




digidoor  **GARAGE DOOR OPENER**
Installation Instructions and User Guide

CONTENTS

IMPORTANT SAFETY RECOMMENDATIONS	01
PRODUCT DESCRIPTION & FEATURES	02
PRE-INSTALLATION RECOMMENDATIONS	03
INSTALLATION (WALL BRACKET & DOOR BRACKET)	03
INSTALLATION (STEEL TRACK)	04
INSTALLATION (SECTIONAL STEEL TRACK ASSEMBLY)	05
BATTERY BACKUP ASSEMBLY (OPTIONAL)	06
PROGRAMMING INSTRUCTIONS	07 - 08
SAFETY BEAM CONNECTION (OPTIONAL)	09
OTHER TERMINALS INTRODUCTION & APPLICATION	09
MANUAL DISENGAGEMENT	10
MAINTENANCE	10
TECHNICAL SPECIFICATIONS	11
PARTS LISTING	12
COMMON FAULT & SOLUTIONS	13 - 14

IMPORTANT SAFETY RECOMMENDATIONS

WARNING: FAILURE TO COMPLY WITH THE FOLLOWING SAFETY RECOMMENDATIONS MAY RESULT IN SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE.

1. PLEASE READ CAREFULLY AND ADHERE TO ALL SAFETY AND INSTALLATION RECOMMENDATIONS.
2. The operator is designed and manufactured to meet local regulations. The installer must be familiar with local regulations required in respect of the installation of the operator.
3. Unqualified personnel or those who do not know the occupational health and safety standards applicable to automatic gates and other doors must under no circumstances carry out installations or implement systems.
4. Persons who install or service the equipment without observing all the applicable safety standards will be responsible for any damage, injury, cost, expense or claim whatsoever suffered as a result of failure to install the system correctly and in accordance with the relevant safety standards and installation manual, whether directly or indirectly.
5. For additional safety, we strongly recommend the inclusion of Safety Beam. Although the operator incorporates a pressure-sensitive Safety Obstruction Force System, the addition of Safety Beam will greatly enhance the operating safety of an automatic garage door and provide additional peace of mind.
6. Make sure that the garage door is fully open and stationary before driving in or out of the garage.
7. Make sure the garage door is fully closed and stationary before walking away.
8. Keep hands and loose clothing off the operator and garage door at all times.
9. The Safety Obstruction Force System is designed to work on STATIONARY objects only. Serious personal injury and/or property damage may occur if the garage door comes into contact with a moving object.
10. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
11.  Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.
12. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
13. **WARNING:** It is important for the safety of persons to follow all instructions. Save these instructions.
14. Do not allow children to play with door controls. Keep remote controls away from children.
15. Watch the moving door and keep people away until the door is completely opened or closed.
16. Take care when operating the manual release since an open door may fall rapidly due to weak or broken springs, or being out of balance.
17. Frequently examine the installation. In particular check cables, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed – a fault in the installation or an incorrectly balanced door may cause injury.
18. Once a month, check that the drive reverses when the door contacts a 50mm-high object placed on the floor. Adjust if necessary and recheck – an incorrect adjustment may present a hazard for drives incorporating an entrapment protection system depending on contact with the bottom edge of the door.
19. Familiarise yourself with the details on how to use the manual release, and information concerning the adjustment of the door and drive.
20. Disconnect the supply when cleaning or carrying out other maintenance.
21. The installation instructions shall include details for the installation of the drive and its associated components.

PRODUCT DESCRIPTION & FEATURES

1. Automatic safety reverse

Automatic stop/automatic reverse is controlled by our circuit board software. This is to protect your children, pets or property.

2. Soft start/soft stop

Ramping speed up and down at the start and end of each cycle reduces stress on the door and operator for longer life, and makes for quieter operation.

3. Auto-close

Auto-close ensures peace of mind and keeps your house secure by automatically closing the door upon entering or exiting the garage.

4. Self-learning open and close obstruction force

The amount of operator power for different stages of the door's travel is learnt during setup and is constantly re-profiled. Operator force measurement is automatically adjusted within a suitable range.

5. Electronic limit: simple adjustment

You only need to control the limit setup from the control panels to adjust it exactly – a simple and quick process.

6. Available terminal for Safety Beam, extra receivers, wire or wireless wall switch, and caution light.

7. Energy saving: LED courtesy light

The LED courtesy light switches on with each cycle to illuminate your garage, and times out in 3 minutes.

8. Battery backup available

Battery backup is available for this operator in case of a power failure at the home.

9. Self-lock in gear motors

The gear motor is self-locking.

10. Manual release

If necessary, the manual release system is used to disengage the operator from the door time.

11. Transmitter technology

Rolling code technology (7.38 x 10¹⁹ combinations), 433.92MHz frequency, 4 function design remote control.

