

5. Installation

24. Attach the curved door arm (1) to the door bracket (2). Guide the bolt, (3) through the hole in the door bracket and in the curved door arm and secure with the locking c-clip (4).
25. Attach the door arm (5) to the carriage (6). The open side of the door arm must be facing towards the ceiling. Guide the bolt (7) through the holes in the carriage and the door arm. Secure with the locking c-clip (8).

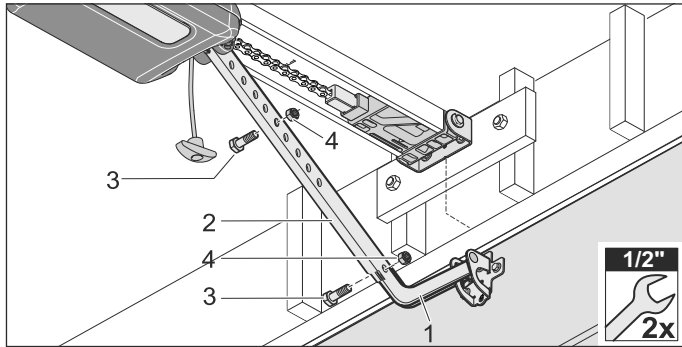


Fig. 26

26. 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 1/2" open-end wrench. While tightening, hold the screws in place using a second 1/2" open-end wrench. Basic position of the screw arrangement, see graphic. The length of the door arm can be adjusted if necessary.

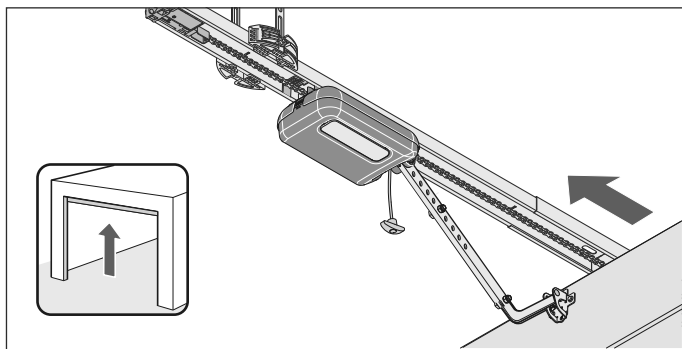


Fig. 27

- **NOTE**
- The door must not rub on the opener or rails. This could damage the opener or rails. The opener must be offset.

27. Open the door completely by hand.
 - ⇒ The limit stop automatically moves with the carriage.

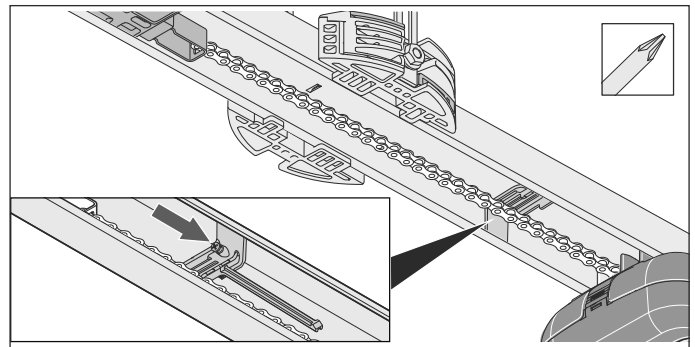


Fig. 28

- **NOTE**
- Do not push the door to the mechanical stop. This is because the opener will pull the door against the mechanical stop. This will apply tension to the door and it may be damaged. A clearance of 1.18" (30 mm) is required.

- i** **INFORMATION**
- Alternatively, the limit stop can be pushed under the chain and clamped into the rail later.

28. Tighten the screw on the limit stop with a phillips screwdriver without changing its position. Check the door OPEN end position: Open the door fully for this. The carriage moves to the door OPEN position on the limit stop until a click noise is heard.
 - ⇒ The door OPEN end position is set.

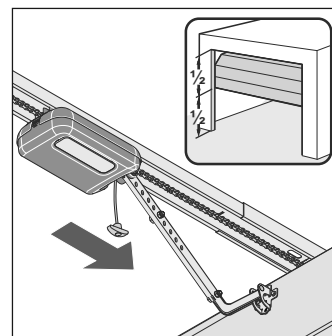


Fig. 29

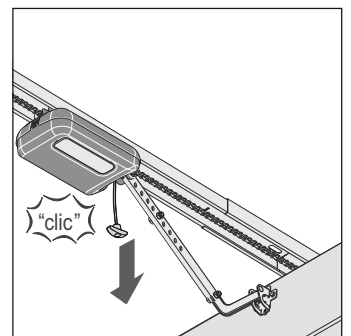


Fig. 30

- **NOTE**
- In case of an emergency release, the door may independently open or close itself due to a broken spring or incorrect setting of the weight balancing. The opener could be damaged or destroyed.

