

3.2 Learning process of the opener

3.2.1 Menu structure

► Press the button .

1. The door will open and briefly stop in the OPEN end-of-travel position.
L flashes.
2. The door automatically completes 3 cycles (OPEN and CLOSE door runs).
L flashes in the CLOSE direction.
L flashes in the OPEN direction.

The travel and required forces are taught in.

The operator light flashes during the learning runs.

The door will stop in the OPEN end-of-travel position. The operator light is continuously illuminated.

Once the opener has completed the learning cycles, the reversing limit is adjusted to a medium setting. To adjust the reversing limit, the door has to be in the open position.

1. Place a suitable object on the floor in the middle of the door at the height at which you want the door to reverse.
2. Start the process by pressing the button  (height: min. 3/8" max. 1").

The door closes and reverses when it touches the object on the floor.

Then the door opens again.

The door automatically completes 1 cycle (OPEN and CLOSE door run).

rA flashes in the CLOSE direction.

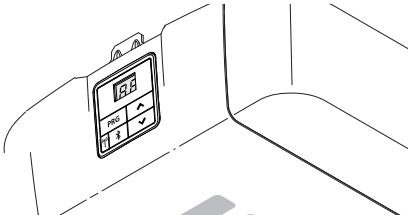
rA flashes in the OPEN direction.

The travel and required forces are taught in.

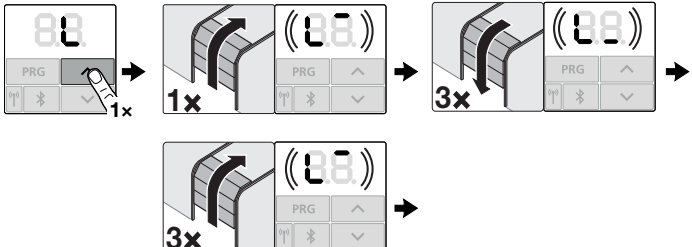
The operator light flashes during the adjustment of reversal limit.

The door will stop in the OPEN end-of-travel position. The operator light is

19



Learning runs



Display of taught-in forces

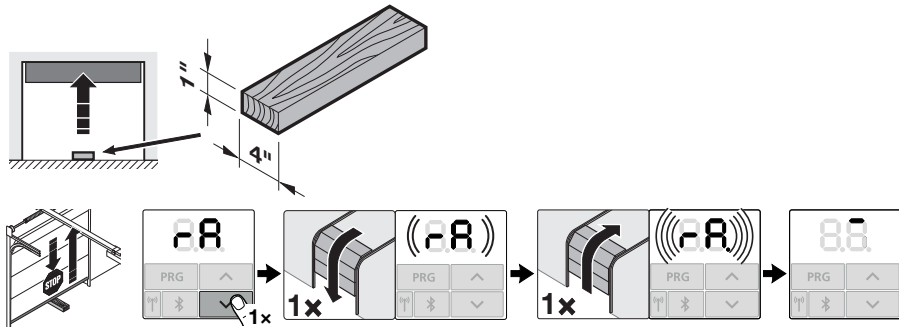
5 sec.



After the learning runs, a number shows the maximum determined force. This value indicates the following:

Door width < 16 ft	Door width ≥ 16 ft	
0 – 2	0 – 4	Optimal force ratios.
3 – 9	5 – 9	Poor force ratios. Check or readjust the door system.

Adjustment of reversal limit



19.1

Aborting a learning run



► Press one of the buttons , ,  or an external control element with impulse function.

On the display, a U is illuminated and the operator has not been taught in.

continuously illuminated.
To abort a learning run (Fig. 19.1).

3.2.2 Programming the radio code

NOTE

Always check the function and programming of hand transmitters from inside the garage.

1. Briefly press and release the button  (programming button) on the opener once.
2. Press the  and  buttons to get to the menus C1 – C6. These channels have six different functions
C1 Impulse operation (Open-Stop-Close-Stop)
C2 Opener light
C3 Partial Position
C4 Travel in the OPEN direction
C5 Travel in the CLOSE direction
C6 Air Position
The 7-segment display shows the selected radio channel C1 – C6 and also the right-hand decimal point if a radio code has already been taught in for the radio channel, for example C1.
3. Press the  button.
In the 7-segment display, the display for the selected radio channel flashes slowly for 25 seconds, for example C1.
4. Press and hold the hand transmitter button from which you want to transmit the radio code.

Hand transmitter

- The LED is illuminated blue for 2 seconds and then goes out.
- After 5 seconds, the LED alternates flashing in red and blue. The radio code is transmitted.

Operator

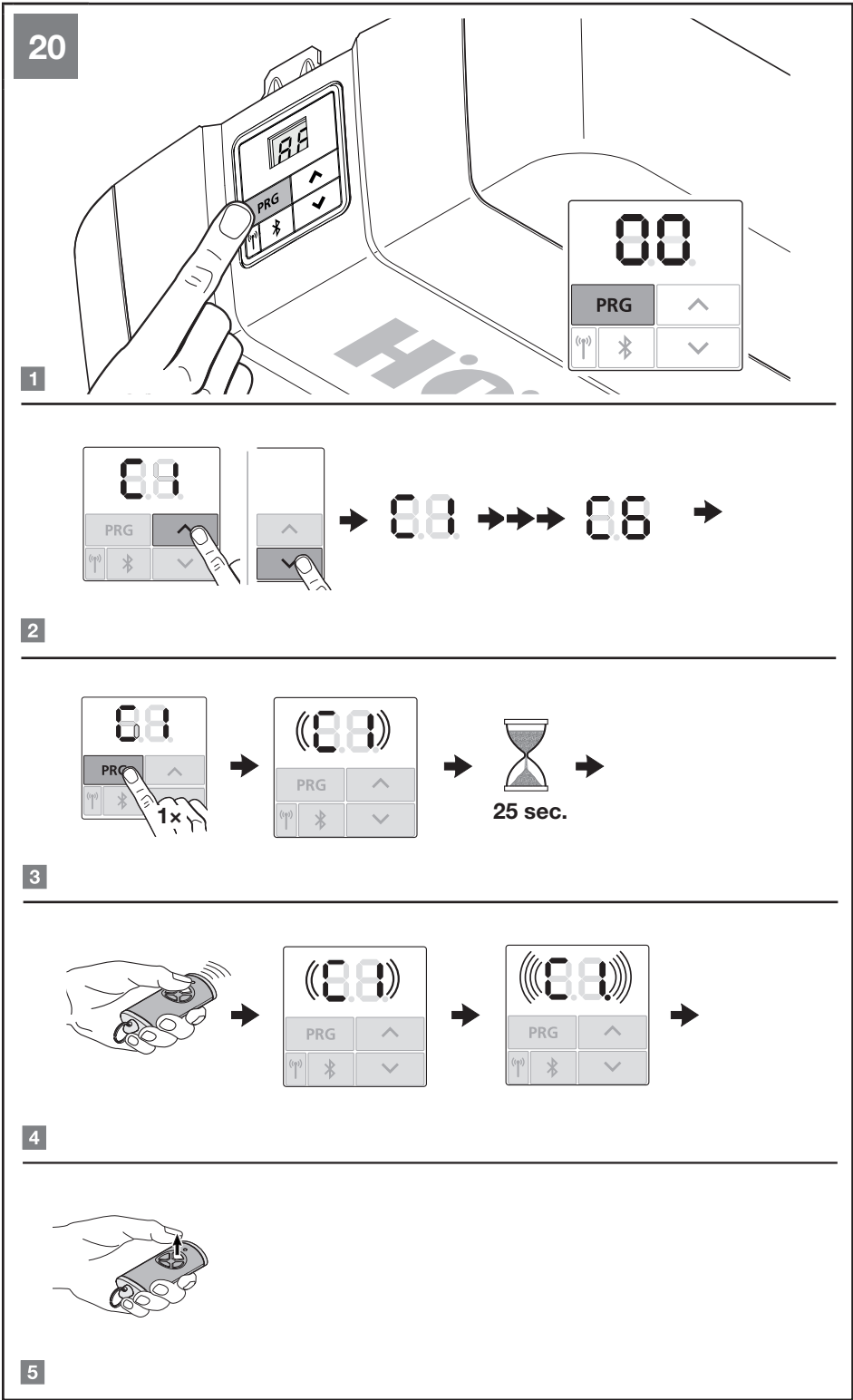
If the receiver detects a valid radio code, the corresponding selected radio channel C1 – C6 and also the right decimal point flashes quickly, for example C1. .

5. Release the hand transmitter button.

THE REMOTE CONTROL IS NOW READY TO USE.

The selected radio channel flashes slowly on the 7-segment display, for example C1. Further hand transmitter buttons can be taught in within 25 seconds. If no valid radio code is detected or the  button is pressed during this time, this menu is closed.

The selected radio channel with decimal point lights up on the display, for example C1. .



3.2.3 Learning runs

The opener is now ready for learning. To ensure proper operation, several cycles are required. During these cycles, the opener learns automatically and adjusts the travel and force limits for optimal performance.

NOTE

During the learning process, the safety beam is in operation.

Take care not to break the path of the safety beam.

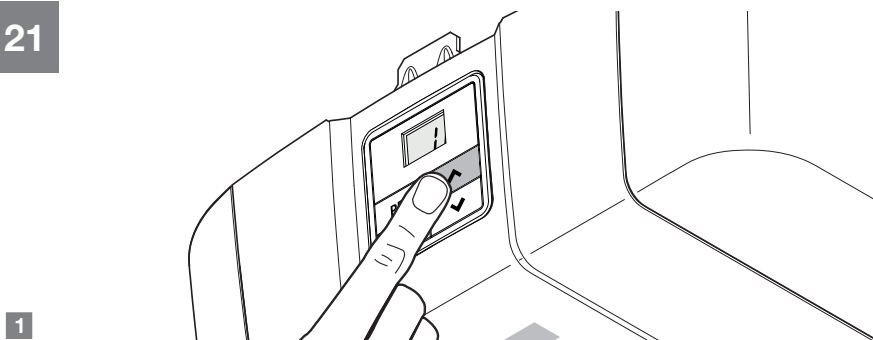
- 1 Press the button  (Fig. 21). This actuates the following door cycles:
- 2 The door opens completely, then closes completely. This cycle learns the end-of-travel limits.
- 3 The door opens completely, then closes completely. This cycle learns the force limits.
- 4 The door opens completely. The opener light illuminates for 180 seconds.
- 5 Display of taught-in forces.

