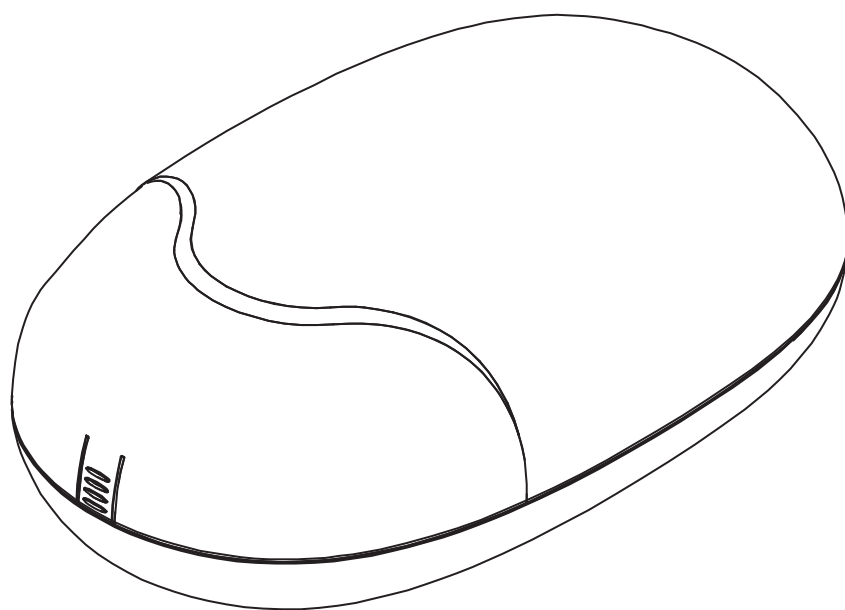


PG SERIES

Garage Door Openers

USER MANUAL



INDEX

1.	WARNINGS	1
2.	PRODUCT DESCRIPTION	1
2.1	APPLICATIONS	1
2.2	DESCRIPTION OF THE AUTOMATION	1
3.	CONNECTION	2
3.1	ACCESSORIES CONNECTION	2
3.2	DOOR POSITION FOR START-UP PHASE	3
3.3	TRANSMITTER MEMORIZING AND ERASING PROCESS	3
3.4	SYSTEM LEARNING, RESET PROCESS, AND LED DISPLAY	3
3.5	PROGRAMMABLE FUNCTION INDICATION LED	3
4.	PARAMETER SETTING	4
4.1	HOW TO SET THE PARAMETER	4
4.2	CHART OF FUNCTION CODE	4
5.	FUNCTION OF EXTERNAL ACCESSORIES	5
5.1	FUNCTION OF PHOTOCELLS	5
5.2	FUNCTION OF EXTERNAL PUSH BUTTON	5
6.	SPECIFICATION	5
7.	INSTALLATION	6
7.1	LIST OF RACK ACCESSORIES	6
7.2	GAGARE OPENER& RACK INSTALLATION	6


1. WARNINGS

WARNING :

Please read this instruction manual carefully before the installation.

This manual is exclusively for qualified installation personnel. Powertech Automation Inc. is not responsible for improper installation and failure to comply with local electrical and building regulations.

Keep all the components of PG Series garage opener system and this manual for further consultation.

- In this manual, please pay extra attention to the contents marked by the symbol: 
- Be aware of the hazards that may exist in the procedures of installation and operation of the garage opener system. Besides, the installation must be carried out in conformity with local standards and regulations.
- If the system is correctly installed and used following all the standards and regulations, it will ensure a high degree of safety.
- Make sure that the door works properly before installing the garage opener system and confirm the doors are appropriate for the application.
- Do not let children operate or play with the garage opener system.
- Do not cross the path of the garage opener system when operating.
- Please keep all the control devices and any other pulse generator away from children to avoid the system being activated accidentally.
- Do not make any modifications to any components except that it is mentioned in this manual.
- Do not try to manually open or close the doors before you release the opener.
- If there is a failure that cannot be solved and is not mentioned in this manual, please contact qualified installation personnel.
- Do not use the garage opener system before all the procedures and instructions have been carried out and thoroughly read.
- Install warning signs (if necessary) on the both sides of the door to warn the people in the area of potential hazards.

