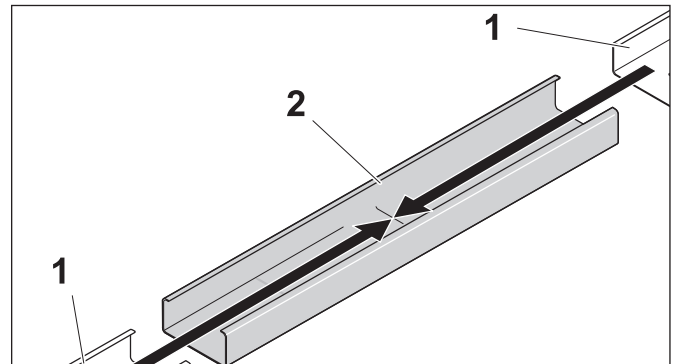


### Rail assembly

- Insert C-rail parts (1) into the connecting sleeve (2) all the way to the stop position

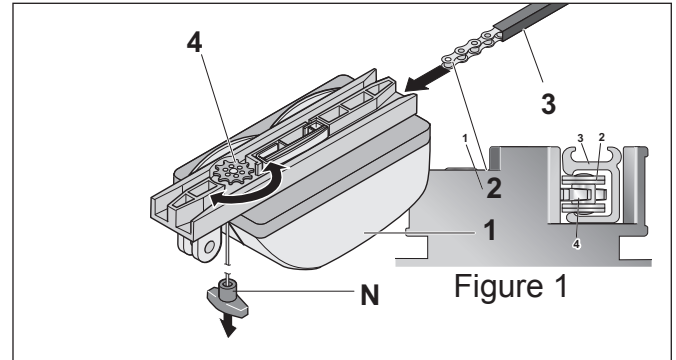


**For more information: please refer to the installation and operating manual**

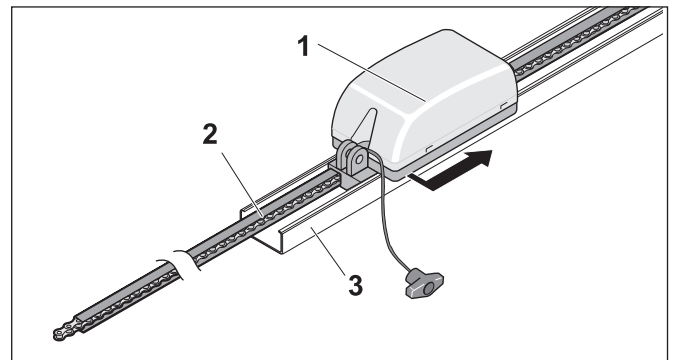
# Assembly

**Important:** There are two possible ways to install the Direct Drive (variant A and variant B). The following instructions are showing the installation of variant A. For more information about the variants please refer to the installation and operating manual.

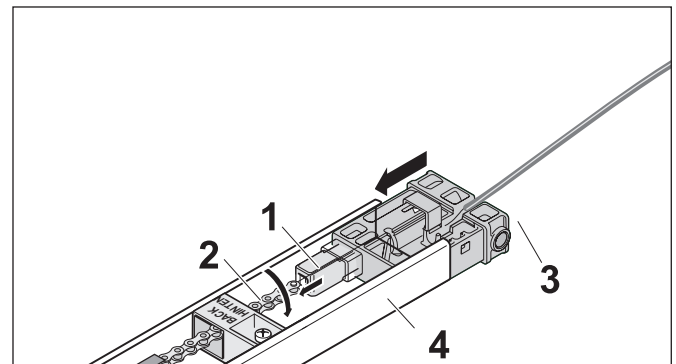
- Slide the carriage (1) onto the chain (2) with chain channel (3) (note the position of the chain with the chain channel, see figure 1).  
The chain (2) engages into the sprocket (4). If the sprocket does not rotate, pull once on the handle of the emergency release cord (N).  
The sprocket is now unlocked and the chain can be pushed on.



- Slide the carriage (1) together with the chain (2) into the C-rail part (3) and slide it to the middle of the rail.
- Feed the chain (1) through the opening holes in the limit stops.



