

If you have any questions, please email our technical team at

support@autohotation.com

Call for immediate assistance from our technical support team

1800-XXX-XXXX

Visit us at www.autohotation.com

For easy-to-follow installation instructions, please visit our website for installation video at www.autohotation.com

**INSTALLATION MANUAL -
PRIME LOCK
REV 01**

INSTRUCTIONS

Congratulations on your purchase of the Prime Lock, automatic patio door opening system by AutoHOMATION. Read these instructions before commencing installation. Please follow the installation instructions carefully.

INTRODUCTION

This manual is designed for the installation and commissioning of Patio Door Operator Model, Prime Lock. If you have any questions or queries in following this manual, please email us at:

support@autohotation.com

Or visit us at:

<http://www.autohotation.com>

Toll Free: 1300 AUTOHOMATION

US number, India number

WARRANTY

Prime Lock is produced by AutoHOMATION and is subject to the following warranty and conditions of operation apply. The product is warranted against failure due to faulty material or workmanship for a period of 12 months from date of purchase. Such warranty will cover repair or replacement of any defective parts at AutoHOMATION premises and subjected to the following conditions, provided that

- Prime Lock is fitted to a patio type sliding door strictly following the supplied instructions
- Sliding door is free sliding within the limits of the trial load sliding door puller supplied
- The Prime Lock is for **domestic** use only
- The warranty is limited to an amount totaling no more than unit cost price
- Warranty Return shall be made via the retailer at the point of purchase and receipt of sale provided

WARRANTY APPLICABILITY

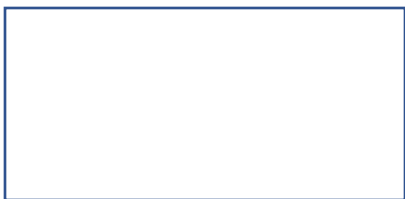
This warranty shall be null and void and to no affect if:

- Prime Lock is abused or in any way used outside the limits of the specification and design,
- The electric wiring has been interfered with and is not wired in accordance with the original factory settings.
- If defects are caused by fair wear and tear,
- If purchaser alters Prime Lock, adds or removes and parts or materials from the unit.
- Fails to notify AutoHOMATION immediately if there is a failure of any component.
- Delivery of all items to and from AutoHOMATION will be at the purchaser's expense.
- The purchaser will be responsible for inspecting the package to ensure that the package is complete and not damaged, and all parts are present.
- The buyer shall immediately notify in writing for any defect in the goods.
- The purchaser expressly acknowledges and agrees that AutoHOMATION is not liable for any external advice in relation to the suitability of the product or its application to certain doors and such advice is relied upon at the purchaser's risk,
- The buyer shall not carry out any remedial work to the alleged defective goods without first obtaining the written consent and instruction from AutoHOMATION.
- The warranty on the battery is (whatever the original manufacturer gives in warranty).

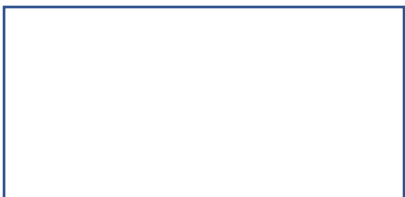
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PRIME LOCK PACKAGE CONTENTS



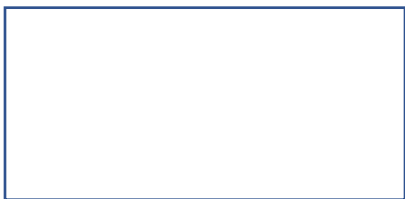
Rack



Controller



Wireless Push Button



Controller Cover



Assorted Screws

PARTS INTRODUCTION



Part Details

1. Enclosure
2. Adapter
3. Bracket
4. Remote
5. Tooth cap nut
6. Automatic door Microwave sensor
7. Gear rack
8. Power plug
9. Wireless push button

TOOLS REQUIRED

1. No. 2 flat head screwdriver
2. Cross head screwdriver
3. Marking pencil
4. Measuring Tape
5. Small flat blade screw-driver
6. Hack saw
7. Utility knife
8. Drill/Driver

PRIME LOCK - ABOUT

Prime Lock, automatic slider for patio door, is inbuilt with an effective controller that enables the smooth movement of the patio door with a rack and pinion mechanism.