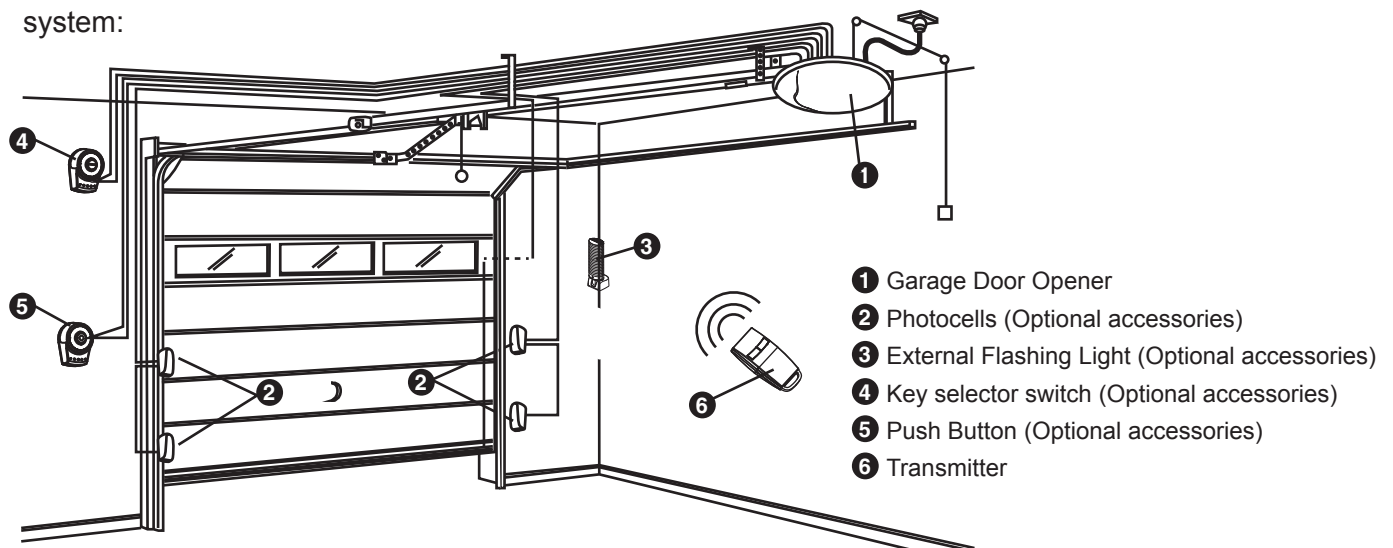
2. PRODUCT DESCRIPTION

2.1 APPLICATIONS

Garage door opener is applied for residential automation of up and over doors and sectional doors and has to be operated with electricity and it's forbidden to be operated by back-up batteries for normal use. Back-up batteries are only allowed for emergent operation when there is a power failure, and the carriage can be released by pulling the cord to move the door manually.

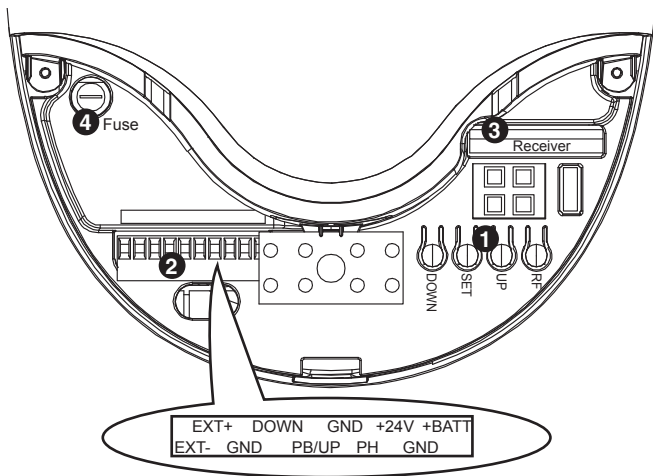
2.2 DESCRIPTION OF THE AUTOMATION

1). The following diagram of typical installation describes some terms and accessories of the door automation system:



Please set stopper in the open limit position of the rack and after the setup is completed, then garage door opener can start the system learning process.

