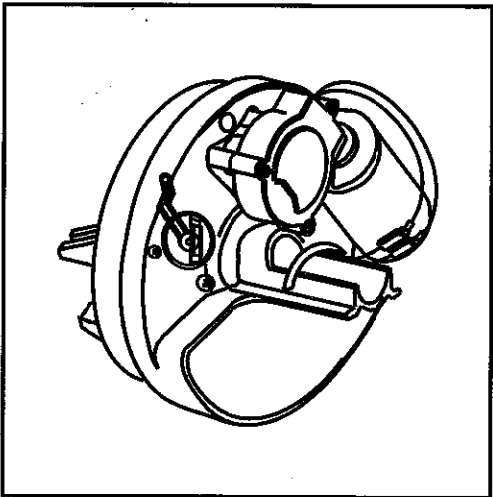


OWNER'S MANUAL

HERCULIFT™ RDO V10

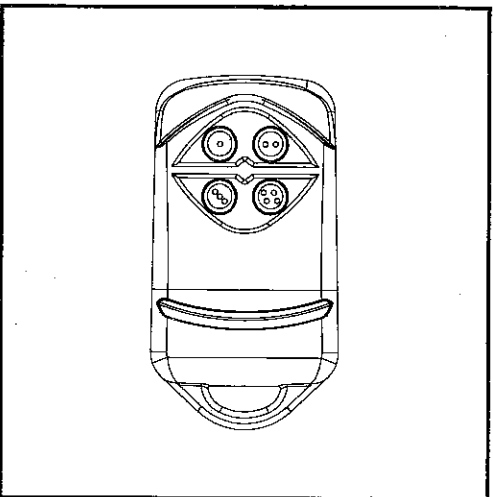
ROLLING DOOR OPENER



- AUTOMATIC SAFETY REVERSE SYSTEM














- N-BUILT ANTITHEFT ALARM SYSTEM

- AUTOMATIC COURTESY



- ROLLING CODE

IMPORTANT USER SAFETY INFORMATION

-  We strongly recommend to use a safety beam device for additional protection.
-  DO NOT operate the Garage Door Opener unless the movement of the door is in full view of the operator and free from any objects near the door such as cars and person etc.
-  DO NOT operate the Garage Door Opener when person/s, especially children are near the door. Children must be under supervised of an adult at all times near the garage door way area especially when the Door Opener is in use.
-  Keep the remote control away from children.
-  Ensure that the SAFETY REVERSE SYSTEM (FORCE) is set strictly according to the Installation Instruction Manual, working correctly and is TESTED each month and adjustment made if necessary.
-  DO NOT pull the Manual Release Handle to switch the Door Opener to manual operation function when any person/s and objects near or under the door way. If it is possible, always use the Release Handle to switch the door to manual when the door is in fully closed position.
-  The Wall Switch or Wall Mounted Transmitter should be installed in a LOCATION/ POSITION where the garage door is fully visible when operating and is out of reach of children.
-  Connect the opener power cord ONLY to properly earthed mains. Installation and wiring must be in compliance with relevant local requirements.
-  DISCONNECT electrical power connected to the door opener before undertaking any repair on/or removal of the opener cover. Only experienced professional service personnel should remove the cover.
-  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.
-  When using Auto Close function, a SAFTY PHOTO BEAM device must be installed in a suitable location. The device will have to be tested for correct operation at regular intervals and in a regular base. EXTREME CAUTION is needed when opener is set to The Auto Close mode, safety rules must be obey at all time.
-  The SAFETY REVESE 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 a degree of DAMAGE OR INJURY. The SAFETY BEAM device is strongly recommended for more protection.
-  Ensure that the door is fully opened before passing under the door way. Ensure that the door is fully closed before leaving the driveway.



MAIN FEATURES

EASY OPERATION

To operate the door opener, simply press the programmed transmitter button once (about 2 seconds). The door can be stopped during traveling by pressing the same button again. The next activation will move the door into the opposite direction. Wall mount transmitter or wall switch (optional) have the same function above.

EXTRA SECURED ROLLING CODE

This opener employs the most up-to-date rolling code technology. Every time a transmission signal is sent from the transmitter, a new secure code will be generated. This feature is designed to prevent possible "copy" of the code and make your garage safer. There are over 4.29 billion possible code combinations.

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 and set initially when the opener is first installed. The safety obstruction force test should be tested once a month and adjustment made should necessary (Refer to Installation Instruction).

COURTESY LIGHT

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

IN-BUILT BUZZER SOUND INDICATOR

For additional safety pre-caution, factory default "Bee" 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 rotating handle up and back to the position again.

