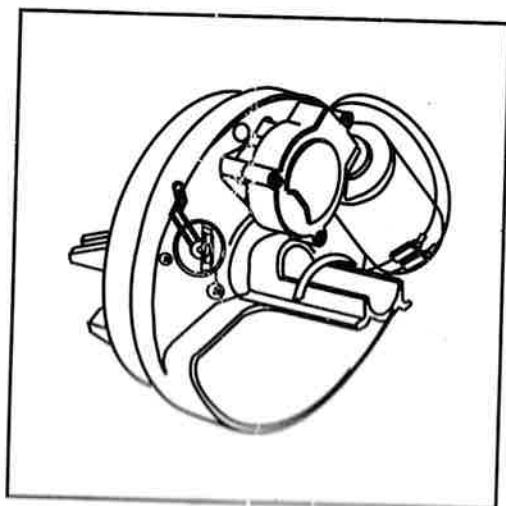


# OWNER'S MANUAL

**RDO-5D**

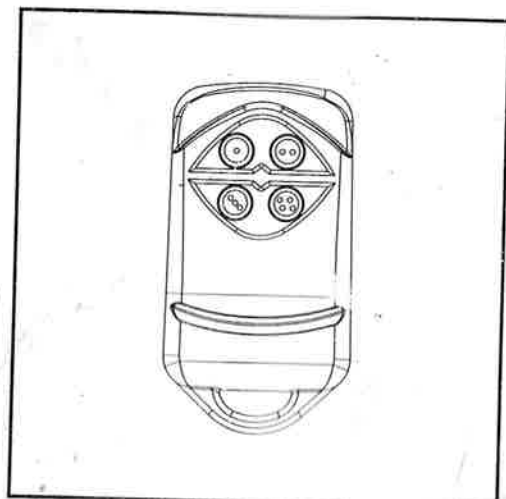
ROLLING DOOR OPENER



- AUTOMATIC SAFETY  
REVERSE SYSTEM

- N-BUILT ANTITHEFT  
ALARM SYSTEM

- AUTOMATIC COURTESY



- R INC CODE

## 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)

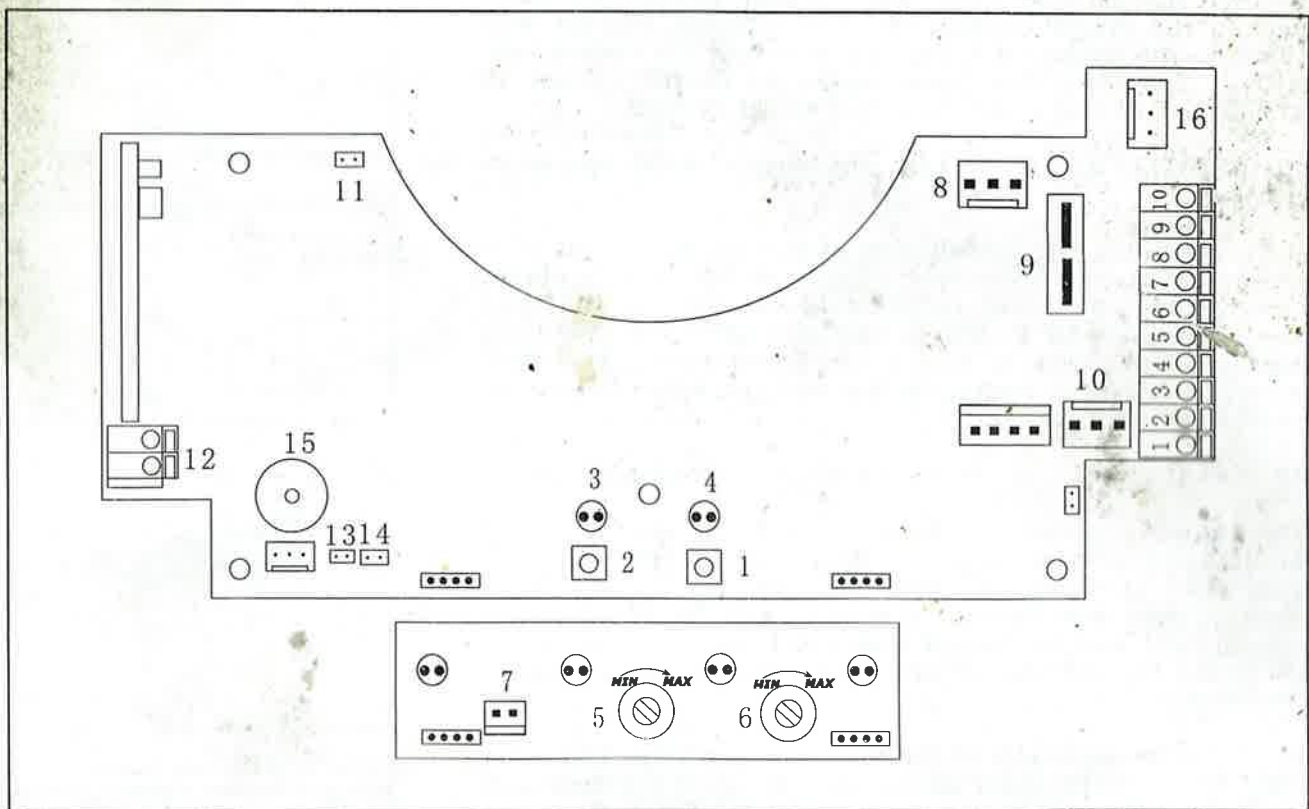
The opener could be connected to an external alarm and the alarm will be activated when a "force-in" force is applied to the door.