NOTE

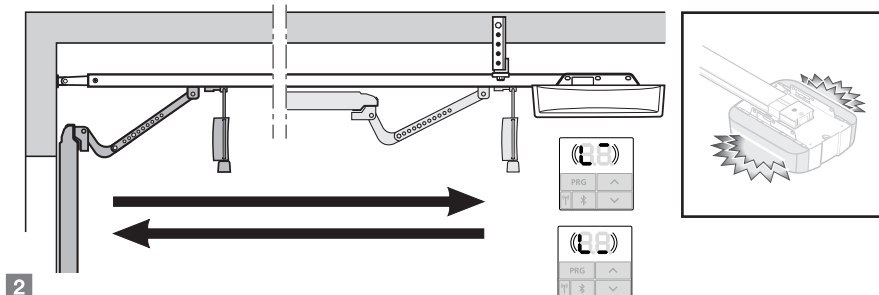
This learning process can always be interrupted by pressing the buttons , ,  or the wall button. Pressing one of these buttons again will reset the opener and you can restart the learning process as described above.

The opener constantly checks the forces required for door operation and adjusts them if necessary.

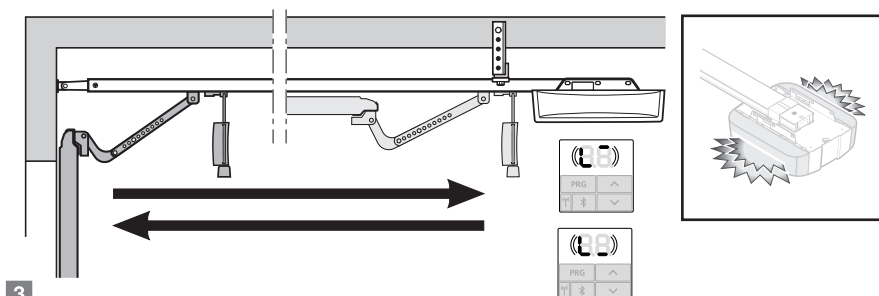
21



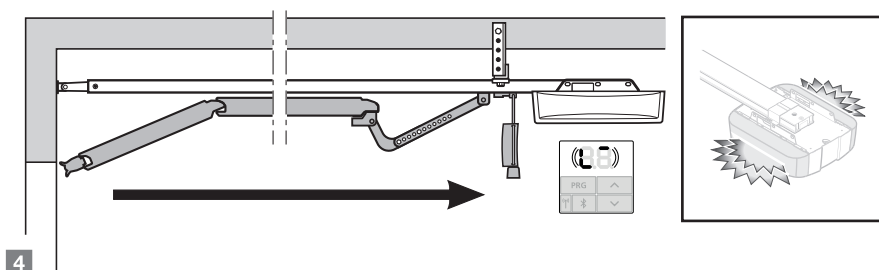
1



2



3



4



After the learning runs, a number displays the maximum determined force. This value indicates the following:

Door width < 16 ft	Door width ≥ 16 ft, track application L	
0 - 2	0 - 4	Optimal force ratios.
3 - 9	5 - 9	Poor force ratios. Check or readjust the door system.

5

 is then illuminated. The reversal limit must be taught in.

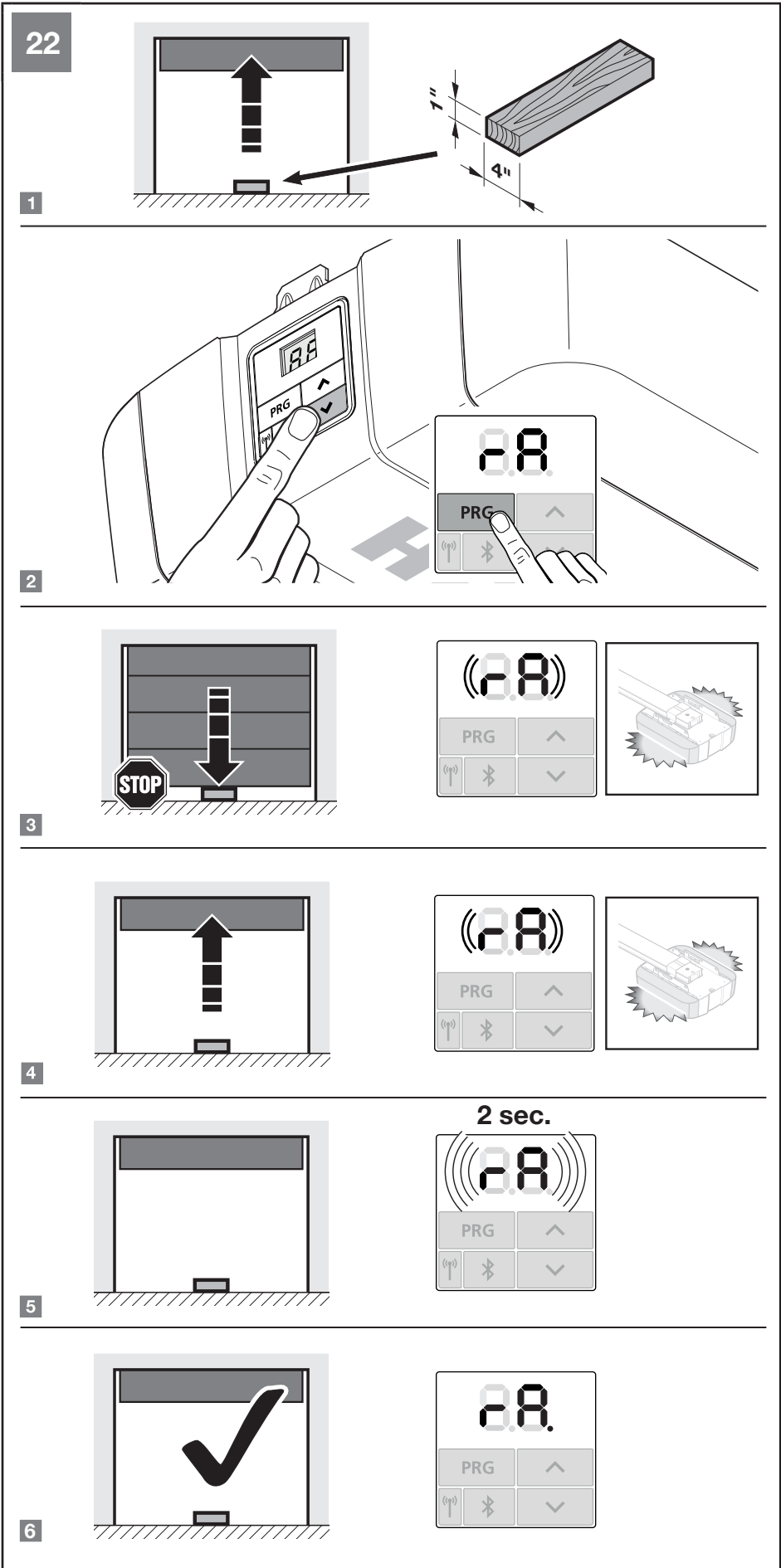
3.2.4 Adjustment of reversal limit

NOTE

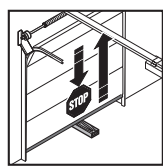
The reversal limit can only be adjusted after the opener has finished the learning cycles. Once the opener has completed the learning cycles, the reversing limit is adjusted to a medium setting. To adjust the reversing limit, the door has to be in the open position.

1. Place a suitable object on the floor in the middle of the door at the height at which you want the door to reverse.
2. Start the process by pressing the button  (height: min. 3/8", max. 1").

The door closes and reverses when it touches the object on the floor. Then the door opens again.



⚠ WARNING

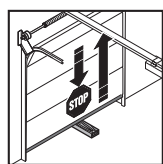


Always test the opener after any adjustment. Failure to adjust the opener significantly increases the risk of **SEVERE INJURY** or **DEATH**. The garage door **MUST** reverse on contact with a 1-1/2" high object (or a 2×4 board laid flat) on the floor.

THE OPENER IS NOW READY FOR USE.

Once the test cycles have been completed, the fixed stops have to be securely fastened. The toothed drive belt in the guide rail has been preset at the factory to the optimal tension. During operation (in the accelerating or braking phase), the belt may hang out of the guide rail briefly. This can happen on very heavy doors and does not affect the normal function or service life of the opener.

⚠ WARNING



- No person or obstacle should disturb the door's range of travel. **SERIOUS INJURY** can result!
- **DO NOT** place your fingers into the guide rail while the door is moving. Serious injury can result!
- After any adjustment, you must check the "reversal upon obstacle" function is working properly. The garage door **MUST** reverse on contact with a 1-1/2" high object (or a 2×4 board laid flat) on the floor.

THE INSTALLATION IS NOW COMPLETE.

3.3 Remote Control

USA: FCC ID: 2BML5HSE4-315

Canada: IC: 4205A-HSE4315

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.

⚠ CAUTION

Changes or modifications made to this equipment not expressly approved by Hörmann could void the FCC authorization required to operate this equipment.

The radiated output power of hand transmitter HSE 4 with an operating frequency 315 MHz is well below the FCC radio frequency exposure limit. Nevertheless, the operating frequency 315 MHz shall be used in such a manner that the potential for human contact during normal operation is minimized.

IC: before the equipment certification number indicates that the Industry Canada technical specifications have been met. It does not guarantee that the certified product will operate to the user's satisfaction.

3.4 Usage of remote control

⚠ WARNING

Changes or modifications made to this equipment not expressly approved by Hörmann could void the FCC authorization required to operate this equipment.

Hand transmitters should only be used by persons who know how to operate the remote-controlled door.

⚠ WARNING

Keep remote controls and hand transmitters out of reach of children.

Do not let children play with or use transmitters or other remote control devices.

Only use the hand transmitter if you are within sight of the door.

⚠ WARNING

Please note that unintended door cycles may occur if a hand transmitter button is accidentally pressed (e.g. if stored in a pocket / handbag).

Always program the remote control inside the garage and near the door opener.

- Make sure equipment is not exposed to direct sunlight.
- Protect the hand transmitter from humidity and dust.

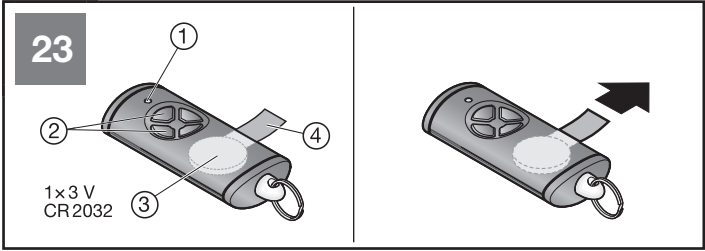
Negligence, in particular exposure to moisture, may impair functions.

