

## Swing Door Opener

MODEL: DM-50 / DM-100



#### CUSTOMER SERVICE

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English

# **Swing Door Opener**

**USER'S INSTRUCTIONS** 

#### **FCC** information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

#### WARNING:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful inter-ference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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#### IMPORTANT SAFETY INSTRUCTIONS

# **WARNING** – To reduce the risk of severe injury or death:

- 1. READ AND FOLLOW ALL INSTRUCTIONS.
- Never let children operate or play with door controls. Keep the remote control away from children.
- 3. Always keep the moving door in sight and away from people and objects until it is completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.
- 4. SAVE THESE INSTRUCTIONS.

#### IMPORTANT INSTALLATION INSTRUCTIONS

# **WARNING** – To reduce the risk of severe injury or death:

- 1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
- 2. Do not connect the opener to source of power until instructed to do so.

#### **PRECAUTIONS**

- This product is intended for indoor use only. The door is a solid wood or hollow-core wood or metal door.
- 2. This product is designed to operate the single door of right hand or left hand in-swing doors with the measuring of 30" to 36" wide multiply 72" height and weighting less than 90 lbs.
- 3. If the power to the unit is lost, the door can be opened manually.

#### **REGISTRATION FORM**

a valid warra		ions have to be follow	ar free warranty or an extended warranty. To have ed. Both parts of the forms have to be filled in at t
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Address			
City		State/Province	
			al Code
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	ser (day)		
			_
Product deta		B 1 16	
_			n
Name of proc	luct		Model number
Serial Number	er		
Serial numbe i.e. AA12345		ck of the Swing Door	Opener. It starts with 2 letters with 5 digits.
Extended v	varranty (optional and	more than one box ca	n be checked)
	rresponding box(es) and		
			<u> </u>
Model	Additional 1 year	Additional 2 years	Additional 4 Years
DM-50 DM-100	☐ USD 34.79 ☐ USD 39.97	☐ USD 59.98 ☐ USD 64.98	□ USD 79.99
DM-100	□ USD 49.97	☐ USD 79.98	☐ USD 99.99
		2 032 77.70	2 650 77.57
	yment method:		
Credit Card F	•	П А Б Б	
☐ Master Car		☐ American Expr	
Credit card n	umber		Expiration date
Cheque must	be sent along with this re	egistration form to one	e of the addresses below.
Cheque Paym	nent		
Name of bank	ζ		Cheque number
			1
Signature			Date
Note:			
-For customer	rs using credit card payme	ent, the name on the for	m should be the same as the name on the credit card.
	warranty is free of charge		
	to be a proof of your purc		arranty to be valid.
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- I ne form mu -Please submi	st be signed to be valid. t this form within 365 day	s after purchasing of th	e product.
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Please send th	is registration form back		py of a proof of purchase.
	ted in North or South Am		are located elsewhere other than North or
			America, please send this registration form to: 603, 13F, Block B, Veristrong Ind. Centre,
			PuiWan Street, Fo Tan, Hong Kong

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Tel: (905) 456-8883 Fax: (905) 456-7819

Email: skylink@skylinkhome.com

#### WARRANTY

Now there is not only a free one-year warranty but also an extended warranty for customers to register. The extended warranty allows your product to be protected for a longer period. To apply fill in the registration form below.

#### LIMITED WARRANTY

#### **Basic terms and conditions**

- 1) Skylink Technologies Inc. guarantees that their Swing Door Opener (excluding batteries) to be free from defect in materials and workmanship under normal use for a period of one year from the day of purchase.
- This warranty does not cover any products, which have been damaged by accident, misuse, abuse or alternations.
- Skylink shall not be liable for any personal injury, property loss, robbery, fire, incidental or consequential damage of any kind from the defects or malfunction of this product.
- 4) If you claim validly under the warranty condition, Skylink shall repair or replace without charge for your product, during the first year of purchase. (One year free warranty)
- Proof of purchase is required for the warranty to take place. (i.e. An invoice or receipt)
- The warranty is provided by both Skylink and Skylink International.

#### **Extended warranty terms and conditions**

- 7) Extended warranty can be provided for up to 4 years making a total of up to 5 years of warranty that can be obtained.
- The shipping cost and duties of the repaired product has to be paid by the registrant.
- The payment of the warranty can be paid by using credit card (Visa, Master or American Express) if registration online or by post. By post Cheque can also be accepted.
- 10) The extended warranty cost is determined according to the number of years you want to extend. (The prices are listed on the registration form)
- 11) The warranty application must be done with in the first year of purchasing the product.
- 12) Registration can be done by using the form provided or register on the Skylink website. With a copy of the proof of the purchase date.
- 13) All of the above terms must be followed to have a valid warranty.

#### INTRODUCTION

#### Overview

Congratulations on your purchase of a Skylink Swing Door Opener. This swing door opener can automatically open / close any swinging doors with a press of a remote. An electromagnetic lock can also be installed for security and privacy purposes. During power failure, the door can still be opened or closed manually.

An obstacle detection feature is built-in to all swing door openers, when an obstacle is detected in the path of an opening / closing door, the door opener will stop to avoid serious injury.

The user's instructions will guide you through the whole setup procedure as well as all the programming instructions. Please read and follow all safety rules and operating instructions before first use of this product.

#### Safety Information

WARNING When you see this Warning symbol and word, that means severe injury can result from failure



When you see this Caution symbol and word, that means the property damage or injury can result from failure to follow instructions.

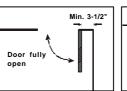


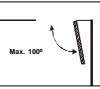
This word is used to indicate the importance of the specified procedure(s). Follow them closely or otherwise the unit may not function properly.