CAUTION: Make sure there is not any person/s or objects under or near the door way when pulling the handle.

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 automatic close when using in conjunction with an optional Safety Beam Device.

IN-BUILT (ANTI BREAK-IN) ALARM SYSTEM (Alarm/ Speaker is optional)

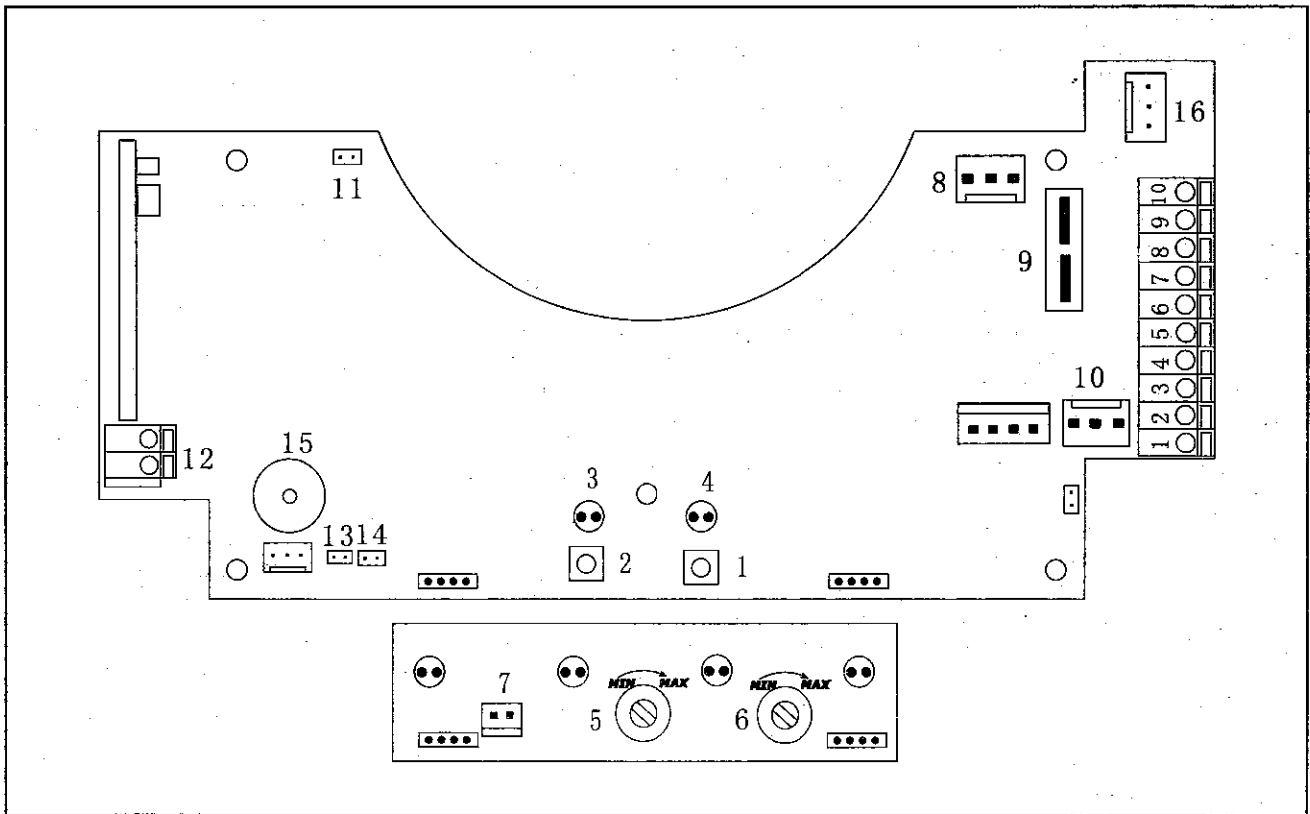
The opener could be connected to an external alarm and the alarm will be activated when a "force-in" force is applied to the door.

IN-BUILT ANTI LOCKING SYSTEM (ALS)- "The World's First" (Device is optional)

The opener has an in-built ALS, when using with an optional ALS device, it will allow you to keep the standard center-lift type sliding manual door lock as an optional locking device while this opener is installed. Other openers require the manual door lock to be disabled when an opener is installed.