Temperature tolerance: -4°F to +140°F

NOTE

Local conditions can affect the range of the remote control.

3.4.1 HSE 4 hand transmitter



- 1 LED, Bicolor
- 2 Hand transmitter buttons
- 3 Battery
- 4 Battery insulation foil

After removing the battery insulation foil, the hand transmitter is ready for operation.

⚠ WARNING

- To prevent possible **SERIOUS INJURY** or **DEATH**:
- NEVER allow small children near batteries.
 - If the battery is swallowed, notify a doctor immediately.
- To reduce risk of fire, explosion or chemical burn:
- Replace **ONLY** with a 3 V CR2032 coin battery.
 - **DO NOT** recharge, disassemble, heat above 212 °F or incinerate.

3.5 Integrated radio receiver

The integrated 6-channel radio receiver enables you to control 6 different functions separately.

1. Channel 1 is for impulse operation: Open-Stop-Close-Stop.
2. Channel 2 is for the opener light.
3. Channel 3 is for Partial Position.
4. Channel 4 is for travel in the OPEN direction.
5. Channel 5 is for travel in the CLOSE direction.
6. Channel 6 is for Air Position.

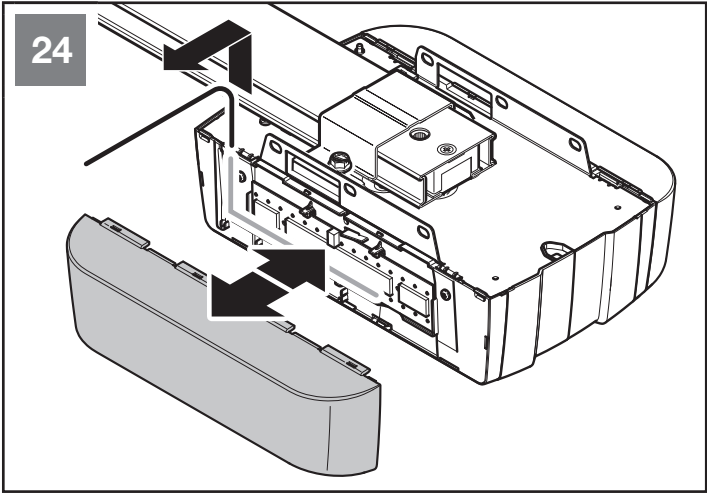
The integrated 6-channel radio receiver can store up to 50 different radio codes. These radio codes can be distributed across the existing channels. These radio codes are stored “First In – First Out”:

If all storage spaces have been used and an additional code is programmed, the first code will be deleted.

NOTE

To transmit the codes from the hand transmitter to the integrated receiver, keep a distance of at least 3 feet between the two devices.

3.5.1 Improving the reception of radio codes



If you need to improve the reception of the integrated receiver, route the aerial wire out of the lamp housing.

NOTE

Make sure that the aerial wire of the receiver does not come into contact with metallic objects (nails, struts, etc.).

3.6 Deleting radio codes

You cannot delete individual radio codes. If you have to delete a radio code you will have to delete all codes.

1. Press and hold the button **PRG**, until **00** illuminates on the display.
2. Press the **▲** and **▼** buttons to select the menu **Cr**. **Cr** flashes slowly on the display and the acoustic signal transmitter beeps slowly.
3. Press and hold the **PRG** button until **Cr** flashes quickly on the display and the acoustic signal transmitter beeps continuously.

All radio codes are now deleted, Cr is illuminated on the display.

NOTE

If you release the button **PRG** before the audible signal sounds, the deletion procedure will be interrupted.

3.7 Connection of additional components / accessories

⚠ CAUTION

Disconnect the power supply prior to working on the opener.

3.7.1 Connection of a separate push button

NOTE

Up to two push buttons PB 3 / PB 3-M can be connected.

1. Route the cables away from any line voltage components, wires and cables that may exist on site.
2. Use a staple gun to attach the cables. Do not use the staple gun for power cords and antennas. Make sure that the staples leave sufficient space for the cable in order to prevent cable damage. All connection terminals can be assigned several times, but not more than 1 × 15 AWG.

Once the wall control has been installed correctly, the button will light up.

3.8 BUS scan

During a BUS scan, accessories connected to the BUS socket are deleted and recognized again.

1. Press and hold the  button until **00** illuminates on the display.
2. Press the  and  buttons to select the menu **Sc**.
3. Briefly press the  button once.
Sc flashes slowly on the display for 5 seconds and quickly for 2 seconds.

Sc flashes slowly during the BUS scan. When the BUS scan is completed, the number of taught-in BUS participants is displayed for 5 seconds. The menu is then closed and **Sc** lights up on the display.

3.9 Deleting bluetooth® devices

You cannot delete individual bluetooth® devices. If you have to delete a bluetooth® device, you will need to delete all devices.

1. Press and hold the button , until **00** illuminates on the display.
2. Press the  and  buttons to select the menu **Br**. **Br** flashes slowly on the display and the acoustic signal transmitter beeps slowly.
3. Press and hold the  button until **Br** flashes quickly on the display and the acoustic signal transmitter beeps continuously.

All bluetooth® device are now deleted Br is illuminated on the display.

NOTE

If you release the button  before the audible signal sounds, the deletion procedure will be interrupted.

3.10 Programming

3.10.1 Programming / changing the partial position

The factory setting for the partial position is 3 ft 1-7/8 in boom travel before the CLOSE end-of-travel position. The position can be changed to a minimum boom travel of 4-3/4 in before each end-of-travel position.

The partial position can be approached as follows:

- Via the 3rd radio channel (menu **C3**)
- An external radio receiver
- An impulse on the terminals 20/23
- Via Bluetooth®

To change the partial position:

Move the door to the desired position.

Press and hold the  button until **00** illuminates on the display. Press the  and  buttons to select the menu **PP**. **PP** flashes slowly on the display.

Press and hold the  button until **PP** flashes quickly on the display. **PP** is then illuminated.

The changed position is saved.

If the selected position is outside the permitted range, the error **01**. appears with a flashing decimal point. The factory-set position is set automatically, or the most recent valid setting is maintained.

3.10.2 Programming / changing the air position

The factory setting for the air position is 3-7/8 in boom travel before the CLOSE end-of-travel position. The position can be changed to a minimum boom travel of 1-1/4 in before the CLOSE end-of-travel position and a maximum boom travel of 4-3/4 in before the OPEN end-of-travel position.

The partial position can be approached as follows:

- Via the 6th radio channel (menu **C6**)
- Via Bluetooth®

To change the air position:

1. Move the door to the desired position.
2. Press and hold the  button until **00** illuminates on the display.
3. Press the  and  buttons to select the menu **AP**. **AP** flashes slowly on the display.
4. Press and hold the  button until **AP** flashes quickly on the display. **AP** is then illuminated.

The changed position is saved.

If the selected position is outside the permitted range, the error **01**. appears with a flashing decimal point. The factory-set position is set automatically, or the most recent valid setting is maintained.

3.10.3 Programming the automatic timed closing from the OPEN end-of-travel position (hold-open phase)

With the automatic timer, the door opens upon a travel command. Once the 60-second hold-open phase and automatically activated 5-second pre-warning time have elapsed, the door closes automatically.

To set the hold-open phase:

1. Press and hold the  button until **00** illuminates on the display.
2. Press the  and  buttons to select the menu **Ac**. **Ac** is illuminated.
3. Press the  button once. **Ac**. is illuminated.

The hold-open phase is set.

3.10.4 Programming the automatic timed closing from the partial position

With the automatic timer, the door opens upon a travel command until the partial position is reached. Once the 180-second hold-open phase and automatically activated 5-second pre-warning time have elapsed, the door closes automatically.

To set the automatic timer:

1. Press and hold the  button until **00** illuminates on the display.
2. Press the  and  buttons to select the menu **Pc**. **Pc** is illuminated.
3. Press the  button once. **Pc**. is illuminated.

The automatic timer is set.

3.11 Push button PB 3

Push button PB 3 allows

- door control (Fig. 25.1),
- opener light (Fig. 25.2)
- vacation function (Fig. 25.3).