#### Before installation

Please ensure:

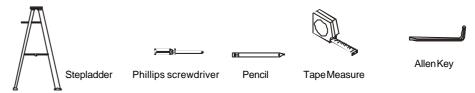
- The door is a solid wood door, or hollow-core wood, metal, or fiberglass door.
- The door is less than 90lbs (approx. 41kg)
- The door is less than 36" wide (approx. 0.91m)
- The clearance between the door (top edge) and door jamb is at least 1/16" (approx. 1.5mm). If the clearance is less than 1/16", you may use a bench chisel to chop part of the door jamb where the slider bracket is mounted, so the clearance of this portion is more than 1/16".
- An electrical outlet is within 15ft (approx. 4.5m) from the door opener. If there is no electrical outlet nearby, you may use an AC extension cord.
- Spring hinge closer may affect the operation of the swing door opener. If possible, adjust the spring hinge so that the torsion is released, or replace the spring hinge to a regular hinge.
- Door closer should not be installed.
- The door opens / closes smoothly. If the door doesn't open smoothly, lubrication may be needed on the door hinges
- When the door is in the fully opened position, ensure there is enough space to mount the door opener. It requires at least 3-1/2" (Approx. 85mm) between the back of the door to the wall.
- Door stopper should be installed in order to limit the door opening to max.100 degrees.
- If weather stripping is too thick or hard, it may affect the operation of the door opener. Replace the weather stripping with something thinner and softer so the door can close properly.





#### Tools Required

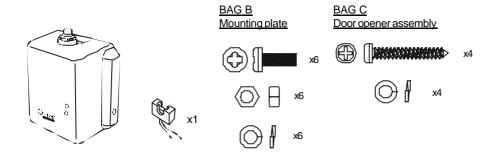
To install the swing door opener, you will need the following tools.



#### **INTRODUCTION**

#### In the package, you should find the following boxes.

Box 1 - Swing Door Opener & Accessories



Box 2 - Electromagnetic Lock & Accessories (Only available for Model DM-100)



Outswing Lock Bracket



Inswing Lock Bracket x1



Inswing Armature Plate Bracket x1



L-Shape Bracket x1



Armature Plate x1



Soft Spacer



Electromagnetic Lock x1

#### BAG E Armature plate

























### **ACCESSORIES**

#### Electric Strike

- Designed specifically for Skylink Swing Door Opener DM-001
- Low current consumption, no external power supply is required



#### Electromagnetic Lock

- Designed specifically for Skylink Swing Door Opener DM-001
- Easy to install



#### **Optional Triggering Devices**

Other than the 4-button remote control, the door opener can also be triggered by:

- Motion Sensor
- Keypad Transmitter (Keyless Entry)

#### Motion Sensor

When the motion sensor is activated, the door will be opened automatically. After the door has been opened for a fixed period of time, the door will be closed automatically. This timer is the same one being used in "Timer Operating Mode".

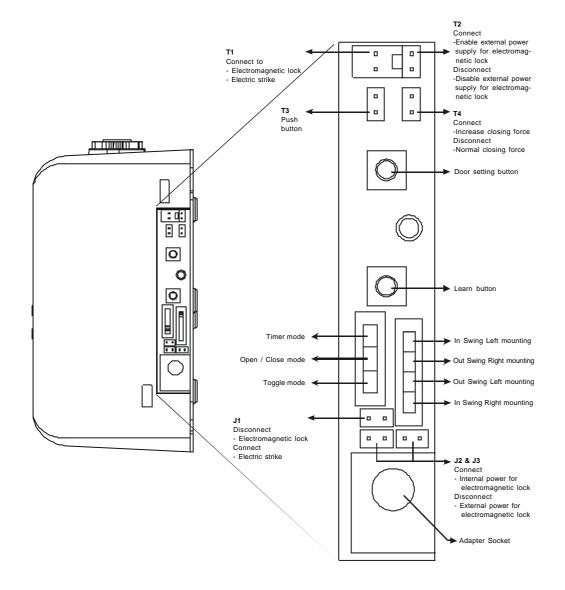


#### **Keypad Transmitter**

Keypad Transmitter can be mounted next to the door opener. User with a valid password can open / close the door.



### **DOOR OPENER CONNECTIONS / SETTINGS**



#### **INTRODUCTION**

Box 2 - Electromagnetic Lock & Accessories (Only available for Model DM-100)

## BAG F

#### Electromagnetic Lock



















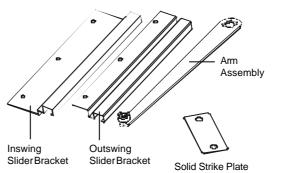








Box 3 - Slider Bracket & Accessories



















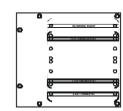
x1

Box 4 - Transformer

Box 5 - Transmitter

You will also find the following:

- User's Instructions Quick Guide
- Mounting Plate







#### **INSTALLATION**

#### Determine the door configuration

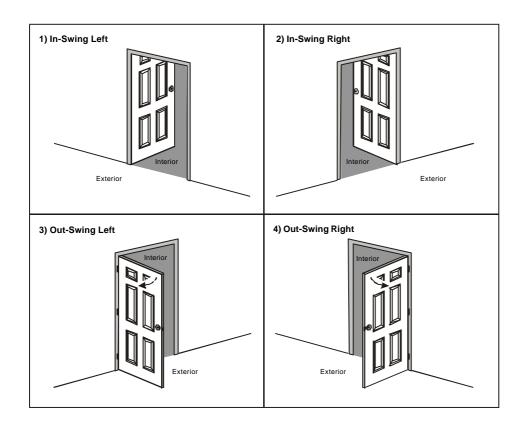
Different doors require different installation. It is important to determine what type of door you are planning to install the door opener to. The door opener can be installed on 4 different types of door:

- In-Swing Left
- In-Swing Right
- Out-SwingLeft
- Out-Swing Right

Follow the criteria below to determine the type of door you have.

- 1. You should be standing outside the room.
- 2. Open the door.
- If you have to <u>pull</u> the door in order to open it, this is an <u>out-swing</u> door.
   If you have to <u>push</u> the door in order to open it, this is an <u>in-swing</u> door.
- If the door <u>hinges are on the left side</u> of the door, it is "<u>left</u>".
   If the door <u>hinges are on the right side</u> of the door, it is "<u>right</u>".

See diagram below for the 4 different configurations.

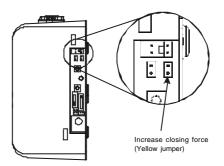


#### **OPERATION**

#### Closingforce

As mentioned earlier, when the door reaches near the fully closed position, the closing speed will decrease. If the factory default closing force is not enough to close the door fully, you may increase the closing force by connecting the yellow jumper (see diagram below).

The setting below will enable the door opener to close the door with a greater amount of force.



