken.
The SERVICE LED has started to flash and is beeping numerous times	A fault has been detected. The fault will be active each time an attempt is made to operate the door.	Record opener function (How many beeps?) then press the LIMIT SET button once to reset the opener. If the fault continues to be tripped contact 1300 736 410 for support.
The Open (Green) LED and Close (Red) LED are flashing alternatively	Opener is overloaded	Check the doors operation by disengaging the motor and ensuring the door runs smoothly. If necessary make door adjustments or contact your door professional.
The Open (Green) LED continues to flash	Door obstructed when opening	Clear away any obstructions and test your door professional.
The Close (Red) LED continues to flash	Door obstructed when closing	Clear away any obstructions and test your door professional.
Limits may be cleared		Remove all power sources (including the battery backup). Wait till all lights are out (10-15 secs), then reconnect power. If Red LED is flashing, limits are not set. Reset Limits.

Troubleshooting Guide

Important Safety Instructions

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.

- WARNING!**
- The door may operate unexpectedly, therefore do not allow anything to stay in the path of the door.
 - 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.
 - The drive must not be used with a door incorporating a wicket door, unless the drive cannot be operated with the wicket door open.
 - The drive is intended to be installed at least 2.5m above the floor.
 - Do not disengage the opener to manual operation with children/persons or any objects including motor vehicles within the doorway.
 - If the door is closing and is unable to re-open when obstructed, discontinue use. Do not use a door with faulty obstruction sensing
 - When using auto close mode, a **Photo Electric beam** must be fitted correctly and tested for operation at regular intervals. **Extreme caution** is recommended when using auto close mode. **All safety rules** must be followed.
 - Place opener in protected area so that it does not get wet.
 - Do not spray with water.
 - Disconnect the power cord** from mains power before making any repairs or removing covers. Only **experienced** service personnel should remove covers from the opener.
 - If the power supply cord is damaged, it **must** be replaced by an Automatic Technology service agent or suitably qualified person.
 - Connect the opener to a properly **earthed** general purpose 240V mains power outlet installed by a qualified electrical contractor.
- ELECTROCUTION!**
- CAUTION:**
Emergency Access
- If 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.
- Muscular strain
- Practice correct lifting techniques (carton weighs approx 9kgs)
 - Practice correct lifting techniques when required to lift the door as per installation instructions.
- Fall from ladder
- Ensure ladder is the correct type for job.
 - Ensure ladder is on flat firm ground that will take the weight without the legs sinking.
 - Ensure user has 3 points of contact while on ladder.
- Crush injury from unsecured door
- Place a 2 metre exclusion zone around area under the door while it is unsecured.
 - Do not move under a door while it is on the door support (or ladder)
 - Follow the installation instructions
 - Fit door support (or ladder) snugly under door before removing bracket.
 - Ensure door support (or ladder) is on flat ground
- Garage Door
- Examine the door installation, in particular, springs and mountings for signs of wear, damage and imbalance.
 - The garage door must be **well balanced**. Sticking or binding doors must be repaired by a qualified garage door installer prior to installation of the opener.
 - Remove or disengage** all garage door locks and mechanisms prior to installation of the opener.
 - Never plug in and operate opener prior to installation.
 - Keep hands and loose clothing clear of door and guides at all times.
- Entanglement
- DO NOT** operate the opener unless the garage door is in full view and free from objects such as cars and children/people. Make sure that the door has finished moving before entering or leaving the garage
 - In order for the opener to **sense** an object obstructing the door way, some **force** must be exerted on the object. As a result the object, door and/or person may suffer minor **damage** or **injury**.
 - Ensure the garage door is in good working order by undertaking regular servicing.
 - 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.
 - Photo Electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg)
- Entrapment under operating door

Safety Obstruction Forces

Controll-A-Door[®] Diamond PD & Roll-A-Pro[™]