- i** **INFORMATION**
- It can be locked and released in any door position.

29. Move door to center position.
 - ⇒ The carriage moves with it.
30. Pull the emergency release handle.
 - ⇒ **Carriage is locked.**
 - ⇒ The door can only be moved by the opener.

5. Installation



WARNING

Danger due to projecting parts!

Door wings or other parts must not project into roads or public footpaths. This also applies while the door is moving.

This may cause serious injury or death to persons or animals.

- ▶ Parts must not project into roads or public footpaths.

⇒ The door opener is completely assembled.

5.7 Installing the wall control unit

In particular, follow the basic safety instructions listed below.



DANGER

Danger due to electric current!

Contact with live parts may result in electric current flowing through the body. Electric shock, burns or death will result.

- ▶ All work on electrical components must be carried out by a **trained electrician**.
- ▶ Before inserting the mains power plug for the first time, ensure that the voltage of the power source matches the voltage listed on the opener type plate.
- ▶ Do not connect the power supply until installation is complete.
- ▶ Disconnect the mains plug before working on the opener.
- ▶ If a battery pack is connected, disconnect it from the wall control unit.
- ▶ Check that the opener is not live.
- ▶ Secure the opener against being switched back on.



WARNING

Danger of crushing and shearing!

The door can be actuated via the wall switch. If the door moves and there are persons or animals in the movement area, crushing and shearing injuries may be caused by the mechanism and safety edges of the door.

- ▶ The membrane keypad of the wall control unit must be mounted within sight of the door.
- ▶ The membrane keypad of the wall control unit must be mounted at a height of at least 5 feet to ensure that children cannot operate the wall station.
- ▶ Children must not be allowed to operate the wall station/the opener.
- ▶ Always keep the moving door in sight.
- ▶ Persons or animals must not be in the range of movement of the door.
- ▶ Never put your hand near the door or moving parts when it is moving. In particular, do not reach into the moving push arm.
- ▶ Do not reach into the ceiling mounting unit when the carriage is running along the rail.
- ▶ Do not drive through the door until it has been fully opened.

NOTE

To prevent damage to the opener, do not connect the wall control unit to the power supply until installation is complete.



INFORMATION

The power cable is approx. 5,7' (1.74 m) long.



INFORMATION

The power cord that has been provided must not be shortened or extended.

All devices to be connected externally must have safe isolation of the contacts from the mains voltage supply in accordance with IEC 60364-4-41.

Wiring for external devices must be installed in accordance with IEC 60364-4-41.

All electrical wiring, including the control cable, must be firmly secured to prevent displacement.

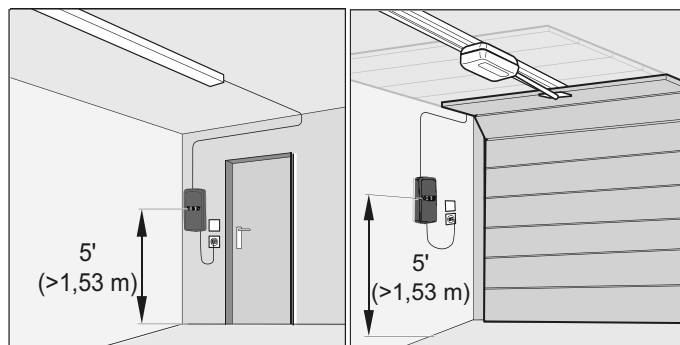


Fig. 1



INFORMATION

The drilling depth must be considered with respect to the ceiling and wall thickness, particularly with prefabricated garages. It may be necessary to reduce the hole depth.

Only use permissible mounting materials appropriate for the supporting surface.

1. Choose a suitable location for the wall control unit close to an existing power outlet.
The maximum length of the control cable is 16.4' (5 m), and it must not be extended.
Note that the distance between the wall control unit and the power outlet must not exceed 5,7' (1,74 m).
The membrane keypad of the wall control unit must be installed at a height of at least 5' (>1.53 m).

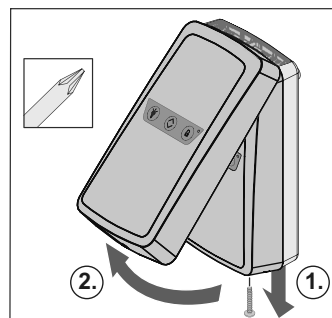


Fig. 2

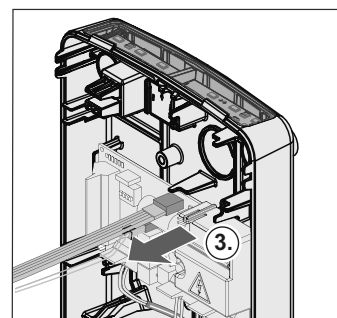


Fig. 3

5. Installation

NOTE

The control unit cover is connected to the circuit board of the wall control unit via a connection cable.