#### External Wired Push Button (sold separately)

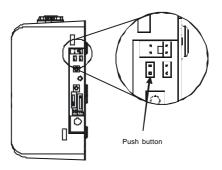
The door opener can be operated by a wired push button. The operation of the push button is always in toggle operation

By connecting the push button to the "push button" terminal, the door will either open or close, depending on the current door position.

If the door is currently opened, activating the push button will close the door.

If the door is currently closed, activating the push button will open the door.

Regardless of whether the operation mode is in the toggle or open/close position, activating the push button will result in toggle operation.



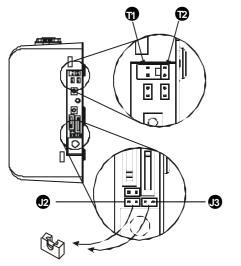
#### **OPERATION**

#### Electromagnetic Lock (Optional - sold separately)

High Holding Force Electromagnetic Lock (Optional - sold separately)

Skylink provides an electromagnetic lock with holding force up to 45kg. However, an electromagnetic lock with higher holding force can be used (sold separately). To install non-Skylink electromagnetic lock, external power must be supplied to the electromagnetic lock, please follow the instructions below.

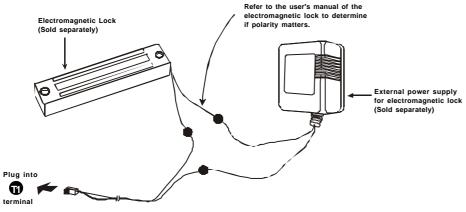
- 1. Disconnect the electric power from the door opener.
- 2. Remove the side covers on the sides of the opener.
- 3. Remove the existing lock (if any) from T1 terminal.
- 4. Remove the 2 jumpers from J2 and J3 positions.
- 5. Insert one jumper to T2 position.
- Connect the 2 wires from the electromagnetic lock to the external power supply and connect them to T1 terminal with the special wire provided.



#### NOTE

The maximum rating of the electromagnetic lock should not exceed  $500 \, \text{mA}$ .

#### Remove these 2 connectors (J2 & J3)



#### INSTALLATION

#### IMPORTANT INSTALLATION INSTRUCTIONS

#### **WARNING**

To reduce the risk of severe injury or death:

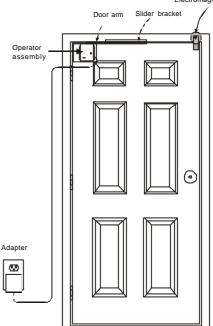
- 1. READ AND FOLLOW ALL INSTALLATION WARNINGS AND INSTRUCTIONS.
- 2. NEVER connect door opener to power source until instructed to do so.
- ALWAYS keep people and objects away from the door. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.
- 4. NEVER wear watches, rings, or loose clothing while installing or servicing opener. They could be caught in door or opener mechanisms.

#### Installing the Door Opener

The following steps are involved in installing the door opener:

- 1. Disable the door lock
- 2. Mounting the Slider Bracket
- 3. Installing the operator assembly onto the mounting plate
- 4. Powering up the operator
- 5. Mounting the operator assembly with mounting plate onto the door
- 6. Attach the door arm assembly on the operator
- 7. Program the door setting
- 8. Mounting the electromagnetic lock (Model DM-100 only)

Electromagnetic lock (Model DM-100 only)



Note: In-Swing Right door installation shown.

Once you have determined the type of door you have, please refer to the pages below for further instructions.

In-Swing Left and In-Swing Right – Follow the instructions below. Out-Swing Left and Out-Swing Right – Go to page 17.

#### In-Swing Left and In-Swing Right

#### 1. Disable the existing latch bolt

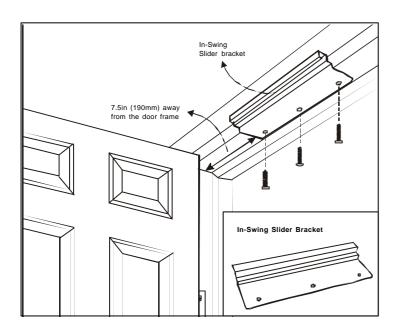
(If you are using electric strike instead of electromagnetic lock, please omit this step and proceed to step 2. Refer to the user's instructions of the electric strike on how to install it on the door frame.)

(Optional electric strike can be purchased from Skylink)

- 1.1 In order for the swing door operator to work properly, the function of the existing latch bolt must be disabled. This can be done by replacing the strike plate.
- 1.2 Remove 2 screws on the strike plate.
- 1.3 Place the solid strike plate over the existing one, so the latch bolt cannot be extended.
- 1.4 Tighten the solid strike plate with the same screws.

#### 2. Mounting the Slider Bracket

- 2.1 For in-swing doors, use the in-swing slider bracket that should be positioned against the underside of the door jamb.
- 2.2 Ensure the edge of the slider bracket is 7-1/2" (190 mm) from the edge of the door jamb (the edge with the door hinge).
- 2.3 Secure the slider bracket with 3 slider bracket screws provided.



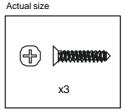


plate by screws

Note: In-Swing Right door installation shown.

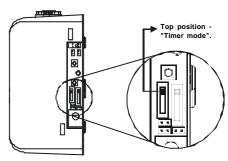
#### **OPERATION**

#### **Timer Mode**

When timer mode is selected, user can activate the door opener to open the door, and the door will be closed automatically after it has been opened for a specific period of time. So the user does not need to close the door, or the door will not be left open even if the user forgets to close it.

To enable the timer mode:

- 1. Unplug the door opener when it is in standby mode.
- Change the setting of the mode selection switch to "Timer" mode.
- Plug the adapter back and the red LED will be on steadily.
- Open the door by activating the remote. After the door has been opened, you should still hear the buzzer beeping, indicating that the timer is counting down and the door will be closed soon. The factory default timer is set to 10 seconds.
- 5. After 10 seconds, the door will be closed automatically.



You may change the timer setting from 10 seconds to 50 seconds, in 10-second intervals.

- 1. Press and hold the door setting button for 3 seconds when the door opener is in standby mode. You will hear the buzzer begoing rapidly and the orange LED flashing. You may now release the door setting button.
- 2. After the door setting button is released, you should hear the buzzer beeping. This buzzer beeping represents the timer setting.