NOTE

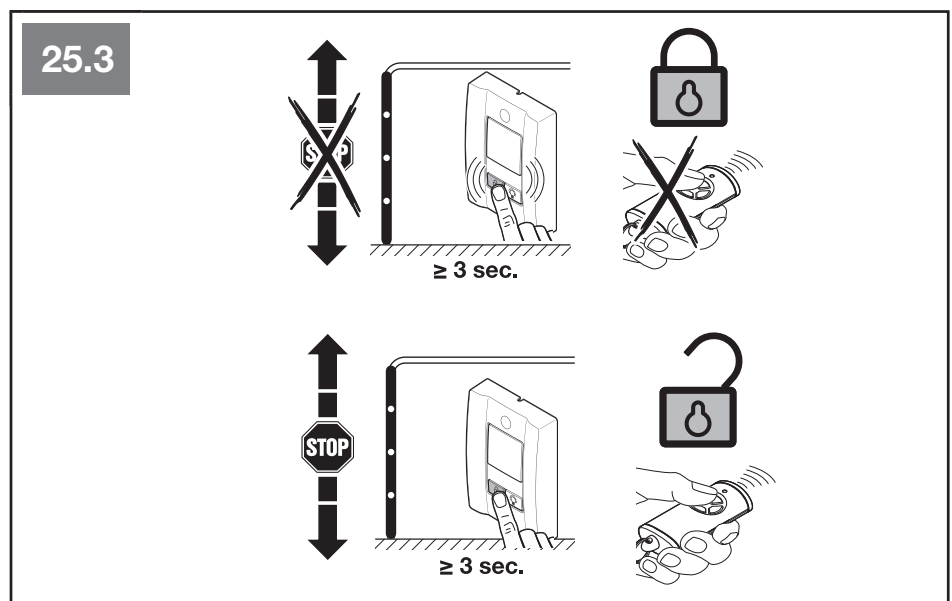
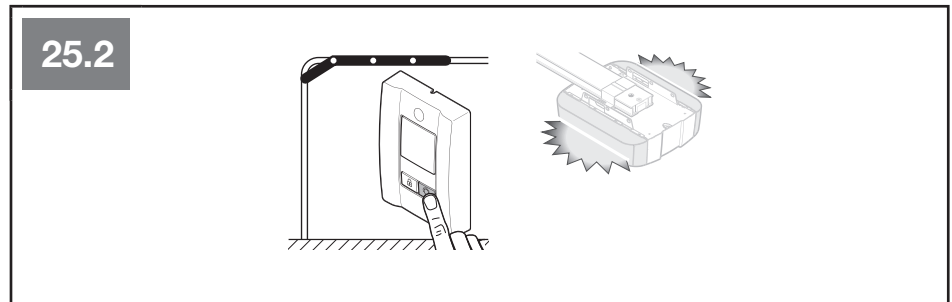
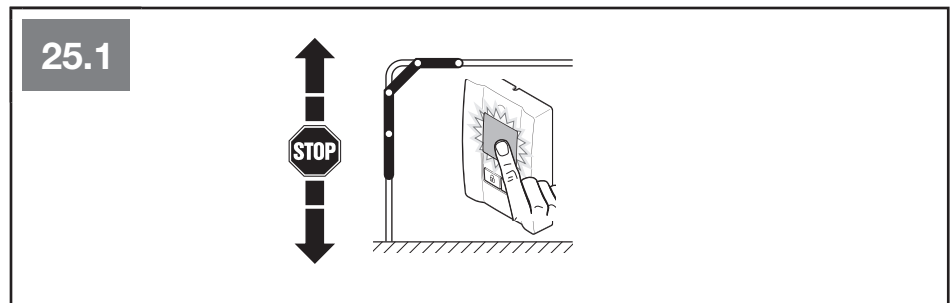
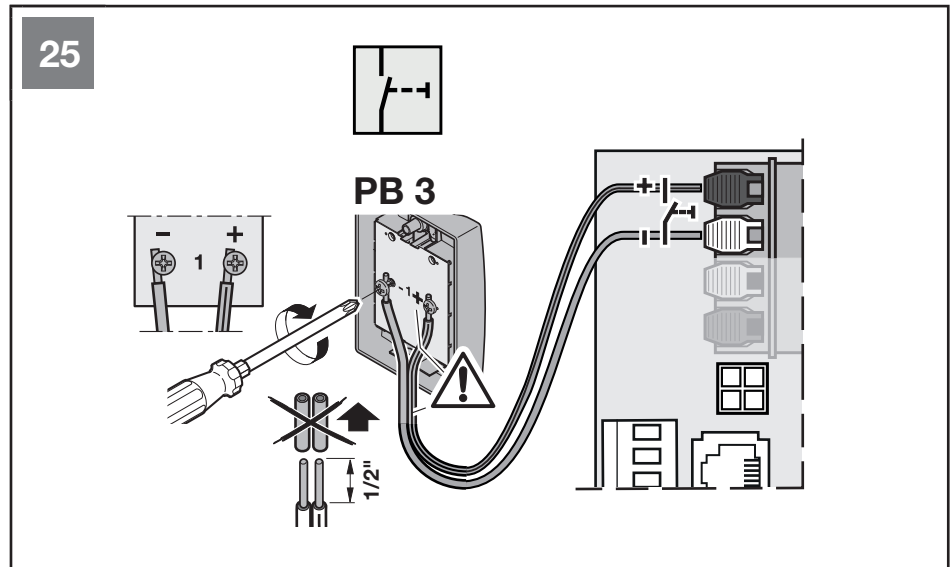
Up to two push buttons can be connected.

Once installation and wiring have been correctly completed, the button on the wall control will illuminate.

NOTE

- To enable the vacation function, press and hold the lock button (Fig. 25.3) for about 3 seconds until the light of the wall button starts flashing.
- To dissable the vacation function, press and hold the lock button (Fig. 25.3) until the light of the wall button stops flashing.

The reception of radio codes is disabled when the vacation function is active and the light of the wall button is flashing.



3.12 Opener light

The opener light can be activated in two different ways:

- The door starts to move.
- The light is activated using the second button of the hand transmitter or the light button of push button PB 3.

NOTE

An additional impulse starts the duration of light again.

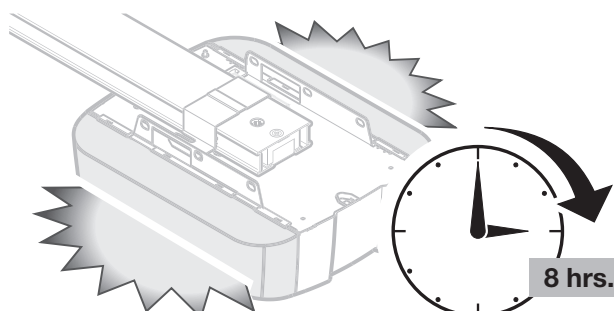
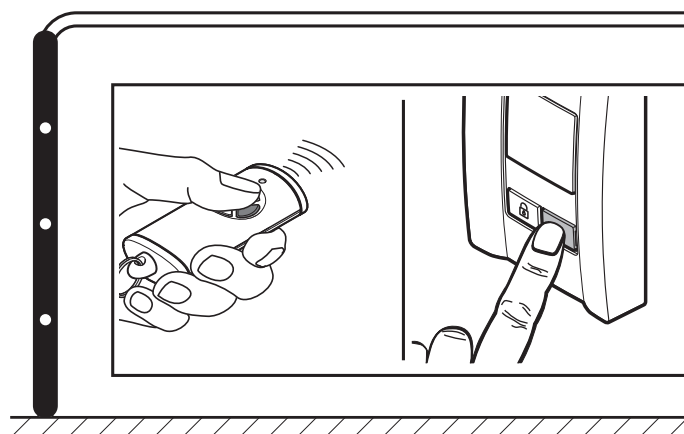
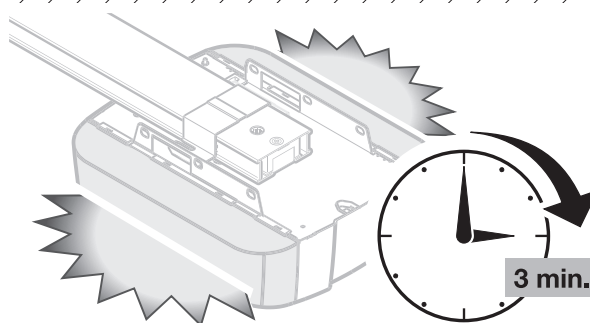
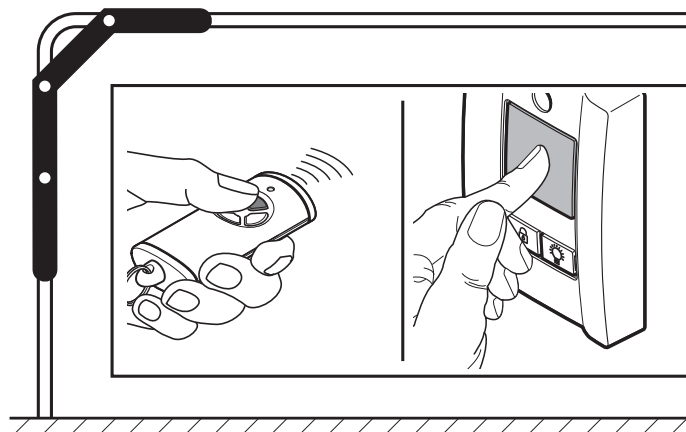
Duration of opener light

When the opener is used and the light is on, pressing the light button within 3 minutes switches the light off.

Pressing the light button again switches the light on.

When both, the opener and the light are off, the light can be toggled on and off using a light command. In this case, the lighting will automatically switch off after 8 hours.

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4 Connection of additional components / accessories

CAUTION

Danger of injury due to incorrectly selected door type.
Door system malfunctions may cause injuries.
Only select the menu for the door system that you have.

4.1 Wall control PB 3-M

Push button PB 3-M allows:

- door control (Fig. 27.1),
- operator light (Fig. 27.2),
- vacation function (Fig. 27.3),
- motion sensor (Fig. 27.4).

Once installation and wiring have been correctly completed, the large button on the PB 3-M will light up.

NOTE

This lock button (vacation function) is designed to prevent operation of the door from any radio control.

- ▶ To activate this function: press the button for at least one second.
The light of the door control button will flash.
- ▶ To deactivate this function: press the button for at least one second.
The light of the door control button will stop flashing and lights permanently.

The light of the door control button flashes as long as the lock function is activated.