12. Lower headroom

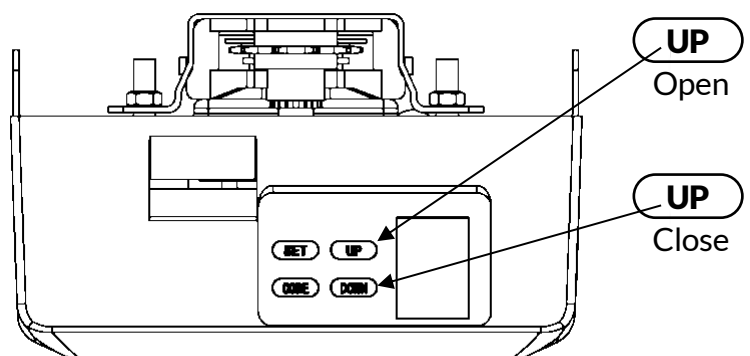
With as little as 30mm required between the ceiling and the highest point of the door travel, the operator can be flush-mounted for low-headroom applications.

13. Metal bottom plate –

Strong and secure.

14. Additional Up and Down buttons

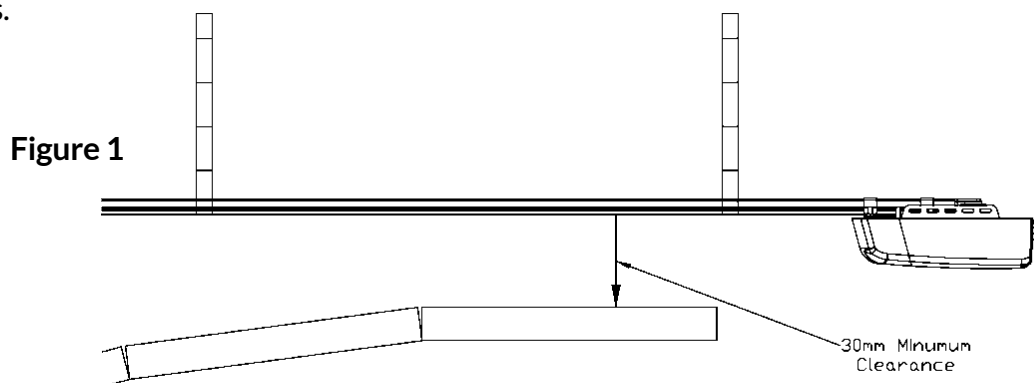
accessible on the rear of the operator.



PRE-INSTALLATION RECOMMENDATIONS

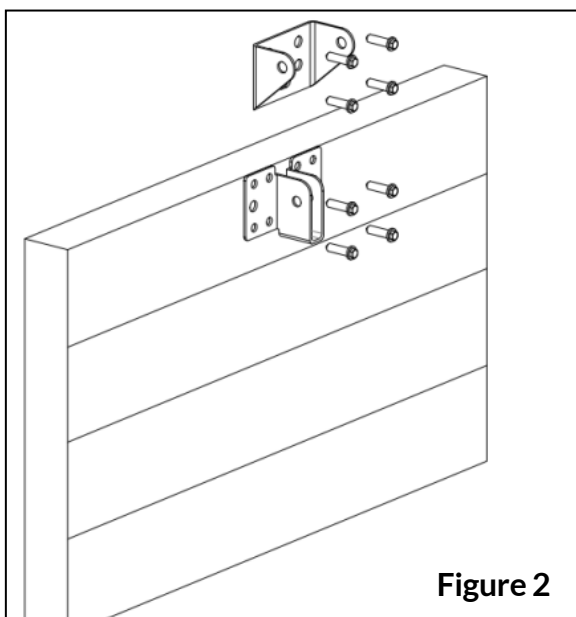
1. Garage door must be able to be lifted and closed easily by hand. A well-balanced and sprung door is important for proper installation.
2. The garage door operator can't compensate for a badly installed garage door, and should not be used as a solution for a 'problem' door.
3. If the unit is being installed on an existing door, make sure any existing locking devices are removed or disabled, or the warranty will be void.
4. An approved outlet must be installed near where the operator is installed.
5. There should be a minimum gap of 30mm between the bottom of the chain drive rail and the top of the garage door at its closest point. (Refer to Figure 1.)

Important note: For additional safety, we strongly recommend the fitting of Safety Beam on all installations.



INSTALLATION INSTRUCTIONS (Sectional door)

Installation (Wall Bracket & Door Bracket)



Wall Bracket

Close the garage door. Measure the door width at the top and mark the centre. Depending on the actual installation space, locate and mount the wall bracket 20 to 150mm above the door on the inside wall.

Door Bracket

Fix the door bracket to a structural part of the top panel, and level with the top rollers.

INSTALLATION (STEEL TRACK)

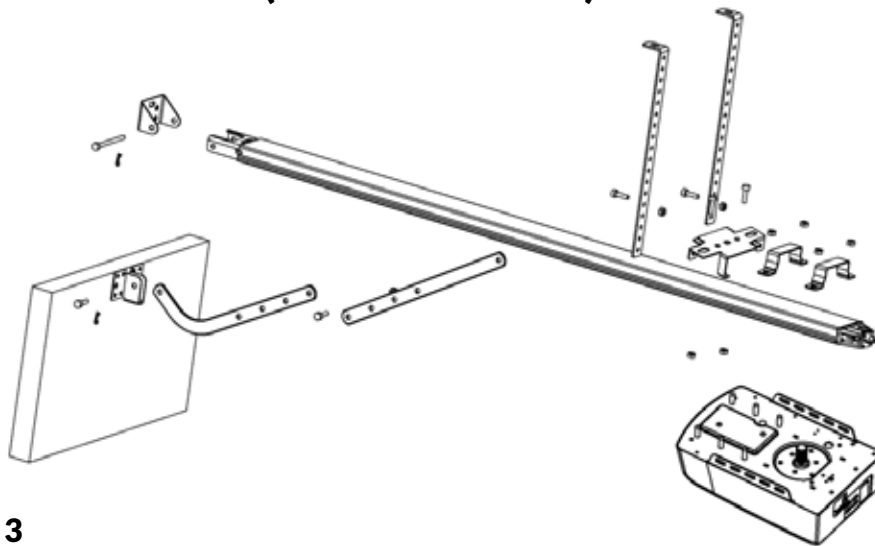


Figure 3

STEP1 (Figure.3)