If a battery pack has been installed, it is also connected to the circuit board. Carefully remove the control unit cover and unplug the connections. This prevents damage to the wall control unit.

2. Loosen the screw on the wall unit of the control unit cover and remove the control unit cover gently upwards.
3. Unplug the connection cable for the membrane keypad from the wall control unit.

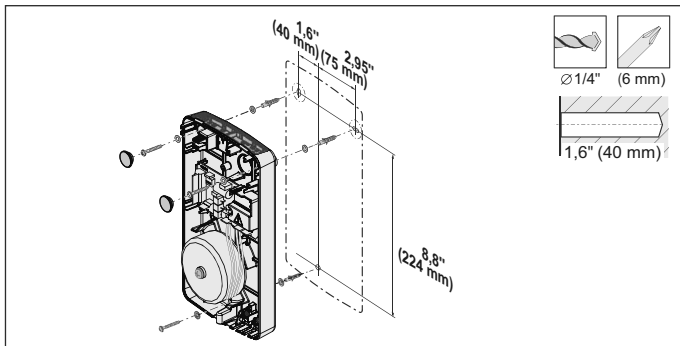


Fig. 4: Installation example



WARNING

Risk of eye injury!

Chips flying when drilling may cause serious injuries to eyes and hands.

► Wear safety glasses when drilling.

4. Transfer the mounting points to the substructure. Drill two holes ($\varnothing 1/4"$ x 1,6" / $\varnothing 6$ x 40 mm deep). Insert the two wall plugs. Affix the wall control unit with two screws and two washers, align the unit and firmly tighten the screws. Press the sealing plugs into the indentation to seal the housing.
5. Route the control cable of the plug-in unit up to the wall control unit and secure to prevent displacement.

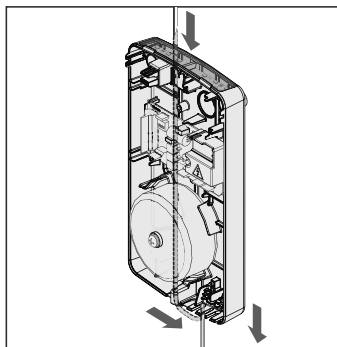


Fig. 6

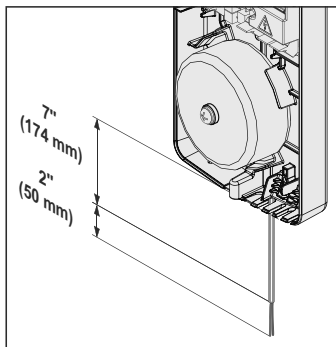


Fig. 7

6. Lay the control cable along the cable conduit on the rear side of the wall control unit up to the cable inlet.

Feed the control cable into the wall control unit through the cable inlet.

7. Shorten the control cable to no less than 7" (174 mm) in length, uncover the last 2" (50 mm) and strip the wires.

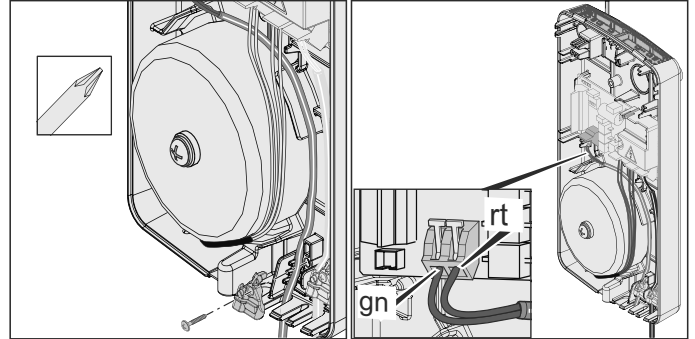


Fig. 8

Fig. 9

8. Remove the below strain relief. Route the control cable in the wall control unit along the transformer up to the gn/rt terminal. Secure the control cable with the below strain relief to prevent displacement.
9. Connect the bu wire of the control cable to the gn terminal. Connect the brown wire of the control cable to the rt terminal.
10. Close the housing in reverse order.
 - ⇒ Installation of the wall control unit is complete.
 Other connection options such as buttons are described in chapter "6. Connection and special functions of the wall control unit".

6. Connection and special functions of the wall control unit

6.1 Control unit cover of the wall control unit



! DANGER

Danger due to electric current!

Contact with live parts may result in electric current flowing through the body. Electric shock, burns or death will result.

- ▶ All work on electrical components must be carried out by a **trained electrician**.
- ▶ Disconnect the mains plug before working on the operator.
- ▶ If a battery pack is connected, disconnect it from the wall control unit.
- ▶ Check that the operator is not live.
- ▶ Secure the operator against being switched back on.



! WARNING

Danger due to hot surfaces!