Prime Lock is engineered to perform with less noise and with programmable variable speeds.

HIGHLIGHTS

- Easy to install for without changing existing door structure
- Sleek and Compact design
- Comes with Sensors, Remote Control, Push button, Pet Switch, Photocell, Card Reader, Lock and so on.

APPLICABILITY

Patio door / Sliding Glass Window /French Window

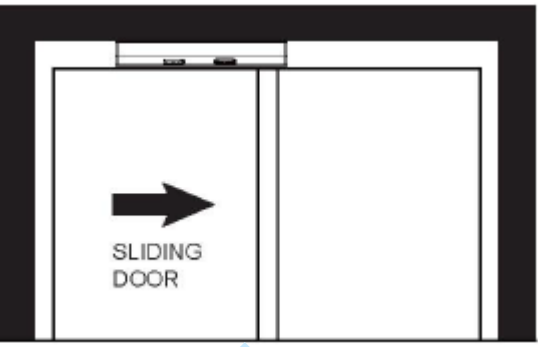
TECHNICAL PARAMETERS

Power Supply	Input: 100-240V; Output: 24V DC
Maximum Door Weight	176.3 lbs / 80 kg
Maximum Door Width	16.40 feet /5 Meters
Standard Track	3.2 feet/1 Meter, length can be customized
Color	White / Black
Length of track	1.64 feet/ 0.5 Meter per piece
Product Weight	6.6 lbs / 3 kg
Product Measurement	19.3in x 2.8in x 2.5in / 490mm x 72mm x 63mm

INSTALLATION STEPS

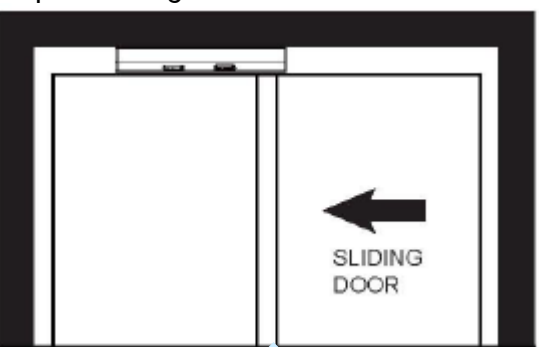
STEP 1: SELECTION OF SYSTEM MOUNTING LOCATION

Top Mounting 1



System to be installed on top of the door/window. Left part is the sliding door/window

Top Mounting 2



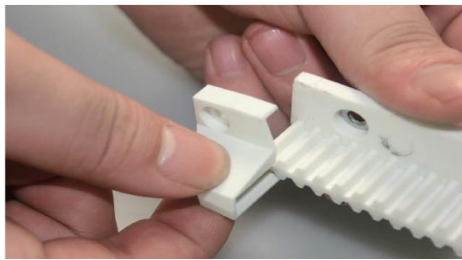
System to be installed on top of door/window. Right part is the sliding door/ window

STEP 2: APPLICATION OF MOUNTING BRACKET



STEP 3: RACK SELECTION

Place the cap on to the rack of close direction



Connect the two racks together when the door/window width over 0.5 m/ 1.6 feet.



Hammer the connection part as required to make it flat and straight



Place the rack to the top of the door/window edge as shown.



RACK FITTING

Make pencil marks for width of the door/window on both edges as shown.



Mark with pencil for three teeth of the rack for end cap use.



Deduct 3 teeth of the rack and cut using a saw (for end cap use) from the position marked before.



