Instructions for fitting, operating and maintenance
Garage door operator
Dissemination as well as duplication of this document and the use and communication of its content are prohibited unless explicitly permitted. Noncompliance will result in damage compensation obligations. All rights reserved in the event of patent, utility model or design model registration. Subject to changes.

App Store® is a brand of Apple Inc.

Google™ Play is a brand of Google Inc.
Dear Customer,
We thank you for choosing a quality product from our company.

1  About these instructions
These instructions are original operating instructions as outlined in EC Directive 2006/42/EC.
These instructions contain important information on the product.
▶ Read through all of the instructions carefully.
▶ Please observe the information. Please pay particular attention to the safety instructions and warnings.
▶ Keep these instructions in a safe place for later reference.
▶ Make sure that these instructions are available to the user at all times.

1.1  Further applicable documents
The following documents for safe handling and maintenance of the door system must be placed at the disposal of the end user:
• These instructions
• The enclosed log book
• The garage door operating instructions

1.2  Warnings used

⚠️ The general warning symbol indicates a danger that can lead to injury or death. In the text, the general warning symbol will be used in connection with the caution levels described below. In the illustrated section, an additional instruction refers back to the explanation in the text section.

⚠️ DANGER
Indicates a danger that immediately results in death or serious injuries.

⚠️ WARNING
Indicates a danger that can lead to death or serious injuries.

⚠️ CAUTION
Indicates a danger that can lead to minor or moderate injuries.

ATTENTION
Indicates a danger that can lead to damage or destruction of the product.

1.3  Definitions used

Hold-open phase
Waiting time for the automatic timer before the door closes from the OPEN end-of-travel position or partial opening.

Automatic timer
After the set hold-open phase and pre-warning phase lapse, the door automatically closes from the OPEN end-of-travel position or partial opening.

Impulse sequence control
The taught-in Impulse radio code or a button triggers impulse sequence control. With each actuation, the door is started against the previous direction of travel, or the door run is stopped.

Learning runs
Door runs during which the operator learns the following:
– Travel distances
– Forces that are required to move the door

Ventilation
In conjunction with a climatic sensor, the upper section is folded down and the door is lifted slightly to allow air to circulate.

Normal operation
Normal operation is a door run with taught-in travel distances and forces.

Reference run
Door run towards the OPEN end-of-travel position at a lower speed in order to set the home position.

Safety reversal / reversing
Door run in the opposite direction when the safety device or power limit is activated.

Reversal limit
The reversal limit is shortly before the CLOSE end-of-travel position. If a safety device is activated, the door runs in the opposite direction (safety reversal). This behaviour does not exist within the reversal limit.

Slow travel
The area in which the door moves extremely slowly to softly approach the end-of-travel position.

Status
The current position of a door.
Partial opening
Individually adjustable second opening height.

Timeout
A defined time period within which an action is expected, e.g. menu selection or function activation. If this time period has elapsed without an action, the operator automatically switches back to operation mode.

Door system
A door with the associated operator.

Doors under thermal load
Doors fitted to the south side, for example, and thus subjected to more sunlight. These doors could expand and may require more space below the ceiling.

Travel
The distance the door takes from the OPEN end-of-travel position to the CLOSE end-of-travel position.

Pre-warning time
The time between the travel command (impulse) and the start of travel.

Factory reset
Resetting of the taught-in values to the delivery condition / factory setting.

1.4 Symbols used
The illustrated section shows how to fit the operator on a sectional door. Deviations for fitting with an up-and-over door are also shown. For this purpose, the following letters are assigned to the figures:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Sectional door</td>
</tr>
<tr>
<td>b</td>
<td>Up-and-over door</td>
</tr>
</tbody>
</table>

a = Sectional door
b = Up-and-over door

All specified dimensions in the illustrated section are in [mm].

Icons
- !: Important notice to prevent injury to persons and damage to property
- ☑: Permissible arrangement or activity
- ❌: Non-permissible arrangement or activity
- 💪: High exertion of force
- 💊: Little force required
- ⌌: Inspect
- ⚠️: Power failure
- ⚡️: Power restoration
- 🔄: Check for smooth running
- ⌒: Use protective gloves
- 🕵️: Factory setting

The Bluetooth® word mark and logos are registered trademarks of Bluetooth SIG, Inc., and are used by Hörmann KG Verkaufsgesellschaft under licence. Other trademarks and brand names are the property of their respective owners.
7-segment display

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display is illuminated</td>
<td></td>
</tr>
<tr>
<td>Display flashes slowly</td>
<td></td>
</tr>
<tr>
<td>Display flashes quickly</td>
<td></td>
</tr>
<tr>
<td>Decimal flashes</td>
<td></td>
</tr>
</tbody>
</table>

1.5 Abbreviations used

**Colour code for cables, single conductors and components**
The colour abbreviations for cable and strand identification and for components conform to the international colour code in accordance with IEC 60757:

<table>
<thead>
<tr>
<th>Colour Code</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>WH</td>
<td>White</td>
</tr>
<tr>
<td>BK</td>
<td>Black</td>
</tr>
<tr>
<td>BN</td>
<td>Brown</td>
</tr>
<tr>
<td>BU</td>
<td>Blue</td>
</tr>
<tr>
<td>GN</td>
<td>Green</td>
</tr>
<tr>
<td>OG</td>
<td>Orange</td>
</tr>
<tr>
<td>YE</td>
<td>Yellow</td>
</tr>
<tr>
<td>RD/BU</td>
<td>Red/blue</td>
</tr>
</tbody>
</table>

**Article designations**

<table>
<thead>
<tr>
<th>Article Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 5 BiSecur</td>
<td>5-button hand transmitter with status feedback</td>
</tr>
<tr>
<td>ESE BiSecur</td>
<td>Bi-directional receiver</td>
</tr>
<tr>
<td>IT 1b-1</td>
<td>Internal push button with illuminated impulse button</td>
</tr>
<tr>
<td>IT 3b-1/PB 3</td>
<td>Internal push button with illuminated impulse button, additional buttons for light on/off and lock/unlock operator</td>
</tr>
<tr>
<td>EL 101/EL 301</td>
<td>One-way photocell</td>
</tr>
<tr>
<td>HOR 1-HCP</td>
<td>Option relay</td>
</tr>
<tr>
<td>UAP 1-HCP</td>
<td>Universal adapter print</td>
</tr>
<tr>
<td>SLK</td>
<td>LED warning light, yellow</td>
</tr>
<tr>
<td>SKS</td>
<td>Activating kit for closing edge safety device</td>
</tr>
<tr>
<td>STK</td>
<td>Wicket door contact</td>
</tr>
<tr>
<td>VL</td>
<td>Activating kit for leading photocell</td>
</tr>
<tr>
<td>HNA 18-4</td>
<td>Emergency battery</td>
</tr>
</tbody>
</table>

## 2 Safety instructions

### ATTENTION:

**IMPORTANT SAFETY INSTRUCTIONS.**

FOR THE SAFETY OF PERSONS, IT IS IMPORTANT TO COMPLY WITH THE FOLLOWING INSTRUCTIONS. THESE INSTRUCTIONS MUST BE KEPT.

For undated references to standards, directives etc. referred to here, the latest version of the publication applies, including any amendments.

### 2.1 Intended use

The garage door operator is intended for the impulse operation of spring-balanced and counterbalanced garage doors. Depending on the operator type, the operator can be used in the private/non-commercial or commercial sector (e.g. underground car parks and collective garages).

Note the manufacturer specifications regarding the door and operator combination. Potential hazards as outlined in DIN EN 13241-1 are avoided by construction and fitting according to our guidelines.

The garage door operator is designed for operation in dry areas.

### 2.2 Non-intended use

The operator must not be used for doors without a safety catch.

Door systems that are located in a public area and which only have one protective device, such as a power limit, may only be operated under supervision.

### 2.3 Fitter qualification

Only correct fitting and maintenance in compliance with the instructions by a competent/specialist company or a competent/qualified person ensures safe and flawless operation of the system.

According to EN 12635, a specialist is a person with suitable training, specialist knowledge and practical experience sufficient to correctly and safely fit, test and maintain a door system.
2.4 Safety instructions for fitting, maintenance, repair and disassembly

⚠️ DANGER
Compensating springs are under high tension
▶ See warning in section 3.1

⚠️ WARNING
Danger of injury due to unexpected door run
▶ See warning in section 12

Fitting, maintenance, repairs and disassembly of the door system and garage door operator must be performed by a specialist.
▶ In the event of a failure of the garage door operator, a specialist must be commissioned immediately to perform an inspection or carry out repairs.

2.5 Safety instructions for fitting

The specialist carrying out the work must follow the prevailing national job safety rules and regulations and those governing the operation of electrical equipment. In the process, the relevant national guidelines must be observed. Potential hazards as outlined in EN 13241-1 are avoided by construction and fitting according to our guidelines.

After fitting is complete, the specialist must declare conformity in accordance with EN 13241-1 based on the area of application.

⚠️ WARNING
Unsuitable fixing material
▶ See warning in section 3.3

Danger to life from the pull rope
▶ See warning in section 3.3

Danger of injury due to unwanted door travel
▶ See warning in section 3.3

ATTENTION
Damage caused by dirt
Drilling dust and chippings can lead to malfunctions.
▶ Cover the operator during drilling work.