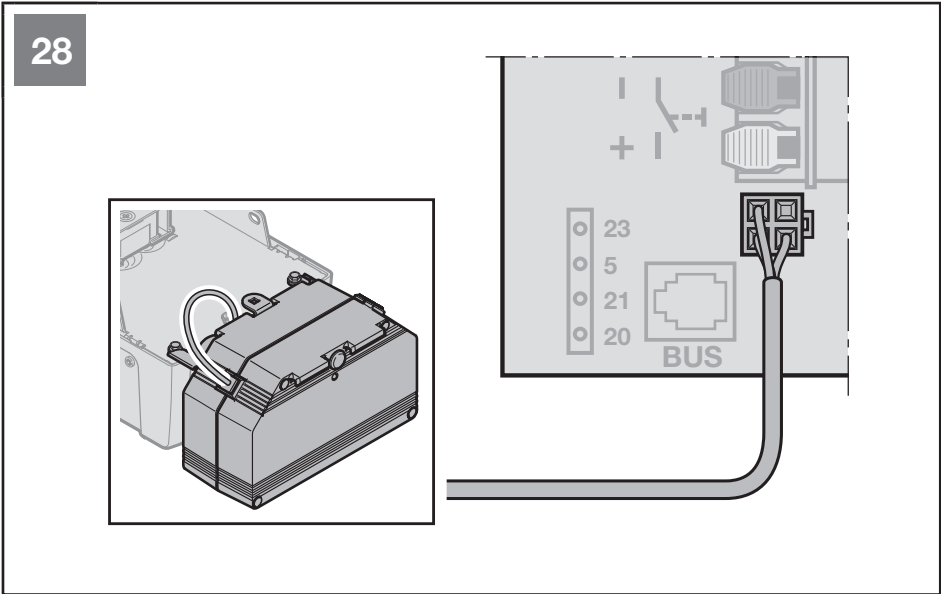
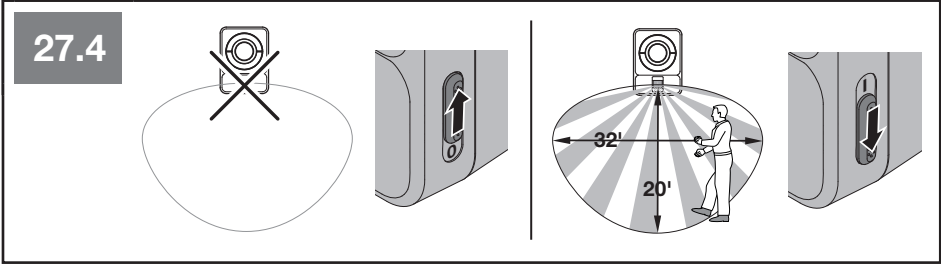
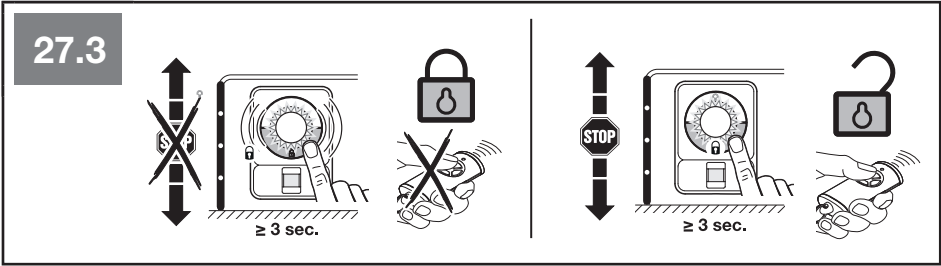
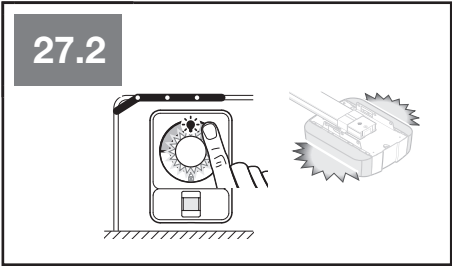
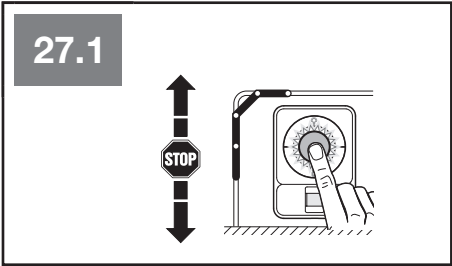
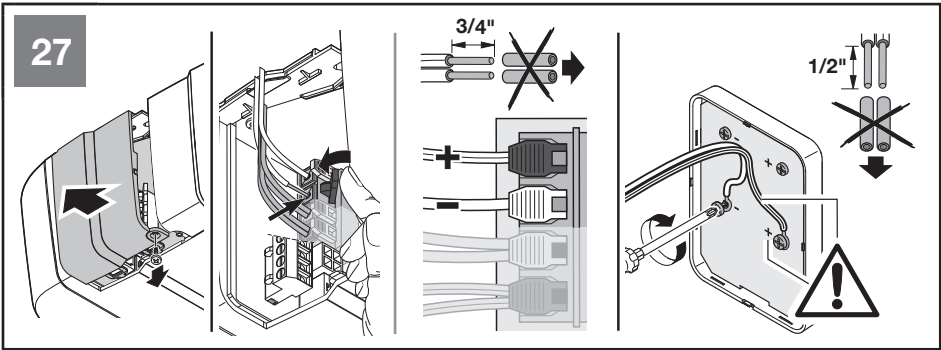
4.2 Battery backup

To move the door in the event of a power failure, an optional emergency battery can be used (Fig. 28). The system automatically switches to battery operation. During battery operation, fewer LEDs are illuminated on the operator light.

WARNING

Danger of injury due to unexpected door run.

- An unexpected door run may occur if the mains plug is pulled out while the emergency battery is still connected.
- Disconnect the mains plug and the emergency battery plug whenever work is being carried out on the door system. Ensure that the door system cannot be switched on again without authorization.



5 Bluetooth®

The garage door operator is equipped with a Bluetooth® receiver. The operator can be controlled via Bluetooth® using the corresponding BlueSecur application (app) on a smartphone.

1. Download the free BlueSecur App.



2. After Bluetooth® is configured, operation with 1 smartphone is free of charge. All other users or admins are subject to a fee.

5.1 BlueSecur application (app)

The BlueSecur app is available free of charge in the App StoreSM or from GoogleTM Play.

- Install the BlueSecur app on your smartphone.

5.1.1 System requirements

Operating system		Software version
Android	Smartphone	see the app info in the Play Store
iOS	Smartphone	see the app info in the App Store

5.1.2 App authorizations

In order to use the full functionality of the app, you must allow the following authorizations:

Camera	To scan the QR code.
Bluetooth®	For the communication between app and receiver.
Location Android	For the Bluetooth® function.
Contacts	To distribute (virtual) keys to one's contacts.

5.1.3 Users

Admin	The first user who connects with the receiver via the QR code automatically is the admin.
	Allocates access rights (keys) for users and one additional admin.
	Can delete access rights (keys) for users.
User	Receives access rights (keys) from the admin.

5.1.4 App functions

In the app, you can select the functions (impulse, lighting, partial opening position, choosing OPEN and CLOSE direction and air position) and notifications. The factory setting is the impulse function.

Triggering a command

Using the app, the user/admin can trigger a command within the range of the Bluetooth® receiver.

Diagnostic data

Operator diagnostic data, such as error messages, operating hours, maintenance displays and door cycles, can be read with the app.

5.1.5 Deleting a device

If the garage door operator is deleted in the app using the dustbin icon, the operator can no longer be controlled using the smartphone. However, the smartphone is still saved in the operator.

To remove the smartphone from the operator, select menu **Br** and delete all Bluetooth® devices.

5.1.6 Keys

Purchasing sets of keys

In order to distribute keys, the admin must purchase sets of keys using the in-app purchase function. Payment is made according to the App StoreSM or GoogleTM Play policies.

One-time keys are free of charge.

Distributing keys

The admin can

- Distribute keys to users via all installed messaging services, e.g. e-mail, Facebook Messenger, iMessage, WhatsApp etc.
- Only distribute a paid key **once** to another admin.
- Distribute a **maximum of 250** paid keys to users.
- Distribute a **maximum of 15** free one-time keys simultaneously.

NOTE

The BlueSecur app must be installed on the smartphone to use the key. If users have not installed the app upon receiving a key, they will be directed to download it from the App StoreSM or GoogleTM Play.

Key type	Validity
Admin key	Always valid
User key	Always valid or just for a defined time period
One-time key	Valid only once and within a maximum of 1 month

The admin has 2 options for defining the time of validity for one-time keys:

1. The one-time key is valid immediately and can be used just once, within a maximum of 1 month.
2. The one-time key is valid from a defined date and can be used just once, within a maximum of 1 month.

Security when distributing keys

When the admin distributes a key to a user, for security reasons, the user must authenticate themselves using a PIN generated by the server. The user must enter this PIN before the key can be provided to them.

Admin key

Admin keys cannot be deleted, not even by the 1st admin. To delete an admin key, select menu **Br** and delete the device from the Bluetooth® receiver.

If an admin key has been distributed by the 1st admin, the 2nd admin must be in range of the receiver to import the key. Once the receiver has recognized the valid admin key, the rights can be used.

5.1.7 Backup

To prevent loss of data, you can create a backup on the Hörmann server. Saved data can be accessed there at any time.

To create a backup, you must first register.

All of the following data existing up to this point will be saved:

- Devices (garage door operators)
- Purchased sets of keys
- Distributed keys

A backup is necessary for restoring data:

- If the admin changes the smartphone
- Before a device reset
- If the smartphone is defective or lost

A backup is strongly recommended to secure the data.

5.2 Enabling / disabling Bluetooth®

If Bluetooth® is disabled:

1. Briefly press the  button on the operator control panel. Bluetooth® is enabled and in receiver mode. The Bluetooth® symbol flashes.
2. A connection can be established. The Bluetooth® receiver remains in receiver mode for 5 minutes and then switches back to operation mode. The Bluetooth® symbol is illuminated.
3. Briefly press the  button on the operator control panel. Bluetooth® is disabled. The Bluetooth® symbol is off.
4. To enable it again, repeat step 1.

5.3 Configuring Bluetooth®

The first user that connects with the Bluetooth® receiver using the supplied QR code is the admin. This procedure can only be performed once!

1. Bluetooth® must be enabled.
2. Start the app in range of the Bluetooth® receiver.
3. Select the **Teach in** field (iOS) or the **+** symbol (Android). The camera opens.
4. Scan the QR code.
The first user is connected with the Bluetooth® receiver as the admin.
5. Assign a name to the device.

The Bluetooth® receiver is in operation mode.

Store the QR code in a safe place. You will need the QR code to set up a Bluetooth® receiver again.

5.4 Operation

A connection to the Bluetooth® receiver is always established exclusively through communication with the app, e.g. for triggering a command, adjusting settings in the app or user management.

Only one smartphone can be connected to the Bluetooth® receiver at a time. A connection takes approx. 1 second. Only after this can the next smartphone connect to the receiver.

5.4.1 Range

Range and performance are highly dependent on the smartphone. For communication with the receiver, the user must be in range to perform the following actions:

- Triggering a command
- Set up, manage and delete devices
- Delete user permissions

5.4.2 Synchronising

The date and time is synchronized in the receiver with each communication of the admin's smartphone with the receiver.

5.4.3 Power failure

Taught-in keys, user data and settings are saved in a power failure-proof manner.

5.4.4 Loss of the smartphone

In the event that the smartphone is lost, unauthorized parties could have access to the garage door. In this case, select menu **Br** and delete the device from the Bluetooth® receiver.

5.5 Open source license

The following open source software is included with this product: mbed TLS 2.16.1 (<https://tls.mbed.org>)

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You can get a copy of the license from

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by law or agreed in writing, the software is used under the license "as is" or "as available" without any promises, guarantees or conditions, neither explicit nor implicit.

You will find information on specific language-relevant rights and restrictions in the license, whose complete text you will find in the corresponding "BlueSecur" app.