Rolling Door Opener Tri-Tran[™] Installation Instructions

Kit Contents

- 1. Diamond PD 1 x RDO-1V4 drive unit OR Roll-A-Pro[™] 1 x RDO-1V3 drive unit
- 2. 2 x Locking Bar Covers
- 3. Diamond PD 2 x TB-6 Transmitters OR Roll-A-Pro[™] 3 x TB-5 Transmitters
- 4. 1 x Collar Kit
- 5. 1 x Weight Bar
- 6. 2 x Nilock Nut
- 7. 2 x 2 x 3/16 x 1/2 flat washers
- 8. 2 x Pan Head Screw M4 x 50
- 9. 2 x Self Tapping Screw M10 x 32
- 10. 2 x Washer 6.4 x 20.6 x 1.2 GAL
- 11. 2 x Extension Fork
- 12. 2 x Flat Washer 107D 6.4 x 20.5 x 1.6
- 13. 2 x Hex Serration Head Screw M6 x 45

Tools Required

- Ladder
- Adjustable Wrench
- Socket set
- Drill
- Screwdrivers
- Marker Pen
- Door Stand

Important Note:
Only Tri-Tran[™] Technology Transmitters and Keypads are compatible with these RDO-1 products.

Power Supply
Properly earthed 3 pin single-phase power is required.

WARNING! A portable power generator is not recommended due to spikes, surges and fluctuations in the supply.

Position
The opener can be installed on either the right - or left hand side of the door (when viewed from the inside the garage). The opener is factory set for right hand side installation.

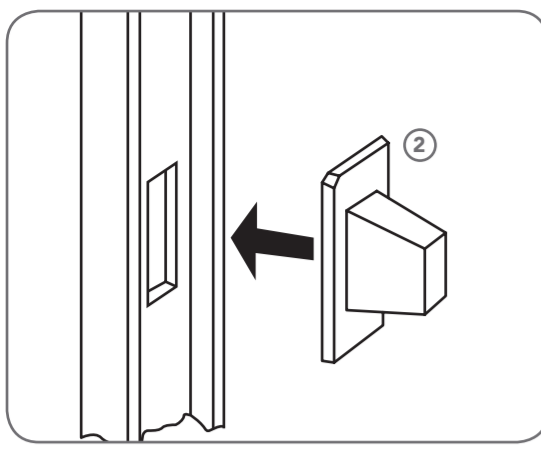
The opener must be installed in a dry position that is protected from the weather. Moisture or corrosion damage is not covered by the Warranty.

Unsuitable Door Types
The drive must not be used with a door incorporating a wicket door, unless the drive cannot be operated with the wicket door open. The fitting of an opener to doors with removable mullions is not recommended.

Sideroom
The minimum sideroom required from the edge of the door curtain is 41mm to the inside of the door bracket, and 85mm to the wall. If a Battery Backup is to be fitted, at least 135mm to the bracket is required. Therefore the recommended sideroom from the edge of the door curtain is 95mm to the inside of the door bracket, and 135mm to the wall as per diagram.

Open to Installation Section

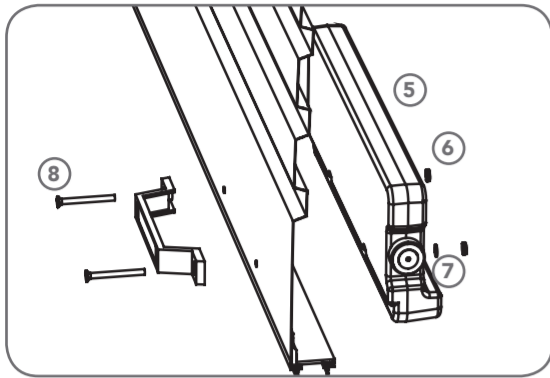
Installation



- Check the door's operation. The door must travel smoothly and be easy to operate by hand.
- Operating force on the bottom rail should be approximately 70N (7kgs) force
- Adjust any tight or twisted guides/tracks. Clean the guides if there is any oil or wax present using a suitable white spirit. The only lubricant suitable for use on door guides is silicon spray. DO NOT use WD-40, RP-7, petroleum grease, or similar.
- Install the locking bar covers ② if there are locking bar holes in the guides.
- Affix the warning labels supplied with this opener in a prominent place where they are clearly visible.
- Choose the side where the opener will be installed, ensuring there is sufficient sideroom.