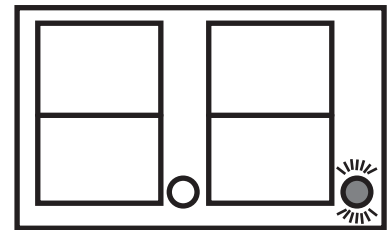
2). The indication of control panel



- ❶ Operation buttons: Remote Function key (RF), Setting key (Set), UP key (Up), DOWN key (Down).
- ❷ Connection terminal of Optional accessories
- ❸ Radio receiver board
- ❹ Fuse

3). The LED indication

- ❶ The power indicator is on the bottom right of the display. When the power is connected, the LED dot indicator is alight.
- ❷ When entering to the power-saving mode, the LED power indicator is flashing (light for 0.5 second and then no light for 5 seconds)



3. CONNECTION

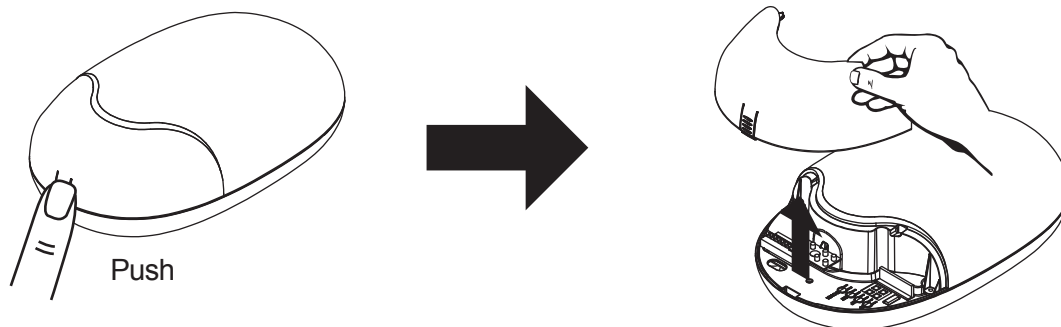
3.1 ACCESSORIES CONNECTION



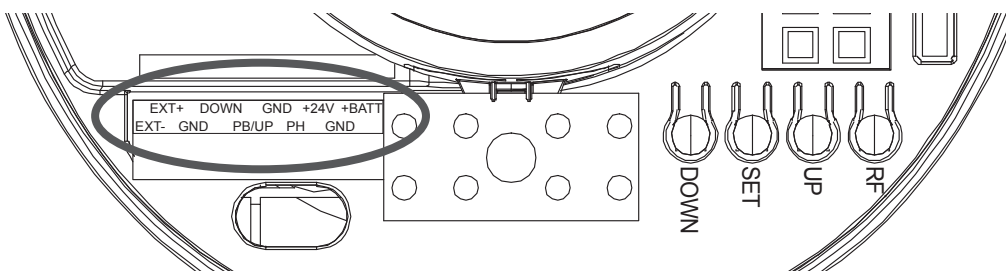
Only carry out electrical connections once the electricity supply to the system has been switched off.

Disconnect any

A. Open the cover in order to access the electronic connection terminal of the PG Series garage gate opener.



B. Connect the wires of each accessories on the terminal. (If necessary)



3.2 DOOR POSITION FOR START-UP PHASE

The manufacturers recommend you unhook the carriage and position the leaf at approximately half travel before starting the checking and start-up phase of the automation. This will ensure the leaf is free to move both during opening and closure.

Power supply connection

Connect the plug. If necessary, use a commercial adaptor if the plug on the PG Series unit does not correspond to the socket available. As soon as the system is powered, you should check the LED in the display. Make sure the LED display is ON.