2.6 Safety instructions for installation

⚠️ DANGER
Risk of deadly electric shock from mains voltage

Contact with the mains voltage presents the danger of a deadly electric shock.
▶ Electrical connections may only be made by a qualified electrician.
▶ Make sure that the on-site electrical installation conforms to the respective, applicable protective regulations (230 / 240 V AC, 50 / 60 Hz).
▶ If the mains connection cable is damaged, it must be exchanged by a qualified electrician to avoid danger.
▶ Before performing work on the system, disconnect the mains plug and the plug of the emergency battery.
▶ Safeguard the system against being switched on again without authorisation.

ATTENTION
Malfunctions in the connection cables
Connection cables and supply cables laid together can result in malfunctions.
▶ Duct the operator’s connection cables (24 V DC) in an installation system that is separate from the supply lines (230 / 240 V AC).

External voltage at the connecting terminals
External voltage on the connecting terminals of the control will destroy the electronics.
▶ Do not apply any mains voltage (230 / 240 V AC) to the connecting terminals of the control.

2.7 Safety instructions for initial start-up and for operation

⚠️ WARNING
Danger of injury during door travel
▶ See warning in section 11

Danger of injury due to a fast-closing door
▶ See warning in section 11.1.1
3 Fitting

ATTENTION:
IMPORTANT INSTRUCTIONS FOR SAFE FITTING.
FOLLOW ALL INSTRUCTIONS; INCORRECT FITTING
CAN LEAD TO SERIOUS INJURIES.

3.1 Testing the door system

DANGER
Compensating springs are under high tension
Serious injuries may occur while adjusting or
loosening the compensating springs!
▶ For your own safety, only have a specialist
conduct work on the compensating springs of
the door and, if required, maintenance and repair
work!
▶ Never try to replace, adjust, repair or reposition
the compensating springs for the
counterbalance of the door or the spring
mountings yourself.
▶ In addition, check the entire door system (joints,
door bearings, cables, springs and fastenings)
for wear and possible damage.
▶ Check for the presence of rust, corrosion, and
cracks.
A malfunction in the door system or incorrectly
aligned doors can cause serious injuries!
▶ Do not use the door system if repair or
adjustment work must be conducted!

The operator is not designed for the operation of
sluggish doors. These doors are either difficult or
impossible to open or close manually.
The door must be in a flawless mechanical condition,
as well as correctly balanced, so that it can be easily
operated by hand (EN 12604).
▶ Check whether the door can be opened and
closed correctly.
▶ Lift the door by approx. one metre and let it go.
The door should stay in this position and neither
move downward nor upward! If the door does
move in either direction, there is a danger that the
compensating springs/weights are not properly
adjusted or are defective. In this case, increased
wear and malfunctioning of the door system can
be expected.

2.8 Safety instructions for using the hand transmitter

WARNING
Danger of injury during door travel
▶ See warning in section 8

Risk of explosion due to incorrect battery type
▶ See warning in section 8.1

CAUTION
Danger of injuries due to unintended door run
▶ See warning in section 8

Danger of burns from the hand transmitter
▶ See warning in section 8

2.9 Approved safety equipment

The following functions or components, where
available, meet cat. 2, PL “c” in accordance with
EN ISO 13849-1 and were constructed and tested
accordingly:
• Internal power limit
• Tested safety equipment

If such properties are needed for other functions or
components, this must be tested individually.

WARNING
Danger of injuries due to faulty safety equipment
▶ See warning in section 7.2
3.2 Clearance required

The clearance between the highest point of door travel and the ceiling (even when opening the door) must be **at least 30 mm**. For doors under thermal loads, the operator is to be fitted 40 mm higher if applicable.

If the clearance is smaller, the operator can also be mounted behind the opened door if enough space is available. In this case, an extended link bracket (ordered separately) must be used.

The garage door operator can be arranged up to max. 500 mm off-centre. Sectional doors with a high lift track application (track application H) present an exception and require a special fitting.

The electrical outlet should be fitted approx. 500 mm from the operator head.

▶ Check the dimensions!

3.3 Fitting the garage door operator

**WARNING**

**Unsuitable fixing material**

Use of unsuitable fixing material may mean that the operator is insecurely attached and could come loose.

▶ The fitter must check the suitability of the provided fixing material (plugs) for use in the intended fitting location; other fixing material must be used if the provided fixing material is suitable for concrete (≥ B15), but is not officially approved (see Figures 1.6a/1.8b/2.4).

**ATTENTION**

**Damage caused by dirt**

Drilling dust and chippings can lead to malfunctions.

▶ Cover the operator during drilling work.

To fully comply with the **TTZ directive concerning break-in-resistance for garage doors**, the cord knob must be removed from the slide carriage.
1. With an off-centre reinforcement profile, fit the link bracket on the nearest reinforcement profile to the left or right.

2. The clearance between the highest point of door travel and the ceiling (even when opening the door) must be at least 30 mm. For doors under thermal loads, the operator is to be fitted 40 mm higher if applicable.

3. Completely disassemble the mechanical door locking.
4. For sectional doors with central door locking, fit the lintel joint and link bracket off-centre (max. 500 mm).

NOTICE
In a deviation from Figure 1.5a, use the 5 x 35 woodscrews from the door accessory pack (hole Ø3 mm) for timber doors.
* Dimension of doors under thermal load.

** Ceiling fitting is not possible for doors under thermal load.

ATTENTION: For Thermoframe, note the respective technical manual for the door!
1. The clearance between the highest point of door travel and the ceiling (even when opening the door) must be at least 30 mm.

2. Render the mechanical door lockings inoperable (Figure 1.3b).
3. Render the mechanical door lockings inoperable (Figures 1.4b/1.5b). For door models not covered here, block the lock latch on site.

4. In a deviation from the Figures 1.6b/1.7b, the lintel joint and link bracket must be attached off-centre for up-and-over doors with ornamental iron door handles.
NOTICE
With N80 doors with timber infill, use the bottom holes on the lintel joint for fitting.
3.4 Fitting the boom

NOTICE
Only use the booms recommended by us for the garage door operators, depending on the respective application (see product information).
Press the green button and move the slide carriage approx. 200 mm towards the centre of the rail. This is no longer possible once the end stops and operator have been fitted.
NOTICE
A second suspension is recommended with divided rails (available under accessories).
NOTICE
Depending on the door hardware, take the installation direction of the link bracket into account.
NOTICE
Depending on the **door type**, take the installation direction of the link bracket into account.
To prepare for manual operation

- Pull on the cord of the mechanical release.

3.5 Determining the end-of-travel positions

If the door cannot be easily moved into the desired OPEN or CLOSED end-of-travel position.

- Note section 3.1.

3.5.1 Fitting the OPEN end stop

1. Loosely insert the end stop in the boom between the slide carriage and operator.
2. Push the door into the OPEN end-of-travel position by hand.
3. Fix the end stop.

NOTICE

If the door does not reach the complete passage height in the end-of-travel position, the end stop can be removed. The integrated end stop (on the operator head) is then used.
3.5.2  Fitting the CLOSE end stop

1. Loosely insert the end stop in the boom between the slide carriage and door.
2. Push the door into the CLOSE end-of-travel position by hand.
3. Move the end stop by approx. 10 mm in the CLOSE direction.
4. Fix the end stop.

To prepare for automatic operation

- Push the green button on the slide carriage.
- Move the door by hand until the slide carriage snaps into the belt lock.
- Note the safety instructions in section 11 – Danger of crushing in the boom
3.5.3 Fitting the operator head

- Fasten the operator head with the display facing the door.

3.6 Emergency release

The cord knob for mechanical release may not be installed at a height greater than 1.8 m from the garage floor. The cord may need to be extended on-site, depending on the height of the garage door.

- When extending the cord, please make sure that the cord cannot become caught on a roof rack system or any other protrusions of the vehicle or door.

An emergency mechanical release is required in garages without a second entrance. An emergency release prevents the possibility of being locked out during a power failure. Order the emergency release separately.

- Check the emergency release monthly for proper function.
4 Installation
▶ Note the safety instructions in section 2.6
– Risk of deadly electric shock from mains voltage
– Malfunctions in the connection cables
– External voltage at the connecting terminals
▶ Remove the cover.

4.1 Connecting terminals
All connecting terminals can have multiple assignments (Figure 11):
• Minimum thickness:
  1 × 0.5 mm²
• Maximum thickness:
  1 × 2.5 mm²

4.2 Connecting accessories
NOTES
• Loading of the operator by all accessories: max. 350 mA. See the figures for component power consumption.
• Series 3 accessories must be connected via the HCP adapter HAP 1.
The BUS jack enables the connection of accessories with special functions.

4.2.1 Button with impulse function
▶ Figure 12
One or more buttons with normally open contacts (volt-free), e.g. internal push button or key switch, can be connected in parallel.
Terminal assignment:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Signal channel 2 Partial opening</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>+24 V DC</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Signal channel 1 Impulse</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0 V</td>
<td></td>
</tr>
</tbody>
</table>

4.2.2 External radio receivers*
▶ Figure 13 + section 10
Depending on the receiver, insert the plug in the corresponding socket or the BUS jack.