WARNING! - Do not lock your door with the locking bars after installing the opener. Remove or disable the lock using wire or cable ties. Security is not affected as the opener has an inbuilt locking facility.

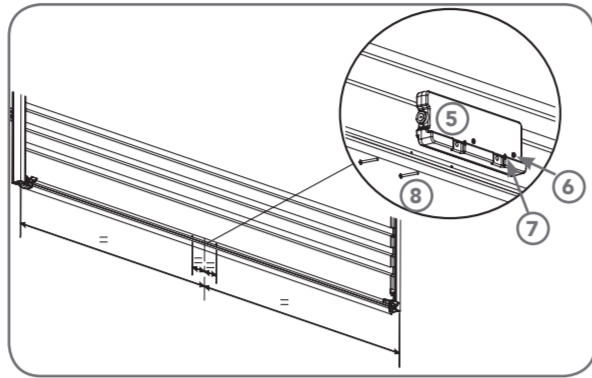
If the door has a handle



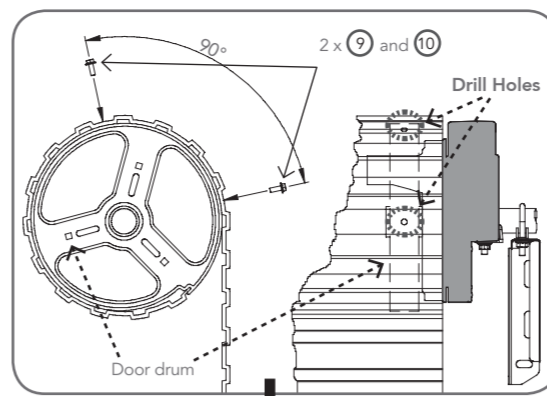
- Remove the door handle
- Fit the weight bar ⑤ and refit the handle using the new fasteners ⑥ ⑦ ⑧ provided.

WARNING! The door and its springs are under significant tension. Adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures.

If the door does not have a handle

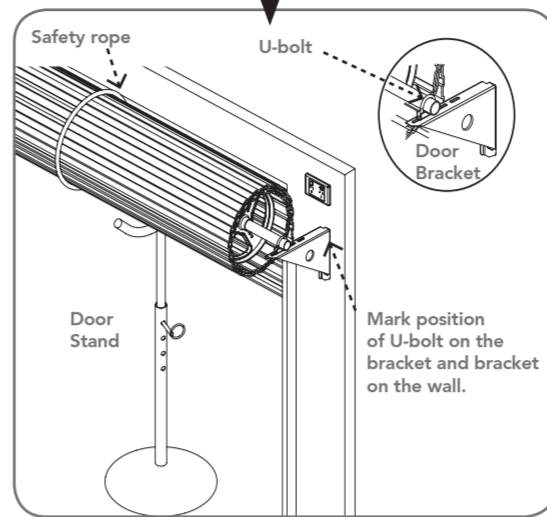


- Locate the centre of the door at the bottom rail.
- Place the weight bar ⑤ at this point (there is a centreline marked on the weight bar) and mark the two positions where the fasteners will go.
- Drill the two 4.5mm holes in the door and fit the weight bar using the new fasteners ⑥ ⑦ ⑧ provided.



- Fully close the door.
- Mark drill two (2) holes in the valley of the curtain at both ends of the door into the drum.
- Drill holes using 3.2mm (1/8") drill bit. Open the door slightly for easier access, if necessary.
- Fit two (2) M10 x 32mm screws ⑨ and washers ⑩. Each screw should be positioned as low as possible, within the valley, but make sure that it does not alter the curtain's normal approach to the guide (lead-in angle).