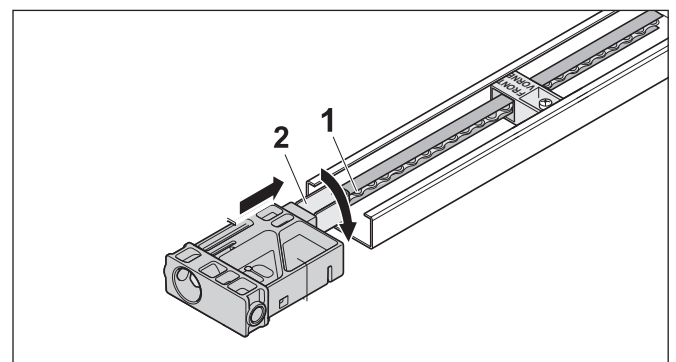
- Insert the slide-in-part with the control cable in the C-rail and attach the tensioner to chain (2) and turn it.



- Feed the first link of the chain (1) into the tensioner (2) of the slide-in part without control cable and turn.  
The limit stop remains in the C-rail.

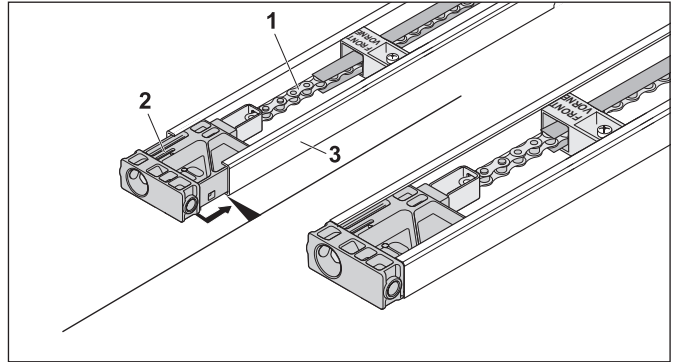
## Caution

**Please make sure the Slide in part with the contact is in the back and the metal strip is visible! tensioner.**



# Assembly

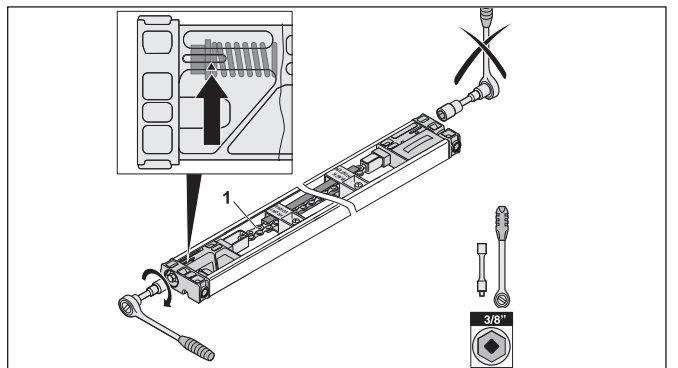
- Slide in the slide-in part without control cable (2) together with the chain (1) into the rail (3).  
Final position see graphic.



- Using a 3/8" socket wrench to tighten the chain (1) up to the marking (arrow on collar of the tensioning bolt)

## Caution

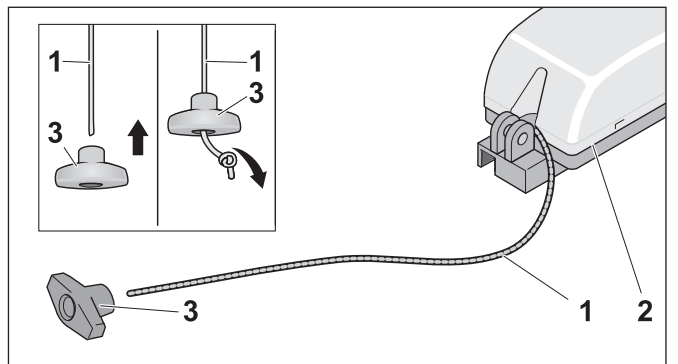
The pre-installed slide-in part on the opposite side has been already pretensioned at the factory and must not be tightened further. Attempting to tighten further can damage or destroy the tensioner.