### 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



- |   |  |
|---|--|
| 1). Transmitter Program button            | 8). Power output for transformer                 |
| 2). Action button: open/atop/close        | 9). Fuse (10A/32V)                               |
| 3). Indicator: power on or off            | 10). Left or Right hand side connection          |
| 4). Indicator: transmitter coding         | 11). Jumper Terminal: for Auto Close Time set    |
| 5). Force Margin Set Trim Pot             | 12). Antenna shocker                             |
| 6). Safety Obstruction Force Set Trim Pot | 13). Jumper Terminal: for removal of BUZZER      |
| 7). Control button line connection        | 14). Jumper Terminal: for heavy/large size doors |
| 8). Power output for transformer          | 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 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 opener 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)

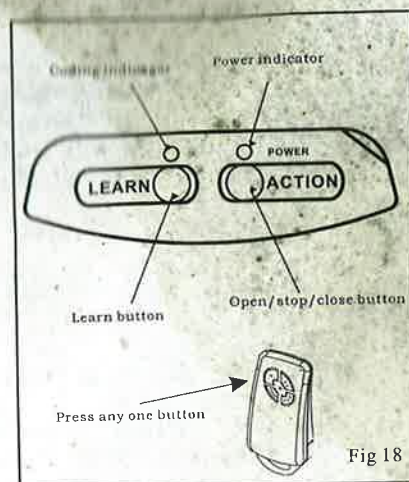


Fig 18

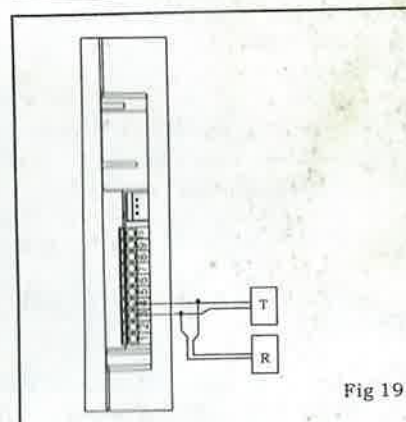


Fig 19

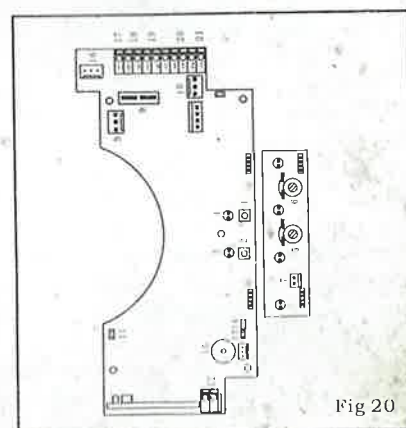


Fig 20

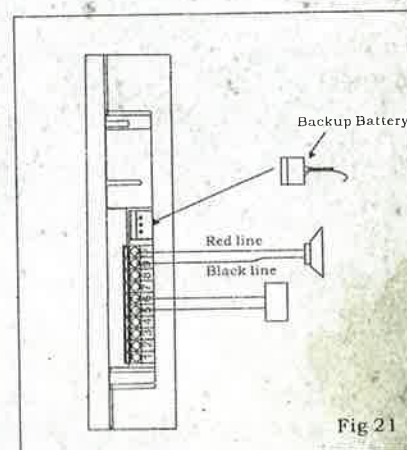


Fig 21

## 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.

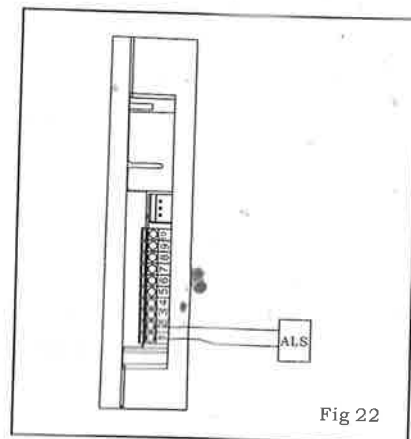
9.2 An optional external switch control could be added onto the opener by connecting to the Terminal 6 and 7. Read its installation manual carefully before using.

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**

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



## TROUBLE SHOOTING GUIDE

SYMPTOMS	POSSIBLE CAUSE	SOLUTION
Opener <b>does not operate at all</b> with any control devices	<ul style="list-style-type: none"> <li>• No power supply to the opener</li> </ul>	<ul style="list-style-type: none"> <li>• Check and make sure power is properly connected and switched on</li> </ul>