Place the cut rack as shown



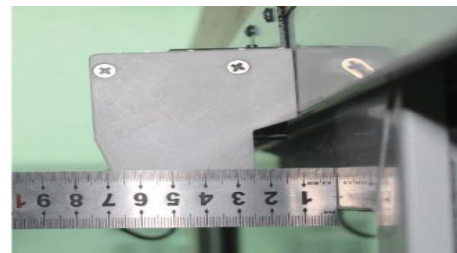
STEP 4: CONTROLLER INSTALLATION METHOD 1

Place controller on top of door frame when door is fully closed. Position it from center of the whole door at 2.7in/70 mm. Mark the ends by pencil.



Note: 2.7in / 70 mm is only suitable when the two doors does not overlap. If not, follow the Controller Installation Method 2

Adjust controller position within the marks, leaving 0.9in / 25 mm distance between controller & door leaf, and tighten the screw



Place the connected rack on the other side.



Adjust the position and make the gear and rack is fit correctly. Insert the screw.



Tighten the screw



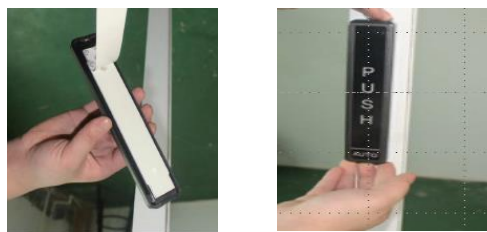
Move the door leaf to reduce resistance. The controller should be smoothly working.



Two wireless push buttons are supplied with Prime Lock, one for each side of the door.

- Measure 3 feet (1m) up from the floor and mark on the door frame, inside and out. Ensure the frames are clean, dry and free of dust, grease etc.
- Peel the double-sided tape on the back of the push button.
- Attach the push button onto the frame to cover the marks made in step (i).

Affix the wireless push button. Mount it on to the desired position.



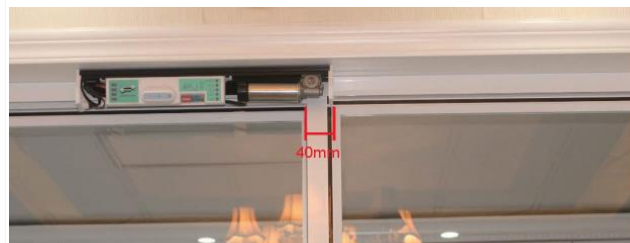
Power on, to test the system



Cover the controller after all the test is done.

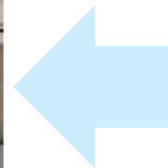


STEP 4: CONTROLLER INSTALLATION METHOD 2

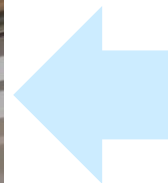


Attention: This is to ensure that door can be fully opened. This would take off the right end cap of track, make door leaf and the rack to be flat.

Place controller on top of door frame when door is fully closed. Position it from center of the whole door at 1.6in / 40 mm right. Mark the ends by pencil.



Adjust the controller position within the markings, leaving 0.9in / 25 mm distance between controller and door leaf.





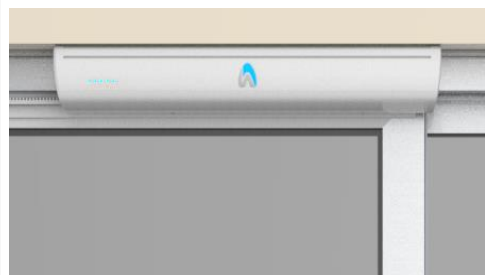
Place the connected rack on the other side, adjust the position.



Make the gear and rack is well fit. Insert the screw.



Tighten the screw at the end.

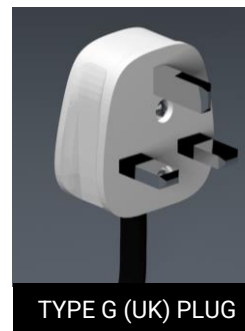


Once all the testing is done, place the top cover.