Attach the operator head to the steel track. Assemble the 2 'U' hanging brackets with the 6mm nuts supplied.

STEP2 (Figure.3)

Place the steel track and operator head assembly centrally on the garage floor, with the open end furthest away from the door. Lift the front of the track up to the door bracket. Insert the pivot pin, and secure it with the split pin supplied.

STEP3 (Figure.3, Figure.4)

Lift and support the operator head (use a ladder) so it is positioned centrally and level. Fix the operator and track on ceiling by metal brackets A and B.

WARNING: Do not allow children in the vicinity of the door, operator or supporting ladder. Serious injury and/or damage may result from failure to follow this warning.

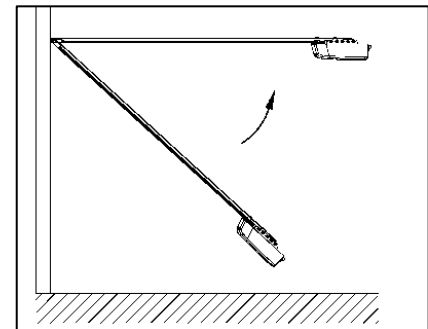


Figure 4

STEP4 (Figure.3, Figure.5)

Connect the straight arm to the bent arm with the M6 nuts and bolts. Position and bolt the arms to the top edge of the door using the bolt supplied.

STEP5

Lift the garage door until the carriage locks into the shuttle connected to the drive chain or belt. The operator is now ready for programming.

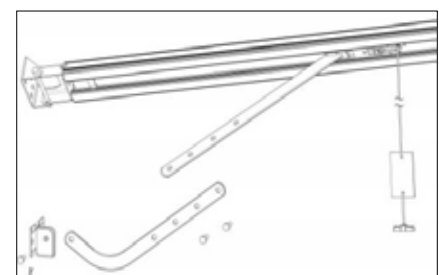
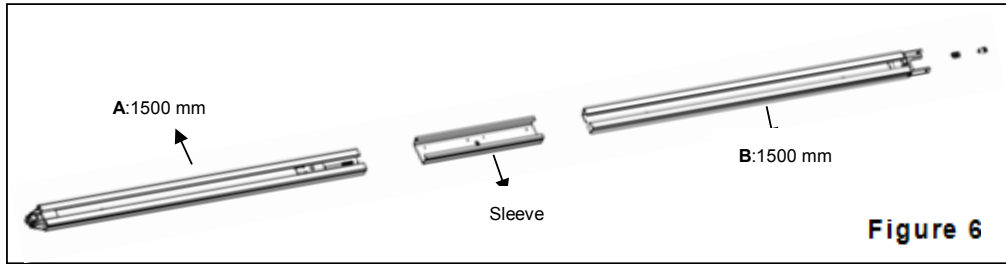


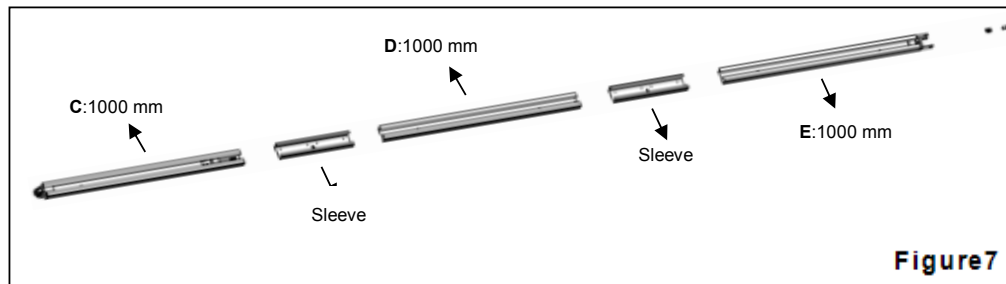
Figure 5

INSTALLATION (SECTIONAL STEEL TRACK ASSEMBLY)