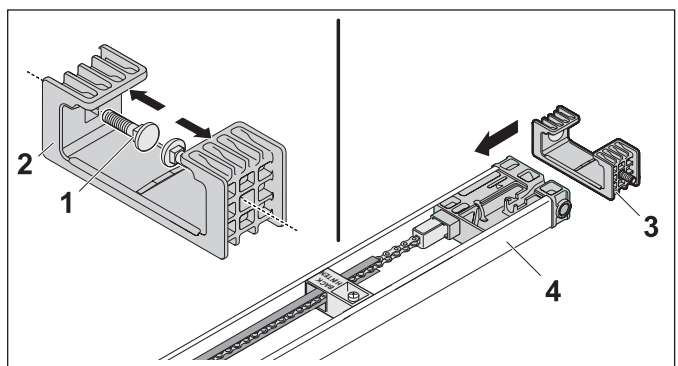
## Attach the emergency release handle

- Attach the emergency release handle (3) to the cord (1) of the carriage.
- Make a knot at the end of the cord (1) and push the handle (3) to the knot.

The final cord length is shortened at the end of the installation when the opener is attached to the ceiling.



- Insert one carriage bolt each M8 x 25 mm (1) from the inside on the left and right sides into the ceiling suspension bracket (2).
- Slide the ceiling suspension bracket (3) onto the C-rail (4) (from position H).



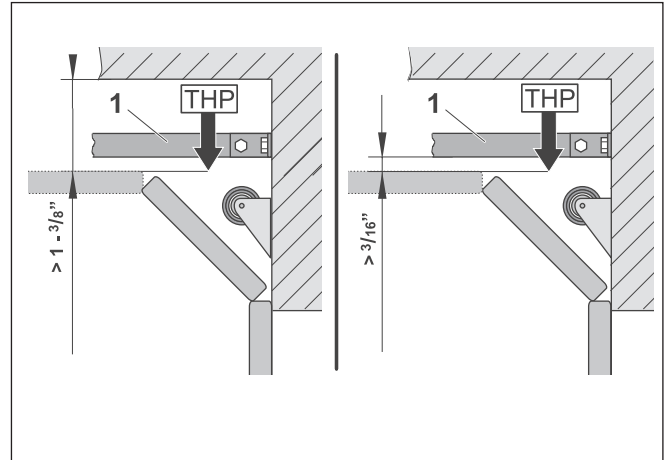
# Installation

## Installation Step 1

### Determine the door's highest position

- Open the door and measure the distance between the top edge of the door and the ceiling where the clearance is the smallest. This point is called the door's highest position (X). This distance must be at least 1-3/8" (35 mm). The clearance between the THP (X) and the lower edge C-rail (1) must be at least 3/16" (5 mm).

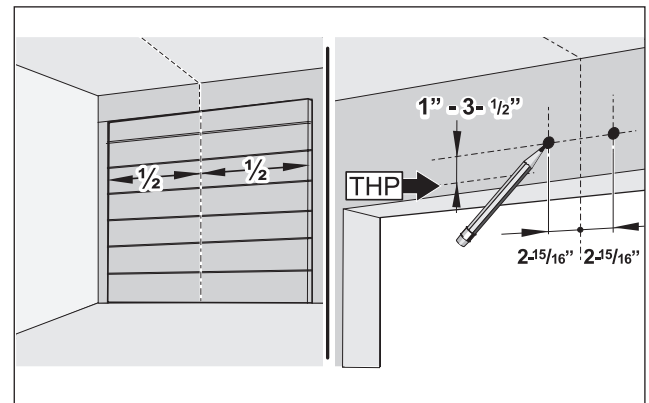
Note: Please observe that this distance may possibly be reduced if a door handle is attached to the middle of the door. The door must be able to run freely.