MAIN OPERATING FEATURES

MAIN COMPONENTS AND CONNECTIONS OF CIRCUIT BOARD



- | | |
|---|--|
| <ol style="list-style-type: none"> 1). Transmitter Program button 2). Action button: open/stop/close 3). Indicator: power on or off 4). Indicator: transmitter coding 5). Force Margin Set Trim Pot 6). Safety Obstruction Force Set Trim Pot 7). Control button line connection 8). Power output for transformer | <ol style="list-style-type: none"> 8). Power output for transformer 9). Fuse (10A/32V) 10). Left or Right hand side connection 11). Jumper Terminal: for Auto Close Time set 12). Antenna shocker 13). Jumper Terminal: for removal of BUZZER 14). Jumper Terminal: for heavy/large size doors 15). BUZZER sound device 16). Terminal: Backup battery input |
|---|--|

MAIN External Terminals

Terminal 1 & 2: for connection of ALS device;

Terminal 3 & 4: for connection of Infra Red Beam Protector

Terminal 5 & 6: for connection of external switch button;

Terminal 9 & 10: for connection of external Alarm.

INSTALLATION REQUIREMENTS

PRE-INSTALLATION

PRE-INSTALLATION 1: ensure sufficient side room space

Minimum side room of 85mm from the face of the door drum wheel to the inside edge of the door support bracket and 135mm to the outside are required to install the opener (see Fig 1). The ideal side room space to fit the opener is respectively of 110mm and 160mm as shown in Fig 2.

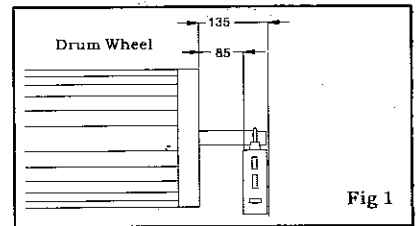


Fig 1

PRE-INSTALLATION 2: ensure reasonable door operation condition

Before beginning the installation of the Opener, check the operation of the door. The door must be well balanced and be in reasonable condition. In general, the door should stay unmoving in 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.

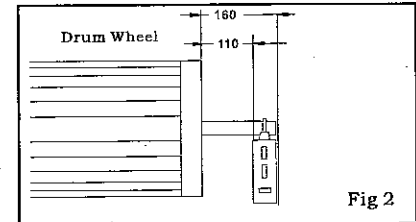


Fig 2

PRE-INSTALLTION 3: weight bars (Optional - Not Supplied)

Weight bars are generally required. 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.

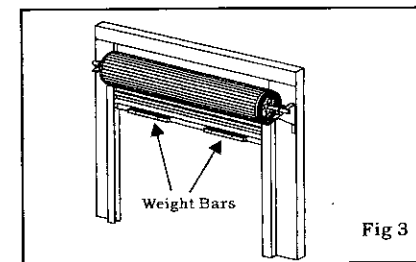


Fig 3

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.

PRE-INSTALLATION 4: Select and set Right or Left Hand Side installation

The opener can be installed in either the Left or the Right hand side of the door (view from inside to look out).

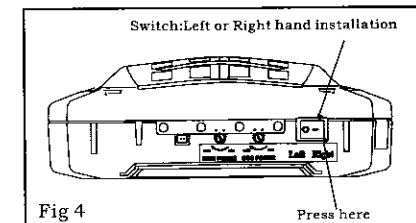


Fig 4

RIGHT-hand side installation: open the Light Cover underneath the opener and press the switch button down/on to the mark workRight side (See Fig 4).

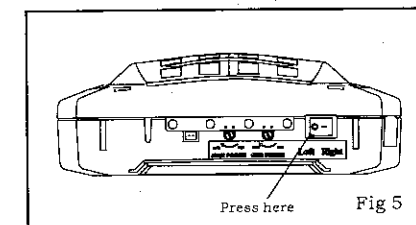


Fig 5

LEFT-hand side installation: open the Light Cover underneath the opener and press the switch button down/on to the mark workLEFT side (See Fig 5).

INSTALLATION INSTRUCTIONS

1. INSTALLING THE OPENER ONTO THE DOOR SHAFT

There are various methods on how to install an opener to the door, in here we demonstrate only one typical method and the demo is as Right hand side installation.

CAUTIONS: THE INSTRUCTIONS SHOWN HERE IS FOR RIGHT HAND INSTALLATION.