Number of continuous beep	Timer Setting
1	
2	
3	
4	
5	

- To change the setting, press the door setting button once will advance the timer by 10 seconds. i.e. if the
  original timer setting is at 10 seconds, pressing the door setting button once will result in 20 seconds, and
  you will then hear 2 beeps. The timer setting will be back to 10 seconds if you press the door setting button
  when the timer setting is at 50 seconds.
- 4. Once you have selected the desired setting, press and hold the door setting button for 3 seconds, you will hear a long beep and the orange LED will be off. You have now changed the timer setting.

#### Trouble Beeping

If the T1 or T2 connectors are connected incorrectly, the operator unit will emit a continuous beep. To resolve this problem, please double check the wiring connection on these 2 terminals. (Refer to page 33 for Door Opener Connections / Settings)

- T1: Make sure the lock wiring connection is not short circuited.
- T2: Ensure jumper connector is not used if external power supply is used for the lock. Please also verify the connection setting on J2 and J3, make sure they match with T2. For example:
- If external power supply is used, J2 and J3 should be removed, while T2 should be connected.
- If internal power supply is used, J2 and J3 should be connected, while T2 should be removed.

#### **OPERATION**

#### Toggle Mode

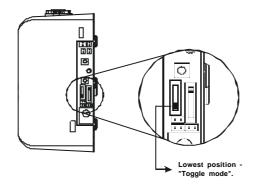
Toggle mode allows one button operation, which means by activating the remote, the door will either open or close, depends on the current door position.

If the door is currently opened, activating the remote will close the door.

If the door is currently closed, activating the remote will open the door.

The same operation is used for most garage door openers.

For Toggle mode, the operating mode switch should be in the lowest position.

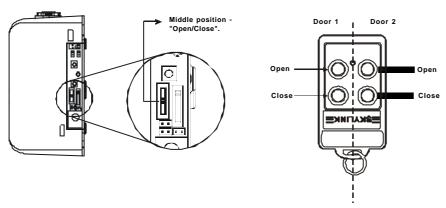


#### Open / Close Mode

When Open / Close mode is selected, the function of the 4-button remote will be different. 2 of the buttons will open the door, the other 2 buttons will close the door.

To enable the Open / Close mode:

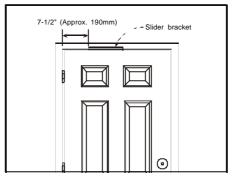
- 1. Unplug the door opener when it is in standby mode.
- Change the setting of the mode selection switch to "Open / Close" mode.
   The door opener is now operating in "Open / Close" mode.



A 4-button remote control allows you to operate 2 different door openers. If you would like to operate Door 1, both the open and close buttons of door 1 must be programmed to the door opener. Follow the instructions for "Learning Remote Controls" on page 28. If you would like to operate another door opener using the same remote, learn the other 2 buttons to the other door opener.

After learning the buttons to the door opener, pressing the open button will open the designated door opener. Pressing the close door button will close the designated door opener.

#### **INSTALLATION - IN SWING**



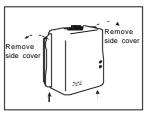
7-1/2" (Approx. 190mm) Slider bracket

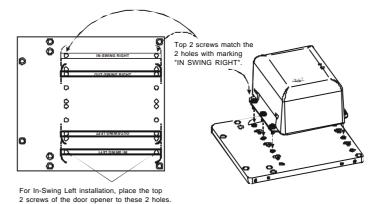
Note: In-Swing right door installation shown.

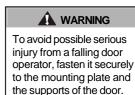
Note: In-Swing left door installation shown.

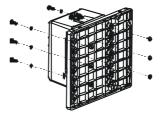
#### 3. Installing the operator assembly onto the mounting plate

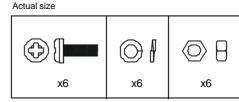
- 3.1 Remove the 2 side covers from the operator by sliding them out.
- 3.2 Place the operator onto the mounting plate based on the door type. For instance, for in-swing left door, the "IN-SWING LEFT" holes should match the 2 top holes of the operator.
- 3.3 Secure the operator to the mounting plate with 6 nuts, spring washers and bolts.











#### 4. Selecting the door type

You must select whether you have an inswing left or inswing right door. Follow the procedures below to set the correct door type.

- 4.1 Before powering up the operator, the proper door configuration must be selected. To select the door type as in-swing right, please set "Door Type" slide switch to the lowest position. To select the door type as in-swing left, please set "Door Type" slide switch to the highest position, which represents in-swing left door configuration.
- 4.2 Before the adapter is plugged in, press and hold the "Door Setting" button (red color button). While holding down the "Door Setting" button, plug in the power adapter to the adapter socket on the door operator. Red LED will be on and the orange LED will flash rapidly and the buzzer will beep rapidly. You may now release the "Door Setting" button.
- 4.3 Once the button is released, the orange LED will flash slowly and the operator's shaft will start to rotate and perform a routine startup procedure automatically in order to set itself up for this door type.
- 4.4 When the startup procedure is completed, you will hear 2 beeps, and the motor will stop.
- 4.5 You should now disconnect the power adapter from the operator and proceed to the next step. The power adapter should not be connected again until step 7.
- 4.6 You may now install the 2 side covers to the operator by sliding them onto the side of the operator.

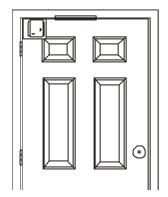


#### **CAUTION**

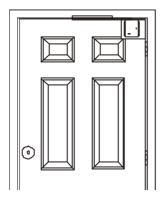
When the operator is in "Door Setting" mode. The motor and its shaft will rotate. ENSURE NOTHING IS TRAPPED BETWEEN THE SHAFT AND THE OPERATOR.

#### 5. Mounting the operator assembly with mounting plate onto the door

5.1 You may now mount the operator with the mounting plate on the door. It should be mounted on the upper left corner of the door for in-swing right, or upper right corner for in-swing left.



Note: In-Swing Right door installation shown.



Step 1) Press and hold the

door setting button, (red)

Step 2) Plug in the adapter,

rapidly

buzzer will beep

Note: In-Swing Left door installation shown.