NOTE: Make sure that the screws do not project into the area where the internal gear will fit.



- At the end opposite to where the opener will be fitted, check that the U-bolt is tightened securely. Open the door completely and tie safety ropes around the door roll approximately 300mm from each end. Do not tie the ropes too tight as damage to the curtain may ensue.
- At the end where the opener is to be fitted, support the door with a door stand or suitable ladder.

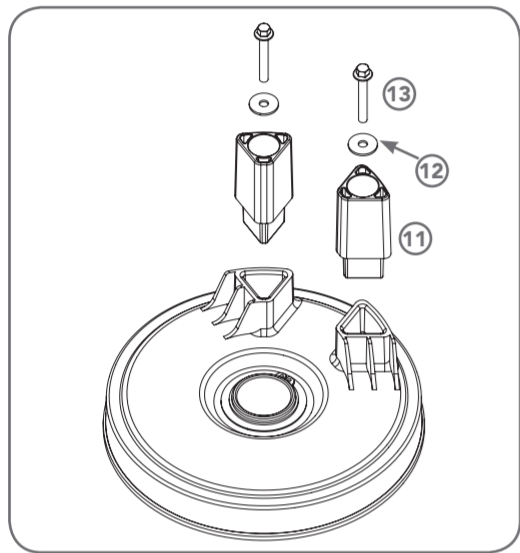
WARNING! Make sure the support is snug under the door, stable and will not move.

- Use masking tape or pen to mark the position of the U-bolt in the door bracket and the position of the door bracket on the wall to assist in reassembling.
- Remove the U-bolt (or bolts) and saddle from the door bracket.
- Remove the door bracket allowing the door to rest on the support.

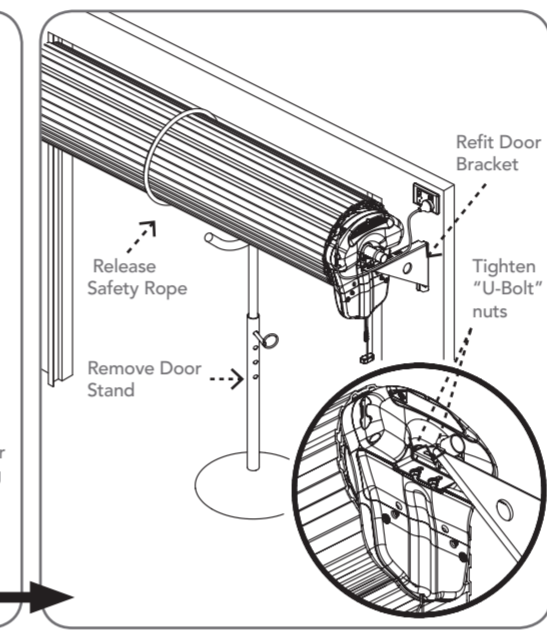
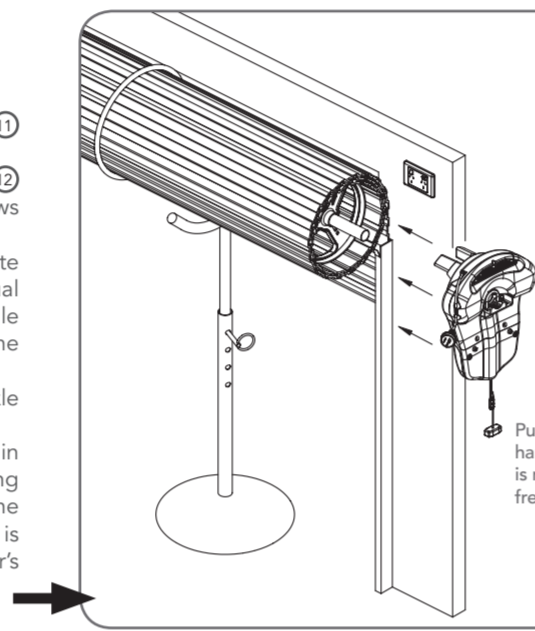
NOTE: For minimum sideroom installations the door may have to be taken down.