## Installation Step 2

### Install the Header Bracket

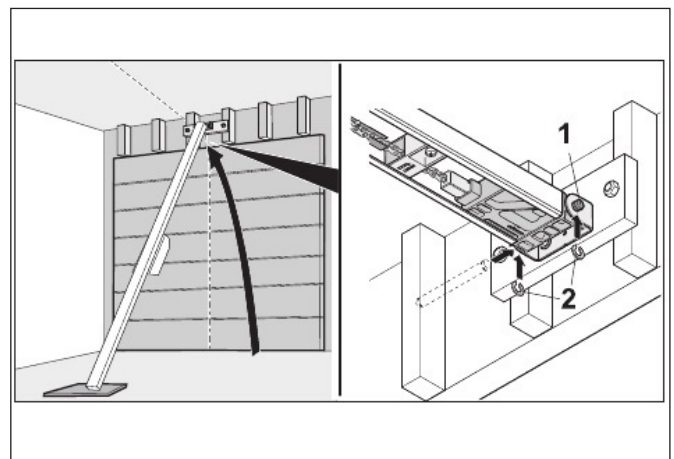
- Close the door.
- Determine the door's center point, mark it on the header wall and transfer this to the header as a vertical guide line. Where needed, an auxiliary construction (1) must be attached. Ask your specialist dealer.
- Determine the horizontal guide line for the header bracket and mark it. It must be at least 1-3/8" (35mm) from the door's highest position (X).
- Center the header bracket on the vertical guideline and mark the horizontal set of bracket holes.
- Fasten the bracket securely to the header with the provided hardware



## Installation Step 3

### Attach the rail to the Header Bracket

- Position the opener on the garage floor below the header bracket. Have someone hold the opener if spring is in the way.
- Slide the C-Rail into the header bracket and secure with the pin. Attach locking c-clip to secure.

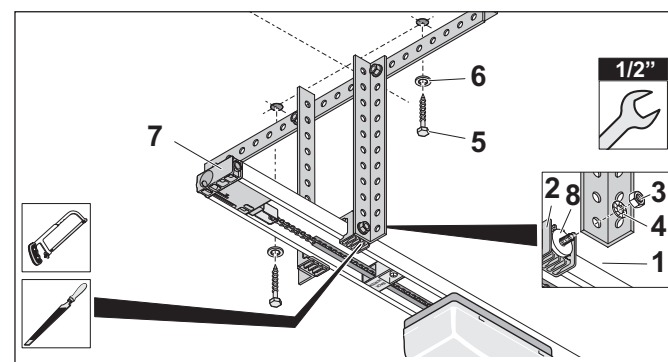
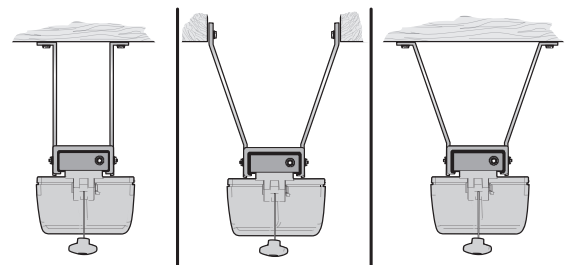
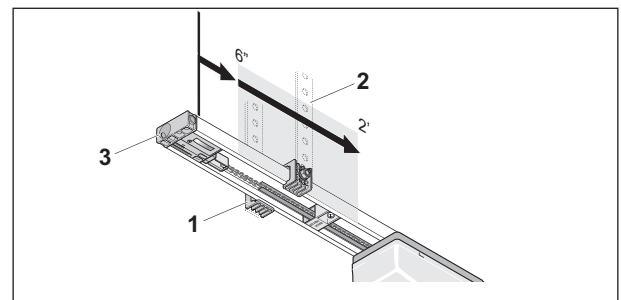
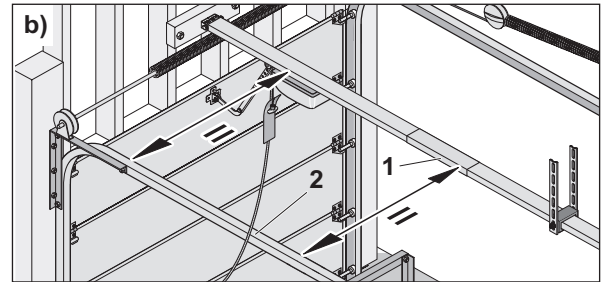
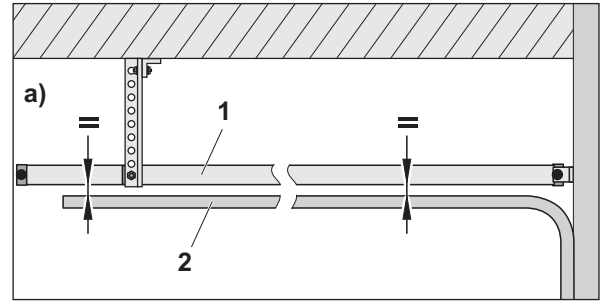