5.6 Reset opener to factory setting

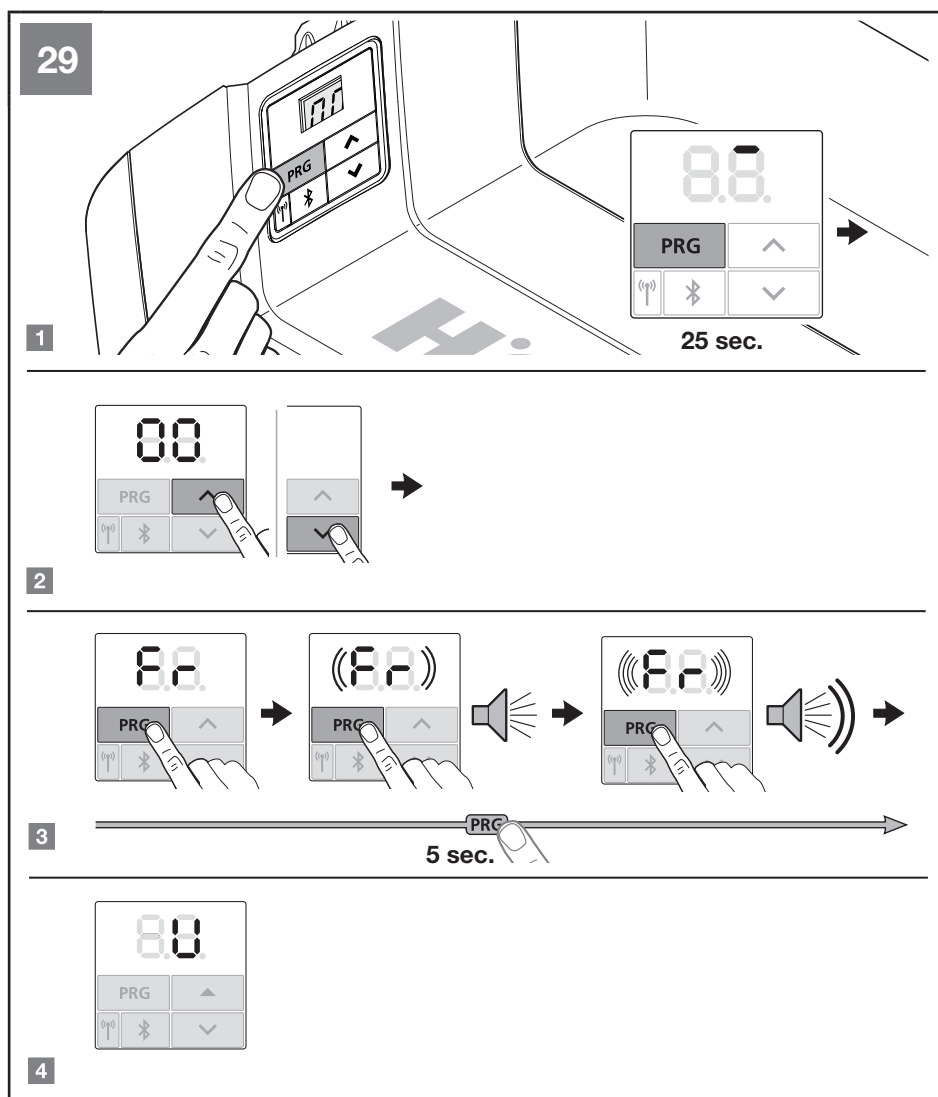
5.6.1 Reset via menu Fr

1. Press and hold the button  , until **00** illuminates on the display.
2. Press the  and  buttons to select the menu **Fr**.
Fr is illuminated on the display.
3. Press and hold the button  .
Fr flashes slowly on the display and the acoustic signal transmitter beeps slowly.
4. When the factory reset has been successfully completed, the **Fr** display flashes quickly and the acoustic signal transmitter beeps continuously.
Afterwards **U** is illuminated.

The original factory settings are active and the opener is in learning mode. **Relearn the opener** – refer to 3.2.

NOTE

The reset to factory settings does not delete the radio codes.



5.6.2 Reset via the PRG button

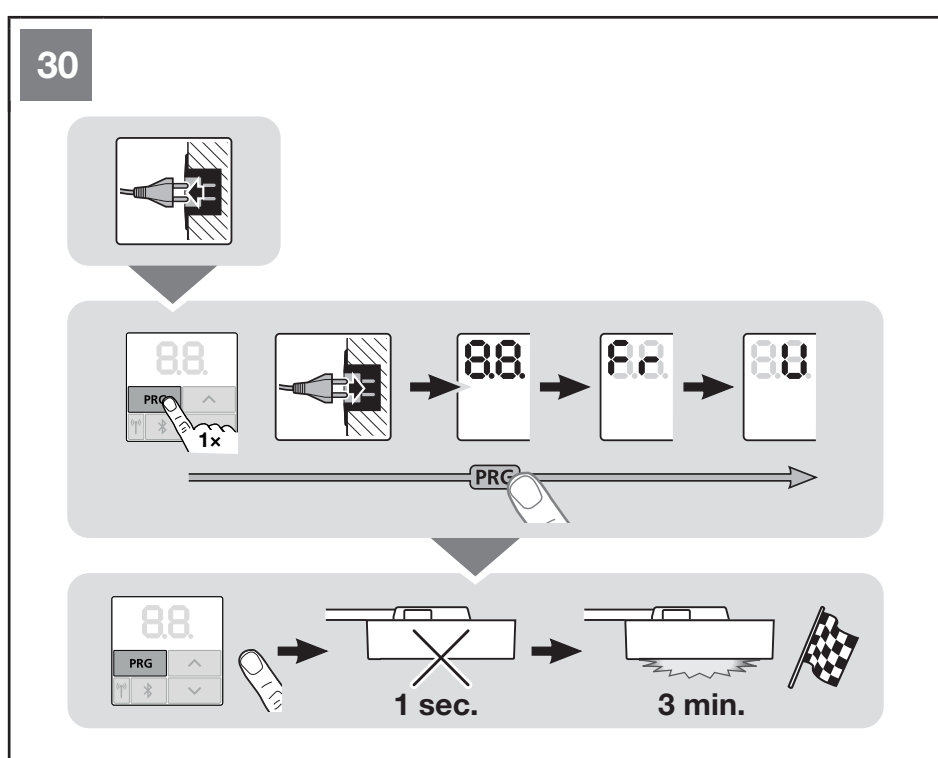
1. Disconnect the mains plug and, if applicable, the plug of the emergency battery.
2. Press and hold the  button.
3. Reconnect the mains plug. The display shows
 - **8.8** for two seconds and the operator light is continuously lit.
 - **Fr** illuminates when the factory reset is started.
 - **U** is then illuminated.
4. Release the  button.

The operator light goes out for 1 second and then lights up for 3 minutes

The original factory settings are active and the opener is in learning mode. Relearn the opener – refer to 3.2.

NOTE

The reset to factory settings does not delete the radio codes.



6 General advice for operation of the opener

Do not activate the opener unless you have a clear view of the door and surrounding area. Do not walk under a moving door. The door should not be operated by anyone who is not familiar with the safety and operating instructions.

Safety testing to be conducted on a monthly basis.

Safety beam

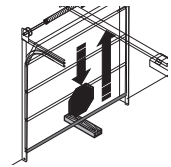
With the door travelling in the close direction, interrupt the safety beam at the bottom of the door by passing an object through the beam. Take care not to enter the path of the moving door.

The door should reverse and reach the “fully open” position. An audible signal sounds 10 times.

Automatic reversal during the cycle

With the door travelling in the down direction, “catch” the door at waist level using both hands (take care not to break the path of the safety beam). The door should stop and reverse up to the “fully open” position.

Automatic reversal at the “fully closed” travel limit



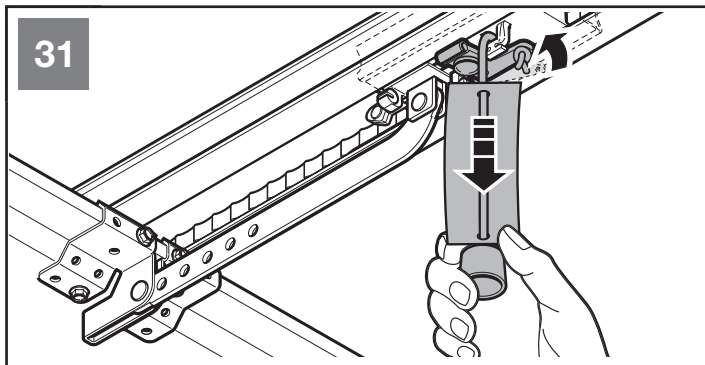
Always test the opener after any adjustment. Failure to adjust the opener properly increases the risk of SEVERE INJURY or DEATH. The garage door MUST reverse on contact with a 1-1/2" high object (or a 2x4 board laid flat) on the floor.

Door check

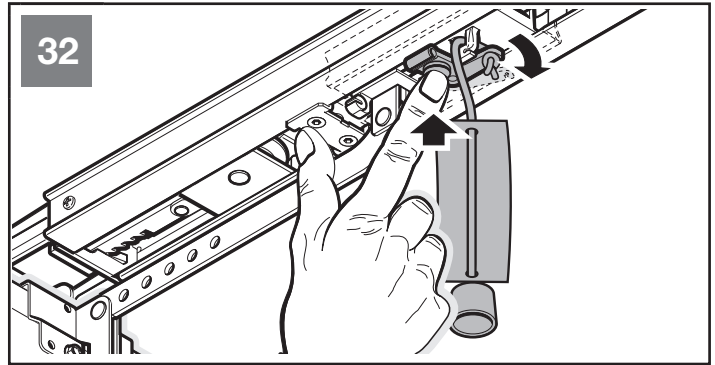
Visually inspect the door assembly (hinges, rollers, bearings, springs and hardware) for signs of wear or damage.

Checking easy motion of the door manually after pulling the emergency release rope. If any of the safety checks cannot be completed, contact a qualified service person to inspect the door and perform any necessary repairs. Do not continue to operate a door that is not functioning properly.

6.1 Emergency release rope



With the door in the “fully closed” position, pull the emergency release rope to **disengage the trolley** from the drive belt. This should require only moderate force.



Reconnect the traveller by pushing the green button on the trolley and manually move the door until the trolley engages with the drive belt.

6.2 Reception indication of the remote control

The hand transmitter features a LED. Every time the transmitter button is pushed, the LED illuminates. If the LED on the transmitter does not illuminate, check that the battery is installed correctly. If necessary, replace the battery.

The opener also has a LED. Every time a signal from a transmitter is received, the LED in the opener goes out briefly. The LED also goes out when the wall control button for door control is pressed.

6.3 Press-and-hold operation

If the safety beam is damaged or not operating: the opener can still be operated by press-and-hold operation.

The garage door can be moved in the open direction as in normal use: Press the transmitter button, the push button or the opener button .

The door can only be moved in the close direction by pressing and holding the push button or the opener button and until the door reaches the “fully closed” position.

If you release the wall control button or the opener button and before the “fully closed” position is reached, the run and emergency operation will end.

7 Maintenance

The opener is **maintenance-free**. For your own safety, we recommend that you have the door and opener equipment inspected once a year by a qualified service person.