4.2.3 Impulse button IT 1b*
▶ Figure 14
* – Accessory, not included as standard equipment!
4.2.4 Internal push button*  
- Figure 15

Impulse button to start or stop door runs  
- Figure 15.1

Light button to switch the operator light on and off  
- Figure 15.2

Button to switch all control elements on and off  
- Figure 15.3

The light can be switched on and off.

4.2.5 2-wire photocell* (dynamic)  
- Figure 16

NOTICE
Follow the fitting instructions when mounting photocells.

After the photocell is actuated, the operator stops and the door performs a safety run to the OPEN end-of-travel position.

* – Accessory, not included as standard equipment!
4.2.6 Tested wicket door contact*

If the wicket door contact is opened during a door run, the operator stops immediately and blocks door run permanently.

4.2.7 Closing edge safety device*

After the closing edge safety device is actuated, the operator stops and the door performs a safety run to the OPEN end-of-travel position.

4.2.8 Option relay*

The option relay is required to connect an external lamp or warning light.

* – Accessory, not included as standard equipment!
4.2.9  Universal adapter print*  
▶ Figure 20 and section 6.1.12  
The universal adapter print can be used for additional functions.

4.2.10  Emergency battery*  
▶ Figure 21  
To close the door in the event of a power failure, an optional emergency battery can be connected. The system is switched to battery operation automatically. During battery operation, fewer LEDs are illuminated on the operator light.

⚠️ WARNING  
Danger of injury due to unexpected door run  
Unexpected door run may occur when the emergency battery is still connected despite the mains plug being pulled out.  
▶ Disconnect the mains plug and the plug of the emergency battery whenever performing work on the door system.

4.2.11  Hand transmitter  
▶ Figure 22  
1  LED, bi-colour  
2  Hand transmitter buttons  
3  Battery insulation foil

* – Accessory, not included as standard equipment!
5 Initial start-up
▶ Before initial start-up, read and follow the safety instructions in sections 2.7 and 2.9.
During learning runs, the operator is adjusted to the door. The travel distance, the required force for opening and closing runs and the connected safety devices are taught in automatically and saved in a power failure-proof manner. The data is only valid for this door.

NOTES
• The hand transmitter must be ready for operation (see section 4.2.11).
• The slide carriage must be engaged.
• No obstacles may be located in the function range of the safety devices.
• Safety devices must be fitted and connected beforehand.
• If further safety devices are connected at a later point, a factory reset is required.
• During learning runs for travel and the required forces, the connected safety devices and power limit are not active.
• While the travel is being taught in, the operator moves in slow travel.

Operator light:
If the operator has not yet been taught in, the operator light is illuminated for 60 seconds as soon as the mains plug is inserted in the socket.

5.1 Teaching in the operator

Caution
Danger of injury due to incorrectly selected operator type
If an incorrect door type is selected, unspecific values are set as default. Door system malfunctions may cause injuries.
▶ Only choose the menu that corresponds to the door system you have.

▶ Figure 23
1. Plug in the mains plug.
On the display
– 8.8. is illuminated for 1 second,
– U is then illuminated continuously.
2. Press the or button and select the available door type.

Door types:

<table>
<thead>
<tr>
<th>Menu</th>
<th>Door type</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Sectional door</td>
</tr>
</tbody>
</table>
| 02.  | Up-and-over door 1)
| 03.  | Side sliding sectional door, hinged garage door |
| 04.  | Non-protruding up-and-over door 2)
| 05.  | Garage horizontal door |
1) Door swinging outward
2) Door tilting inward

3. Press the button.
   – L is illuminated.
4. Press the button .
   – The door will open and briefly stop in the OPEN end-of-travel position. L flashes.
   – The door automatically completes 3 cycles (OPEN and CLOSE door runs). L flashes in the CLOSE direction.
   – The travel, required forces and connected safety devices will be 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.

To abort 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.

Display of taught-in forces
After the learning runs, a number is illuminated, which shows the maximum determined force.
This value indicates the following:
0-2 Optimal force ratios.
   The door system runs easily.
3-9 Poor force ratios.
   The door system must be checked and adjusted if necessary.

The operator automatically switches to the menu for teaching in the hand transmitters.
Each hand transmitter button is assigned to a radio code.

▶ Also note section 8.

On the display, 11 flashes.

To teach in a radio code (impulse):
5. 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, 11 flashes quickly on the display.

6. Release the hand transmitter button.

   **The hand transmitter has been taught in and is ready for operation.**
   On the display, 11 flashes normally.
   Further hand transmitters can be taught in within 25 seconds.

To teach in further radio codes (impulse):
▶ Repeat steps 5 + 6.

To cancel radio code teach-in:
▶ Press the PRG button.

To teach in further functions on the hand transmitter:
▶ Press the button and select

```
<table>
<thead>
<tr>
<th>Menu 12</th>
<th>Lighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu 13</td>
<td>Partial opening</td>
</tr>
<tr>
<td>Menu 14</td>
<td>Choosing OPEN direction</td>
</tr>
<tr>
<td>Menu 15</td>
<td>Choosing CLOSE direction</td>
</tr>
<tr>
<td>Menu 16</td>
<td>homee Brain</td>
</tr>
</tbody>
</table>
```

7. Press the PRG button and switch to programming mode.
Correspondingly, 12, 13, 14, 15 or 16 flashes.

8. Perform steps 5 + 6 as for the impulse radio code.

To teach in no further hand transmitters:
1. Press the / buttons to select the menu 00.
2. Press the PRG button.
The operator switches to operation mode.
   Or
▶ No input for 25 seconds (timeout).
The taught-in safety devices are active and activated in the menus.

**The operator is ready for operation.**

**Timeout**
If the timeout (25 seconds) is exceeded while teaching in the hand transmitter, the operator automatically switches to programming mode. To register a hand transmitter, the corresponding menu must be selected manually.
▶ Section 6.1.4
* Teach-in hand transmitter according to section 6.1.4, page 36
6  Menus

NOTES
• Menu 00 is the 1st visible menu in programming mode
• Menu 00 is also used to exit the programming mode.
• Menus 01 – 09 are only accessible during initial start-up.
• After initial start-up, only the available menus 10 – 38 are visible.
• A decimal point next to the menu number indicates an active menu.

To switch to programming mode:
▶ Press the PRG button for 5 seconds until the 00 display is illuminated.

To select a menu:
▶ Press the / buttons to select the desired menu. Press and hold the / buttons for fast run-through.

To activate the menu with individual functions:
▶ Press the button 1×.
  The menu is active immediately.
  The decimal point next to the menu number is illuminated.

To activate a menu with selectable parameters:
1. Press the button 1×.
  The active parameter flashes.
2. Select the desired parameters with the / buttons.
3. Press the button 1×.
  The parameter is immediately active.
  The menu number illuminates.

To exit programming mode:
1. Press the / buttons to select the menu 00.
2. Press the PRG button.
  Or
  ▶ No input for 60 seconds (timeout).
  All inputs are saved. The operator switches to operation mode.
6.1 Menu description
A table containing all of the menus can be found in section 19 from page 57.

6.1.1 Advanced menus
In addition to menus 01–37 described here and the respective parameters, additional settings can be made, such as
- Speed adjustment
- Power limit adjustment
- Belt adjustment
- Change to the reversal limit
- Effective direction and reversing behaviour of the safety devices
- Changing the ventilation position without safety equipment

Contact your specialist dealer with regard to these settings.

NOTICE
Settings that change the factory setting may only be made by specialists.

6.1.2 Menu 01–06: Door types
You only need menus 01–06 to commission the operator. These menus are only available during initial start-up or after a factory reset.

If you select the door type, all door-specific values are automatically set by default, such as:
- Speeds,
- Soft stop,
- Reversing behaviour of the safety devices,
- Reversal limits,
- Etc.

An overview of the door types can be found in section 5.1.

6.1.3 Menu 10: Learning runs
▶ Please note the information from section 5.

Learning runs are necessary:
- After service or maintenance work,
- If changes have been made to the door.

Learning runs in delivery state:
During initial start-up (section 5), all learning runs are performed automatically.
To start learning runs:
1. Press the PRG button until the 00 display is illuminated.
2. Press the / buttons to select the menu 10.
3. Press the PRG button for 5 seconds.
   - L is illuminated,
4. Press the button.
   - The door will open and briefly stop in the OPEN end-of-travel position. L flashes.
   - 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 remains illuminated and goes out after approx. 60 seconds.

**Display of taught-in forces**
After the learning runs, a number is illuminated, which shows the maximum determined force.
This value indicates the following:

**Optimal force ratios.**

**Poor force ratios.**

The door system runs easily.
The door system must be checked and adjusted as necessary.
6.1.4 Menu 11–15: Teach-in hand transmitters

The integral radio receiver can learn up to 150 radio codes. The radio codes can be distributed across the existing channels. If more than 150 radio codes are taught in, the codes taught in first are deleted. If the radio code for a hand transmitter button is taught in for two different functions, the radio code for the function first taught in is deleted.

To teach in a radio code, the following prerequisites must be met:

- The operator is at rest.
- Pre-warning phase is not active.
- Hold-open phase is not active.