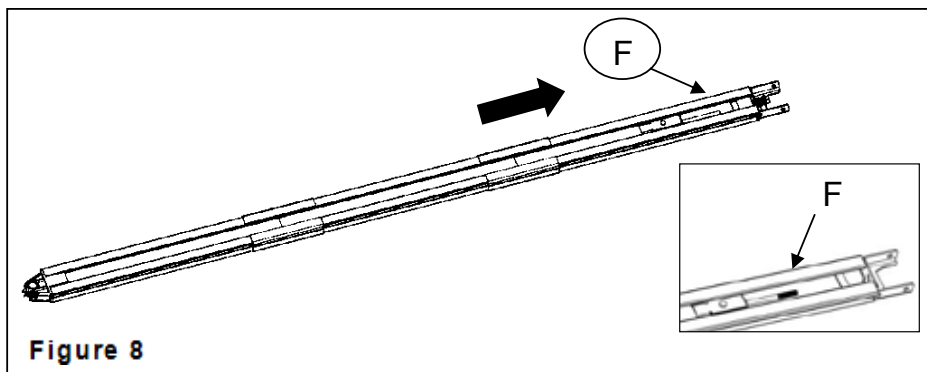
2 Parts Steel Track



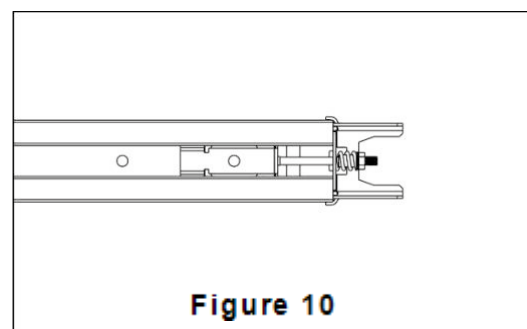
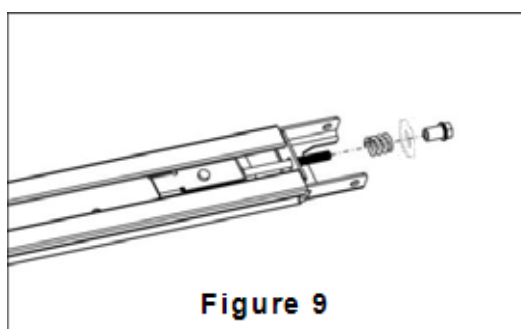
3 Parts Steel Track



- 1. 2-Parts Steel Track** - As shown in Figure 6, slide the A rail into the sleeve, then slide the B rail into the sleeve.
3-Parts Steel Track - As shown in Figure 7, slide the C rail into the sleeve, then slide the D rail into the sleeve, and slide the E rail into the sleeve.
- 2.** Cut the plastic thread. Pull the screw rod (F) along with inner chain to the end rail position. (See Figure 8.)



- 3.** As shown in Figure 9, fit the spring and nut.
- 4.** Tighten the nut as shown in Figure 10. Cut the plastic tape, then cut the plastic thread on the sprocket.



BATTERY BACKUP ASSEMBLY (OPTIONAL)

Option 1 - Top Fixed

STEP1

Assemble the battery and battery bracket as in Figure 11. Fix with screws supplied.

STEP2

Plug the battery cable into the operator cable, as in Figure 12.

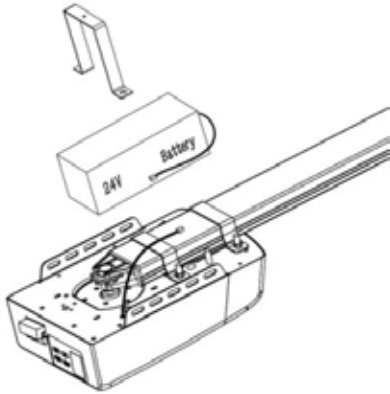


Figure 11

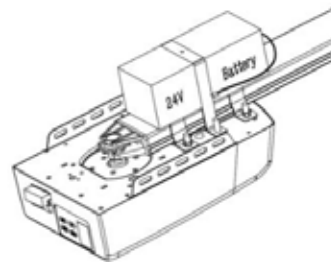


Figure 12

Option 2 - Side Fixed

STEP1

Assemble the battery and battery bracket as in Figure 13. Fix with screws supplied.

STEP2

Plug the battery cable into the operator cable, as in Figure 14.

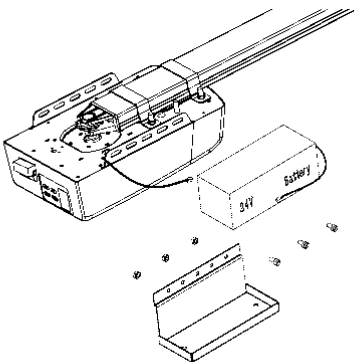


Figure 13

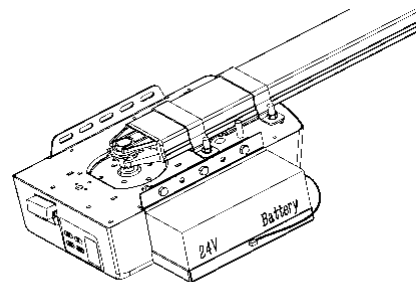


Figure 14

PROGRAMMING INSTRUCTIONS



1. PROGRAMMING OPEN AND CLOSED LIMITS

a) Press and hold the **SET** button until 1 appears on the display, then release the button.

The door operator is now in Programming Mode.

b) Press and hold the **UP** button until the door reaches the desired Open position. **NOTE:** Fine adjustments can be made by using the **UP** and **DOWN** buttons.

c) Now press the **SET** button to confirm the Open position. The display will now indicate the number 2.

d) Next press and hold the **DOWN** button until the door reaches the desired closed position. For fine adjustments, use the **UP** and **DOWN** buttons.

e) Now press the **SET** button to confirm the closed position.