#### **OPERATION**

#### Advanced programming / operations

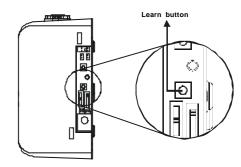
You have successfully setup the swing door opener and it can perform all the basic operations. There are some advanced features that require additional programming. If you would like to enable these features, follow the instructions below. These additional features / programming are:

- Learn / Frase remote
- Different operating modes

#### Learn remote controls

You can program up to 15 single button - remotes to the swing door opener. This is ideal if you have multiple users for one door and they can carry their own remotes. To program remote controls, follow the instructions below:

- The operator should be in standby mode, i.e. adapter plugged in but the swing door opener should not be operating, only the red LED should be on steadily.
- 2. Press and hold the "Learn" button, the red LED will start to flash and buzzer will beep indicating the door opener is now in learn mode.
- 3. Press and hold the button on the remote you would like to program while you are holding onto the learn button on the door opener, you should hear a long beep and the LED will be off. You may now release both the learn button on the door opener and the button on the remote. You have now successfully programmed the remote to the door opener.



#### Erase remote controls

In order to erase any unwanted remote controls (buttons), you must first erase all of them. Then reprogram each remote (button) you wish to use.

To erase all remote controls:

- 1. Unplug the door opener when it is in standby mode.
- 2. Press and hold the learn button, then plug the adapter back in while holding the learn button.
- You should see the red LED flashing and buzzer beeping rapidly. This indicates all the remotes have been
  erased and you may release the learn button. You can now program the remote you wish to use based on
  the instructions "Learning remote controls".

#### Operating Modes

The door opener can operate in different operating modes, the 3 different operating modes are:

- Toggle (factory default)
- Open / Close
- Timer

#### **OPERATION**

#### Mute

If you would like to disable the buzzer beeping when the door opener is operating, follow the procedures below.

- · The door opener should be in standby mode, i.e. the red LED is on and the door is not moving.
- Press and hold both the "Door Setting" and "Remote Learning" buttons, until a long beep is emitted (approx. 3 seconds), then release both buttons.
- The buzzer is now disabled.

To enable the buzzer, repeat the procedures above.

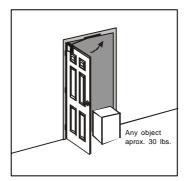
#### Obstacle detection

The swing door operator has a built-in safety feature of obstacle detection. When the opener is operating and if the door hits an obstacle (it could be an object or a person), the operator will stop.

To start the operator again, you must clear the obstacle from the door and activate the remote again.

#### Test the obstacle detection system

In order to test the obstacle detection, place an obstacle with weight of approx 30 lbs (any small furniture, or a 3/4 filled 5-gallon bucket of water) in the middle of the door travel, i.e. 45 degrees from the fully closed position (assuming the door travel is 90 degrees). Try this on both opening and closing cycles to see if the door stops when it hits the obstacle. If the door doesn't stop when it hits the obstacle, please contactus.



#### **WARNING**

- Obstacle detection system must be tested every month.
- After any adjustments are made, the obstacle detection system must be tested.

#### Power failure

During power failure, the remote control and the electromagnetic lock will not work. However, the door can still be opened or closed manually by pushing and pulling the door.

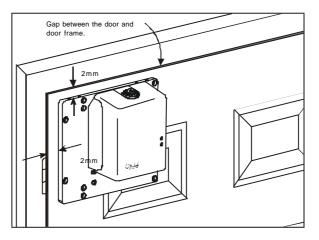
When the door is manually opened or closed and the clutch engages and disengages it will make a clicking sound. It is normal that more force is required to open / close the door due to the force generated by the clutch.

#### NOTE

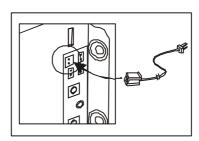
During power failure, although the door can still be opened and closed, but the electromagnetic lock will not function. When power resumes, the electromagnetic lock will function after a fully closed operation is performed.

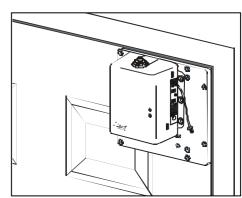
#### **INSTALLATION - IN SWING**

5.2 Locate the operator assembly 2mm away from the top of the door frame, and 2mm from the side.



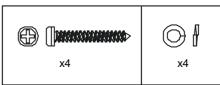
For Inswing Left, plug in the extension cord for the electromagnetic lock to the 2 upper left jupmers.

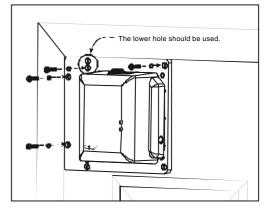




5.3 Secure the mounting plate with 4 screws onto the door.

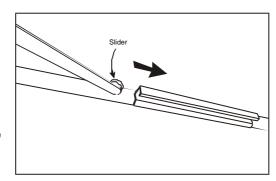


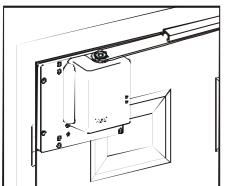


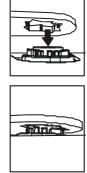


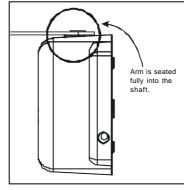
#### 6. Attach the door arm assembly to the operator

- 6.1 The door should remain at the fully closed
- 6.2 Slide one end of the arm assembly (the end with the slider) into the slider bracket.
- 6.3 Place the other end of the arm assembly on top of the operator motor shaft. You may notice the arm assembly coupling is not fully seated into the slots of the operator motor shaft. In order for the arm assembly to seat fully into the slots of the operator motor shaft, open the door slowly about 5 degrees from the fully closed position. You should visually check if the arm assembly is fully seated into all the slots.

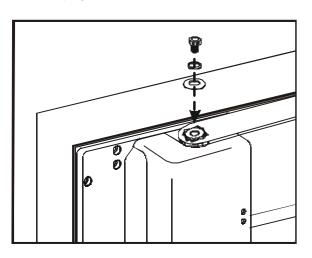




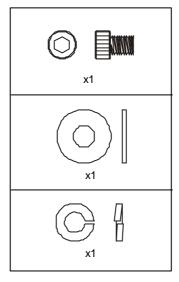




6.4 Tighten the arm assembly to the operator motor shaft by a screw, spring washer, and a flat washer.



Actual size



#### **OPERATION**

#### **Remote Control Operation**

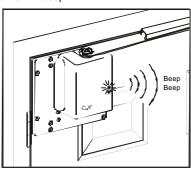
The remote control can be used to open and close your door. The remote has been programmed at the factory to the swing door opener so no further programming is necessary. There are 4 buttons on the remote, button 1 is programmed so it can perform the door opening and closing operations.