Proceed to Mounting the Opener

Mounting the Opener



- Insert the two (2) Extension forks ⑪ into the ring gear.
- Secure with two (2) Flat washers ⑫ and two (2) Hex serration head screws ⑬.
- If the internal gear does not rotate freely, switch the opener to manual by pulling the disengagement handle down (there will be a click), so that the ring gear can be rotated by hand.
- Slide the opener over the door axle and into the drum of the door.
- Ensure the internal gear is pushed in as far as possible (without interfering with the door curtain) and that one of the door drum's wheel spokes is completely between the opener's drive forks.



- Re-attach the door bracket using your reference marks as a guide and tighten the bolts. Ensure that the slots in the mounting bracket of the opener align with the slots in the door bracket, otherwise the door bracket may have to be relocated.

NOTE: If the bracket cannot be relocated, the opener may be fitted onto the axle using the opener's saddle and U-bolt as follows:

- Using your reference marks as a guide, sit the opener on the door mounting bracket and secure with the opener's U-bolt and saddle and tighten firmly.
- Adjust the door position (if necessary) on the brackets so that the door feeds smoothly into the guides. Make sure that the centre of the door doesn't hit the lintel and that the curtain is not pushed forward hard into the guide.

- Remove the Door stand and safety ropes

CAUTION - 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.

- Connect the power cord to a suitable power point, but **DO NOT SWITCH ON**. Secure the power cord away from any moving object (e.g. the door) with the cable clip supplied.
- With the opener still disengaged, pull the door up and down to make sure it runs freely. Leave the door approximately in the middle of travel and engage the opener.

Proceed to Programming the Opener

Programming the Opener

WARNING! Use caution when operating the manual release with the door open since it may fall rapidly due to weak or broken springs, or an improperly balanced door. Ensure that no persons or objects are in the door's path.

Setting the Close Limit

Move the door to half way open. If necessary, disengage the opener by pulling the red handle down.

- Re-engage the opener by pulling the red handle down.
- Turn on the power to the opener. The CLOSE LIMIT LED will be flashing.
- Press and hold the MINUS (-) button - the door should start closing.
- If the door opens, release the MINUS (-) button and press the OPERATE button once to change the motor's direction. Press the MINUS (-) button again to close the door.
- Release the MINUS (-) button when the door is near the desired closed position. Single presses of the MINUS (-) button will "inch" the door closed.
- If the door overshoots press the PLUS (+) button to move the door in the open direction.
- When the door is at the desired close position, press the LIMIT SET button to record the Close limit position.

Setting the Open Limit

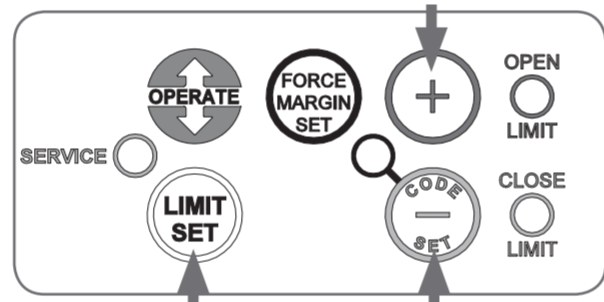
- The OPEN LIMIT LED will now flash.
- Press and hold the PLUS (+) button to open the door
- Release the PLUS (+) button when the door is near the desired open position. Single presses of the PLUS (+) button will "inch" the door open.
 - if the door overshoots press the MINUS (-) button to move the door in the CLOSE direction.