CAUTION: The door will now cycle open/close to set the travel limits and the force sensitivity adjustments. The door is now ready for normal operation.

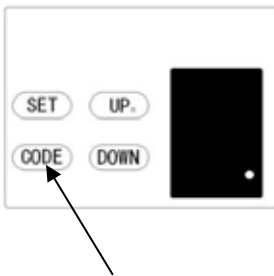
2. PROGRAMMING REMOTE CONTROLS

NOTE: Remotes that are supplied with the door operator are pre-programmed.

For any additional remotes:

- Press the **CODE** button. A dot will show in the lower right corner of the display.
- Now press the chosen button on the remote, pause for 2 seconds, then press the same button on the remote for a further 2 seconds.

The dot on the display will flash to confirm the code, and then turn off. Repeat the process for additional remotes.

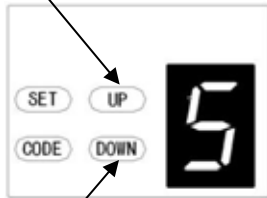


3. DELETING STORED REMOTES

Press and hold the **CODE** button until a C is indicated on the display. All stored remotes will be deleted.



Increase Force



Decrease Force

4. OBSTRUCTION FORCE ADJUSTMENT

NOTE: The obstruction adjustment is set automatically during programming. Usually, no adjustment is necessary.

If a change is needed:

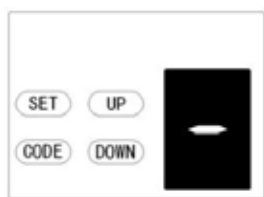
- Press and hold the **SET** button until 3 appears on the display, then release the button.
The unit is now in force adjustment mode.
- Press the **UP** button to increase the force setting, or the **DOWN** button to decrease the force setting.
The minimum force is 1, and can be adjusted upwards.
- Press **SET** to confirm your setting.

NOTE: The factory default setting is 3.

5. AUTOMATIC CLOSING

NOTE: We recommend that Safety Beam be used in any installation where the Auto Close function is enabled.

- Press and hold the **UP** button until a horizontal bar is indicated on the display. Now press the **UP** button once to set the Auto Close time (in minutes).
- Press the **UP** button to increase the time, or the **DOWN** button to decrease the time.
NOTE: The maximum time is 135 seconds. To disable Auto Close, set time to zero (0).
- Press the **SET** button to confirm the choice.



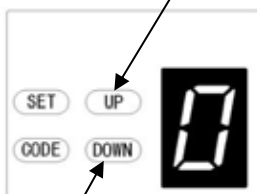
Auto Close enabled



Auto Close disabled



Increase A/C time



Decrease A/C time

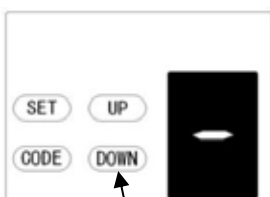


6. SAFETY BEAM

NOTE: Make sure the Safety Beam has been correctly installed, and use Normally Closed contacts to the accessory terminals of the operator (Figure 16)

Also note that the Safety Beam function must be disabled if no Safety Beams are fitted, otherwise the door cannot be closed, and the LED will blink once as an indication.

- Press and hold the **DOWN** button until 11 appears on the display. To enable the Safety Beam option, press **UP** again – the display will indicate an H (enabled) – or press the **DOWN** button to disable the option (display will show 11).
- Press **SET** to confirm the setting.