ADJUSTING THE CONTROLS AND PROGRAMMING SENSORS

Checking for the Controller settings:

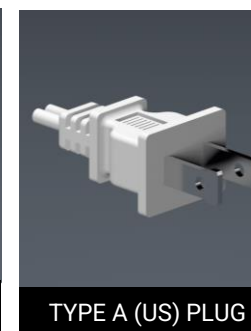
- a. Plug the power pack into the wall socket, run the cable and plug into Prime Lock unit . Refer applicable power plugs below:



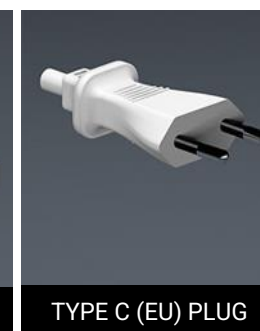
TYPE G (UK) PLUG



TYPE I (AU) PLUG



TYPE A (US) PLUG



TYPE C (EU) PLUG

- b. The main isolator switch is located on the side of the controller.
- c. The 'open time' control sets the time the door will stay open for when in the 'auto' or 'pet' mode – the dwell time.
- d. Configure wireless control devices: (Note: Following will be applicable, only when the door is powered on and operational)
 - i. Press the 'Remote learn' button, and release, the red light should illuminate once the button is released.
 - ii. Wave your hand in front of each of the sensors, and/or push the buttons on the remote control.
 - iii. The light will go out when the Prime Lock has learnt each sensor.
 - iv. To clear all 'learnt' devices press and hold the learn button for 5 seconds.

- b. The desired mode is selected by successive presses of the Mode button, to the right of the LED display. The modes will cycle in the order shown above (although the pet mode will be omitted if no pet opening width has been set). The selected mode will engage after a short delay.

DIP FUNCTION INTRODUCTION AND SETTING

DIP Switch	ON (back)	OFF (forward)
1. Direction	ON – Left opening, OFF – Right opening. Toggle (back and forth) to erase memory and re-learn open/close cycle. Lights will blink and system will self-calibrate again	
2. Toggle mode	Activate to open/close	Normal Mode
3. Beeper★	Beeper enabled	Beeper disabled
4. Door/Window Mode	Window Mode	Door Mode
5. Lock Mode	Automatic Lock after fully closed	Lock only with full lock signal.
7. Slam Shut	Helps overcome weather seals, with rubber	Normal operation

DIP Switch 1 and 4 must be power off and restart can switch mode.
★This dip switch can only turn off the voice of remote. If needed, turn off the voice of wireless push button, it should press learning button, then switch on or off.

Pet mode to half open mode:
Turn to close signal (A) Turn to open signal (B)
Photocell ☒ ☐ Outside ☒ ☐
Inside ☒ ☐ Pet ☒ ☐

Active any terminal of A and B at same time, will work active to open or active to close. Attention: Must be one terminal from A and B active at same time.

Learning Process:
Turn on the power switch, ensure dip 1 is correct, if direction is wrong. Please switch the dip to opposite direction, turn off the power and make sure door/window is fully closed. Then, power on.

Opening width learning (pet):
Pet mode indicator will flash, door will start to open slowly. Have an obstacle at the position you need, after short pause, door will close slowly. The learning process will be done after the door/window is fully closed, standard opening width learning.

All Mode indicator flash, door:
Will open and close slowly. When the door is fully closed, automatic mode indicator flashes, indicating the learning process is done. Controller is with memory of opening width

SETTING PET OPENING WIDTH







- a. Toggle DIP switch for pet learn.
- b. The door will begin to close slowly. If the door is already closed there will be a short delay.
- c. After a short delay the door will begin to open slowly. When the door reaches the desired pet opening width stop the door preferably with your foot. **Be careful to not get** anything caught in the opening door!
- d. After a short delay the door will begin to slowly close. Once fully closed the Prime Lock will return to Automatic mode, indicated by a green LED on the display, and pet options will be available.
- e. Test the pet opening width by pressing the 'pet sensor' button. If the width is incorrect then return to step 'a'.

Congratulations, you should now have a fully functioning Prime Lock automatic door!!