1.1 Roll the door up until the door curtain is out the door guides/tracks and use a rope to firmly tight up the roll in the middle of the door (see Fig. 6)

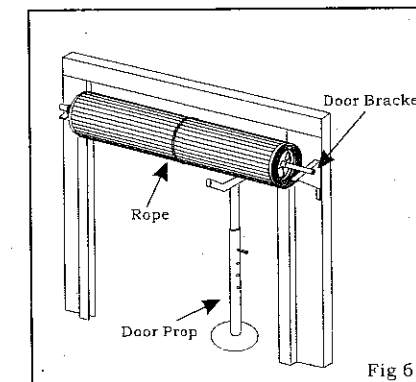


Fig 6

INSTALLATION INSTRUCTIONS

1.2 Go to the opposite of the door that opener is to be installed and check and ensure the fasteners of the "U" bolt that tightens the door shaft to the bracket is firmly tightened on. Extra attention should be given to make sure the "U" bolt is tight and the shaft would not loose when loosening the "U" bolt of the opener installation side.

1.3 Using a suitable prop, e.g. step ladder together with soft padding to protect door surface under the door roll on right hand end to support (see Fig 7).

1.4 Loosen the nuts that tighten the shaft "U" bolt on the Right hand side of the opener (opener fitting side) and place the door onto the supporting prop carefully. Remove and refit the door support bracket to a suitable side room position should be needed.

WARNING: EXTREM PRECAUTION SHOULD BE GIVEN TO PREVENT ANY POSSIBLE DAMAGES IN CASE OF INCIDENTS.

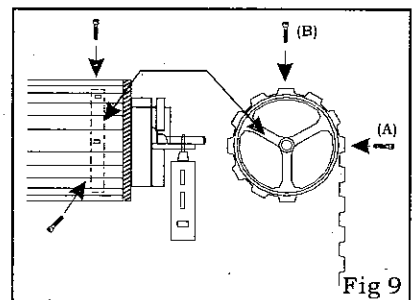
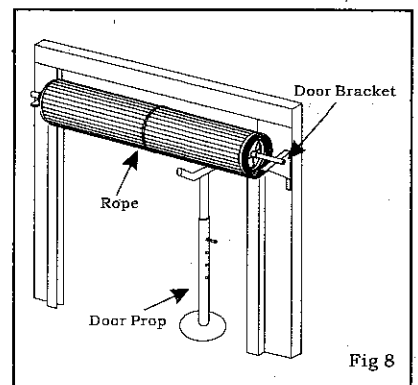
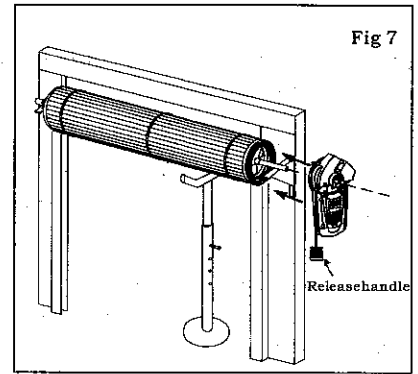
1.5 Switch the opener into manual operation mode by pulling Manual Release Handle to make the opener drive be able to rotate freely (see Fig 7).

1.6 Raise the door carefully, insert the opener into the door axle and ensure the two opener forks hold the door drum wheel support. Push the opener inside into the door roll as deep as possible (see Fig. 7).

1.7 Remove the supporting prop, untie the rope and insert the door curtain back into its guides.

1.8 Re-position the door shaft on the door support bracket and fit the specially supplied U-bolt (see Fig 8) over the axle/drive assembly and tighten firmly.

1.9 Manually opening and closing the door a few times to ensure that the door runs freely and does not interfere with unmoving parts of the opener.

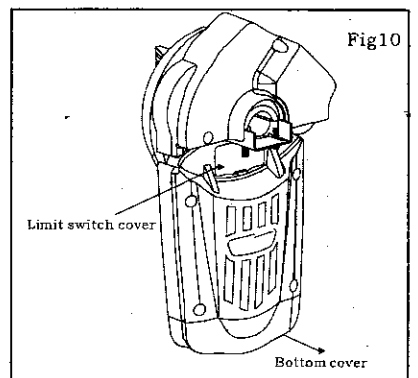


2. PIN DOOR CURTAIN TO DOOR DRUM WHEEL

Pinning door curtain to drum wheel would reduce possible forced lift-up of the door.

2.1 Close the door in fully closed position and mark the two positions on each end side of the door that curtain could be pinned onto the drum wheel. The mark position (pinning location) should be at least 90 degree apart (see Fig 9).

2.2 Raise door a little so that you can access to the marked positions and pin curtain to drum wheel with self drilling screws or others.