# Installation

## Installation Step 4

### Hang the opener

- Raise the opener onto a ladder. You will need help at this point if the ladder is not tall enough.
- Open the door all the way and rest the opener on the top section.
- Align the opener parallel to the running rails of the door (2):  
a) in the horizontal direction and b) in the vertical direction.
- Select the position for the ceiling bracket (1). The ceiling bracket can be attached i.e. using metal bracket (angle iron) (2) (not supplied).  
The distance from the ceiling bracket to the end of the C-rail (end of the slide-in part) (3) should be between 6" and 2' (150 and 610 mm). If necessary, an auxiliary construction for mounting the opener must be attached to this location.
- Fasten the metal brackets (1) to the ceiling bracket (2) using the nuts M8 (3) and toothed lock washers 5/16" (4) using a 1/2" open-end wrench.

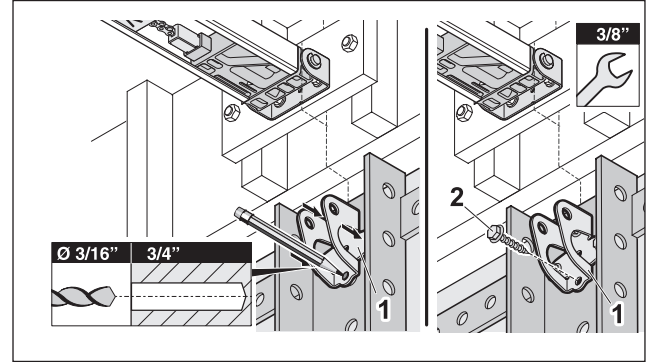


# Installation

## Installation Step 5

### Mount the door bracket

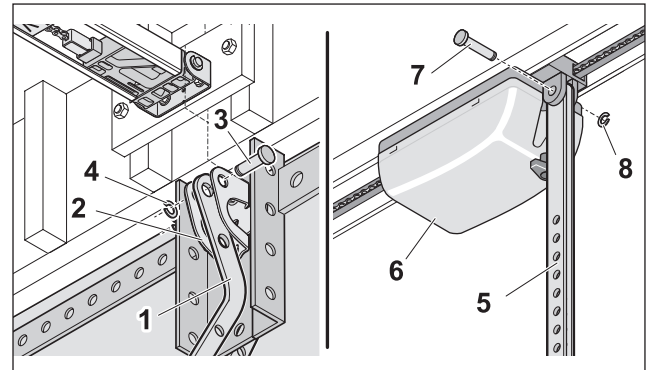
- Close the door.
- Align the door bracket (1) to the center of the door (guide line) and the top section of the door and mark four mounting points.
- Attach the door bracket (1) using four self-tapping screws 1/4" including washers (2) using a 3/8" open-end wrench.



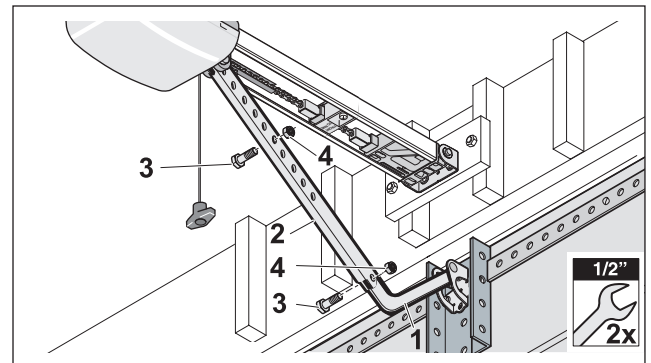
## Installation Step 6

### Attach the door arm

- Guide the bolt, (short) (3) through the hole in the door bracket (2) and in the curved door arm (1) and secure with the locking c- clip (4).
- Guide the bolt, (long) (7) through the holes in the motor carriage (6) and the door arm. Secure with the locking c- clip (8).