OPERATING MODES

Once the door is operating correctly the desired mode can be selected. There are five modes available:



-  Automatic mode (green LED) – the door will open when a sensor is triggered and close after the preset dwell time has elapsed.
-  Hold open mode (Blue LED) – door will open and remain open until another mode is selected.
-  Lock mode: door will close and remain closed until another mode is selected through remote system, if an e-Lock is connected.
-  Pet mode (Yellow LED) – Will open the door to the pet opening width when pet sensor is triggered and close after the preset dwell time has elapsed.
-  Manual mode: the door can be manually operated; the system will not drive the door.
-  This option is for function select.

- Once the settings are confirmed the drive unit can be powered on. Switch the main isolator switch on the left side of the controller to the down (on) position. **Caution: the door will begin to move without warning!**
- After a short delay, the LED display will begin to flash, and door will begin close slowly. If the door starts to open when first powered up, turn dip switch 1 to the opposite position (leave power on), the door will then change direction to the closing position.
- During self calibration process, once the door has fully closed, the door will then slowly slide to the open position, then close slowly back to the closed position with a small increase in speed. The door will then open in a fast speed once, then closed. Once the lights on the control panel stop blinking and turns on solid green,

learn cycle is successful. The Prime Lock has now memorized the width of the door opening, the weight and friction of your door while sliding. And now knows the individual power to operate your door smoothly and reliable. Your Prime Lock is now ready to be used.

SPEED ADJUSTMENT



Adjustment of Speed:

Opening Speed: 0.4in to 1.6in/second / 10 to 41 cm/second

Closing Speed: 0.5in to 0.8in/second / 12 to 22 cm/second

Slam Mode:

Opening Speed under 80%, Open and Close speed is same.

Opening Speed higher than 80%, Closing speed is half of opening.

Without rubber:

Opening Speed lower than 50%, Open and Close speed is same.

Opening Speed higher than 50%, Closing speed is half of opening.

Opening time: 0 to 20 seconds (Adjustable)

Learning button: Learning button of remote or wireless push button, added and delete remote process

Learning LED: Remote Learning Indicator

SETTING OF WIRELESS PUSH BUTTON

Add:

Press the learning button for few seconds till the indicator turns blue, then press any button of the remote, learning is done after indicator flashes 3 times.

Delete:

Press learning button for few seconds till the indicator turns blue, after the indicator flashes 3 times, all remote learning is deleted.

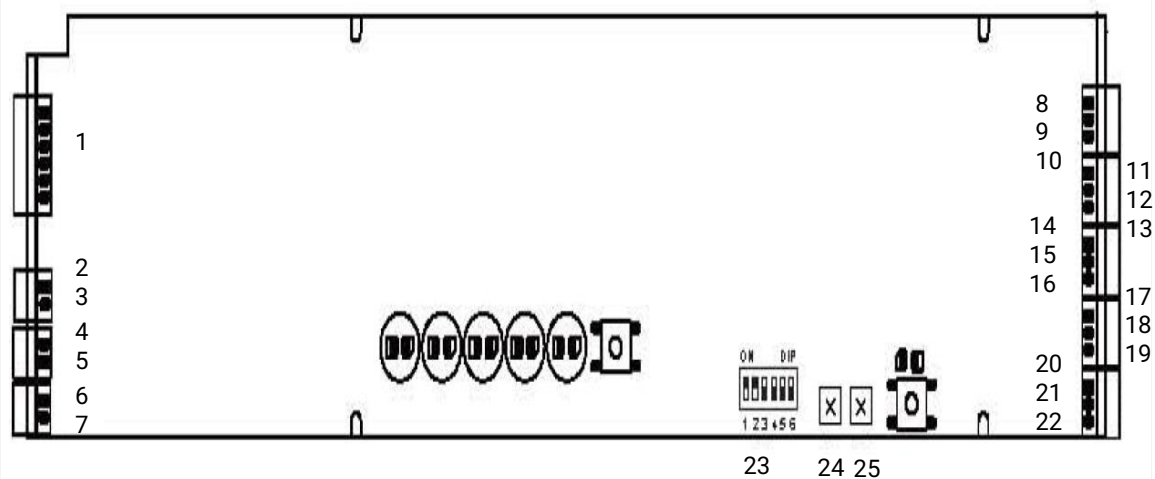
Please verify carefully the DIP switching selection is same as during learning process.