When the door is opened, pressing remote button 1 will close the door. When the door is closed, pressing the remote button 1 will open the door.

When the door opener is operating, the orange LED will flash and the buzzer will beep.







If you would like to stop the door when it is either opening or closing, you can press the remote button 1 again, it will stop the operator therefore stopping the door from opening / closing.

If the door operator does not respond to the remote control, program the remote control again, refer to page 28 "Learn remote controls" to program the remote control again.

(For Model DM-100) The electromagnetic lock will be energized when the door is in the fully closed position. Once the lock is energized, the door cannot be opened manually. If you do not want the door to be locked, you may disconnect the cable from the electromagnetic lock to the door opener.

#### Reminders

- If the door cannot be closed all the way due to friction, you may apply lubricant to the hinges.
- · If weather stripping is too thick or hard, it may affect the operation of the door opener. Replace the weather stripping with something thinner and softer so the door can close properly.
- Door stopper should be installed in order to limit the door opening to max.100 degrees.

# When the door reaches the near fully closed position, the closing speed will decrease in



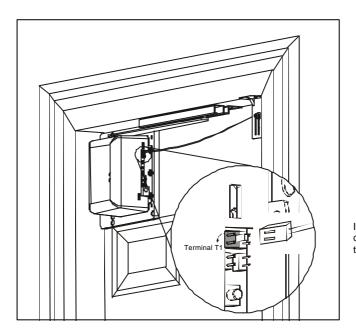


#### **WARNING**

- Only activate door when it can be seen clearly, and there are no obstructions to door travel.
- Always keep door in sight until completely closed.
- Moving doors can cause serious injury or death. Stay out from moving doors.
- Do not remove the head cover from the door opener.
- Do not disassemble the door opener.
- The electrical power to the door opener MUST BE disconnected while making electrical connections.
- SAVE THESE INSTRUCTIONS.

NOTE

order to reduce the risk of injury.



If the wire is too long, you may use a cable tie or tape to secure the wire on the door.

#### **INSTALLATION - IN SWING**

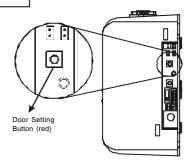
#### 7. Program the OPEN and CLOSE travel limits

The door opener will automatically detect the open and close travel limited. It is capable of detecting the fully opened and fully closed positions. Follow the procedures below to set the travel limits.

#### NOTE

Before proceeding to the following steps, ensure you have cleared the path so the door can be opened and closed without hitting any obstacle.

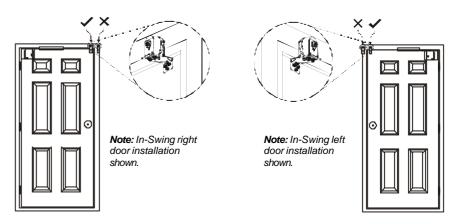
- 7.1 Plug in the power adapter to the operator, the other end should be plugged into an electrical outlet. Red LED should be on indicating power is plugged in.
- 7.2 Press and hold the "Door Setting" button (red color button) for 10 seconds, buzzer will start to beep one at a time, then a continuous beep. Release the button when the buzzer emits a long continuous beep.
- 7.3 The door operator will try to open the door all the way until it hits the door stopper, then it will close all the way until it is fully closed. During this travel limit setup procedure, do not interrupt the door by blocking it. Otherwise, it will affect the normal operation.



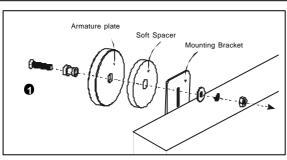
#### 8. Mounting the electromagnetic lock (For Model DM-100 only)

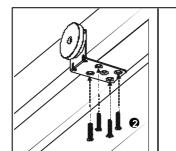
(If electric strike is used, please omit this section.)

8.1 The electromagnetic lock is energized when the door is fully closed to provide additional security and privacy. The holding force of the electromagnetic lock is approx. 100lb (45kg). For in-swing right door, the electromagnetic lock should be mounted on the upper right corner of the door. For in-swing left door, the electromagnetic lock should be mounted on the upper left corner of the door. Diagram below shows the location and configuration after the lock has been installed. Note: Do not mount the armature plate on the corner of 2 door jambs, it should be mounted on the top door jamb.



Actual size

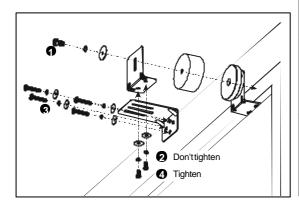


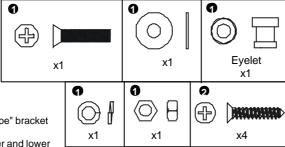


- 8.2 Secure the armature plate mounting bracket and spacer on the upper corner of the top door jamb with the armature screw, eyelet and a washer.
  - Note: Pay attention to the armature plate, it can only be mounted properly with the correct side facing up.

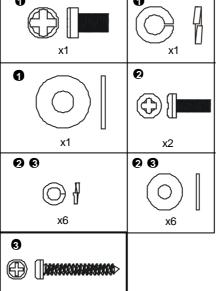
Even if the screw is tightened all the way, you may find the armature plate is a bit loose, which is normal.

- 8.3 1). Secure the screws between the "L-shape" bracket and the electromagnetic lock.
  - Secure the 2 screws between the upper and lower "L-shape" brackets. Do not tighten these screws too much because the position may still need to be adjusted.
  - Position the lock assembly so that the lock is directly on top of the armature plate. Tighten the 4 screws from the lower "L-shape" bracket to the door.
  - Move the lock towards the armature plate by sliding it forward and ensure they are contacting each other. You can now tighten the 2 screws between the upper and lower brackets.
- 8.4 The 2 wires from the lock should be connected to the "T1" terminals (the upper left terminal) on the operator. Polari ty does not matter.