After frequent operation, parts of the motor carriage or the control unit may become hot. If the cover is removed and hot parts are touched, they may cause burns.

- ▶ Allow the operator to cool down before removing the cover.

Removing the light and control unit cover

1. Disconnect the operator from the mains voltage. Check that the operator is disconnected from the power supply.

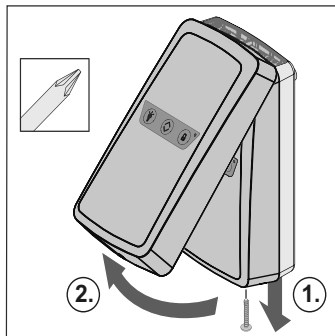


Fig. 2

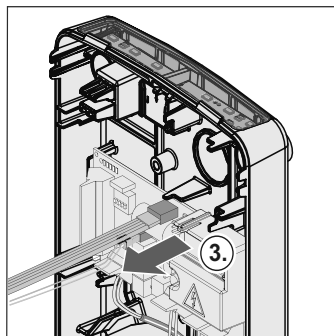


Fig. 3

NOTE

The control unit cover is connected to the circuit board of the wall control unit via a connection cable.

If a battery pack has been installed, it is also connected to the circuit board. Carefully remove the control unit cover and disconnect the connections to prevent damage to the wall control unit.

2. Loosen the screw on the wall unit of the control unit cover and remove the control unit cover gently upwards.
3. Unplug the connection cable for the membrane keypad from the wall control unit.

4. If a battery pack is used, it must also be disconnected, see Chapter "8.1 Installing and removing battery pack".
5. Remove the control unit cover.

Attaching the control unit cover

1. After working on the wall control unit, replace the control unit cover in reverse order.
2. Connect the operator to the mains voltage. Check that the power supply is connected.
⇒ The operator is supplied with mains voltage.