Menu 11: Teach in radio code for impulse control:

1. Select menu 11 as described in section 6.
2. Press the PRG button.
   On the display, 11 flashes normally.
3. Carry out steps 5 + 6 as described in section 5.1.

To cancel hand transmitter teach-in:

- Press the PRG button.

Timeout

If the timeout (25 seconds) is exceeded while teaching in the hand transmitter, the operator automatically switches to programming mode.

Menu 12: Teach in radio code for light:

- Proceed as with menu 11.

Menu 13: Teach in radio code for partial opening:

- Proceed as with menu 11.
Menu 14: Teach in radio code for choosing OPEN direction:
▸ Proceed as with menu 11.

Menu 15: Teach in radio code for choosing CLOSE direction:
▸ Proceed as with menu 11.

Menu 16: Teach in all radio codes (homee Brain)
All radio codes and functions are provided and taught in.
▸ Proceed as with menu 11.
6.1.5 Menu 19: Delete radio
   – all functions

The radio codes for individual hand transmitter buttons or individual functions cannot be deleted.
1. Select menu 19.
   – 00 flashes
2. Select the parameter of the desired function with the ▲ + ▼ buttons.

<table>
<thead>
<tr>
<th>19</th>
<th>Delete radio</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Back without deleting</td>
</tr>
<tr>
<td>01</td>
<td>Radio</td>
</tr>
<tr>
<td>02</td>
<td>Bluetooth®</td>
</tr>
<tr>
<td>03</td>
<td>–</td>
</tr>
<tr>
<td>04</td>
<td>All</td>
</tr>
</tbody>
</table>

   – The selected parameter flashes.
3. Press the PRG button for 5 seconds to confirm deletion.
   – The selected parameter flashes quickly.
   – 19 is illuminated.
On the menus described in the following:
▶ See also the overview in section 19.

6.1.6 Menu 23: Change the partial opening or ventilation position
The partial opening and ventilation positions depend on the door type and are pre-set at the factory.

### Partial opening

<table>
<thead>
<tr>
<th>Area</th>
<th>Approx. 260 mm before the CLOSED end-of-travel position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>Approx. 120 mm before each end-of-travel position</td>
</tr>
</tbody>
</table>

### Ventilation

<table>
<thead>
<tr>
<th>Area</th>
<th>100 mm slide travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>35–300 mm before the CLOSE end-of-travel position</td>
</tr>
</tbody>
</table>

The partial opening position can be approached as follows:
- Via the 3rd radio channel (menu 13)
- An external radio receiver
- Additional print UAP 1-HCP
- An impulse on the terminals 20 / 23

The ventilation position can be approached and changed as follows:
- Via the HKSI-1 climatic sensor
- Via additional print UAP 1-HCP, for example
- Via homee Brain

### NOTES
- The ventilation position can only be changed if at least one additional safety device (photocell/leading photocell) is connected in addition to the standard power limit in CLOSE direction.
- A climatic sensor and an additional safety device (photocell/leading photocell) must be taught in first. Only then can menu 23 – parameter 02 be seen and configured.
- If a climatic sensor is connected, the following are automatically activated:
  - The pre-warning phase (menu 32 – parameter 03)
  - The advance warning in CLOSE direction (menu 33 – parameter 00).
- If the additional safety device (photocell/leading photocell) is deactivated or the CLOSE direction is deselected, the changed ventilation position is reset. Menu 23 – parameter 02 is hidden and can no longer be set.

To change the partial opening or ventilation position:

1. Using the ▲ + ▼ buttons, move the door to the desired position via the taught-in impulse radio code or an external control element with impulse function.
2. Select menu 23.
   - 00 flashes
3. Select the parameter of the desired function with the ▲ + ▼ buttons.
   - 01 or 02 flashes
4. Press the PRG button for 5 seconds to save this position.
   - 01 or 02 flashes quickly.
   - 23 is illuminated.

The changed position is saved.
If the selected position is too close to the CLOSE end-of-travel position, error 1 appears with a flashing decimal point (see section 17). The factory-set position is set automatically, or the most recent valid position is maintained.

### NOTICE
A folding roller bracket from the accessories allows you to ventilate the garage without installing an additional safety device (photocell).
▶ Contact your specialist dealer with regard to fitting and programming.

6.1.7 Menu 25: Operator light deactivated
If menu 25 is activated, the operator light is switched off, even during a door run.
If menu 25 is activated, parameter 01 in menu 30 is also automatically activated.
6.1.8  Menu 26: Illumination period
The operator light switches on as soon as the door is set in motion. Once the door run is complete, the operator light remains on corresponding to the time set (illumination period).

To set the desired function:
▶ Select the menu and the parameter for the desired function as described in section 6.

<table>
<thead>
<tr>
<th>26</th>
<th>Illumination period</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>30 seconds</td>
</tr>
<tr>
<td>02</td>
<td>60 seconds</td>
</tr>
<tr>
<td>03</td>
<td>120 seconds</td>
</tr>
<tr>
<td>04</td>
<td>180 seconds</td>
</tr>
<tr>
<td>05</td>
<td>300 seconds</td>
</tr>
<tr>
<td>06</td>
<td>600 seconds</td>
</tr>
</tbody>
</table>

6.1.9  Menu 27: Illumination period for external illumination
The illumination period for a connected external illumination is switched by the operator.

To set the desired function:
▶ Select the menu and parameter for the desired function as described in section 6.

<table>
<thead>
<tr>
<th>27</th>
<th>Illumination period of the external illumination</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>As with menu 26 1)</td>
</tr>
<tr>
<td>02</td>
<td>60 seconds</td>
</tr>
<tr>
<td>03</td>
<td>180 seconds</td>
</tr>
<tr>
<td>04</td>
<td>300 seconds</td>
</tr>
<tr>
<td>05</td>
<td>600 seconds</td>
</tr>
</tbody>
</table>

1) ATTENTION: No maintenance display (In).

6.1.10 Menu 28: ON time of the external illumination with additional print
If an external light is connected to an option relay HOR 1-HCP or a universal adapter print UAP 1-HCP (3rd relay), it can be switched on permanently via external control elements.

<table>
<thead>
<tr>
<th>28</th>
<th>Permanent ON – external light</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>Activated</td>
</tr>
</tbody>
</table>

6.1.11 Menu 29: Operator chase light
The menu is only shown and can be selected depending on the operator type.
When the chase light is activated, the operator light indicates the travel direction of the door.

<table>
<thead>
<tr>
<th>29</th>
<th>Chase light</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>Activated during door run</td>
</tr>
<tr>
<td>02</td>
<td>Activated during start warning / advance warning</td>
</tr>
<tr>
<td>03</td>
<td>Activated during door run and start warning / advance warning</td>
</tr>
</tbody>
</table>

6.1.12 Menu 30: External relay functions
The option relay HOR 1-HCP or universal adapter print UAP 1-HCP (3rd relay) are required to connect an external lamp or warning light.
Further functions, such as OPEN and CLOSE limit switch reporting, choosing direction or operator light, can be switched with the universal adapter print UAP 1-HCP (3rd relay).

To set the desired relay functions:
▶ Select the menu and the parameter for the desired function as described in section 6.

<table>
<thead>
<tr>
<th>30</th>
<th>External relay functions HOR 1-HCP, UAP 1-HCP (3rd relay)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>External illumination function 1)</td>
</tr>
<tr>
<td>02</td>
<td>OPEN limit switch reporting</td>
</tr>
<tr>
<td>03</td>
<td>CLOSE limit switch reporting</td>
</tr>
<tr>
<td>04</td>
<td>Partial opening limit switch reporting</td>
</tr>
<tr>
<td>05</td>
<td>Momentary signal at the time of command</td>
</tr>
<tr>
<td>06</td>
<td>Error message on the display (malfunction)</td>
</tr>
<tr>
<td>07</td>
<td>Start warning / advance warning 2) permanent signal</td>
</tr>
<tr>
<td>08</td>
<td>Start warning / advance warning 1) flashing</td>
</tr>
<tr>
<td>09</td>
<td>Relay energises during travel and de-energises in the end-of-travel positions.</td>
</tr>
<tr>
<td>10</td>
<td>Maintenance interval signal (display In)</td>
</tr>
<tr>
<td>11</td>
<td>As with menu 26 1)</td>
</tr>
</tbody>
</table>

1) ATTENTION: No maintenance display (In).
2) Advance warning only if activated in menu 32.
If parameter 00 or 11 is activated in menu 30, the function in menu 25 is automatically deactivated.

**Timeout**
If you do not press the PRG button to save the desired parameter within 60 seconds, the default parameter is maintained.

### 6.1.13 Menu 32: Pre-warning phase
If a travel command is output, the operator light flashes before the door run begins. A warning light connected to the option relay also flashes.

