ABSTRACT: Please read this instruction in its entirety before beginning to install your Marvin Sliding Door Automatic Control (SDAC) system. This instruction demonstrates the installation of a motorized system onto a FACTORY prepared door.

Regional standard practices, environmental conditions, and codes may vary and supersede the procedures contained within. The responsibility for compliance is yours: the installer, inspector, and owner(s).

NOTE: Numbers listed in parentheses ( ) are metric equivalents in millimeters rounded to the nearest whole number.
Table of Contents

Before You Begin.......................................................................................................................................................2
Safety Messages.......................................................................................................................................................2
Flush Bolt Removal for Bi-Parting Units.....................................................................................................................2
Door Operation and Head Track Clearance...............................................................................................................2
Electrical Supply.........................................................................................................................................................2
Wall Cavity.................................................................................................................................................................3
Access Panel.............................................................................................................................................................3
Installer and Builder Information................................................................................................................................3
Belt Holes...................................................................................................................................................................3
Mounting Motor..........................................................................................................................................................5
Threading Belt............................................................................................................................................................6
Installation of Electrical Components.........................................................................................................................9
Programming...........................................................................................................................................................10
Wireless Component Installation and Pairing...........................................................................................................11
Installation of the Closing Ramp...............................................................................................................................11
Installation of Secure Setup.....................................................................................................................................12
New Code Setup......................................................................................................................................................12

Before You Begin

Safety Messages
Please familiarize yourself with the following hazard notations used throughout this instruction.

<table>
<thead>
<tr>
<th>Danger</th>
<th>Warning</th>
<th>Caution</th>
<th>Seek Assistance</th>
<th>Tips/Hints</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="DangerIcon.png" alt="DANGER" /></td>
<td>![WarningIcon.png]</td>
<td>![CautionIcon.png]</td>
<td>![SeekAssistanceIcon.png]</td>
<td>![TipsHintsIcon.png]</td>
</tr>
<tr>
<td>Indicates a hazardous situation that, if not avoided, will result in death or serious injury.</td>
<td>Indicates a hazardous situation that, if not avoided, could result in death or serious injury.</td>
<td>Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.</td>
<td>Help from another individual is necessary to perform this task safely and correctly</td>
<td>Information on alternative procedures, definitions, helpful hints</td>
</tr>
<tr>
<td><strong>DANGER</strong> Risk of electrical shock. All electrical work must be performed by a licensed electrician.</td>
<td><strong>WARNING</strong> Always practice safety! Wear the appropriate eye, ear and hand protection, especially when working with power tools.</td>
<td><strong>CAUTION</strong> Pinch point can occur at panel intersections during operation. Do not keep fingers in exterior pull when bypassing adjacent panel.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Flush Bolt Removal for Bi-Parting Units
1. Remove inactive panel using appropriate steps.
2. Remove the screw on the flush bolt guide and then remove flush bolt guide.
3. Unthread rod.

Door Operation and Head Track Clearance
Ensure the door moves freely over the entire length of travel. Unit needs to be plumb and square; and have at least 1/2" from the top of the primary panel to the head jamb over the full length of travel. If any operational problems are detected, contact the door installer or job superintendent to have them corrected.

Electrical Supply
Per the manufacturer’s instruction:
- The motor will require 110VAC run to controller.
- A dedicated circuit is recommended. Non-GFCI circuit (ground fault circuit interrupter) is recommended.

Wall Cavity
Prep your framing material by providing an uninsulated wall cavity with a 12" (305) minimum width by 36" (915) minimum height (starting at the top of the door header).

Access Panel
Due to many types of construction, styles, conditions, etc, Marvin does not offer an access panel for the motor and controller. You are required to incorporate a minimum of a 12" x 24" access point near the motor/controller if service or reprogramming is ever needed.

Installer and Builder Information
Always provide a copy of these instructions for the current or future building owner.