6. Connection and special functions of the wall control unit

6.2 Wall control unit pcb

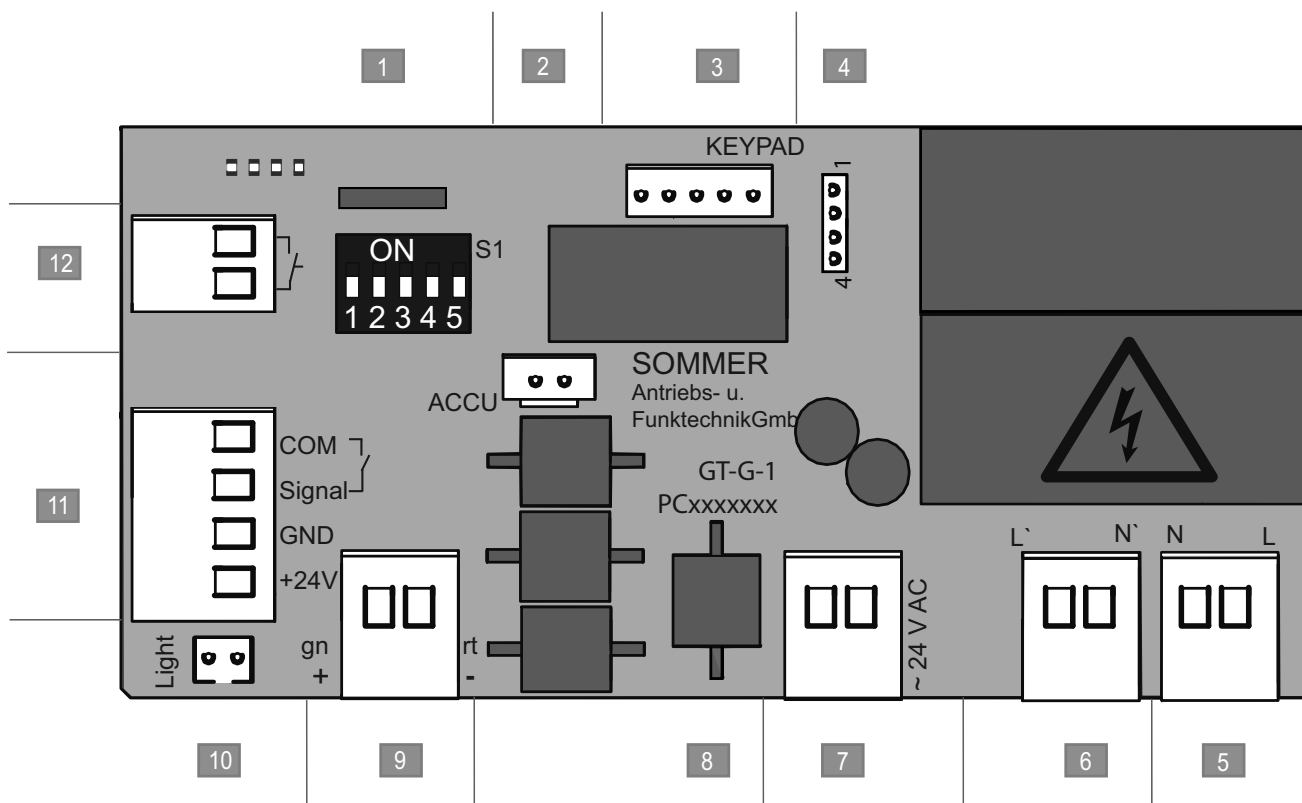


Fig. wall control unit pcb

Connection options to the wall control unit

1	DIP switches	7	Terminal, 2-pin 24 V AC transformer secondary side
2	ACCU slot Terminal for battery pack	8	pcb label
3	Slot, keypad, black Terminal for the button connector cable of the pro+ wall control unit	9	Terminal, 2-pin chain and rail, 24 V AC
4	Slot Terminal for RELAY, OUTPUT OC	10	Light slot, white terminal for LUMI Strip supplementary lighting
5	Terminal, 2-pin power supply 120 V AC, 50/60 Hz	11	Terminal, 4-pin • safety sensors • external transformer, 24 V DC, 100 mA
6	Terminal, 2-pin transformer primary side 120 V AC, 50/60 Hz	12	Terminal, 2-pin wall button

The version can vary depending on the type. This means the use of accessories can vary.

6. Connection and special functions of the wall control unit

6.3 Connection options to the wall control unit



⚠ WARNING

Danger of crushing and shearing!

The door can be actuated by a button.

Persons who cannot see the door and are in the range of movement of the mechanism or the closing edges may be injured by crushing or shearing.

- ▶ Only install the switch in view of the door.
- ▶ Do not press the button unless the door is in view.
- ▶ Always keep the moving door in sight.
- ▶ Persons or animals must not be in the range of movement of the door.



⚠ WARNING

Danger due to hot surfaces!

After frequent operation, parts of the carriage or the wall control unit may become hot. If the cover is removed and hot parts are touched, they may cause burns.

- ▶ Allow the opener to cool before removing the cover.



NOTE

Never lay the control cable along a power line, as this could cause interference in the wall control unit. Note the length of the control cable and install it correctly.



INFORMATION

The wall control unit detects a short-circuit between chain and rail and then switches the opener off.



INFORMATION

Control or regulating units in a fixed position must be mounted within sight of the door at a height of at least 5' (1.53 m).



INFORMATION

The power cable is approx. 69" (1.74 m) long.

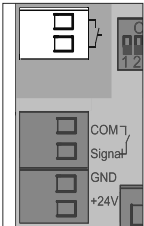


INFORMATION


The maximum cable length for connected accessories is 82' (25 m).

pcb section	Function/application example
	BATTERY slot Terminal for battery pack
	Slot, black (only for typ pro+), 5-pin Terminal for the Keypad connector cable of the wall control unit
	Slot for RELAY, OUTPUT OC switching capacity max: 5 A/120 V AC max: 5 A/24 V DC
	Terminal, 2-pin power supply 120 V AC, 50/60 Hz
	Terminal, 2-pin transformer primary side 120 V AC 50/60 Hz
	Terminal, 2-pin 24 V AC transformer secondary side
	Terminal, 2-pin chain and rail, 24 V AC
	Light slot, white slot for LUMI Strip supplementary lighting
	Terminal, 4-pin 2-wire safety sensors any polarity
	Terminal, 4-pin power output for external devices, 24 V DC, 100 mA GND and +24 V DC

6. Connection and special functions of the wall control unit

pcb section	Function/application example
	Terminal, 2-pin wall button 2 potential-free

The version can vary depending on the type. This means the use of accessories can vary.

 **INFORMATION**


If a safety eye is used, it must not be actuated when starting the programming.

If a safety eye is used as a frame safety eye, move the door to the center position.

6.4 Setting the DIP switches on the wall control unit



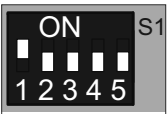



Special functions can be set up with the DIP switches on the wall control unit.


All DIP switches are set to OFF by default.

 **NOTE**

Do not use a metal object to set the DIP switches, because this may damage the DIP switches or the pcb.


Use a suitable tool to set the DIP switches, such as a flat plastic object.

DIP switches on the wall control unit	ON	OFF
		
1 	<ul style="list-style-type: none">• Button 1 defined door OPEN• Button 2 defined door CLOSE	<ul style="list-style-type: none">• Button 1 pulse sequence• Button 2 lighting function /partial opening
2 	<ul style="list-style-type: none">• "Relay" Door status display: Relay is activated during door movement and if the door is not closed	<ul style="list-style-type: none">• "Relay" lighting function: Relay can be used to switch external light
3 	<ul style="list-style-type: none">• No function	<ul style="list-style-type: none">• No function
4 	<ul style="list-style-type: none">• No function	<ul style="list-style-type: none">• No function

DIP switches on the wall control unit	ON	OFF
5 	<ul style="list-style-type: none">• No function	<ul style="list-style-type: none">• No function

6.5 Installing the safety sensors

Please observe and comply with all instructions to ensure a safe installation.