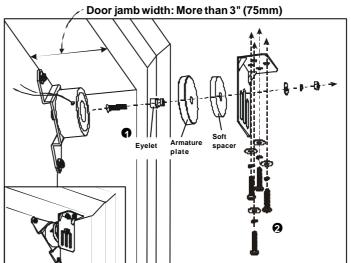
#### Actual size



х4

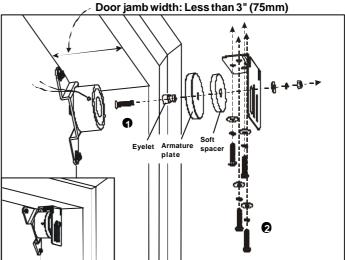
#### **INSTALLATION - OUT SWING**

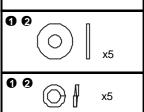
- 8.5 After mounting the lock on the door, you can now mount the armature plate on the door jamb. (Follow Fig. A to mount the armature plate. If the door jamb width is less than 3" (75mm), follow Fig.B)
  - Secure the armature plate to the "L-shape" bracket with a screw and an eyelet. Note: Pay attention to the
    armature plate, it can only be mounted properly with the correct side facing up. Even if the screw is
    tightened all the way, you may find the armature plate is a bit loose, which is normal.
  - Position the armature plate assembly so that the armature plate is directly on top of the lock. Tighten the 4 screws from the "L-shape" bracket to the door jamb with washers and spring washers.
- 8.6 The 2 wires from the lock should be connected to the "T1" terminals on the operator. Polarity does not matter.



(H)

Fig.A



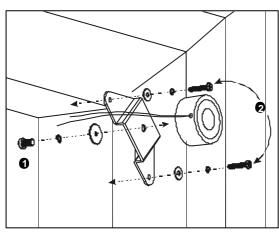


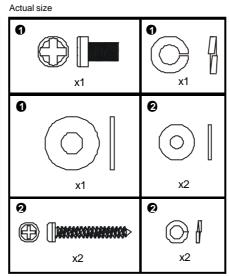
BACCOMMAN

Fig.B

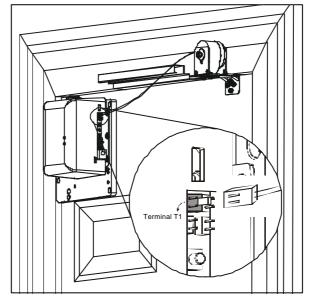
-15-

- 8.2 Secure the lock to the bracket with screw.
- 8.3 Close the door fully, mount the lock with the bracket to the door.
  8.4 When securing the electromagnetic lock, position the wire towards the operator, which will be mounted on the upper left side of the door for out-swing right door, or upper right side of the door for out-swing left door.



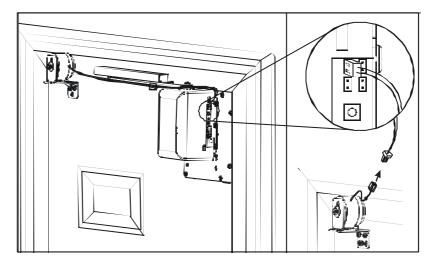


## **INSTALLATION - IN SWING**



If the wire is too long, you may use a cable tie or tape to secure the wire on the door.

For Inswing Left, connect the lock cable to the 2 upper left jumpers on the door opener. (DM-100 only)



#### Out-Swing Left and Out-Swing Right

#### 1. Disable the existing latch bolt

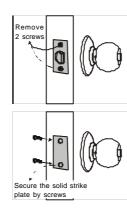
(If you are using electric strike instead of electromagnetic lock, please omit this step and proceed to step 2. Refer to the user's instructions of the electric strike on how to install it on the door frame.)

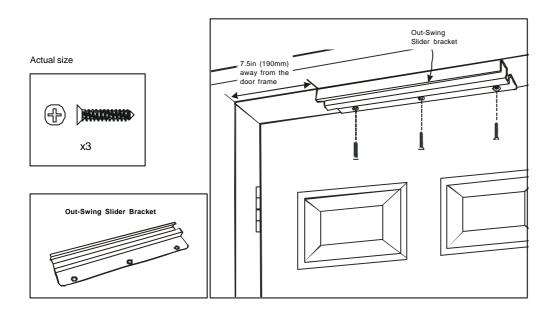
(Optional electric strike can be purchased from Skylink)

- 1.1 In order for the swing door operator to work properly, the function of the existing latch bolt must be disabled. This can be done by replacing the strike plate.
- 1.2 Remove 2 screws on the strike plate.
- 1.3 Place the solid strike plate over the existing one, so the latch bolt cannot be extended.
- 1.4 Tighten the solid strike plate with the same screws.

#### 2. Mounting the Slider Bracket

- 2.1 For out-swing doors, use the "Out-Swing" slider bracket, and it should be positioned on the inside part of the door and against underside of the door jamb when the door is closed.
- 2.2 Ensure the edge of the slider bracket is 7-1/2" (Approx. 190mm) from the edge of the door iamb (the edge with the door hinge).
- 2.3 Secure the slider bracket with 3 slide bracket screws provided.





#### **INSTALLATION - OUT SWING**

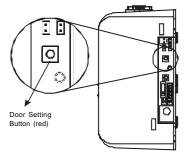
#### 7. Program the OPEN and CLOSE travel limits

The door opener will automatically detect the open and close travel limited. It is capable to detect the fully open and fully closed positions. Follow the procedures below to set the travel limits.

#### NOTE

Before proceeding to the following steps, ensure you have cleared the path so the door can be opened and closed without hitting any obstacle.

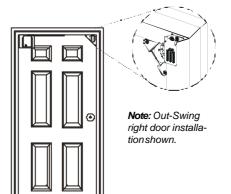
- 7.1 Plug in the power adapter to the operator, the other end should be plugged into an electrical outlet. Red LED should be on indicating power is plugged in.
- 7.2 Press and hold the "Door Setting" button (red color button) for 10 seconds, buzzer will start to beep one at a time, then a continuous beep. Release the button when the buzzer emits a long continuous beep.
- 7.3 The door operator will try to open the door all the way until it hits the door stopper, then it will close all the way until it is fully closed. During this travel limit setup procedure, do not interrupt the door by blocking it. Otherwise, it will affect the normal operation.