WARNING! The door will automatically close, open and close again once the next step is performed. Ensure that no persons or objects are in the door's path.

- Press the LIMIT SET button to store the open limit. Please read the above warning.

Resetting the Door Limit Positions

To reset the limits press and hold the Limit Set button for 6 seconds until the Close Limit LED flashes quickly. If no action is taken within 30 seconds, the opener will return to normal operating mode and restore the original limit settings.



WARNING! In setting the close limit position, do not force the door into the floor with excessive force, as this can interfere with the ease of operation of the manual release mechanism.

Setting the PET Mode position

When activated, PET mode drives the door to the preset position from the close position.

- Drive and stop the door at the desired PET mode open position by pressing the transmitter button coded for Open/Stop/Close operation.
- Press and hold the PLUS (+) button on the opener for six (6) seconds until the OPEN and CLOSE LEDs are lit to record the new PET position.
- Release the PLUS (+) button.

Proceed to Accessories

Coding Transmitters

Storing the Transmitter Code

The opener can only be operated from remote control transmitters that have been programmed into its memory. Up to 64 codes (Diamond PD) or 8 codes (Roll-A-Pro™) can be stored in the memory.

- Ensure that the battery is inserted in 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.
- Press the transmitter button (one of four) that you want to control the door. The CODE SET LED will flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second then go out.
- The transmitter button is now coded - press to test.

Coding a Transmitter to the Courtesy Light

The transmitter can be programmed to operate the courtesy light on the opener independently of the door moving.

- Press the CODE SET button twice - the CODE SET LED and courtesy light will both illuminate.
- Press one of the four buttons on the transmitter for two (2) seconds, pause for two (2) seconds, then press the same button again for two (2) seconds. The CODE SET LED will illuminate for one second then go out.
- Press the transmitter button to test.

Coding a Transmitter Button to Enable Vacation Mode

The opener can be programmed into a "Vacation Mode" where the opener will not respond to any transmitter except the button of the transmitter that was programmed for vacation mode.

- Press the CODE SET button three (3) times - the CODE SET LED will illuminate and the courtesy light will flash slowly.
- Press one of the four (4) buttons on the transmitter for two (2) seconds, the CODE SET LED will begin to flash, pause for two (2) seconds, then press the same button again for two (2) seconds.
- 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.
- Press and hold the transmitter button for five (5) seconds to set Vacation Mode. The CODE SET LED will stay lit while Vacation Mode is active.
- To reset Vacation Mode, press the same button for two seconds, until the CODE SET LED turns off.

Coding a Transmitter to enable AUX Output

- Press the CODE SET button four (4) times - the CODE SET LED will illuminate and the courtesy light will flash quickly.
- Press one of the four (4) buttons on the transmitter for two (2) seconds, the CODE SET LED will begin to flash, pause for two (2) seconds, then press the same button again for two (2) seconds. The CODE SET LED will illuminate for one second then go out.
- Press the transmitter button to test.

Setting the Transmitter to Operate PET (Pedestrian) Mode

The PET mode position (see Programming the Opener) must set prior to coding a transmitter.

- Press the CODE SET button five (5) times - the CODE SET LED will illuminate and the courtesy light will flash quickly (twice per second).
- Press one of the four (4) buttons on the transmitter for two (2) seconds, the CODE SET LED will begin to flash, pause for two (2) seconds, then press the same button again for two (2) seconds.
- 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.
- Press the transmitter button to test.