 **DANGER**

Danger due to electric current!

Contact with live parts may result in electric current flowing through the body. Electric shock, burns or death may result.

- ▶ Installation, testing and replacement of electrical components may only be carried out by an electrician.
- ▶ The opener must be disconnected from the power supply before working on the opener.
- ▶ If a battery pack is used, it must be disconnected.
- ▶ Then check that the opener is disconnected from the power supply.
- ▶ Only connect the safety sensors to the opener terminals in the wall control unit.
- ▶ Some local construction ordinances do not allow an on-wall installation of wires. Please check with your local building inspector.

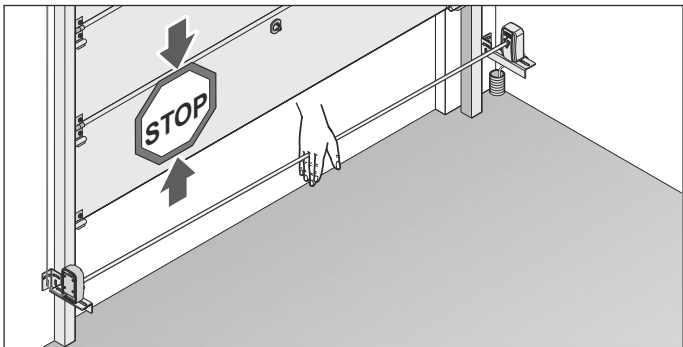


Fig. Test the safety sensors

The safety sensors kit safeguards the door. If the safety sensors are breached, the door's closing procedure is stopped. If the door stops during closing because of the safety sensors, it subsequently opens completely. The opener only functions with the connected safety sensors kit. Product contents see "3.5 Product contents for safety sensor kit".

6. Connection and special functions of the wall control unit

6.6 Installation requirements and dimensions

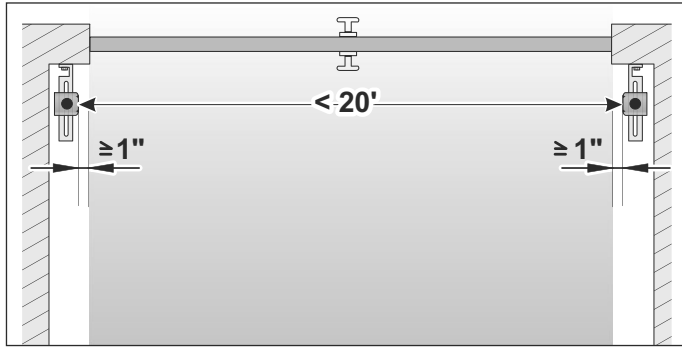


Fig. Installation of safety sensors



⚠ DANGER

Danger of crushing and shearing!

If the assembly conditions are not complied with during installation, malfunctions and error messages may result when the safety sensors is operated. This may result in serious injury or even death.

The following assembly conditions must be complied with:

- ▶ Select an installation location outside the range of the opener and door mechanism.
- ▶ Comply with all specified installation conditions and installation dimensions.

NOTE

If the following installation conditions and installation dimensions are not observed, malfunctions and error messages may result.

All specifications for installation of the safety sensors must be complied with.

NOTE

Never route the cable connection between the safety sensors and the wall control unit along a power supply line. This can cause the wall control unit to malfunction. Observe the length of the connection cable between safety sensors and wall control unit. Route the cable firmly.

The safety sensors must be correctly connected and aligned before the garage door opener will move in the downward direction. Do not mount the safety sensors in the area of the moving garage door. Mount at least 1" (25 mm) away from it.

The distance between the transmitter and receiver of the safety sensors set can range up to a maximum of 20' (6.10 m).

The distance from the floor must be selected so that an obstacle of 6" (152 mm) high can be reliably detected. This corresponds to a distance of 2" (50 mm) from the bottom edge of the installation bracket to the floor.

The safety sensors kit consists of a transmitter (green sticker) and a receiver (red sticker). Mount one safety sensor to the left and one to the right of the door. As a general rule, it does not matter which safety sensor is installed on

the left or on the right side.

If the safety sensors are exposed to direct sunlight, the receiver (red sticker) should be installed on the side facing away from the sun.