Door <b>reverses</b> before reaching the floor or stops before reaching the fully opened position	<ul style="list-style-type: none"> <li>• Door becomes <b>sticky</b>, spring broken &amp; not properly balanced from time</li> <li>• Possible obstruction stops the door</li> <li>• Close and Open Limit is set incorrectly</li> <li>• Door becomes too <b>heavy</b> to the preset closing and opening force margin</li> </ul>	<ul style="list-style-type: none"> <li>• Operate door manually to ensure that the door operating force is less than 15 Kg, maintenance and service the door is necessary</li> <li>• Remove the possible objects</li> <li>• Re-adjust the open &amp; closing limits (section 6.)</li> <li>• Re-set the door force margin (section 7.)</li> </ul>
Door only operates from door control button but not from a transmitter	<ul style="list-style-type: none"> <li>• Flat battery</li> <li>• Transmitter is not programmed correctly</li> <li>• Transmitter is damaged</li> </ul>	<ul style="list-style-type: none"> <li>• Try a new battery</li> <li>• Re-program the transmitter (section 10)</li> <li>• Try another transmitter</li> </ul>
Door only operates from door control button but not from a transmitter	<ul style="list-style-type: none"> <li>• Battery is weak</li> <li>• Metal obstacles in the path of signal, radio (including citizen band transmissions) or other electronic interference</li> </ul>	<ul style="list-style-type: none"> <li>• Try a new battery</li> <li>• Re-position the opener antenna aerial toward the direction of the transmission signal</li> </ul>
Door opens but will not close	<ul style="list-style-type: none"> <li>• Optional Infra Red Protection Device is activated</li> <li>• Optional ALS Device is activated</li> <li>• Closing force margin set incorrectly</li> </ul>	<ul style="list-style-type: none"> <li>• Check Protection Device and ALS Device (unlocking the lock)</li> <li>• Re-adjust the close force margin (section 7)</li> </ul>
Door opens or closes automatically when not in Auto Close Mode	<ul style="list-style-type: none"> <li>• Transmitter button is stuck and always is on</li> </ul>	<ul style="list-style-type: none"> <li>• Check transmitter and use another push button or change a new one</li> </ul>
The motor runs when activated, but the door does not move	<ul style="list-style-type: none"> <li>• The opener is disengaged in the manual operating mode</li> </ul>	<ul style="list-style-type: none"> <li>• Pull the handle once to reengage the opener to the automatic mode</li> </ul>