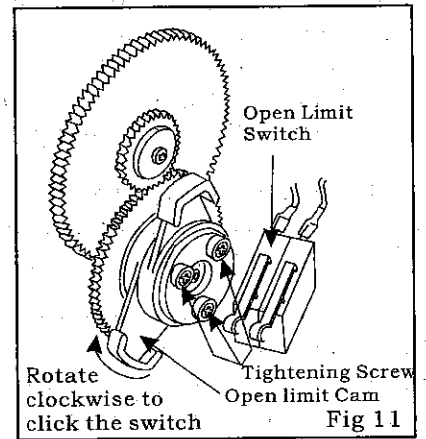
INSTALLATION INSTRUCTIONS

3. SETTING THE DOOR TRAVEL LIMIT

3.1 Setting the Travel Limit when opener is installed on the RIGHT hand side of the door.

3.1.1 Remove the Bottom Cover (see Fig. 10) from the opener using a cross screw driver. Pull the Manual Release Handle (see Fig 13) to switch (ensure) opener into the manual operation mode.

3.1.2 Setting Opener Limit: Raise the door manually to a (open) position that you would like it to stop at 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 (inside cam) clockwise by hand in the direction of the limit switch until the cam clicks the open limit switch (see Fig 11).



3.1.3 Setting Close Limit: Close the door down manually to a close position that the bottom edge of the door just touches the floor. Rotate the close limit cam (outside cam) by hand anti-clockwise until the cam clicks the close limit switch (Fig. 12).

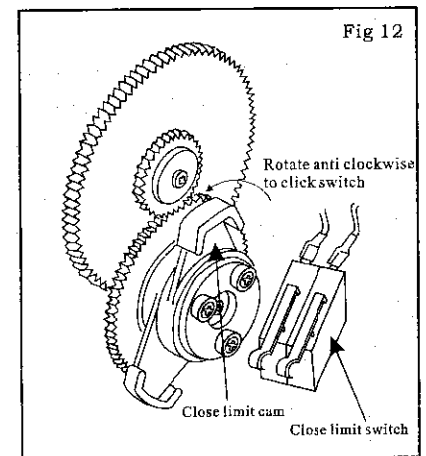
3.1.4 Slightly re-tighten the three screws.

3.1.5 Connect the power cord.

3.1.6 Pull the Manual Release Handle to switch to automatic mode.

3.2 Testing and adjusting Travel Limit setting (RIGHT hand fit)

3.2.1 Opening Position: Press Action button (see Fig. 18) and hold to fully open the door. If the door does not stop at the pre-set Open position, repeat Step 3.1.2 above. Turn the Open Limit Cam anti-clockwise to raise the open position or clockwise to lower it (see Fig 11).



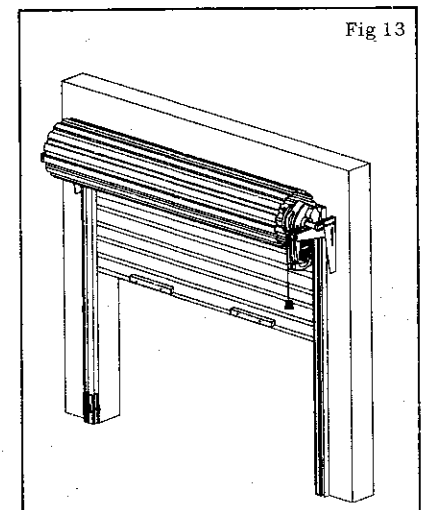
11). Tighten the screws after the adjustment.

3.2.2 Closing Position: Press Action button (see Fig. 18) and hold to fully close the door. If the door does not stop at the pre-set Close position, repeat Step 3.1.3 above. Turn the Close Limit anti-clockwise to raise the close position or clockwise to lower it (see Fig. 12). Tighten the screws after the adjustment.

3.3 Setting the Travel Limit when opener is installed on the LEFT hand side of the door

3.3.1 Remove the Bottom Cover (see Fig. 10) from the opener using a cross screw driver. Pull the Manual Release Handle (see Fig 13) to switch (ensure) opener into the manual operation mode.

3.3.2 Setting Opener Limit: Raise the door manually to a (open) position that you would like it to stop at 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 (inside cam) anti-clockwise by hand in the direction of the limit switch until the cam clicks the open limit switch (see Fig 14).



INSTALLATION INSTRUCTIONS

3.3.3 Setting Close Limit: Close the door down manually to a close position that the bottom edge of the door just touches the floor. Rotate the close limit cam (outside cam) by hand clockwise until the cam clicks the close limit switch (Fig. 15).