For garages with multiple doors (top view)

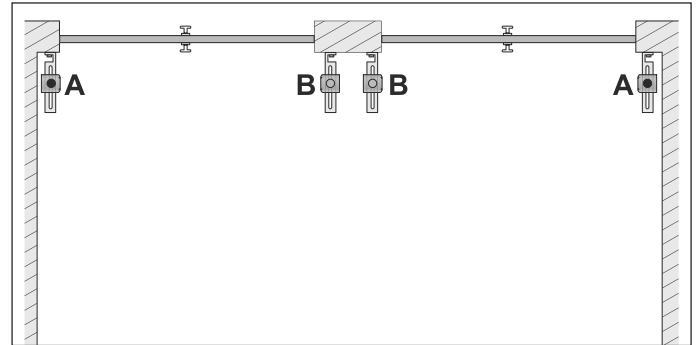


Fig. Installation on multiple doors

Install the safety sensors as shown in the diagram.

A = receiver (red sticker), B = transmitter (green sticker).

In this way, the safety sensors cannot influence each other through stray light.

6.7 Installation

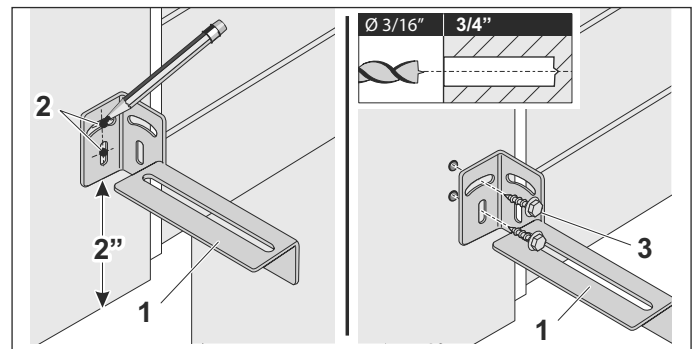


Fig. 1

Fig. 2

1. Look for a suitable installation position for the mounting bracket (1) inside the garage to the left and the right of the door.

Hold the mounting bracket (1) to the wall and mark the mounting points. The distance from the bottom edge of the installation bracket to the floor is 2" (50 mm).

The height and angle of the bracket can be adjusted through the slotted holes (2).

2. Drill holes for the screws. (3).
Screw in two screws (3).



⚠ WARNING

Risk of eye injury!

Chips flying when drilling may cause serious injuries to eyes and hands.

- ▶ Wear safety glasses when drilling.

6. Connection and special functions of the wall control unit

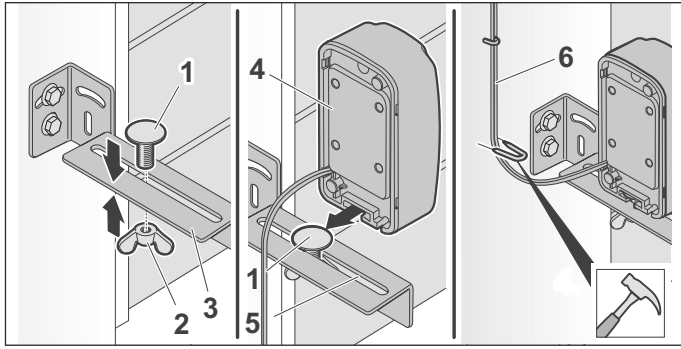


Fig. 3

Fig. 4

Fig. 5

3. Pre-attach the carriage bolt M6 (1) and the wing nut M6 (2) to the mounting bracket (3).
 4. Slide the transmitter (4) over the head of the carriage bolt M6 (1) and tighten the wing nut M6 (2). The position of the safety sensors can be adjusted through the slotted holes (5).
- Mount the receiver on the opposite side in the same way.
5. Run the two sets of wires (6) from the safety sensors to the wall control unit.
 6. Use staples to keep wires in place.
 7. Connect to wall control unit.

6.8 Connection of the safety sensors

The 2-wire safety sensors from **SOMMER** must be connected to the wall control unit. Initial operation is not possible without the safety sensors. The safety sensors are automatically detected during initial operation.



INFORMATION

During initial operation, the safety sensors must not be actuated or the sensors interrupted by persons or objects.

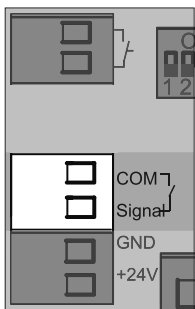


Fig: Terminal block for the 2-wire safety sensors

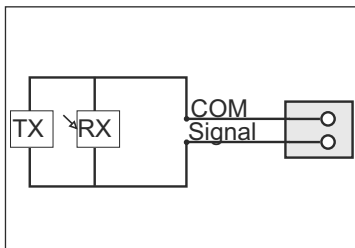


Fig: Connecting diagramm for the 2-wire safety sensors

1. Connect one wire of the transmitter to terminal (COM) and the other to terminal (Signal).

2. Connect one wire of the receiver to terminal (COM) and the other wire to terminal (Signal).
3. Check the function after connecting the 2-wire safety sensors.