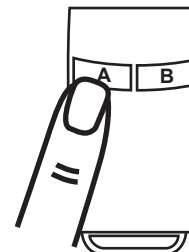
Never cut or remove the cable supplied with PG Series garage opener. If not already available, the power socket of PG Series garage opener connection must be fitted by skilled and qualified personnel in strict observance of current legislation, standards and regulations.

The power supply line must be protected from short circuits and ground leakage.

3.3 TRANSMITTER MEMORIZING AND ERASING PROCESS

A. Transmitter Memorizing:

Press "RF Learn" button for 3 seconds, and the Display will show "CS"; then press the transmitter A button within 10 seconds; the "CS" will blink three times and show "CS". After 10 seconds without any movement, "CS" will be off. The transmitter learning is completed.



B. Erasing Transmitter Memory:

Press and hold "RF Learn" button for 10 seconds, the display will show "CS". When "CC" show up, the memory is cleared.

C. Memorizing by memorized transmitter:

Press and hold A and B button for 5 seconds, LED light and external flash light will start to blink in the same time. Within 10 seconds, press any button of the un-memorized transmitter 2 seconds, the transmitter will be memorized after LED light and external flash light are off. To program by memorized transmitter, just can do the transmitter learning one by one.

3.4 SYSTEM LEARNING, RESET PROCESS, AND LED DISPLAY

A. System Learning:

Step1: Press and hold "RF" and "SET" buttons 3 seconds, the display will show "OL(Open Limit)".

Step2: Press and hold "UP" button to open the door continually or press "UP" button to move the door up little by little. When door move to the stopper, press "SET" button to set Open limit and the display will show "CL (Close Limit)".

Step3: Press and hold "Down" button to close the door continually or press "Down" button to move the door down little by little. When door moves to close position, press "SET" button to set Close limit and the display will show "GE".

Step 4: Press "SET" button or "A" button of the transmitter, the door opener will have test running for open and close phase.

Display panel will shows "GE" blinking continually. Opener will run open process until reach the stopper and the display will flash "OL" 3 seconds. And then run close process and flash "GE" until the opener stop in the close position and the display will blink "OC" 3 seconds.

Step 5: System will display will "SO" which means system learning completely.

B. Restore Default Setting:

Press "RF" and "DOWN" buttons for 3 seconds, and the LED display shows "CLR" to recover the default settings.

3.5 Programmable function indication LED

LED Display	Programmable Functions	LED Display	Programmable Functions
	Start transmitter learning mode.		Operation testing
	Cleaned all studied transmitter.		System Learning Fail.
	Set up Open Limit.		System Learning Completely.
	Set up Close Limit.		System setting clear

4. Parameter setting

4.1 HOW TO SET THE PARAMETER:

Step 1: Press the "Set" key for 3 seconds, the display will show the function code.

Step 2: Choosing the setting by Up and Down keys, after having chosen the indicated item, press the Set key and enter the setting of this function. The second digit will be shown on the right of the display, indicating the related function (please refer below chart for details). Using the Up and the Down Keys to choose the setting function and press the Set key to save.