**Tools and Supplies Needed:**
- Power drill
- Screw drivers
- Side Cutter
- 6‘Level
- Ladder
- Extension cord (for programming only)
Belt Holes- Installing Mechanical Components

To watch a video on how install the mechanical components, click on the play button or scan this code with your smart phone or similar device.

NOTE: On uni-directional units, the motor will be installed on the locking jamb side of the unit. On bi-parting units the motor will be installed where the pass through corner key is located.

IMPORTANT
Ensure there is sufficient room to mount the motor on the motor side. The installation bracket must fit between the studs.

1. Drill 3/8” (10) hole through framing material using pass-through corner key as a guide.

2. Please note the hole placement needed for pre-drilling. See figure 2.

Pre-drill top six holes with 1/8”(3) drill bit. Drill side two holes nearest to the door with 7/8”(22) drill bit.

3. Align bracket to hole. See figure 3. Note: “Interior” must face interior of home.

4. If the header used for mounting the motor is not installed, use the jig to mark header location. Install header at correct height. See figure 4.
5. Using the jig, mark the 7/8\textquotesingle\textquotesingle (22) hole locations going through the studs and the motor mounting holes into the header. See figure 5.

6. Pre-drill marked holes in header with 1/8\textquotesingle\textquotesingle (3) bit. See figure 6.

7. Drill 7/8\textquotesingle\textquotesingle (22) holes through the studs. See figure 7.

---

**Mounting Motor**

1. Break off bracket tabs. See figure 8.

2. Fasten plate to motor using four \#10 x 3/4\textquotesingle\textquotesingle machine screws and nuts. See figure 9.
Tip
Install a pilot screw into the header to ‘hang’ the motor assembly on while other screws are being installed. See figure 10.

Figure 10

3. While holding the motor in place with the aid of the pilot screw, fasten with four #12 x 3” flathead screws. See figure 11.

Figure 11

Threading Belt

To watch a video on how to thread the belt, click on the play button or scan this code with your smart phone or similar device.

IMPORTANT
Ensure there are no twists in the belt throughout installation.

1. Loosen turnbuckle until there are 5 threads of engagement on each side. See figure 12.

Figure 12

2. Insert belt through belt clamp. See figure 13.

Figure 13
3. Attach belt on panel bracket and fasten with #8-32 x 3/8" screw. See figure 14.

4. Thread belt through exterior side of return pulley. Ensuring no twists in belt, thread belt over top of panel with teeth facing up. See figure 15.

**IMPORTANT**
On bi-parting units, belt must run above the structural bracket with teeth facing up. See figure 16.
5. Thread belt through the pass through corner key and around motor drive sprocket. Continue to thread the belt back over the panel tooth side up. See figure 17.

Tip
Ensure that termination of the belt is on the exterior side of the door.

6. Pull belt tight, cut so there are 3 teeth of engagement on the belt clip. See figure 18.

7. Fasten belt to turnbuckle, completing the loop. See figure 19.

8. Tighten turnbuckle nut until belt is taut, ensuring turnbuckle ends don’t spin (twisting belt).

9. Tighten lock nut to turnbuckle nut. See figure 20.

10. Fasten turnbuckle to the pulley side of the panel using two #8 x 1 3/4" black screws. See figure 21.

Note: Steps 11 and 12 are for Bi-Parting units only.
11. Install bi-parting clamp to interior side of the belt by hooking on the belt. The teeth will need to be faced upwards. See figure 22.

![Figure 22](image)

12. With panels in locked position, slide the clamp into the route and fasten with two #8 x 1 3/4" screws. Ensure clamp is engages with the teeth on the belt. See figure 23.

![Figure 23](image)

**IMPORTANT**

Motor and controller must be at room temperature prior to power being applied.

1. Connect the battery back-up inside the controller. See figure 24.

![Figure 24](image)

2. Install one screw on stud to hang controller box near motor. (Must be accessible from the access panel.) See figure 25.

![Figure 25](image)

![Figure 26](image1)

4. Connect controller to power using provided cord. See figure 27.

![Figure 27](image2)

5. Connect wireless receiver to side Ethernet port on controller. If using wired wall switch, connect to "wall switch" port on controller. See figure 28.