WARNING

- Disconnect the power supply prior to working on the opener. Safeguard the door system against being switched on again without authorization.
- Check the function of all safety devices (safety beam, emergency release, automatic reversal) on a monthly basis – refer to 6.
- Contact a qualified service person if your opener fails any of the safety checks.

8 Displaying errors, warnings and operating modes

8.1 Operator light messages

Status	Function
Flashes slowly	Learning runs or reference run are being performed During the pre-warning time
Flashes 2 × once	After the power returns, if the operator has not been taught in.
Flashes 3 × once	Maintenance interval has been reached Expecting a reference run
Goes out for 1 second, then illuminates for 180 seconds	Factory reset successful
Illuminated for 180 seconds	The operator has not been taught in (delivery condition) Normal operation During the hold-open phase for automatic timer

8.2 Operating condition display

	The operator has not been taught in
	Learning runs are necessary
	The operator performs the required learning run in the OPEN direction
	The operator performs the required learning run in the CLOSE direction
	The operator is in the OPEN end-of-travel position
	The operator is in the CLOSE end-of-travel position
	1. The operator moves in the OPEN direction 2. The automatic timer is active 3. The operator has initiated a safety reversal in the CLOSE direction after an error
	1. The operator moves in the CLOSE direction 2. The operator briefly reverses in the OPEN direction after an error
	1. The operator is in the OPEN end-of-travel position 2. The pre-warning phase is active
	1. The operator is in the CLOSE end-of-travel position 2. The pre-warning phase is active
	The operator is in an intermediate position
	1. The operator is in an intermediate position 2. The pre-warning phase is active
	The operator is in the partial position (partial opening)

	The operator moves to the partial position (partial opening) 1. The operator is in the partial position (partial opening) 2. The automatic timer is active
	1. The operator is in the partial position (partial opening) 2. The pre-warning phase is active
	The operator is in the air position (ventilation)
	The operator moves to the air position (ventilation)
	1. The operator is in the air position (ventilation) 2. The pre-warning phase is active
	The operator is expecting a learning run for the CLOSE reversal limit
	The learning run for the CLOSE reversal limit is being performed
	The CLOSE reversal limit learning run has been completed successfully.
	Impulse input from a radio code (flashes 1 ×) Standby (flashes slowly and continuously)
	A reference run is being performed
	Illuminated for 2 seconds 1. On power restoration after a power failure. 2. After a factory reset
	All taught-in radio codes are being loaded.
	Performing a BUS scan
	Emergency operation – Hold Control
	The operator moves to the last force error
	The last force error has been reached

Emergency battery operation

	State of charge 100% – 67%
	State of charge 66% – 34%
	State of charge 33% – 1%

8.3 Program overview

00	Start menu
88	Learning runs
88	Adjustment of reversal limit
88	Radio: Impulse operation (Open-Stop-Close-Stop)
82	Radio: Opener light
83	Radio: Partial position
84	Radio: Travel in the OPEN direction
85	Radio: Travel in the CLOSE direction
86	Radio: Air position

88	Changing the partial position
88	Changing the air position
82	Activating the air position hold-open phase
82	Activating the partial position hold-open phase
52	BUS scan
88	Delete: Radio reset
88	Delete: Bluetooth® reset
88	Delete: Factory reset
58	Opening the advanced menus

8.4 Troubleshooting and control instructions

Display	Error / warning	Possible cause	Remedy
08	Door teach-in not possible	The taught-in travel path is too short	Increase the distance between the end stops
	Setting the reversal limit is not possible	When setting the reversal limit, an obstacle is in the way	Remove the obstacle
		The position of the reversal limit is > 1" before the CLOSE end-of-travel position	Pressing the  and  buttons acknowledges the error. Select a position 3/8" – 1" before the CLOSE end-of-travel position
		The test body was not recognized when setting the reversal limit.	Repeat the setting of the reversal limit.
	Setting the partial position (partial opening) is not possible	The partial opening position is too close to the end-of-travel positions ($\leq 4\text{-}3/4"$ slide travel)	The partial opening position must be $> 4\text{-}3/4"$.
02	Protective device at SE1 (photocell)	Setting the air position (ventilation) is not possible	The air position (ventilation) must be $1\text{-}3/16"$ – $4\text{-}3/4"$ slide travel before the CLOSE end-of-travel position
		No protective device connected	Connect a protective device.
		The protective device signal is interrupted before travel	Set / align the protective device
03	Power limit in the CLOSE direction		Check the connecting leads and, if necessary, replace them
		The protective device is defective	Replace the photocell
04	Static current circuit interrupted	The door is too sluggish or does not move smoothly	Correct the door travel
		Obstacle in door area	Remove the obstacle and teach in the operator again, if necessary
04	Static current circuit interrupted	Static current circuit interrupted on the accessory connected to the BUS socket	Check the accessory on the BUS socket

Display	Error / warning	Possible cause	Remedy
05 _(w)	Power limit in the OPEN direction	The door is too sluggish or does not move smoothly	Correct the door travel
		Obstacle in door area	Remove the obstacle and teach in the operator again, if necessary
		Spring break	Check the springs. If necessary, have a specialist replace the springs.
		Spring tension decreasing	Check the spring tension. If necessary, have a specialist adjust the spring tension.
06 _(w)	System error	Internal error	Perform a factory reset – refer to 5.6, menu Fr – and teach in the operator again; if necessary, replace it
	Travel time limit	The belt is torn	Exchange the belt
		The operator is defective	Replace the operator
07 _(w)	Communication error	Communication with control element or additional print is faulty	Check the connecting leads and, if necessary, replace them
			Check the control element or additional print and, if necessary, replace them
			Perform a BUS scan
08 _(w)	Control elements / operation	Error during input (emergency battery operation)	Exit programming mode. Connect mains voltage. Return to programming mode and change the menu
	Travel command is not possible	The operator was locked for the control elements and a travel command was issued	Release the operator for the control elements
		Initial start-up: No photocell connected	Connect a photocell
		Initial start-up: No mains voltage in emergency battery operation	Disconnect all voltage sources. Connect mains voltage and emergency battery. Launch initial start-up.
09 _(w)	Voltage error (over / undervoltage)	In emergency battery operation: Signalling	Charge the emergency battery
		In the event of power supply undervoltage: Internal error without signalling	Check the voltage source
11 _(w)	Spring	Spring tension decreasing	Check the spring tension. If necessary, have a specialist adjust the spring tension.
		Spring break	Check the springs. If necessary, have a specialist replace the springs.
49 _(w)	Software	Display and control software versions are incompatible	
88	No reference point	The CLOSE direction power limit was activated 3 × in a row Power failure during a door run	Move the door to the OPEN end-of-travel position
88	The operator has not been taught in	Not an error: The operator has not been taught in yet	Teach in the operator – refer to 3.2.
((88))	Maintenance interval signal (In display flashes slowly during and after each door run)	No error The maintenance interval set by the fitter has been exceeded.	Have the door system inspected and maintained by a specialist in accordance with manufacturer specifications.

9 Technical Data of the Garage Door Operator

Power supply	120 V AC, 60 Hz
Standby	Approx. 1 W
Protection category	IP 20, for dry rooms only
Automatic safety cut-out	Is automatically taught in for both directions separately.
End-of-travel position cut-out / power limit	Self-learning, wear-free, as it is designed without mechanical switches, additionally integrated travel time limit of approx. 60 secs. Automatic safety cut-out that readjusts with each door travel.
Rated load	See data label
Pull and push force	See data label
Motor	DC motor, hall effect sensor and electronically controlled “soft start” and “soft stop” with self-locking worm gear.
Connection	No-screw connection technology for equipment with 24 VDC low safety voltage, such as internal push buttons with impulse operation.
Special functions	Photocell
Emergency release	In case of a power failure, to be operated from inside by an emergency release rope.
Remote control	With 4-button hand transmitter HSE 4 (315 MHz) and integrated radio receiver. HomeLink®-compatible. HomeLink® is a registered trademark of Johnson Controls, Inc.
Applications	For residential sectional doors – max. door weight (517 lbs)
Speed of door travel	SilentDrive® 7560 / 8560 series – approx. 7-1/2" per sec.
Airborne noise emitted by opener	≤ 70 dB (A)
Guide rail	1-1/4" high, with integrated door security kit (Patent 6,557,301) and maintenance-free patented toothed belt (Patent 5,868,639)

10 Service

Prior to using our service, please read and check the trouble-shooting and control instructions – refer to 8.4 – as well as the spare parts list – refer to 13.

Please have the following data ready.

FOR YOUR RECORDS:

Date purchased: _____

Purchased at: _____

Model Number: _____

Serial Number: _____

Date installed: _____

Consumer Hotline:
1 877 OK HORMANN (1-877-654-6762)

11 FCC

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 interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does 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.



12 Warranty

Limited Warranty for Silent Drive Garage Door Openers
General Information

Warranty Coverage

Any defect in material or workmanship for the times specified below.

Warranty Period

Lifetime* on motor, opener rail and drive belt, two (2) years from day of purchase on parts (excluding batteries) and remote radio controls.

* Lifetime: For as long as first residential user, purchaser of the Hörmann product, owns or rents home where Hörmann product is first installed.

Warranty Holder

This warranty is limited to the first residential user of the Hörmann product.

Geographic Scope

This warranty applies only to Hörmann products purchased and used in the Continental United States of America, Canada, Puerto Rico and Virgin Islands.

What we will do

If Hörmann believes product or parts have defects in materials or workmanship, Hörmann will, at its discretion, provide you with refurbished or replacement parts or product at no charge or refund the purchase price. The refurbished or replaced parts or product may then be installed by your professional installer at your expense.

If Hörmann repairs or replaces defective parts or a defective product, it may use new or reconditioned replacement parts with an identical or similar design.