3.3.4 Slightly re-tighten the three screws.

3.3.5 Connect the power cord.

3.3.6 Pull the Manual Release Handle to switch to automatic mode.

3.4 Testing and adjusting Travel Limit setting (LEFT hand fit)

3.4.1 Opening Position: Press Action button (see Fig. 18) and hold to fully open the door. If the door does not stop at the pre-set Open position, repeat Step 3.1.2 above. Turn the Open Limit Cam clockwise to raise the open position or anti-clockwise to lower it (see Fig. 14). Tighten the screws after the adjustment.

3.4.2 Closing Position: Press Action button (see Fig. 18) and hold to fully close the door. If the door does not stop at the pre-set Close position, repeat Step 3.1.3 above. Turn the Close Limit clockwise to raise the close position or anti-clockwise to lower it (see Fig. 15). Tighten the screws after the adjustment.

4. FORCE LEVEL FOR DOOR SAFETY REVERSE AND OPENING

Attention: There is not different for Left or Right hand installation in setting the door force level.

4.1 Setting door force level

4.1.1 Open the Light Cover under neat of the opener, turn the Max Force set anti-clockwise to the minimum (see Fig 16).

4.1.2 Turn the OBS Force (Safety Obstruction Force) set clockwise to the maximum (see Fig. 16).

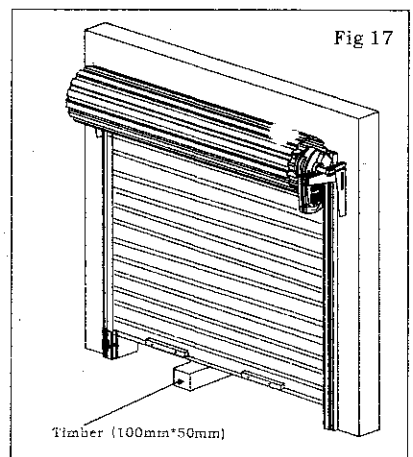
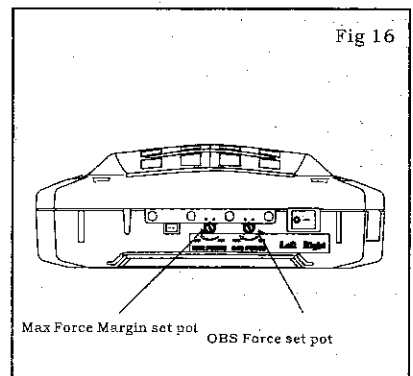
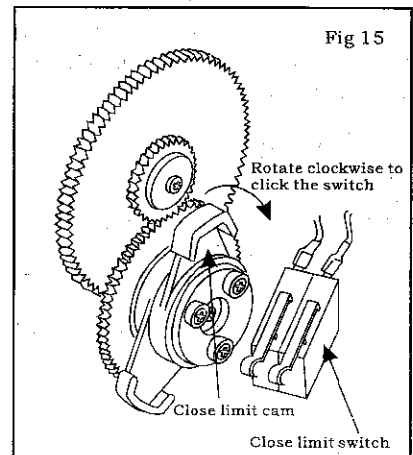
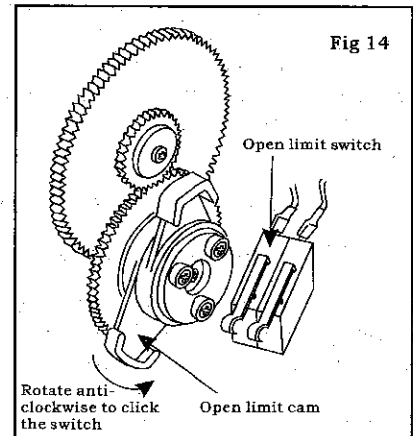
4.1.3 Press Action button (see Fig 18) to operate the door. If the door does not operate, slightly turn the Max Force set clockwise 10 degree each time until the door can operate normally. Afterwards while the door is closing, slowly turn the OBS Force set anti-clockwise until it stops and then reverse, or while the door is opening until it stops (before reaching the preset Open Limit/position). You may need to repeat this step until the door can operate normally.

4.1.4 Turn the OBS Force set clockwise 10 degrees.

4.1.5 Open and close the door several times to see if the door can fully open and close. If it does not, turn the OBS Force set 10 degrees each time until it works properly.

4.2. Testing the Safety Reverse Force

4.2.1 Open the door by pressing the Action button. Fig 18.



INSTALLATION INSTRUCTIONS

4.2.2 Place a length of timber 100mm X 50mm on the floor directly under the middle of the door Fig 17. Press the Action button to close the door. The door must reverse back when striking on the timber. If it does not, the Safety Reverse Force maybe excessive and needs adjustment, refer to Step 4.1.3 to 4.1.5.