![Figure 28](image3)

### Programming

**IMPORTANT**

If using a wireless wall switch, please follow pairing process on page 11. Do not pair the hand held remote and motion sensor until the motor system has been programmed. The controller must be on to pair devices.

1. Begin by making all necessary connections and ensure the controller is OFF. All wood covers on door must be installed prior to programming.

2. Position the lead panel approximately two feet from the fully closed position. See figure 29.

![Figure 29](image4)

**NOTE:** On bi-parting units, this distance between panels should be approximately four feet.

To watch a video on how to program, click on the play button or scan this code with your smart phone or similar device.
3. Set both the #1 and #2 DIP switches to the on position. See figure 30.

![DIP switches](image)

**Figure 30**

4. Turn on the controller – a red light should blink once, a yellow twice, and a green three times.

*NOTE: If this LED sequence does not occur, turn the controller off for 30 seconds, and then turn back on.*

![Controller](image)

**Figure 31**

5. After a few seconds, the lead panel(s) will move approximately six inches in one direction. If the panel(s) moved towards the closed position, press the close button on the wall switch. If they moved towards the open position, press the open button on the wall switch.

6. Slide the panels to the fully closed position and ensure the door hardware locks and unlocks. Press the close button on the wall switch.

7. Slide the panels to the fully open position and press the open button.

8. Allow the panel(s) to cycle a few times and then close and engage the brake on the motor before continuing to step 9. The brake will make an audible 'click' when it engages.

*NOTE: All LED's should be off at this time.*

9. Turn OFF the power to the controller and then set both the #1 and #2 DIP switches to the off position.

10. Programming is now complete. Turn power to the controller back on. After approximately 20 seconds, the door will be ready for normal operation.

11. Opening/Closing the Door Troubleshooting:
   - If you cannot manually lock the door, refer to the bracket section. Adjustments may be required.
   - If door locks, refer to the wireless component section. Adjustments may be required.

### Installing the Closing Ramp

1. Fully close the door

2. Locate the pre drilled hole 1” behind the interlocking stile.

![Closing ramp](image)

**Figure 32**

3. Open the primary panel(s) past 1 full panel width.

*NOTE: If OX, XO, OX-XO unit, leave the panel(s) fully closed.*

4. Install the closing ramp, using the provided #8 x 3” screw, into the pre drilled hole.

5. Close and lock the door.
6. Pull the ramp tight so that it fully contacts the turnbuckle. See figure 33.

![Figure 33](image)

**NOTE:** If more contact is needed, adjust the set screw in the closing ramp.

7. Open and close the door using Sliding Door Automatic Control System. Ensure the door manually locks. If the door doesn’t manually lock, adjust the set screw. See figure 34.

![Figure 34](image)

### Wireless Component Installation and Pairing

**IMPORTANT**

Before pairing, all connections must be made and power to the controller must be on.

1. Insert batteries into device. (The remote must be fully charged.) See figure 35.

![Figure 35](image)

2. Press the blue button on the receiver and the device to be paired. See figure 36.

![Motion Sensor](image)

3. The blue LED’s will flash slowly, then fast. See figure 37.

![Remote Control](image)

**NOTE:** If the LED’s do not flash, return to step 1.
Secure Exterior Keypad Setup

Using supplied Ethernet cables, connect the keypad to the receiver, and the receiver to either the open port on the controller or wired wall switch.

IMPORTANT
Receiver must be located in a secure location.

New Code Setup

1. Hold the “5” button for 5 seconds (green light will begin to blink slowly.) See figure 38.

2. Enter the current code. It is sent from the factory with the code “1234”.

3. Enter the new four digit number code.

IMPORTANT
If the code is unknown, keypad must be sent to the factory to be reset.

To watch a video on how to program, click on the play button or scan this code with your smart phone or similar device.

1. Hold the “5” button for 5 seconds (green light will begin to blink slowly.) See figure 38.