Safety Beam enabled



Safety Beam disabled

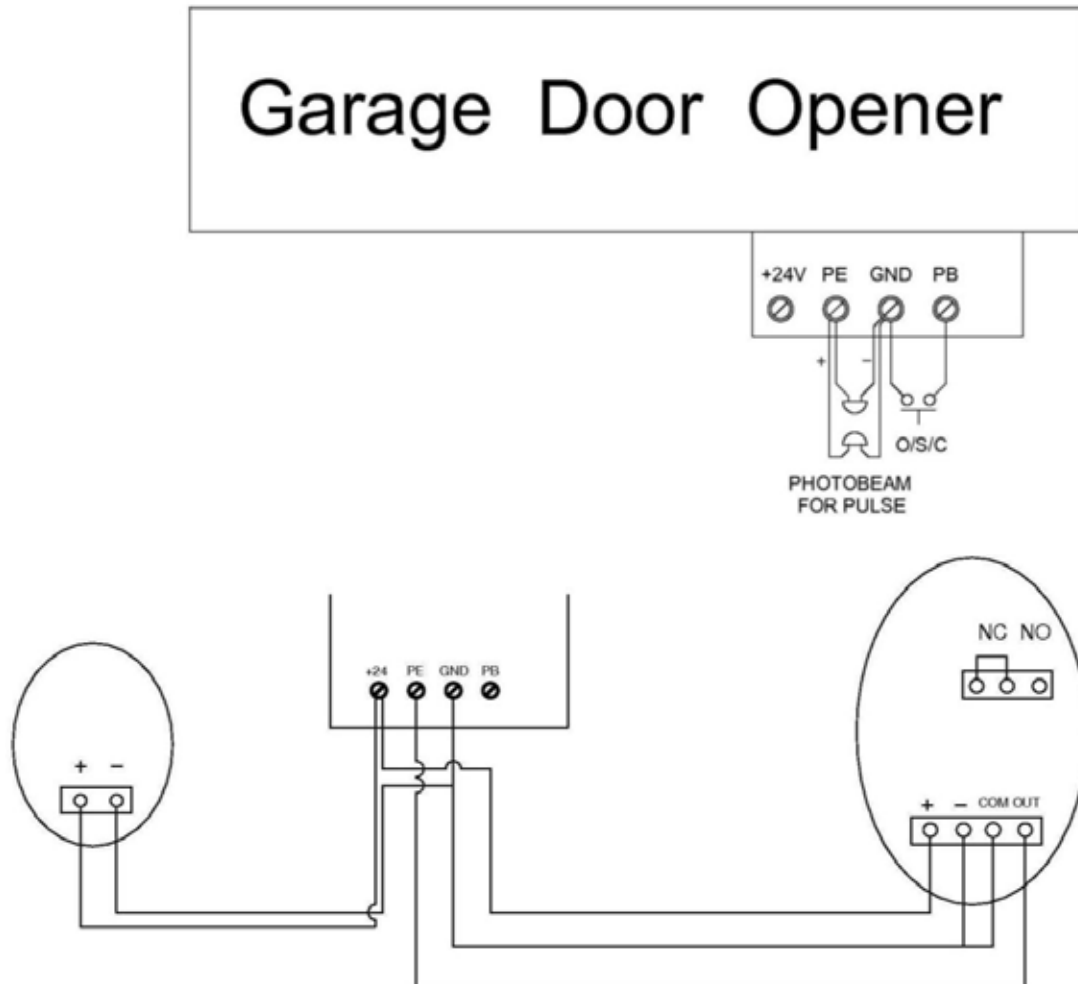
7. PB TERMINAL

This terminal can be used for an external push button switch to control the operator. The switch must have voltage free normally open contacts (Figure 16).

SAFETY BEAM CONNECTION (OPTIONAL)

Important notes:

1. Flash (Caution Light) should be less than 25W.
2. PB (External Push Button) should be 'N O'.



Connection of photo beam/switch control

Figure 16

OTHER TERMINAL INTRODUCTION AND APPLICATION

1. The O/S/C interfaces available.
Add a new O/S/C button to operate the door.
2. Flash light function.
There are corresponding interfaces for this function and provide 24V-35V flash light voltage. Connect the flash light with DC 24V-28V, current $\leq 100\text{mA}$. When using AC 220V power flash lights, please match an adapter and wiring as required.

MANUAL DISENGAGEMENT

The operator is equipped with a manual release cord to disengage the shuttle and move the door by hand while holding the handle down (Figure 19). Pull on the handle to disengage the shuttle. To re-engage the door, simply run operator in automatic mode or move the door by hand until the trolley engages in the chain shuttle.

In situations where the garage door is the only access, it is recommended that an external Key Release device should be fitted (Figure 20).