**To set the desired function:**
- Select the menu and the parameter for the desired function as described in section 6.

<table>
<thead>
<tr>
<th>32</th>
<th>Pre-warning time</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td></td>
<td>If a travel command is output, the door run is started immediately.</td>
</tr>
<tr>
<td>01</td>
<td>1 second</td>
</tr>
<tr>
<td>02</td>
<td>2 seconds</td>
</tr>
<tr>
<td>03</td>
<td>3 seconds</td>
</tr>
<tr>
<td>04</td>
<td>4 seconds</td>
</tr>
<tr>
<td>05</td>
<td>5 seconds</td>
</tr>
<tr>
<td>06</td>
<td>10 seconds</td>
</tr>
<tr>
<td>07</td>
<td>15 seconds</td>
</tr>
<tr>
<td>08</td>
<td>20 seconds</td>
</tr>
<tr>
<td>09</td>
<td>30 seconds</td>
</tr>
<tr>
<td>10</td>
<td>60 seconds</td>
</tr>
</tbody>
</table>

**Timeout**
If you do not press the PRG button to save the desired parameter within 60 seconds, the default parameter is maintained.

### 6.1.14 Menu 33: Advance warning
In menu 33, set whether the advance warning time is active in the CLOSE direction or OPEN + CLOSE direction.

<table>
<thead>
<tr>
<th>33</th>
<th>Advance warning direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Advance warning in the CLOSE direction</td>
</tr>
<tr>
<td>01</td>
<td>Advance warning in the OPEN + CLOSE direction</td>
</tr>
</tbody>
</table>

**Timeout**
If you do not press the PRG button to save the desired parameter within 60 seconds, the default parameter is maintained.

### 6.1.15 Menu 34: Automatic timer
With the automatic timer, the door opens upon a travel command. Once the set hold-open phase and pre-warning phase have elapsed, the door closes automatically.

**NOTES**
- The automatic timer may/can only be activated within the scope of EN 12453 if at least one additional safety device (photocell/leading photocell) is connected in addition to the standard power limit.
- An additional safety device (photocell/leading photocell) must be taught in first. Only then can menus 34 - 35 be seen and configured.
- If the automatic timer is set (menus 34 - 35), the following are also automatically activated:
  - The pre-warning phase (menu 32 - parameter 03)
  - The advance warning in CLOSE direction (menu 33 - parameter 00).
- If the additional safety device (photocell/leading photocell) is deactivated or the CLOSE effective direction is deselected, the menus 34 - 35 are hidden and can no longer be configured.

**To set the desired function:**
- Select the menu and the parameter for the desired function as described in section 6.

<table>
<thead>
<tr>
<th>34</th>
<th>Automatic timer</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>Hold-open phase of 5 seconds</td>
</tr>
<tr>
<td>02</td>
<td>Hold-open phase of 10 seconds</td>
</tr>
<tr>
<td>03</td>
<td>Hold-open phase of 20 seconds</td>
</tr>
<tr>
<td>04</td>
<td>Hold-open phase of 30 seconds</td>
</tr>
<tr>
<td>05</td>
<td>Hold-open phase of 60 seconds</td>
</tr>
<tr>
<td>06</td>
<td>Hold-open phase of 90 seconds</td>
</tr>
<tr>
<td>07</td>
<td>Hold-open phase of 120 seconds</td>
</tr>
<tr>
<td>08</td>
<td>Hold-open phase of 180 seconds</td>
</tr>
<tr>
<td>09</td>
<td>Hold-open phase of 240 seconds</td>
</tr>
<tr>
<td>10</td>
<td>Hold-open phase of 300 seconds</td>
</tr>
</tbody>
</table>

**Timeout**
If you do not press the PRG button to save the desired parameter within 60 seconds, the default parameter is maintained.
6.1.16 Menu 35: Automatic timer from the partial opening position

NOTES

• The automatic timer may/can only be activated within the scope of EN 12453 if at least one additional safety device (photocell / leading photocell) is connected in addition to the standard power limit.

• An additional safety device (photocell / leading photocell) must be taught in first. Only then can menus 34 - 35 be seen and configured.

• If the automatic timer is set from the partial opening position (menus 34 - 35), the following are also automatically activated:
  – The pre-warning phase (menu 32 – parameter 03)
  – The advance warning in CLOSE direction (menu 33 – parameter 00).

• If the additional safety device (photocell / leading photocell) is deactivated or the CLOSE effective direction is deselected, the menus 34 - 35 are hidden and can no longer be configured.

To set the desired function:

▶ Select the menu and the parameter for the desired function as described in section 6.

### 35 Automatic timer – partial opening

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>Hold-open phase as set in menu 34</td>
</tr>
<tr>
<td>02</td>
<td>Hold-open phase of 5 minutes</td>
</tr>
<tr>
<td>03</td>
<td>Hold-open phase of 15 minutes</td>
</tr>
<tr>
<td>04</td>
<td>Hold-open phase of 30 minutes</td>
</tr>
<tr>
<td>05</td>
<td>Hold-open phase of 45 minutes</td>
</tr>
<tr>
<td>06</td>
<td>Hold-open phase of 60 minutes</td>
</tr>
<tr>
<td>07</td>
<td>Hold-open phase of 90 minutes</td>
</tr>
<tr>
<td>08</td>
<td>Hold-open phase of 120 minutes</td>
</tr>
<tr>
<td>09</td>
<td>Hold-open phase of 180 minutes</td>
</tr>
<tr>
<td>10</td>
<td>Hold-open phase of 240 minutes</td>
</tr>
</tbody>
</table>

Timeout

If you do not press the PRG button to save the desired parameter within 60 seconds, the default parameter is maintained.

6.1.17 Menu 36: Control buttons on the operator

The ▲ + ▼ buttons can be deactivated and activated on the operator. External control elements and the hand transmitter remain active.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Control buttons on the operator</td>
</tr>
<tr>
<td>00</td>
<td>Deactivated</td>
</tr>
<tr>
<td>01</td>
<td>Activated</td>
</tr>
</tbody>
</table>

6.1.18 Menu 37: Reset

If parameter 01 is selected, accessories connected to the BUS jack are deleted and recognised again. The b.S. display flashes quickly for BUS scan.

If parameter 02 is selected, all settings of menus 20 - 36 are restored to the factory setting.

If parameter 03 is selected, all settings, taught-in travel and forces are restored to the factory setting. The operator must be taught in again.

▶ Section 5

NOTICE

Taught-in radio codes are maintained.

7 Final work

Upon completion of all required steps for initial start-up:

▶ Close the cover.
7.1 Fixing the warning sign
▶ Fix the supplied crushing warning sign in a prominent, cleaned and degreased place, for example near the permanently installed button for moving the operator.

7.2 Function test

⚠️ WARNING

Danger of injuries due to faulty safety equipment
In the event of a malfunction, there is a danger of injuries due to faulty safety equipment.
▶ After the learning runs, the person commissioning the system must check the function(s) of the safety equipment.

The system is ready for operation only after this.

To check the safety reversal:

1. Stop the door with both hands while it is closing. The door system must stop and initiate the safety reversal.
2. Stop the door with both hands while it is opening. The door system must switch off and take the load off.
3. Position a test object with a height of approx. 50 mm (SKS) or 16 mm (VL) in the centre of the opening and close the door. The door system must stop and initiate the safety reversal as soon as it reaches the obstacle.

▶ In the event of a failure of the safety reversal, a specialist must be commissioned immediately for the inspection and repair work.

8 Hand transmitter HSE 4 BiSecur

⚠️ WARNING

Danger of injury during door travel
Persons may be injured by door travel if the hand transmitter is actuated.
▶ Make sure that hand transmitters are kept away from children and can only be used by people who have been instructed on how the remote-control door system functions!
▶ If the door has only one safety feature, only operate the hand transmitter if you are within sight of the door!
▶ Only drive or pass through remote-control door systems when the door is at a standstill!
▶ Never stand in the opening of the door system.
▶ Please note that an unwanted door run may occur if a hand transmitter button is accidentally pressed (e.g. if stored in a pocket/handbag).

⚠️ CAUTION

Danger of injuries due to unintended door run
An unintended door run may occur while teaching in the radio system.
▶ Make sure no persons or objects are in the door’s area of travel when teaching in the radio system.

⚠️ CAUTION

Danger of burns from the hand transmitter
Direct sunlight or great heat can heat up the hand transmitter. As a result, burns could occur during use.
▶ Protect the hand transmitter from direct sunlight and great heat (e.g. by placing it in a stowage compartment in the dashboard).

⚠️ CAUTION

Danger of burns from hazardous materials
If you ingest the battery, burns may result from hazardous materials in the battery.
▶ Do not ingest the battery and make sure that children cannot get their hands on the battery.
ATTENTION

Functional impairment caused by effects of the environment
High temperatures, water and dirt impair the function of the hand transmitter.
Protect the hand transmitter from the following conditions:
• Direct sunlight (permissible ambient temperature 0°C to +50°C)
• Moisture
• Dust

If you start up, enhance or change the radio system:
• Only possible if the operator is at rest.
• Perform a function check.
• Only use original parts.
• Local conditions may affect the range of the radio system.

If there is no separate garage entrance, perform all programming changes and extensions of radio systems while standing in the garage.

8.1 Changing the battery
3 V battery, type: CR 2032, lithium
After inserting the battery, the hand transmitter is ready for operation.

8.2 Hand transmitter operation
Each hand transmitter button is assigned to a radio code.
► Press the button of the hand transmitter whose radio code you want to transmit.
  – The LED is illuminated blue for 2 seconds.
  – The radio code is transmitted.