4.3. Testing door opening force level

4.3.1 Close the door by pressing the Action button (see Fig 18).

4.3.2 Press the button again to open the door. Once the door is halfway open, hold down (about 10 KG force) firmly on the bottom rail of the door with your hand and it should stop.

4.3.3 If the door does not stop, the force may be excessive and needs adjustment, refer to Step 4.1.3 to 4.1.5.

Important Note. (On hitting an obstruction) If the door Stops on the Down Cycle and Reverses on the Up Cycle then check the Left or Right hand fit button if it is set wrongfully.

5. PROGRAM THE TRANSMITTER CODE

Important: Before commencing ensure that the red indicator lamp on the transmitter illuminates when the transmitter button is pressed. The memory in the openers receiver can store up to 6 different transmitter codes.

5.1 Setting the transmitter code

5.1.1 Press the Learn button once and release it when the led above it illuminates (see Fig 18).

5.1.2 Press any one button on the transmitter (which ever one you want to control the door) for about 2 seconds, the Learn Led will switch off. Release the button and press again for 2 seconds, the Learn Led will begin to flash. When the LED stops flashing, the transmitter code is programmed.

5.1.3 To test for correct coding, press the programmed button on the transmitter and the opener should be activated.

5.1.4 Repeat steps 5.1.1 to 5.1.3 to program more transmitters/codes. The system can store up to 6 transmitter codes. If the 7th are programmed into, the first coded previously will be deleted automatically.

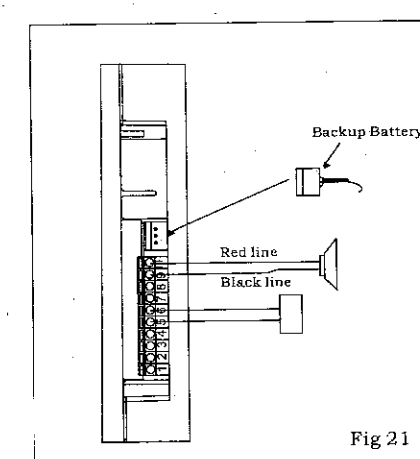
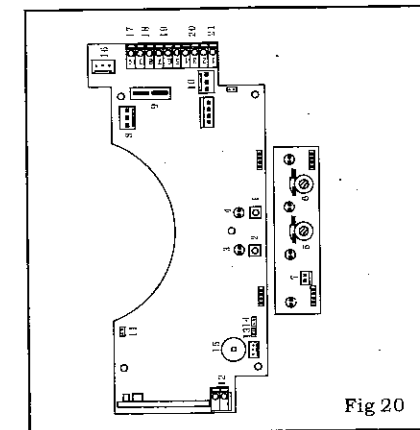
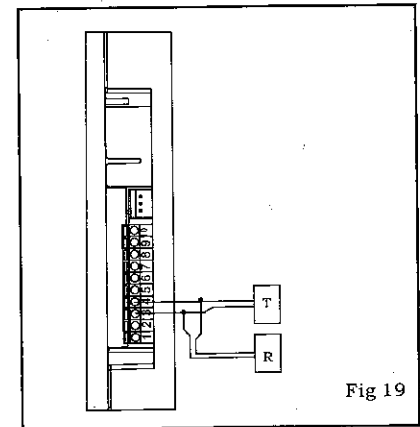
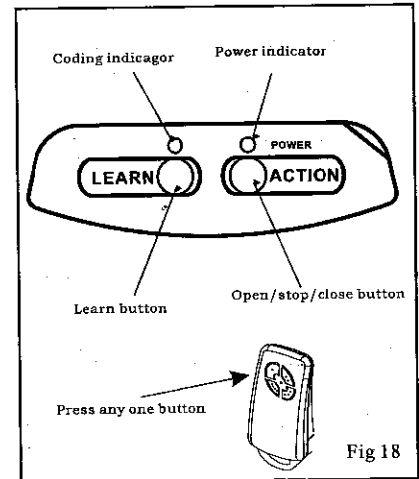
5.2. Delete / remove programmed transmitter codes

Press and hold the Learn button for 5 seconds. When the Learn Led switches off, all of the programmed codes are deleted.

6. COURTESY LIGHT

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

7. INSTALLING A SAFETY INFRA RED BEAM PROTECTION DEVICE (OPTIONAL)



INSTALLATION INSTRUCTIONS

7.1 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.

7.2 Connect the beam device into the Terminal 3 & 4 (see Fig 19), while disconnecting the existing connection in the Terminal.

Caution: Strongly recommend that the device to be installed by a door professional and tested regularly!