Limitations

EXCEPT FOR THIS LIMITED WARRANTY, HÖRMANN DISCLAIMS ALL OTHER EXPRESS WARRANTIES, DOES NOT WARRANT THE PERFORMANCE OF THIS PRODUCT, AND EXPRESSLY REJECTS ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. NO REPRESENTATIVE OF HÖRMANN MAY CHANGE OR ALTER THIS LIMITED WARRANTY OR EXTEND THIS LIMITED WARRANTY TO ANYONE OTHER THAN THE ORIGINAL RESIDENTIAL USER. HÖRMANN'S EXCLUSIVE OBLIGATIONS UNDER THIS LIMITED WARRANTY WILL BE LIMITED TO REPAIRING OR REPLACING ANY COMPONENTS THAT, UPON INSPECTION, APPEAR TO HAVE DEFECTS IN MATERIALS AND/OR WORKMANSHIP. HÖRMANN SHALL DETERMINE, AT ITS SOLE DISCRETION, WHETHER REPAIR OR REPLACEMENT IS APPROPRIATE. REPLACED PARTS BECOME THE PROPERTY OF HÖRMANN. REPLACEMENT PARTS MAY BE NEW OR RECONDITIONED PARTS WITH AN IDENTICAL OR SIMILAR DESIGN. HÖRMANN SHALL ACCEPT NO LIABILITY FOR DAMAGES OR LOSSES OF ANY KIND CAUSED DIRECTLY OR INDIRECTLY BY ANY BREACH OF THIS LIMITED WARRANTY OR THE USE OR INABILITY TO USE THIS PRODUCT, INCLUDING BUT NOT LIMITED TO DAMAGE TO PROPERTY, DAMAGES FOR INCONVENIENCE OR DELAY, DAMAGES FOR LOST PROFITS OR BUSINESS INTERRUPTION, OR DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL,

SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES, EVEN IF HÖRMANN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH POTENTIAL LOSSES OR DAMAGES. IN NO EVENT SHALL HÖRMANN'S LIABILITY EXCEED THE RETAIL COST OF THE PRODUCT COVERED BY THIS WARRANTY.

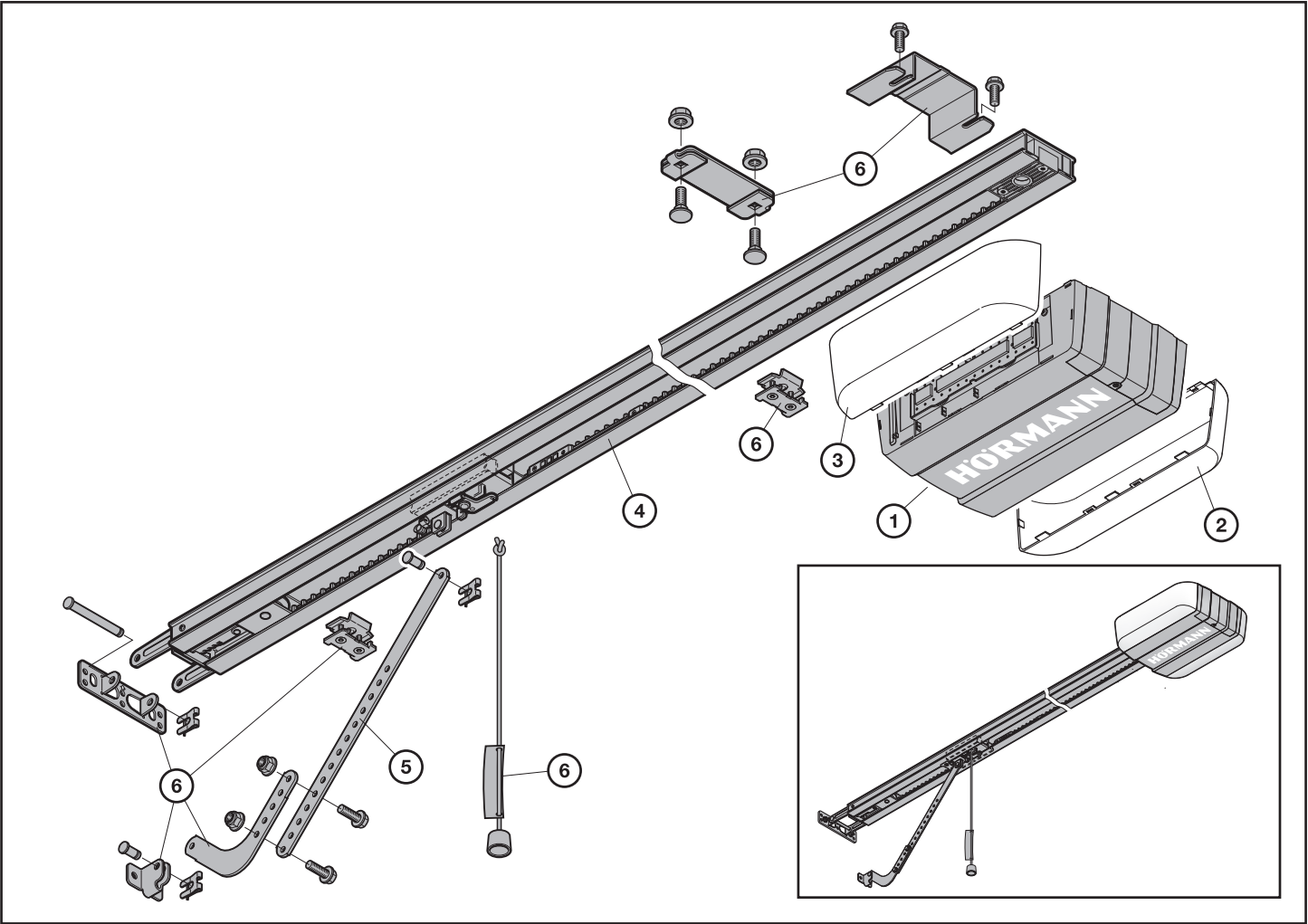
Warranty Service

To obtain warranty service, proof of date and place of purchase of the Hörmann product must be provided. Applications for warranty service or breach of warranty must be made in writing within 90 days of knowledge of the apparent defect to Hörmann LLC, 5050 Baseline Road, Montgomery, Illinois 60538.

What This Warranty does not cover

This Limited Warranty does not cover batteries, removal of defective parts or product or installation of repaired or replacement parts or product, damage while in transit to our service location, commercial use or residential use other than in single family installation, or damages that result from improper installation or operation, lack of proper maintenance, unauthorized repair, product modification, fire, flood, weather, accidents, normal wear or delays in notice to Hörmann.

13 Spare Parts



1	
2	
3	

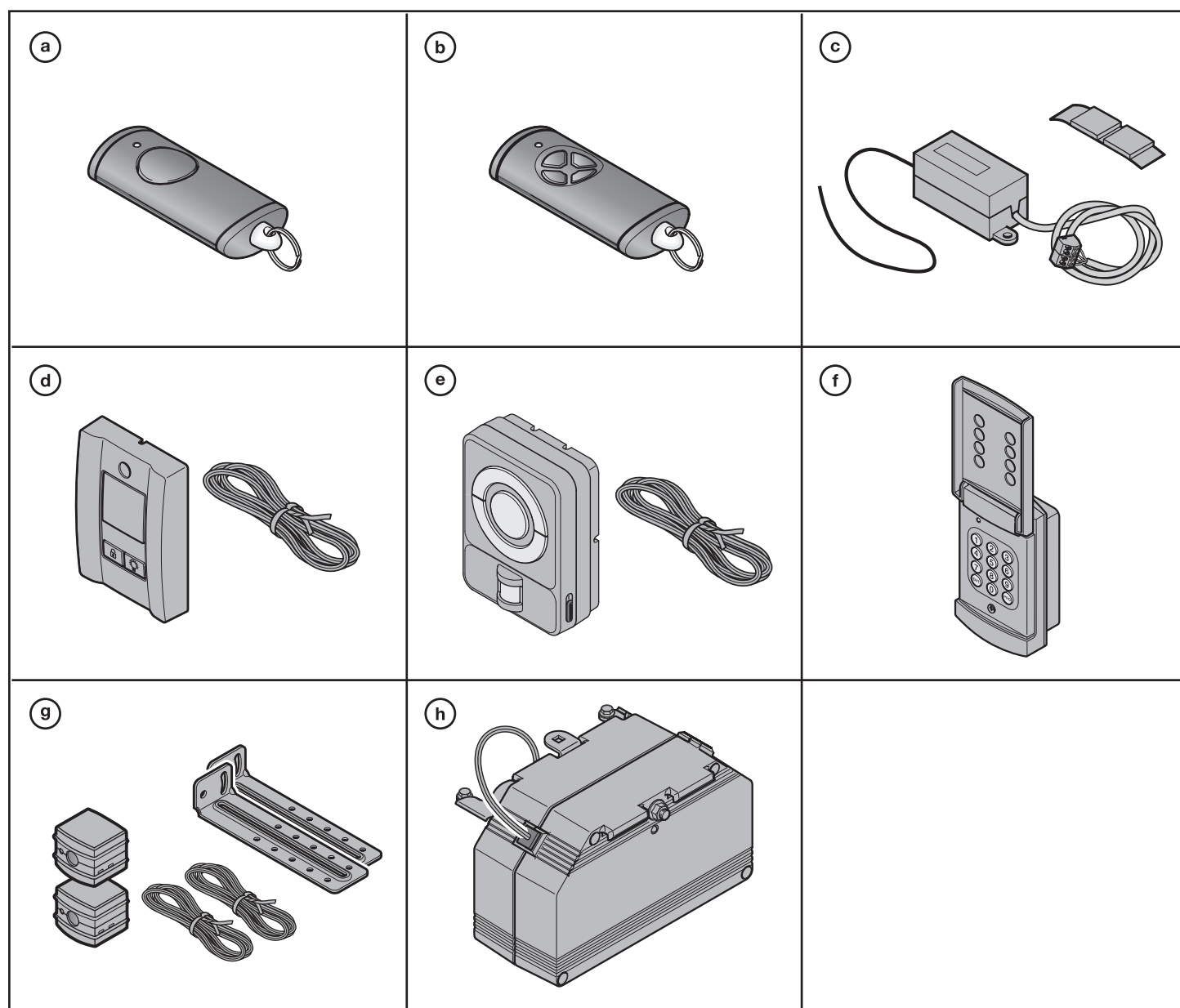
4	
5	
6	

14 Accessories

NOTE

When installing one of these accessories, refer to the installation instructions included there.

Item	Article	Article no.	Description
a	HSE 1-315	4511094	Hand transmitter – 1 button, 315 MHz
b	HSE 4-315	4511095	Hand transmitter – 4 button, 315 MHz
c	HE 2	437 236	Radio receiver – 2-channel, 315 MHz
d	PB 3	437 146	Push button – 3 button (impulse / opener light / vacation switch), illuminated impulse button
e	PB 3-M	4555672	Push button – 3 button (impulse / opener light / vacation switch), illuminated impulse button, motion sensor
f	FCT 3b	436 301	Wireless keypad – open or close up to 3 different doors, illuminated keys, 315 MHz
g	EL201	4555948	Safety beam
h	HBA-18	4557424	Battery backup



SilentDrive® 7560 / 8560 series

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