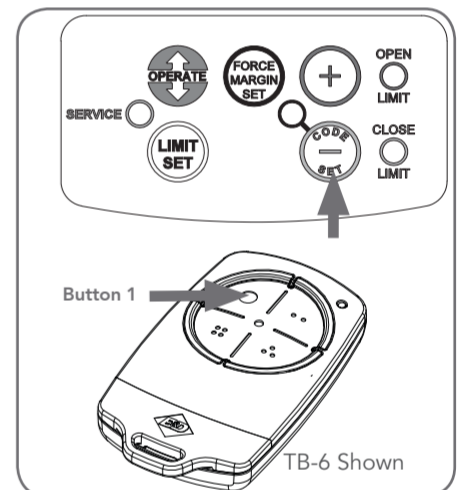
Installation of the Wall Mounted Transmitter

- Mount the transmitter in a convenient location, yet out of reach of children and at least 1.5m off the ground.
- Make sure the door is visible from this location.
- To set 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.
- Press the transmitter button (one of four) that you want to control the door. The CODE SET LED will flash.
- Press the same transmitter button again. The CODE SET LED will illuminate for one second then go out.
- The transmitter button is now coded - press to test

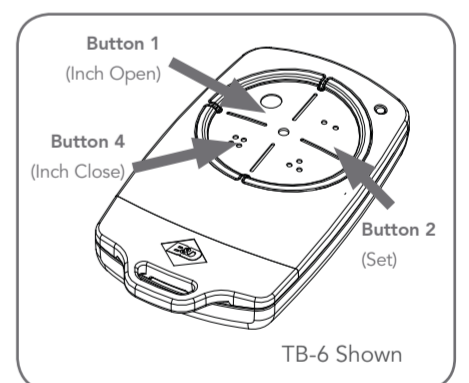
Remotely Coding Transmitters

Using this coding transmitters can be coded without access to the opener's control panel as long as a pre-coded transmitter is available.

- Take any pre-coded transmitter. Press the button for the function to be duplicated and release.
- Using a small needle / pen, press and hold firmly for two seconds the middle button, through the Coding Hole.
- Within ten (10) seconds take the additional transmitter you wish to code. Hold the new transmitter's button for two seconds, pause for two seconds, hold again for two seconds and then release.
- Wait for ten (10) seconds and then press the new transmitter's button to test.



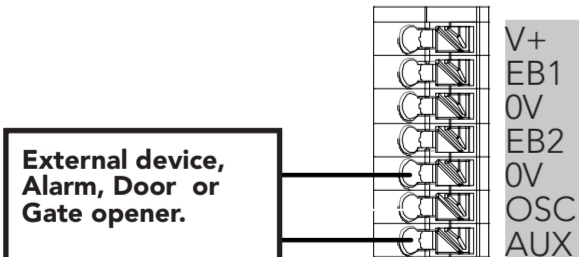
IMPORTANT NOTE: Only Tri-Tran™ Technology Transmitters are compatible with these RDO-1 products.



Accessories

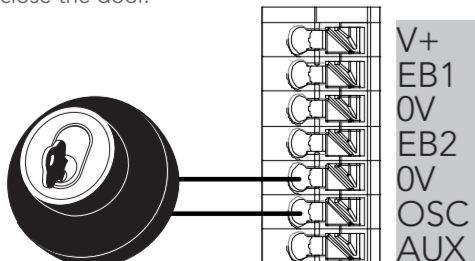
Auxiliary Output

The auxiliary output can be used to control alarm or another garage door opener. A valid transmission from the pre-coded transmitter will cause the auxiliary output to pulse for approximately 1 (one) second. The maximum DC voltage must not exceed 35 volts DC. Maximum current must not exceed 80 ma.



Keyswitch Connection

The RDO-1V3 has the input to connect bell switch or keyswitch to open or close the door.



Reset all Factory Defaults

- Turn power to the opener off.
- Press and hold the LIMIT SET Button.
- Turn power on while holding the LIMIT SET button. Continue to hold until all LEDs are off.
- This will not erase transmitter codes stored in memory.

Remote Aerial

Some sites cause poor radio reception. Particularly problematic areas are those where there is a large amount of metal, like a steel garage, or an underground car park with large masses of steel reinforced concrete. These issues, and others, can create 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 line of sight position, to where you normally use your transmitter.

Proceed to Coding Transmitters

Proceed to Safety Obstruction Force