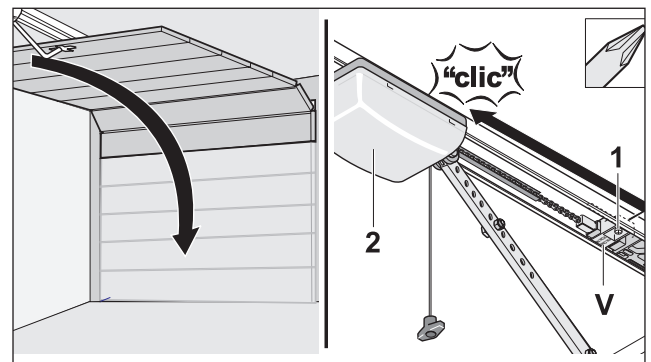
- Slide the curved door arm (1) into the door arm (2) and secure with two bolts 3/8" (3) and two self-locking nuts 3/8" (4). Tighten the nuts using a 9/16" open-end wrench. While tightening, hold the screws in place using a second 9/16" open-end wrench. Basic position of the screw arrangement see graphic. The length of the door arm can be adjusted if necessary.



## Installation Step 9

### Set the the limit stops

- Close the door by hand. Slide the limit stop (with the V marking) all the way to the carriage (2) until you hear a click. Tighten the screw (1) with a phillips screwdriver.
- Open the door by hand. Slide the limit stop (with the H marking) all the way back to the carriage (2) until you hear a click. Tighten the screw (1) with a phillips screwdriver.



## Installation

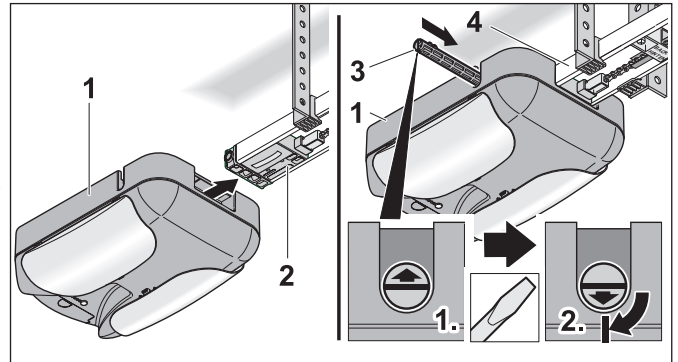
**Important:** Depending on the scope of delivery, there are two possible ways to attach the control housing to the C-rail.

### Installation Step 10

#### Variant 1

##### Attach the Control Housing to the C- rail

- Make sure the contact on the slide in part (2) faces down. Slide the control housing (1) all the way onto the rail. Slide in the fastening bolt (3) all the way through the hole of the control housing (1). Turn the fastening bolt (3) a half turn in the clockwise direction to secure. If a half turn is not possible, the control housing (1) is not correctly attached to the C-rail (4).