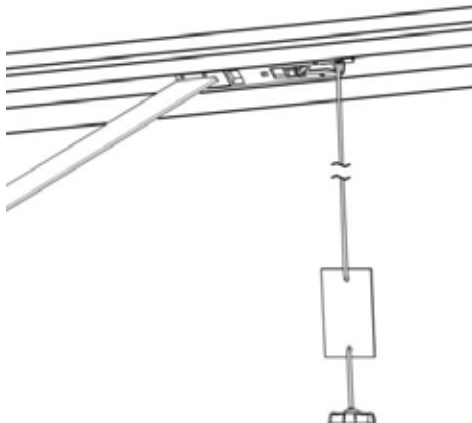


Figure 19

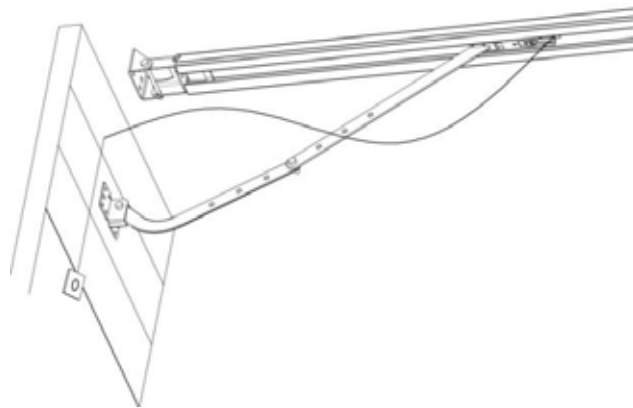


Figure 20

MAINTENANCE

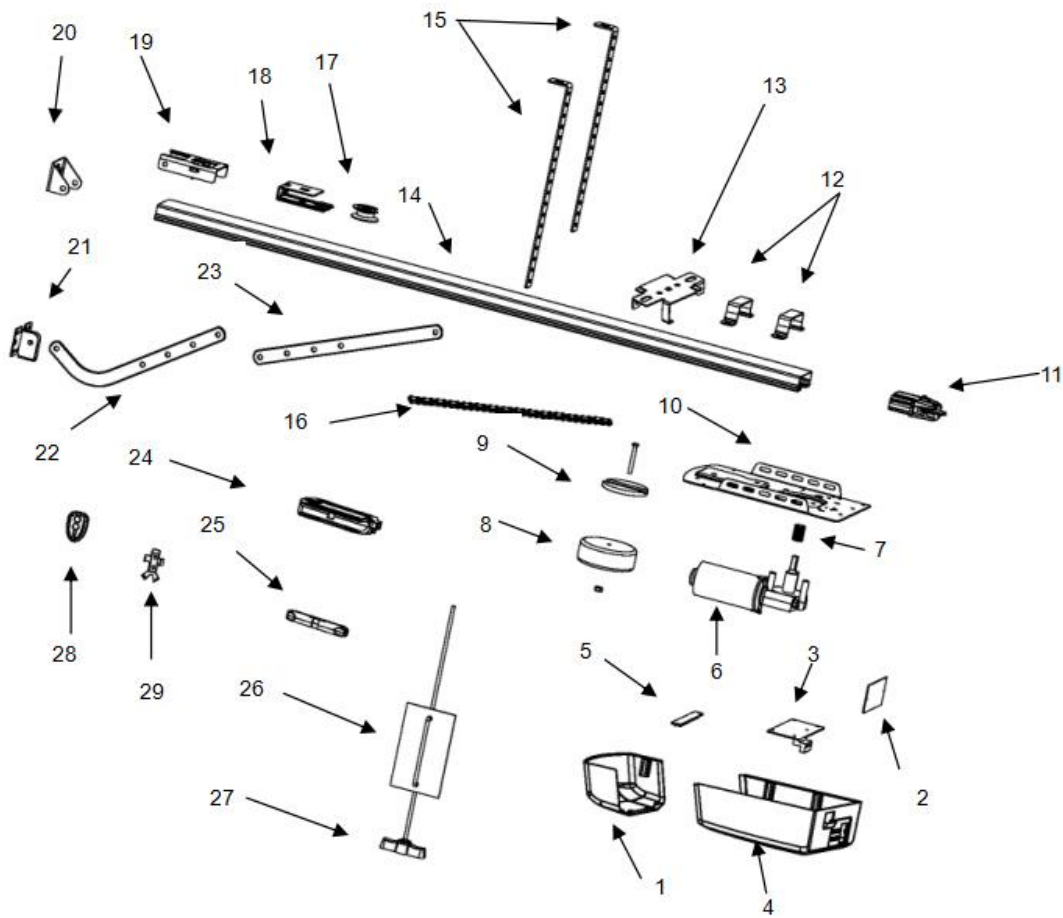
1. No particular maintenance is required for the control board.
2. Check the door at least twice a year to ensure it is properly balanced, and that all working parts are in good condition.
3. Check obstacle sensing at least twice a year, and adjust if necessary.
4. Make sure that all safety devices (such as Safety Beam) are working effectively.

NOTE: A poorly operating door can affect the life of the operator, and will void the warranty.

TECHNICAL SPECIFICATIONS

Item	Digidoor 6 S
Input voltage	220 - 240V / 110 - 127V, 50-60 Hz
Max. pull force	600 N
Max. door area	12m ²
Max. door weight (Balanced)	180 kg
Max. door height	2400 - 3500mm
Drive	Chain / Belt
Opening / Closing Speed	160mm / Second
Drive mechanism	Chain / Belt
L.E.D	24V / 15pcs LED lamp
Limit setting	Electronic
Transformer	Overload protection technology
Radio frequency	433.92 MHz
Coding Format	Rolling code (7.38 x 10 ¹⁹ Combinations)
Standard transmitter	2 X
Code Storage Capacity	20 different codes
Caution light terminal	Included
Working temperature	-40°C to +50°C
Safety Protection	Soft start & stop, Safety beam option
Protection level	IP20

PARTS LIST











Item	Qty	Description
1	1	L.E.D cover
2	1	Control PCB-1
3	1	Power PCB-2
4	1	Main cover
5	1	L.E.D light
6	1	DC gear motor
7	1	Motor shaft sleeve
8	1	Transformer
9	1	Transformer plate
10	1	Steel bottom base

Item	Qty	Description
11	1	Sprocket assy
12	1	U hanging bracket
13	2	Click bracket
14	1	C rail - steel
15	2	Mounting bracket
16	1	DC gear motor
17	1	Chain wheel
18	1	Wheel bracket
19	1	Track ending bracket
20	1	Wall bracket

Item	Qty	Description
21	1	Door bracket
22	1	Bent arm
23	2	Straight arm
24	1	Trolley assy
25	2	Chain/Belt connection
26	1	Caution card
27	1	Release handle
28	2	Transmitter
29	1	Transmitter bracket