6.9 Functions of the buttons

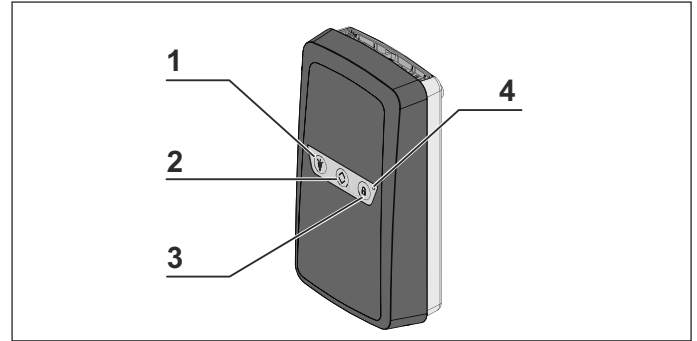


Fig. Wall control unit - buttons

- (1) Left = Turn the lighting on and off
- (2) Middle = Open, stopp and close the door
- (3) Right = Locking or unlocking the opener
- (4) Upper right corner, status LED = red: Operator locked, green: Operator unlocked

Turning the lighting on and off

The button (1) lights up green when the wall station is ready for operation and the opener is not locked.

1. Press the button (1).
⇒ Opener lighting switched on.
2. Pressing the button (1) again switches the opener lighting back off.
⇒ Opener lighting off.



INFORMATION



If the opener lighting is not switched off manually, it switches off automatically after 60 minutes. This value can be changed via SOMlink and a WiFi-enabled device.

The lighting cannot be switched off when the opener is moving.

Opening, closing and stopping the door

1. Press the button (2) to open and close.
⇒ The door opens or closes depending on the starting position.
2. Press the button (2) during the opening or closing process.
⇒ The door stops:
3. Press the button (2) again.
⇒ The door moves into the respective starting position.

6. Connection and special functions of the wall control unit

Locking or unlocking the opener


Unauthorized access can be prevented by locking the opener. For example in the absence of the user or to prevent unintentional activation with a handheld transmitter. The following functions are deactivated in the factory settings when the lock button is activated:

- Radio (handheld transmitter)
- Senso ventilation function
- Control device (corded external button)

To lock:

The button (3) on the wall station lights up green when the opener is unlocked. The button (3) lights up red when the opener has been locked by the wall station.


1. Press and hold the button (3) for at least 5 seconds with the door closed.
 - ⇒ Button (3) flashes green.
 - ⇒ After 5 seconds, the button (3) lights up red.
 - ⇒ Locking function activated.
 - ⇒ All the functions of the opener are locked.




INFORMATION
If the door was still open, it can be closed using the handheld transmitter. Only then are all opener functions locked.

To unlock:

1. Press the button (3) for at least 5 seconds.
 - ⇒ Button (3) flashes red.
 - ⇒ Button (3) lights up green.
 - ⇒ Locking function deactivated.
 - ⇒ All the functions of the opener are activated again.



INFORMATION
All locking and unlocking functions can be modified and adjusted with SOMlink and a WiFi-enabled device. For more information ask your specialist dealer.



6.10 Output OC

The door status can be displayed with the Output OC (open collector output) accessory. Optional, external lighting (Lumi Strip) DC 24V max. 750 mA can also be switched. The function depends on the setting of the DIP switches. See also chapter "6.4 Setting the DIP switches on the wall control unit".

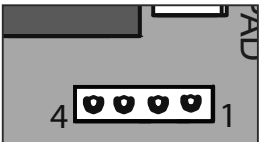


Fig. Relay slot for Output OC

The Output OC accessory part is plugged into the Relay slot, see separate "Output OC" instructions.

6.11 Relay

External lighting such as the garage light, courtyard light or door status display can be controlled with the relay accessory part. The function depends on the setting of the DIP switches. See also chapter "6.4 Setting the DIP switches on the wall control unit".

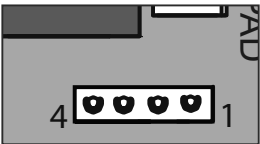


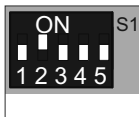


Fig. Relay slot

The Relay is plugged into the Relay slot on the wall control unit, see separate "Relay" instructions. The max. switching capacity is 250 V AC, 5 A or 24 V DC, 5 A.

DIP switches on the wall control unit	ON	OFF 
		
2 	<ul style="list-style-type: none">• "Relay" Door status display: Relay is activated during door movement and if the door is not closed	<ul style="list-style-type: none">• "Relay" lighting function: Relay can be used to switch external light

6.12 Installing the control unit cover of the wall control unit

1. After working on the wall control unit, replace the control unit cover in reverse order, see "6.1 Control unit cover of the wall control unit".
2. Connect the opener to the main power supply. Check that the power supply is connected.