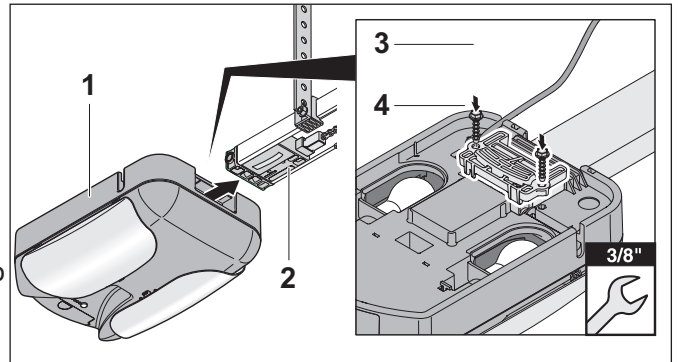


### Installation Step 10

#### Variant 2

##### Attach the Control Housing to the C- rail

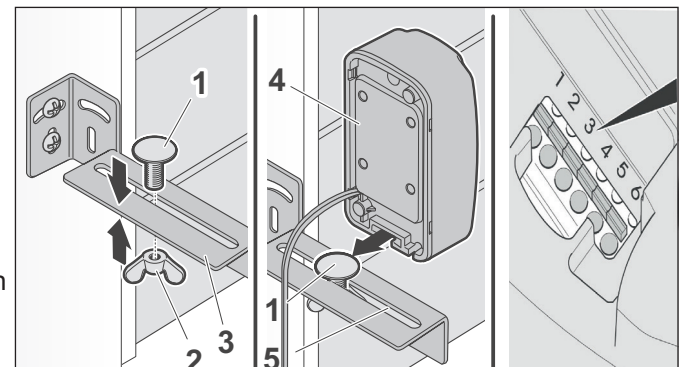
- Make sure the contact on the slide in part (2) faces down. Slide the control housing (1) all the way onto the rail. Fasten the screws (3) to fix the pressure plate (4) with the control housing.



### Installation Step 12

#### Install photo eyes

- Mount the photo eye brackets (3) to the wall with a distance of 2" (50 mm) from its bottom edge to the floor.
- Slide the photo eye (4) over the head of the carriage bolt M6 (1) and tighten the wing nut M6 (2). The position of the photo eyes can be adjusted through the slotted holes (5).
- Run the wires from each photo eyes to the power head and connect it to terminal # 5+6.



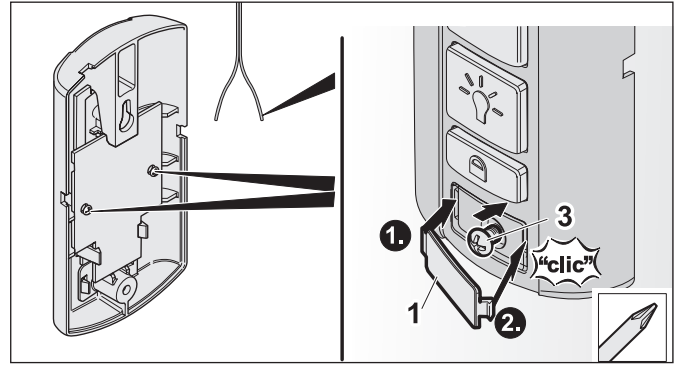


# Installation

## Installation Step 13

### Install wall station

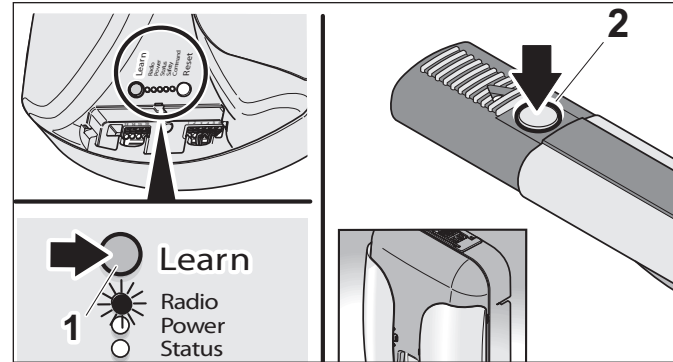
- Use the 1/8" x 1/2" screw at the preferred position so the housing can be hung on it. Connect the wire to the wall station by using two screws 1/8" x 3/8" on the backside.
- Hang the housing upright and tighten the 1/8" x 1.2" screw located behind the cover (1).
- Run the wires from the wall station to the power head and connect it to terminal # 3-4.