8.3 Inheriting/transmitting a radio code
1. Press and hold the button of the hand transmitter whose radio code you want to inherit/transmit.
  – The LED is illuminated blue for 2 seconds and then goes out.
  – After 5 seconds, the LED alternates flashing in red and blue.
  – The hand transmitter button sends the radio code.
2. If the radio code is taught in and recognised, release the hand transmitter button.
  – The LED goes out.

WARNING

Danger to life due to internal burns
If you swallow the battery, severe internal burns may result from hazardous materials in the battery. The burns can lead to death within 2 hours.
► Do not swallow the battery and make sure that children cannot get their hands on the battery.

ATTENTION

Destruction of the hand transmitter by leaking batteries
Batteries can leak and destroy the hand transmitter.
► Remove the battery from the hand transmitter if it is out of use for a long period of time.

WARNING

Risk of explosion due to incorrect battery type
There is the risk of explosion if the battery is replaced with an incorrect battery type.
► Only use the recommended battery type.
NOTICE
You have 15 seconds to inherit/transmit the radio code. If inheriting/transmitting the code was not successful within this period of time, repeat the process.

8.4 Hand transmitter reset
1. Open the hand transmitter housing.
2. Remove the battery for 10 seconds.
3. Press and hold a hand transmitter button.
4. Insert the battery.
   - The LED slowly flashes in blue for 4 seconds.
   - The LED flashes rapidly in blue for 2 seconds.
   - The LED is illuminated in blue for a prolonged period of time.
5. Release the hand transmitter button.
   **All radio codes have been newly assigned.**
6. Close the hand transmitter housing.

NOTICE
If you release the hand transmitter button prematurely, no new radio code is allocated.

8.5 LED display

<table>
<thead>
<tr>
<th>Blue (BU)</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Function</td>
</tr>
<tr>
<td>Illuminated for 2 seconds</td>
<td>A radio code is being transmitted</td>
</tr>
<tr>
<td>Flashes slowly</td>
<td>Hand transmitter is in teach-in mode</td>
</tr>
<tr>
<td>Flashes quickly after slow flashing</td>
<td>A valid radio code was detected during the teach-in procedure</td>
</tr>
<tr>
<td>Flashes slowly for 4 seconds, Flashes quickly for 2 seconds Illuminated for a prolonged period</td>
<td>Reset is being performed and completed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Red (RD)</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Function</td>
</tr>
<tr>
<td>Flashes 2 x</td>
<td>The battery is almost empty</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blue (BU) and Red (RD)</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Function</td>
</tr>
<tr>
<td>Flashing alternately</td>
<td>Hand transmitter is in inherit/transmit mode</td>
</tr>
</tbody>
</table>

8.6 Cleaning the hand transmitter

**ATTENTION**

**Damaging the hand transmitter by faulty cleaning**

Cleaning the hand transmitter with unsuitable cleaning agents can damage the hand transmitter housing and the hand transmitter buttons.

▶ Clean the hand transmitter with a clean, soft, damp cloth.

NOTICE

White hand transmitter buttons can change their colour when used regularly over an extended period of time, if they come in contact with cosmetic products (e.g. hand cream).

8.7 Disposal

Electrical and electronic devices, as well as batteries, must not be disposed of in household rubbish, but must be returned to the appropriate recycling facilities.

8.8 Technical data

<table>
<thead>
<tr>
<th>Type</th>
<th>Hand transmitter HSE 4 BiSecur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>868 MHz</td>
</tr>
<tr>
<td>Power supply</td>
<td>1 × 3 V battery, type CR 2032, lithium</td>
</tr>
<tr>
<td>Perm. ambient temperature</td>
<td>0 °C to + 50 °C</td>
</tr>
<tr>
<td>Max. humidity</td>
<td>93%, non-condensing</td>
</tr>
<tr>
<td>Protection category</td>
<td>IP 20</td>
</tr>
</tbody>
</table>

8.9 EU declaration of conformity for the hand transmitter

The manufacturer of this operator herewith declares that the provided hand transmitter complies with EU Directive Radio Equipment 2014/53/EU.

The complete declaration of conformity can be found in the enclosed log book or requested from the manufacturer.
9  Bluetooth®

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

9.1  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.

9.2  BlueSecur application (app)

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

▶ Install the BlueSecur app on your smartphone.

9.2.1  System requirements

<table>
<thead>
<tr>
<th>Operating system</th>
<th>Software version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Android</td>
<td>Smartphone from 5</td>
</tr>
<tr>
<td>iOS</td>
<td>Smartphone from 9</td>
</tr>
</tbody>
</table>

9.2.2  App authorisations

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

- **Camera**: To scan the QR code.
- **Bluetooth®**: For the communication between app and receiver.
- **Location**: Android For the Bluetooth function.

9.2.3  User roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin</td>
<td>The first user who connects with the receiver via the QR code. One other admin can be added. Allocates access rights (keys) for users. Can delete access rights (keys) for users. Can adjust relay settings.</td>
</tr>
<tr>
<td>User</td>
<td>Receive access rights (keys) from the admin.</td>
</tr>
</tbody>
</table>

9.2.4  App functions

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

**Trigger a command**

When the user is within range of the Bluetooth receiver, a command can be triggered using the app.

9.2.5  Delete device

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

If you want to remove the smartphone from the operator, select parameter 02 in menu 19 and delete all Bluetooth devices (see section 6.1.5).

9.2.6  Backup

To avoid losing 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, for example,

- the admin changes the smartphone,
- a reset is to be performed,
- the smartphone is defective or lost.

**A backup is strongly recommended to secure the data.**

9.3  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. Make sure that you are in range of the Bluetooth receiver.
2. Start the app.
3. Select the Teach in field (iOS) or the + symbol (Android). The camera opens.
4. Scan the QR code on the supplied key card.

   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.**

Keep the key card in a safe place. The key card will be required if you need to set up the Bluetooth receiver again at a later stage.
9.4 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.

9.4.1 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:
• Trigger a command
• Set up and manage devices
• Delete devices
• Delete user authorisations

9.4.2 Synchronising
The date and time is synchronised in the receiver with each communication of the admin’s smartphone with the receiver.

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

9.4.4 Loss of the smartphone
In the event that the smartphone is lost, unauthorised parties could have access to the garage door. In this case, select menu 19–parameter 02 and delete the device from the Bluetooth receiver (see section 6.1.5).

9.5 Keys

9.5.1 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 Store℠ or Google™ Play policies.

One-time keys are free of charge.

9.5.2 Distributing keys
The admin can distribute keys to users via all installed messaging services, e.g. e-mail, Facebook Messenger, iMessage, WhatsApp, etc.

The admin can only distribute a key once to another admin.

The admin can distribute a maximum of 15 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 Store℠ or Google™ Play.

<table>
<thead>
<tr>
<th>Key type</th>
<th>Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin key</td>
<td>Always valid</td>
</tr>
<tr>
<td>User key</td>
<td>Always valid or just for a defined time period</td>
</tr>
<tr>
<td>One-time key</td>
<td>Valid only once and within a maximum of 1 month</td>
</tr>
</tbody>
</table>

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

Safety when distributing keys
When the admin distributes a key to a user, for security reasons, the user must authenticate himself/herself using a PIN generated by the server. The user must enter this PIN before the key can be provided to him/her.

9.5.3 Admin key
Admin keys cannot be deleted, not even by the 1st admin. If you want to delete an admin key, select menu 19–parameter 02 and delete the device from the Bluetooth receiver (see section 6.1.5).

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 recognised the valid admin key, the rights can be used.
9.6 External Bluetooth antenna*

An external antenna is recommended in the event of a limited range.
You must configure an external antenna in the app settings. The factory setting is the internal antenna.

9.7 EU Declaration of Conformity for Bluetooth Receivers

The manufacturer of this operator herewith declares that the integrated Bluetooth receiver complies with EU Directive Radio Equipment 2014/53/EU.

The complete declaration of conformity can be found in the enclosed log book or requested from the manufacturer.

9.8 Open source license

The following open source software is included with this product:
mbed TLS 2.16.1 (https://tls.mbed.org)
Copyright 2006-2018, ARM Limited, all rights reserved
This software is licensed under Apache license version 2.0 (the “license”); you may only use this file in accordance with the license. 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 provided” 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.

10 External receivers*

10.1 Radio receiver ESE BiSecur
If the range is limited, the following functions can be controlled with an external radio receiver:
- Impulse
- Operator light
- Partial opening
- Choosing OPEN direction
- Choosing CLOSE direction

If an external radio receiver is retrofitted, be sure to delete the radio codes for the integrated radio module.
▶ Section 6.1.5

10.2 Teaching in a radio code on the external radio receiver
▶ Teach in the radio code for a hand transmitter button using the operating instructions for the external receiver.

10.3 EU Declaration of Conformity for Receivers

The manufacturer of this operator herewith declares that the integrated receiver complies with EU Directive Radio Equipment 2014/53/EU.

The complete declaration of conformity can be found in the enclosed log book or requested from the manufacturer.