4.2 CHART OF FUNCTION CODE:

Function Code	Description	Digit	Value	Description
1	Over-current setting	1-1	2A	1. The default setting is 1-3.
		1-2	3A	
		1-3	4A	
		1-4	5A	
		1-5	6A	
		1-6	7A	
		1-7	8A	
		1-8	9A	
2	Deceleration position starting point (% full operation)	2-1	75%	1. The default setting is 2-3.
		2-2	80%	
		2-3	85%	
		2-4	90%	
		2-5	95%	
3	Open-stop-close-stop function key on the transmitter	3-0	No function	1. The default setting is 3-1.
		3-1	A key	
		3-2	B key	
		3-3	C key	
		3-4	D key	
4	Flashlight function key on the transmitter	4-0	No function	1. The default setting is 4-2.
		4-1	A key	
		4-2	B key	
		4-3	C key	
		4-4	D key	
5	External device control function key on the transmitter	5-0	No function	1. the default setting is 5-3.
		5-1	A key	
		5-2	B key	
		5-3	C key	
		5-4	D key	
6	Photocell function	6-1	Inactivated	1. the default setting is 6-1.
		6-2	Activated	
7	Alarm device	7-1	OFF	1. The default setting is 7-1 2. If the door has not been closed for 10 minutes, the alarm will sound until the door closed.
		7-2	ON	
8	Automatic closing	8-1	No automatic closing	1. The default setting is 8-1. 2. The setting seconds indicate time interval for automatic closing.
		8-2	30 seconds	
		8-3	60 seconds	
		8-4	90 seconds	
		8-5	120 seconds	
		8-6	150 seconds	
		8-7	180 seconds	
		8-8	210 seconds	
		8-9	240 seconds	
9	LED light function	9-1	No function	1. the default setting is 9-4
		9-2	Alight for 1 min when opening	
		9-3	Alight for 2 min when opening	
		9-4	Alight for 3 min when opening	

5. FUNCTION OF EXTERNAL ACCESSORIES

5.1 FUNCTION OF PHOTOCELLS

Gate Status	The reactions of the photocells when detecting obstacles
Closed	No effect. Photocells maintain in the inactive status.
Opened	Forbidden to move. If setting the automatic closing function, the door will reload automatic closing time.
Stop during moving	Forbidden to move. If setting the automatic closing function, the door will reload automatic closing time.
Closing	Stop closing immediately and open. If setting the automatic closing function, the door will reload automatic closing time.
Opening	Stop and wait for a next command. If setting the automatic closing function, the door will reload automatic closing time.

5.2 FUNCTION OF EXTERNAL PUSH BUTTON:

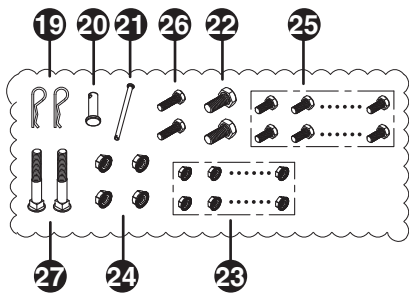
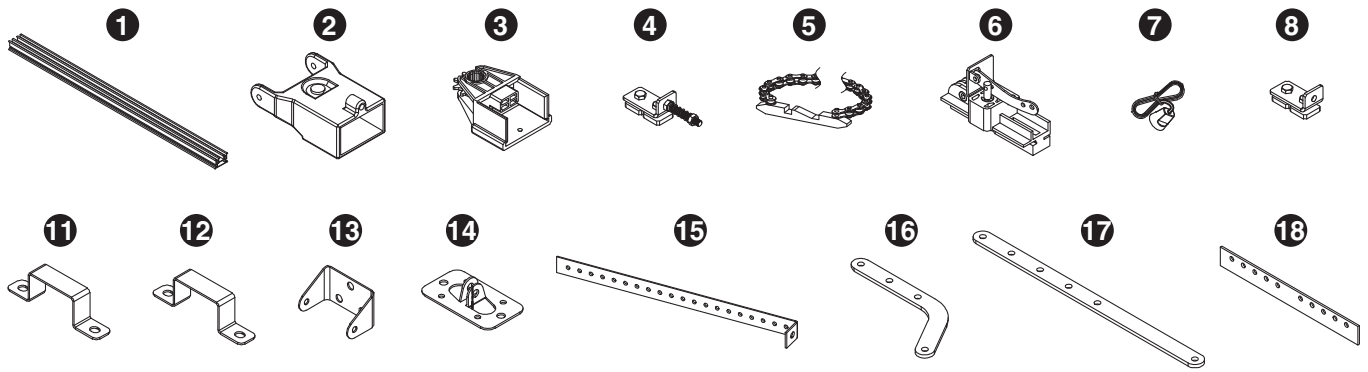
Operation logic of door when press the push button: **open-stop-close-stop**