8. AUTO CLOSE TIMER

Caution: an optional Infra Red Beam Protection Device **MUST** be installed before activating to Auto Close Mode!

Removing the Shunt (11) (see Fig 22) can activate the Auto Close Timer and the door will close automatically in 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 Infra Red Protection Device does not detect any obstructions in its protection path.

9. INSTALLING AN OPTIONAL ALARM, MAGNETIC DOOR LOCK AND BACKUP BATTERY

9.1 An optional external Alarm device could be added on by connecting to Terminal 5 and 10 (see Fig. 20) on the main connection terminal. For more details on how to connect, please refer to the installation instruction inside the Alarm packing.

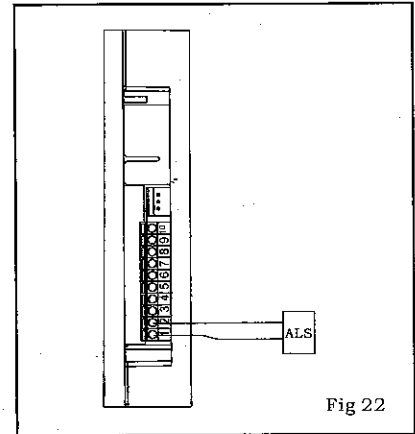
9.2 An optional external switch control could be added onto the opener by connecting to the Terminal 6 and 7. Read its installation manual carefully before using.

9.3 An optional backup battery could be added on by connecting to the 3-pin Terminal (see Fig 20) above the main connection terminal. For more details on how to connect, please refer to the installation instruction inside of the backup battery packing.

10. Installing an optional Anti-Lock System (ALS)

An optional ALS device can be added on by connecting to the Terminal 1 and 2 (see Fig 21). For more details on how to connect, please refer to the installation instruction inside of the ALS Device packing.

Caution: When the ALS Device is activated while the door is locked by a standard manual centre lift lock, all controls will not be able to operate the opener until the manual lock is unlocked and therefore, the Device is deactivated. The device may not work on any door locks, strongly recommended to seek professional advise and installation.



TECHNICAL SPECIFICATIONS

POWER INPUT	220-240VAC,50-60HZ	
TRANSFORMER	Primary Voltage	220/240VAC
	Secondary Voltage	24VAC 100VA
	Control Voltage	24VDC
OPERATOR LIFTING FORCE	250N	
OPENER MAXIMUM TRAVEL	6 Turns of Door Drum Wheel	
OPENER MAXIMUM RUN TIME	40seconds	
RECEIVER TYPE	UHF433.92MHZ	
	Code Storage Capacity	6four button transmitter code
	Frequency	433.92MHZ
	Coding Type	Rolling Code
	Number of Code Combinations	Over 4.29Billion Combinations
TRANSMITTER	Code Generation	Non-linear Encryption
	Battery Voltage	12Volts
MOTOR TYPE	Permanent Magnet Direct Current	24VDE
COURTESY LIGHT TYPE	Bright LED	

TROUBLE SHOOTING GUIDE

SYMPTOMS	POSSIBLE CAUSE	SOLUTION
Opener does not operate at all with any control devices	<ul style="list-style-type: none"> • No power supply to the opener 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 button but not from a transmitter	<ul style="list-style-type: none"> • Flat battery • Transmitter is not programmed correctly • Transmitter is damaged 	<ul style="list-style-type: none"> • Try a new battery • Re-program the transmitter (section 10) • Try another transmitter
Door only operates from door control button but not from a transmitter	<ul style="list-style-type: none"> • Battery is weak • Metal obstacles in the path of signal, radio (including citizen band transmissions) or other electronic interference 	<ul style="list-style-type: none"> • Try a new battery • Re-position the opener antenna aerial toward the direction of the transmission signal
Door opens but will not close	<ul style="list-style-type: none"> • Optional Infra Red Protection Device is activated • Optional ALS Device is activated • Closing force margin set incorrectly 	<ul style="list-style-type: none"> • Check Protection Device and ALS Device (unlocking the lock) • Re-adjust the close force margin (section 7)
Door opens or closes automatically when not in Auto Close Mode	<ul style="list-style-type: none"> • Transmitter button is stuck and always is on 	<ul style="list-style-type: none"> • Check transmitter and use another push button or change a new one
The motor runs when activated, but the door does not move	<ul style="list-style-type: none"> • The opener is disengaged in the manual operating mode 	<ul style="list-style-type: none"> • Pull the handle once to reengage 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 Step 4), 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 Step 3) 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.