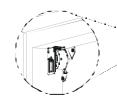


#### 8. Mounting the electromagnetic lock (For Model DM-100 only)

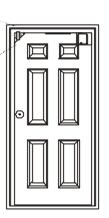
(If electric strike is used, please omit this section.)

8.1 The electromagnetic lock is energized when the door is fully closed to provide additional security and privacy. The holding force of the electromagnetic lock is approx. 100lb (45kg). For out-swing right, the electromagnetic lock should be mounted on the upper left corner of the door (Inside part). For out-swing left, the electromagnetic lock should be mounted on the upper right corner of the door (Inside part). See diagram below shows the location and configuration after the lock has been installed.







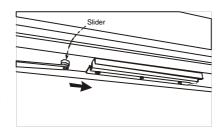


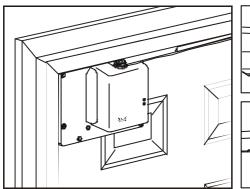
Note: Out-Swing right door installation shown.

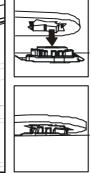
-17-

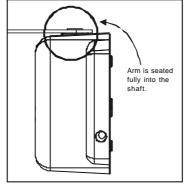
#### 6. Attach the door arm assembly on the operator

- 6.1 The door should remain at the fully closed position.
- 6.2 Slide one end of the arm assembly (the end with the slider) into the slider bracket.
- 6.3 Place the other end of the arm assembly on top of the operator motor shaft. You may notice the arm assembly coupling is not fully seated into the slots of the operator motor shaft. In order for the arm assembly to seat fully into the slots of the operator motor shaft, open the door slowly to about 75 degrees from the fully open position. You should feel the arm is now seated all the way into the slots, and you can visual check to confirm.





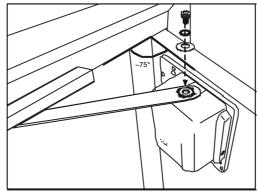




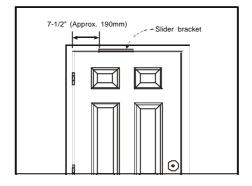
6.4 Tighten the arm assembly to the operator motor shaft by a screw, spring washer, and a flat washer.

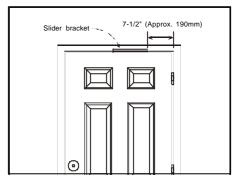
# 

Actual size



### **INSTALLATION - OUT SWING**



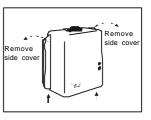


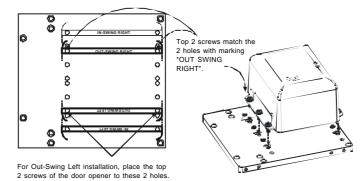
Note: Out-Swing right door installation shown.

Note: Out-Swing left door installation shown.

#### 3. Installing the operator assembly onto the mounting plate

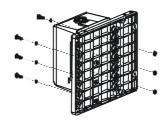
- 3.1 Remove the 2 side covers from the operator by sliding them out.
- 3.2 Place the operator onto the mounting plate based on the door type. For instance, for out swing right door, the "OUT-SWING RIGHT" holes should match the 2 top holes of the operator.
- 3.3 Secure the operator to the mounting plate with 6 nuts, spring washers and bolts.



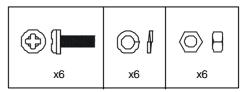


#### **WARNING**

To avoid possible serious injury from a falling door operator, fasten it securely to the mounting plate and the supports of the door.



#### Actual size



#### 4. Selecting the door type

You must select whether you have an outswing left or outswing right door. Follow the procedures below to set the correct door type.

- 4.1 Before powering up the operator, the proper door configuration must be selected. To select the door type as out-swing right, please set "Door Type" slide switch to 2rd position from the top. To select the door type as out-swing left, please set "Door Type" slide switch to the 3<sup>rd</sup> position from the top.
- 4.2 Before the adapter is plugged in, press and hold the "Door Setting" button (red color button). While holding down the "Door Setting" button, plug in the power adapter to the adapter socket on the door operator. Red LED will be on and the orange LED will flash rapidly and the buzzer will beep rapidly. You may now release the "Door Setting" button.
- 4.3 Once the button is released, the orange LED will flash slowly and the operator's shaft will start to rotate and perform a routine startup procedure automatically in order to set itself up for this door type.
- 4.4 When the startup procedure is completed, you will hear 2 beeps, and the motor will stop.
- 4.5 You should now disconnect the power adapter from the operator and proceed to the next step. The power adapter should not be connected again until step 7.
- 4.6 You may now install the 2 side covers to the operator by sliding them onto the side of the operator.

**A** CAUTION

When the operator is in "Door Setting" mode.

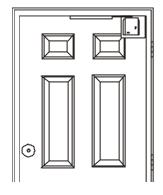
The motor and its shaft will rotate. ENSURE NOTHING IS TRAPPED BETWEEN THE

SHAFT AND THE OPERATOR.

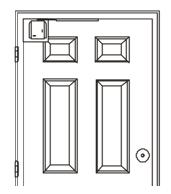


# 5. Mounting the operator assembly with mounting plate onto the door

5.1 You may now mount the operator with the mounting plate on the door. It should be mounted on the upper left corner of the door for out-swing right, or upper right corner for out-swing left.



Note: Out-Swing Left door installation shown.



Note: Out-Swing Right door installation shown.

Step 1) Press and hold the

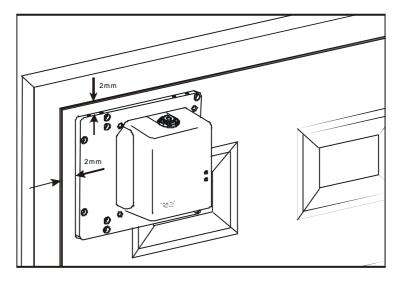
door setting button. (red)

Step 2) Plug in the adapter, buzzer will beep

rapidly.

#### **INSTALLATION - OUT SWING**

5.2 Locate the operator assembly 2mm away from the top of the door frame, and 2mm from the side.



5.3 Secure the mounting plate with 4 screws onto the door.