COMMON FAULTS & SOLUTIONS

Nature of Fault	Possible Cause	Solutions
Operator not functioning. LCD screen is dim.	1. No power supply. 2. Plug wire is loose.	1. Check that mains voltage is present. 2. Check the fuse. 3. Check the low-voltage wires from the transformer to the control board. 4. Check that the ribbon cable is plugged into the board. 5. If 26V AC is present on the transformer low-voltage side, replace the control board. If not, replace the transformer.
Loss of Limit settings	System error	Reset the limits. (See PROGRAMMING OPEN AND CLOSE LIMITS.)
While learning,  is displayed.	Travel is less than 30cm or more than 9m.	Reset the limits. (See PROGRAMMING OPEN AND CLOSE LIMITS.)
 is displayed, and the operator does not work or stops working.	Insufficient voltage.	Check the power supply.
 or  is displayed.	Unbalanced springing of the door.	Adjust the spring system of the door to achieve balance.
The operator is not working and  is displayed	Open and close limits failed to learn, or improperly learnt.	Reset the limits. (See PROGRAMMING OPEN AND CLOSE LIMITS.)
Courtesy LEDs are always on.	Either the control board or the power supply board is faulty.	Replace the control board or power board.
After starting the door, the operator stops automatically after running 10cm, and  is displayed.	Hall sensor wire is loose or damaged.	Open the cover, check the hall sensor wire, and re-plug or replace.
Operator does not work. The relay is heard to 'click', and  is displayed	The wires between the gear motor and the control board may be loose.	Open the cover and check the wires between the gear motor and the board.
Operator stops automatically after running 10cm, nothing is displayed.	The wires between the gear motor and the board are plugged in inversely.	First power off. Open the cover and reverse the plug on the wires between the gear motor and the board. Reset the limits. (See PROGRAMMING OPEN AND CLOSE LIMITS.)
The door opens, but will not close and  is displayed.	1. If no Safety Beam device is installed: 2. If a Safety Beam device is installed:	1. Disable the Safety Beam function if no safety beam device is connected. (See PROGRAMMING INSTRUCTIONS: SAFETY BEAM.) 2. The Safety Beam may be faulty, incorrectly connected, misaligned or obstructed by some object.
After being open for some time, the door closes by itself. The courtesy LED lights flash 4 times.	Automatic closing function is selected	Disable the Auto Close function or, if required, set a more suitable delay. NOTE: It is highly recommended that a Safety Beam device is fitted if Auto Close is selected. (See PROGRAMMING INSTRUCTIONS: AUTOMATIC CLOSING.)

COMMON FAULTS & SOLUTIONS

The courtesy LED lights stay on instead of timing out after the last operation.	The power board may be faulty.	Replace the power board.
The courtesy LED lights do not work.	<ol style="list-style-type: none"> 1. The LED wire is not plugged in. 2. The LED is faulty. 3. The power or control board is faulty. 	<ol style="list-style-type: none"> 1. Check the LED wire. 2. Replace the LED. 3. Replace the circuit board(s).
The door fails to close fully, stops and automatically re-opens, or simply stops while opening.	<p>The obstacle function is being activated because:</p> <ol style="list-style-type: none"> 1. The door is binding or unbalanced. 2. Something is obstructing the door. 	<ol style="list-style-type: none"> 1. In manual mode, check that the door moves freely (at the speed of the operator). Re-set the Open and Close limits. (See PROGRAMMING OPEN AND CLOSE LIMITS.) 2. Identify the obstruction and remove it.
The remote control does not work, or its operating range is reduced.	<ol style="list-style-type: none"> 1. The remote battery may be flat – is its LED lighting up during operation? 2. The antenna is loose or not well extended. 3. Local radio interference is present. 	<ol style="list-style-type: none"> 1. Replace the remote battery. 2. Re-attach or extend the antenna on the operator. 3. Attempt to identify the interference and remove it.
Unable to code in new remotes.	The new remotes may not be compatible with the operator.	Ensure that the remotes are compatible.
Unable to code in a compatible remote, and F is displayed.	The stored capacity of 20 remotes is full.	Ensure that all the existing remotes are available, then delete all the stored codes, and code in all the remotes again. (See PROGRAMMING REMOTE CONTROLS.)
The operator seems to be working, but the door is not moving.	The motor shaft sleeve may be worn out.	Replace the motor shaft sleeve. (See PARTS LISTING on page 14.)
The battery does not supply power.	<ol style="list-style-type: none"> 1. The battery is flat. 2. The battery wire is plugged inversely. 3. The battery wires may be faulty. 4. The battery may be faulty (old). 	<ol style="list-style-type: none"> 1. Charge the battery. 2. Open the cover, check battery polarity. 3. Check and replace the battery wires. 4. Replace the battery. Dispose of the old one responsibly.
Other abnormal issues	External devices are not compatible with the operator.	Remove all the external devices. If the abnormal issues persist, replace the circuit board.

SBS is a supplier of specialised building products. As part of the Swartland Group, traditional values such as hard work, pride in our craft and continuous improvement are an integral part of who we are.

These values are at the core of all our products, resulting in products that are manufactured to the highest standards and made to last.

Sales Branches		
City	Tel	Fax
Johannesburg	0861 22 3444	+27 11 474 9067
East Rand	+27 11 397 8448	+27 11 397 8480
Midrand	+27 12 653 6399	+27 11 653 6464
Nelspruit	+27 13 753 2176	+27 13 752 2636
Cape Town	+27 21 933 5556	+27 21 933 5558
Durban	+27 31 700 2110	+27 31 700 2111
Port Elizabeth	+27 41 367 2874	+27 41 367 3164

Tell: +27 (0) 861 10 24 25

Email: customerservice@sbsbuilding.co.za

www.hydrodoors.co.za



digidoor  **ROLL UP
DOOR OPENER**

Installation Instructions and User Guide