6. SPECIFICATION

Garage Door Opener	PG 60	PG 80	PG 100	PG 120
Volt	AC 220V / 110V ; 50Hz~60Hz	AC 220V / 110V ; 50Hz~60Hz	AC 220V / 110V ; 50Hz~60Hz	AC 220V / 110V ; 50Hz~60Hz
Motor volt	DC24V	DC24V	DC24V	DC24V
Power	80W	80W	100W	120W
Force	600N	800N	1000N	1200N
Remote frequency	433.92MHZ	433.92MHZ	433.92MHZ	433.92MHZ
Max door area	8-10m ²	10-12m ²	12-14m ²	14-16m ²
Temperature range	-20°C ~ +50°C	-20°C ~ +50°C	-20°C ~ +50°C	-20°C ~ +50°C
Rail length	3.0m/3.3m	3.0m/3.3m	3.0m/3.3m	3.0m/3.3m
Running speed	100~120mm/s	100~120mm/s	100~120mm/s	100~120mm/s

7. INSTALLATION

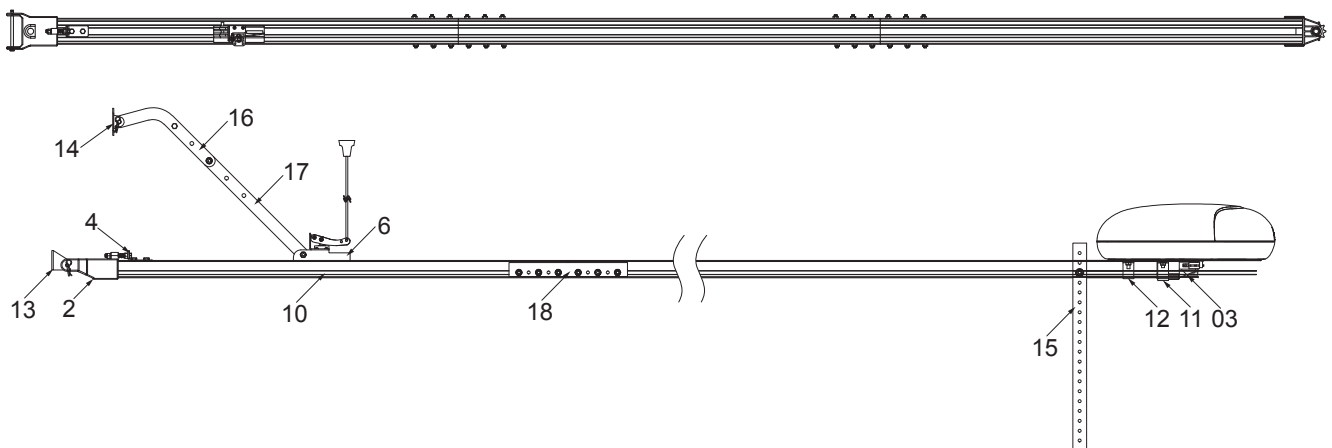
7.1 LIST OF RACK ACCESSORIES



No.	Part No.	Pcs
1	32409-13-960	3
2	50007-008	1
3	50007-009	1
4	50007-010	1
5	50007-011	1
6	50007-012	1
7	50007-013	1
8	50007-014	1
9	34600-221	1
10	34100-113	1
11	32906-185	1
12	32906-186	1
13	32906-187	1
14	32906-188	1
15	32906-189	2

No.	Part No.	Pcs
16	32906-190	1
17	32906-191	1
18	32906-192	4
19	33302-022	2
20	33302-023	1
21	33302-024	1
22	33903-039	2
23	33903-279	30
24	33903-280	4
25	33903-281-14	24
26	33903-281-20	2
27	33903-282	2
28	34206-962	1
29	34206-963	1
30	34206-964	1

7.2 GAGARE OPENER & RACK INSTALLATION



34100-XXXX



POWERTECH

THE STRONGEST SOLUTION FOR SWING GATES

- Worm gear provides durability and silence in motor operation.
- Slowdown during opening and closing phase.