* – Accessory, not included as standard equipment!
11 Operation

⚠️ WARNING

Danger of injury during door travel
If people or objects are in the area around the door while the door is in motion, this can lead to injuries or damage.
- Children are not allowed to play near the door system.
- Make sure that no persons or objects are in the door’s area of travel.
- If the door system has only one safety feature, only operate the garage door operator if you are within sight of the door’s area of travel.
- Monitor the door travel until the door has reached the end-of-travel position.
- Drive or walk through the door openings of remote-controlled door systems only when the garage door is in the OPEN end-of-travel position!
- Never stand under the open door.

⚠️ CAUTION

Danger of crushing in the boom
Do not reach into the boom with your fingers during a door run, as this can cause crushing.
- Do not reach into the boom during a door run

⚠️ CAUTION

Danger of injury from the cord knob
If you hang on the cord knob, you may fall and injure yourself. The operator could break away and injure persons or damage objects that are located underneath, or the operator itself could be destroyed.
- Do not hang on the cord knob with your body weight.

⚠️ CAUTION

Danger of injury resulting from uncontrolled door travel in the CLOSE direction if one of the counterbalance springs breaks and the slide carriage is released.
If a retrofit set is not installed, uncontrolled door travel in the CLOSE direction may occur if the slide carriage is released while a counterbalance spring is broken, the door is improperly balanced or the door is not completely closed.
- The responsible fitter must install a retrofit set on the slide carriage if the following applies:
  - The standard DIN EN 13241-1 applies
  - The garage door operator is retrofitted to a Hörmann sectional door without spring safety device (BR30) by a technical expert.

This set includes a screw that secures the slide carriage against uncontrolled unlocking as well as a new cord knob sign with images showing how the set and the slide carriage should be handled for the two operation modes of the boom.

NOTICE
The use of an emergency release or an emergency release lock is not possible in conjunction with the retrofit set.

⚠️ ATTENTION

Damage due to the cord of the mechanical release
If the cord of the mechanical release becomes caught on a roof rack system or any other protrusions of the vehicle or door, this can lead to damage.
- Make sure that the cable cannot become caught.

11.1 Instructing users
The operator may be used by
- children over 8 years of age
- persons with limited physical, sensory or mental capabilities
- persons with a lack of experience or knowledge.
The condition for use of the operator is that the above-mentioned children/persons
- are supervised
- instructed on safe use
- understand the resulting dangers.

Children must not play with the operator.
- All persons using the door system must be shown how to operate the garage door operator properly and safely.
- Demonstrate and test the mechanical release as well as the safety reversal.
11.1.1 Cord knob mechanical release
The cord knob for mechanical release may not be installed at a height greater than 1.8 m from the garage floor. The cord may need to be extended on-site, depending on the height of the garage door.

► When extending the cord, please make sure that the cord cannot become caught on a roof rack system or any other protrusions of the vehicle or door.

⚠️ WARNING

Danger of injury due to a fast-closing door
If the cord knob is actuated while the door is closing, the door may close quickly due to weak, broken springs or faulty counterbalance.

► Only pull the cord knob when the door is closed.

► Pull the cord knob when the door is closed. The door is now unlocked and should be easy to open and close by hand.

11.1.2 Mechanical release by emergency release lock:
(Only for garages without a second entrance)

► When the door is closed, actuate the emergency release lock. The door is now unlocked and should be easy to open and close by hand.

11.2 Functions of various radio codes
Each hand transmitter button is assigned to a radio code. To operate the operator with the hand transmitter, the radio code for the respective hand transmitter button must be taught in to the channel of the desired function on the integral radio receiver.

► Section 6.1.4

NOTICES

• If the radio code of the hand transmitter button is inherited from another hand transmitter, press and hold the hand transmitter button until the LED flashes alternately in red and blue and the desired function is performed.

• If the operator recognises an inherited radio code that has not yet been taught into the integrated radio receiver, the operator automatically changes to learning mode for 10 seconds. 11, 12, 13, 14 or 15 flashes on the display.

11.2.1 Channel 1/impulse
In normal operation, the garage door operator works with the impulse sequence control.

Pressing the corresponding hand transmitter button, the T button or an external button triggers the impulse.

1st impulse: The door runs towards an end-of-travel position.
2nd impulse: The door stops.
3rd impulse: The door runs in the opposite direction.
4th impulse: The door stops.
5th impulse: The door runs in the direction of the end-of-travel position selected in the 1st impulse.

etc.

11.2.2 Channel 2 / lighting
Pressing the corresponding hand transmitter button for light switches the operator light on and off prematurely.

11.2.3 Channel 3 / partial opening
If the door is not in the partial opening position, the hand transmitter button with the radio code for partial opening triggers a door run to this position.

If the door is in the partial opening position, the hand transmitter button triggers the following:

• A door run in the CLOSE end-of-travel position with the radio code for partial opening.
• A door run in the OPEN end-of-travel position with the radio code for impulse.

11.2.4 Channel 4 / choosing OPEN direction
The hand transmitter button with the radio code for OPEN position triggers the impulse sequence (Open – Stop – Open – Stop) for a door run to the OPEN end-of-travel position.

11.2.5 Channel 5 / choosing CLOSE direction
The hand transmitter button with the radio code for CLOSE position triggers the impulse sequence (Close – Stop – Close – Stop) for a door run to the CLOSE end-of-travel position.

11.2.6 Channel 6 / homee Brain
All radio codes and functions are provided and taught in and can be operated using the corresponding apps.

11.3 Garage door operator behaviour after 3 fast OPEN door runs in a row
The motor of the garage door operator is equipped with thermal overload protection. If the operator performs 3 fast runs in the OPEN direction within 2 minutes, the overload protection reduces the travel speed. Runs in the OPEN and CLOSE direction are then performed at the same speed. After an idle time of another 2 minutes, the next run in the OPEN direction is then once again fast.
11.4 Behaviour during a power failure (without an emergency battery)
During a power failure, you have to open and close the door system by hand. For this, you have to disengage the operator.

▶ Pull on the cord of the mechanical release. The slide carriage is disengaged for manual operation.

11.5 Behaviour after the power returns (without emergency battery)
After the power returns:
• 8.8. is illuminated for 1 second on the display. Or
• 8.8. flashes until all taught-in radio codes are loaded.

▶ Push the green button on the slide carriage. The slide carriage is re-engaged for automatic operation.

11.6 Reference run
Display A reference run is required:
• If the power limit is activated 3 × in a row during a run in the CLOSE direction.

A reference run is performed:
• Only in the OPEN direction. The operator light and display flash.

• At a reduced speed.
• With a minor increase in force of the most recently taught-in forces.

The impulse command triggers the reference run. The operator moves to the OPEN end-of-travel position.

12 Inspection and maintenance
The garage door operator is maintenance-free. In the interest of your own safety, however, we recommend having the door system inspected and maintained annually by a qualified person in accordance with manufacturer specifications.

**WARNING**

Danger of injury due to unexpected door run
An unexpected door run may occur during inspection and maintenance work if the door system is inadvertently actuated by other persons.
▶ Disconnect the mains plug and the plug of the emergency battery whenever performing work on the door system.
▶ Safeguard the door system against being switched on again without authorisation.

Inspection and repairs may only be carried out by a qualified person. If necessary, contact your specialist dealer.

A visual inspection may be carried out by the operator.
▶ Check all safety and protective functions monthly.
▶ Check all safety devices without self-testing every six months.
▶ Any malfunctions and/or defects must be remedied immediately.

Do not allow children to clean or maintain this operator without supervision.

12.1 Tension of the toothed belt
The toothed belt of the boom is tensioned optimally at the factory. During the start-up and slow-down phase, with larger doors the toothed belt may briefly hang out of the boom profile. However, this does not constitute a technical malfunction and does not negatively affect the function and service life of the operator.
12.2 Checking safety reversal / reversing

To check safety reversal / reversing:

1. Stop the door with both hands while it is closing. The door system must stop and initiate the safety reversal.
2. Stop the door with both hands while it is opening. The door system must switch off and take the load off.
3. Position a test object with a height of approx. 50 mm (SKS) or 16 mm (VL) in the centre of the opening and close the door. The door system must stop and initiate the safety reversal as soon as it reaches the obstacle.

In the event of a failure of the safety reversal, a specialist must be commissioned immediately for the inspection and repair work.

12.3 Change the light module

- Operator light module
- Nominal power: 4.9 W – 30 LEDs, 3.3 W – 20 LEDs
- Nominal voltage: 37 V

When the operator light is on, a voltage of 37 V DC is applied.

Only exchange the operator light when the operator is not energised.

13 Dismantling and disposal

NOTICE
When dismantling the system, observe the applicable job safety rules and regulations.

Have a specialist dismantle the garage door operator in the reverse order of these instructions and dispose of it properly.

14 Warranty conditions

Warranty period
In addition to the statutory warranty provided by the dealer in the sales contract, we grant the following warranty for parts from the date of purchase:
- 5 years on operator technology, motor and motor control
- 2 years on radio equipment, accessories and special systems

Claims made under the warranty do not extend the warranty period. For replacement parts and repairs the warranty period is six months or at least the remainder of the warranty period.

Prerequisites
The warranty claim only applies in the country where the equipment was purchased. The product must have been purchased through our authorised distribution channels. A claim under this warranty exists only for damage to the object of the contract itself.

The receipt of purchase substantiates your right to claim under the warranty.