## Installation Step 15

### Programming the transmitter

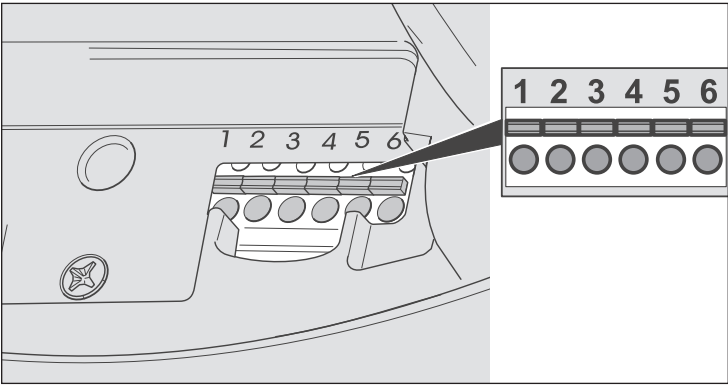
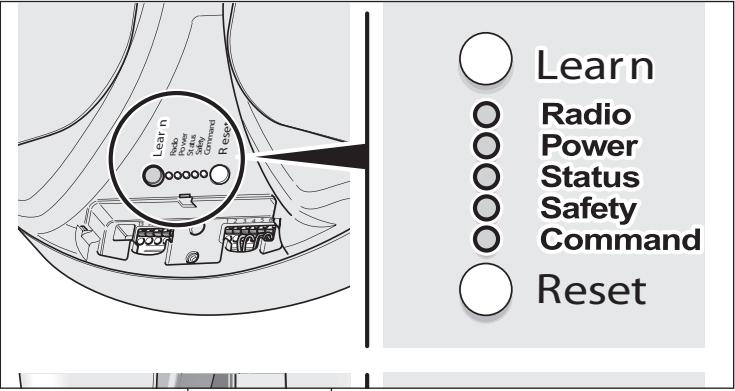
- Press the learn button (1) once on the control housing. The LED (Radio) is solid.
- Press a desired transmitter button (2). The LED (Radio) flashes briefly.
  - If the LED (Radio) lights up for a second, the transmitter has been learned.



**Important: The opener has to complete two cycles to learn the forces of the door.**

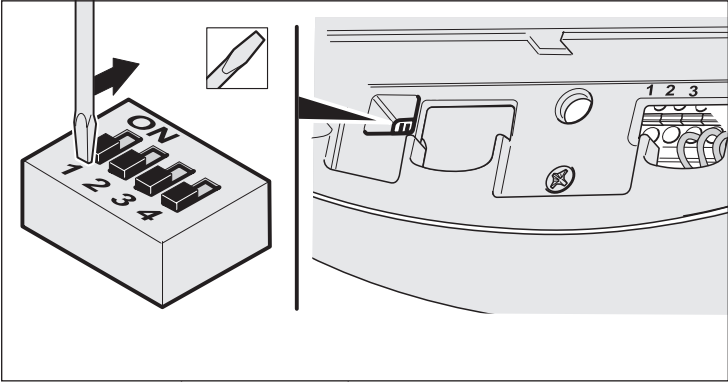


# Operation



Description	Signal	Function
Radio	Green (LED)	Lights up or blinks during “learning” of a transmitter respective of the programming state. Please see “Programming the transmitter”. Lights up, as long as a transmitter button for starting the opener is pressed.
Power	Red (LED)	Lights up when the opener is supplied with voltage.
Status	Red (LED)	Always blinks while the opener opens/closes the door. If the opener is not yet learned in, the LED also blinks when the opener is in the stopped state. During the learned in state, the LED is off when the opener is in the stopped state.
Safety	Red (LED)	Lights up if the photo eyes are interrupted. As long as a correct signal is coming from the photo eyes, the LED is off.
Command	Red (LED)	Lights up if the operator is started via a transmitter or a wall station (accessory) for example.

Description	Connection to terminal	Function / Application example
DC 24 Volt	1 + 2	Corresponding accessories with 24 volt voltage can be connected.
Command	3 + 4	A control device can be connected, for example a wall station or a button.
Photo eyes	5 + 6	The supplied photo eyes are connected here.



Description	DIP switch	Function for “ON” setting
Soft running	1	The opener moves with constant speed between the end points/ limit stops
Backjump	2	The opener moves to the defined end position over the limit stop and stops
Defined opening and closing	3	See chapter 14.1 “Settings” Overview of special functions in manual.
Partial opening	4	See chapter 14.1 “Settings” Overview of special functions in manual.