POWER CUT MEMORY FUNCTION

All settings will be saved when the power goes off. **Door will be closed slowly, if it is open.** Once the power is on, the Prime Lock resumes normal working (the working mode is same selection before power off).

TERMINAL INTRODUCTION



- | | |
|------------------------------------|----------------------------------|
| 1. Motor Terminal | 14. Inside Sensor |
| 2. DC24V | 15. DC13V + |
| 3. GND | 16. GND |
| 4. UPS + | 17. Outside Sensor |
| 5. UPS - | 18. DC13V + |
| 6. E-Lock - | 19. GND |
| 7. E-Lock + | 20. Pet signal terminal |
| 8. Function select Signal terminal | 21. DC13V+ |
| 9. DC13V + | 22. GND |
| 10. GND | 23. Function Select DIP Switch |
| 11. Photocell | 24. Open Speed Adjustment Knob |
| 12. DC13V + | 25. Opening Time Adjustment Knob |
| 13. GND | |

TROUBLESHOOTING

SYMPTOM: Door does not open fully after learn cycle.

CAUSE: Incomplete learn cycle.

SOLUTION: Remove the external cover (if already fitted). Turn the Prime Lock off at the controller switch. Close the door manually. Turn Prime Lock back on with the controller switch. Test again after the learn cycle has completed. Refit external cover.

SYMPTOM: Door does not open fully and automatically reopens after every 'close' cycle.

CAUSE: Rack & pinion have skipped teeth.

SOLUTION: Check the engagement of the rack and pinion gears and adjust if necessary. Remove the external cover (if already fitted). Turn the Prime Lock off at the controller switch. Close the door manually. Turn the Prime Lock back on at the controller switch. Test again after the learn cycle has completed. Refit external cover.

SYMPTOM: Door opens/closes very slowly and/or struggles to move the door.

CAUSE: Door weight configuration is incorrect.

SOLUTION: Turn on DIP switch 5 or 6 to increase the power output.

SYMPTOM: Door cannot overcome the starting friction.

CAUSE 1: Door lock/catch is engaged.

SOLUTION 1: Prime Lock will only operate when the door is unlocked. Release the door lock and try again.

CAUSE 2: Heavy weather seals or excess friction in the door.

SOLUTION 2: Investigate excessive door friction and/or turn on DIP switch 2 to increase Prime Lock starting power.

SYMPTOM: Door labours and excessive noise is produced during operation.

CAUSE: Rack and pinion gear too tightly meshed.

SOLUTION: Double check that there is a **slight** gap between the rack teeth and pinion cog along the entire length of the rack. Adjust as required. Note: it may be easier to adjust the height of the door via wheel adjustment than to remove/refit the rack assembly.

SYMPTOM: Door opens at random.

CAUSE 1: Interference on the radio control frequency.

SOLUTION 1: Remove the external cover. Press and hold the 'learn' button on the controller for 5sec. until the red light illuminates, to clear all previously learned remotes. Press and release the 'learn' button on the controller and operate each of the door remote controls/button/sensor one at a time.

CAUSE 2: Active IR sensors are set to too high a sensitivity.

SOLUTION 2: Remove the sensor covers and reduce the sensitivity setting dial slightly, replace the covers and test. Re-adjust if necessary.

SYMPTOM: Door tries to open but does not.

CAUSE: Rack & pinion have skipped teeth.

SOLUTION: Check the engagement of the rack and pinion gears and adjust if necessary. Remove the external cover (if already fitted). Turn the Prime Lock off at the controller switch. Close the door manually. Turn the Prime Lock back on at the controller switch. Test again after the learn cycle has completed. Refit external cover.

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