Services
For the duration of the warranty we shall eliminate any product defects that are proven to be attributable to a material or manufacturing fault. We pledge to replace free of charge and at our discretion the defective goods with non-defective goods, to carry out repairs, or to grant a price reduction. Replaced parts become our property.

Reimbursement of expenditure for dismantling and fitting, testing of parts as well as demands for lost profits and compensation for damages are excluded from the warranty.
Damage caused by the following is also excluded:

- Improper fitting and connection
- Improper initial start-up and operation
- External factors such as fire, water, abnormal environmental conditions
- Mechanical damage caused by accidents, falls, impacts
- Negligent or intentional destruction
- Normal wear or deficient maintenance
- Repairs conducted by unqualified persons
- Use of non-original parts
- Removal or defacing of the data label

15 EC / EU Declaration of Conformity / Declaration of Incorporation

(as defined in EC Machinery Directive 2006/42/EC according to Annex II, Part 1 A for a complete machine or Part 1 B for incorporation of an incomplete machine).

For the end user to fit this garage door operator, only a combination with specifically approved door types is permitted. These door types can be found in the complete EC/EU Declaration of Conformity in the provided log book.

However, if this garage door operator is not combined with an approved door type, the fitter will be considered a manufacturer of the complete machine.

In this case, fitting may only be done by a fitting company, as only they have knowledge of the relevant safety regulations, valid directives and standards, as well as the required testing and measuring devices.

The appropriate Declaration of Incorporation can also be found in the provided log book.
## Technical data

<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mains voltage</strong></td>
<td>230/240 V, 50/60 Hz</td>
</tr>
<tr>
<td><strong>Standby</strong></td>
<td>&lt; 1 W</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>• Radio system: 868 MHz</td>
</tr>
<tr>
<td></td>
<td>• Bluetooth: 2.4 GHz</td>
</tr>
<tr>
<td><strong>Max. humidity</strong></td>
<td>93%, non-condensing</td>
</tr>
<tr>
<td><strong>Protection category</strong></td>
<td>Only for dry rooms</td>
</tr>
<tr>
<td><strong>Automatic safety cut-out</strong></td>
<td>Is automatically taught in for both directions separately</td>
</tr>
<tr>
<td><strong>End-of-travel position cut-out / power limit</strong></td>
<td>• Self-learning</td>
</tr>
<tr>
<td></td>
<td>• Wear-free, as it has no mechanical switches</td>
</tr>
<tr>
<td></td>
<td>• Additionally integrated travel time limit of 90 s, side sliding sectional door 180 s</td>
</tr>
<tr>
<td></td>
<td>• Automatic safety cut-out, readjusting at every door run.</td>
</tr>
<tr>
<td><strong>Rated load</strong></td>
<td>See data label</td>
</tr>
<tr>
<td><strong>Pull and push force</strong></td>
<td>See data label</td>
</tr>
<tr>
<td><strong>Motor</strong></td>
<td>Direct current motor with hall sensor</td>
</tr>
<tr>
<td><strong>Switching power supply</strong></td>
<td>With thermal protection</td>
</tr>
<tr>
<td><strong>Connection</strong></td>
<td>• Screw terminal for external devices with protective low voltage, such as internal and external push buttons with impulse operation</td>
</tr>
<tr>
<td></td>
<td>• Screwless connection technology for external 2-wire buttons and photocells</td>
</tr>
<tr>
<td><strong>Special functions</strong></td>
<td>• Photocell or closing edge safety device can be connected</td>
</tr>
<tr>
<td></td>
<td>• Option relay, adapter print and additional HCP BUS participants can be connected</td>
</tr>
<tr>
<td><strong>Quick release</strong></td>
<td>Actuated from inside with pull cord in the event of a power failure</td>
</tr>
<tr>
<td><strong>Universal fittings</strong></td>
<td>For up-and-over doors and sectional doors</td>
</tr>
<tr>
<td><strong>Door travel speed</strong></td>
<td>• Max. 14 cm/s(^1) for travel in the CLOSE direction</td>
</tr>
<tr>
<td></td>
<td>• Max. 25 cm/s(^1) for travel in the OPEN direction</td>
</tr>
<tr>
<td><strong>Airborne sound emission of the garage door operator</strong></td>
<td>≤ 70 dB (A)</td>
</tr>
<tr>
<td><strong>Side guide</strong></td>
<td>• Extremely flat with 30 mm</td>
</tr>
<tr>
<td></td>
<td>• With integrated anti-lift kit</td>
</tr>
<tr>
<td></td>
<td>• With maintenance-free toothed belt</td>
</tr>
</tbody>
</table>

\(^1\) Depending on operator type, door type, door size and door leaf weight
# Displaying errors, warnings and operating modes

## 17.1 Operator light messages

<table>
<thead>
<tr>
<th>Status</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashes slowly</td>
<td>Learning run or reference run is being performed</td>
</tr>
<tr>
<td>Flashes once</td>
<td>Factory reset successful</td>
</tr>
<tr>
<td>Flashes 2× once</td>
<td>The operator has not been taught in (delivery condition)</td>
</tr>
<tr>
<td>Flashes 3× once</td>
<td>During the pre-warning phase</td>
</tr>
<tr>
<td></td>
<td>Maintenance interval has been reached</td>
</tr>
</tbody>
</table>

## 17.2 Display of errors and warnings

<table>
<thead>
<tr>
<th>Display</th>
<th>Error/warning</th>
<th>Possible cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="1.png" /></td>
<td>Not possible to set the reversal limit</td>
<td>When setting the SKS/VL reversal limit, an obstacle is in the way</td>
<td>Remove the obstacle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The position of the reversal limit is &gt; 200 mm before the CLOSE end-of-travel position</td>
<td>Pressing the ▲ or ▼ button acknowledges the error. Select a position &lt; 200 mm before the CLOSE end-of-travel position</td>
</tr>
<tr>
<td></td>
<td>Setting the partial opening position not possible</td>
<td>The partial opening position is too close to the CLOSE end-of-travel position (≤ 120 mm slide travel)</td>
<td>The partial opening position must be &gt; 120 mm</td>
</tr>
<tr>
<td></td>
<td>Setting the ventilation position not possible</td>
<td>The ventilation position is too close to the CLOSE end-of-travel position (≤ 16 mm slide travel)</td>
<td>The ventilation position must be &gt; 16 mm</td>
</tr>
<tr>
<td><img src="image2.png" alt="2.png" /></td>
<td>Safety equipment on SE1</td>
<td>No safety devices are connected</td>
<td>Connect a safety device. Deactivate the safety device in the menu by performing a reset (menu 37).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The safety device signal is interrupted before travel</td>
<td>Set/position the safety device</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The safety device is defective</td>
<td>Replace the safety device</td>
</tr>
<tr>
<td><img src="image3.png" alt="3.png" /></td>
<td>Power limit in the CLOSE direction</td>
<td>The door is too sluggish or does not move smoothly</td>
<td>Correct the door travel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obstacle in door area</td>
<td>Remove the obstacle and teach in the operator again, if necessary</td>
</tr>
<tr>
<td><img src="image4.png" alt="4.png" /></td>
<td>Static current circuit interrupted</td>
<td>The wicket door is open</td>
<td>Close the wicket door</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The magnet has been fitted the wrong way</td>
<td>Fit the magnet correctly (see the instructions for the wicket door contact)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The testing result is not OK</td>
<td>Exchange the wicket door contact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Static current circuit interrupted on the accessory connected to the BUS jack.</td>
<td>Check accessory on the BUS jack</td>
</tr>
<tr>
<td><img src="image5.png" alt="5.png" /></td>
<td>Power limit in the OPEN direction</td>
<td>The door is too sluggish or does not move smoothly</td>
<td>Correct the door travel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obstacle in door area</td>
<td>Remove the obstacle and teach in the operator again, if necessary</td>
</tr>
<tr>
<td>Display</td>
<td>Error/warning</td>
<td>Possible cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>8.6</td>
<td>System error</td>
<td>Internal error</td>
<td>Perform a factory reset and teach in the operator again; if necessary, replace it</td>
</tr>
<tr>
<td></td>
<td>Travel time limit</td>
<td>The belt is torn</td>
<td>Exchange the belt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The operator is defective</td>
<td>Exchange the operator</td>
</tr>
<tr>
<td>8.7</td>
<td>Communication error</td>
<td>Communication with control element or additional print is faulty</td>
<td>Check the connecting leads and, if necessary, replace them</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check the control element or additional print and, if necessary, replace them.</td>
<td></td>
</tr>
<tr>
<td>8.8</td>
<td>Control elements/operation</td>
<td>Error during input</td>
<td>Check and change the input</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Input of invalid value</td>
<td>Check and change the input value</td>
</tr>
<tr>
<td></td>
<td>Travel command not possible</td>
<td>The operator was locked for the control elements and a travel command was issued</td>
<td>Release the operator for the control elements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check the IT3b connection</td>
<td></td>
</tr>
<tr>
<td>8.9</td>
<td>Specific to taught-in safety devices</td>
<td>Self-testing safety device is interrupted</td>
<td>Check the safety device and, if necessary, replace it</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Closing edge safety device/leading photocell actuated</td>
<td>Remove the obstacle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Closing edge safety device/leading photocell defective or not connected</td>
<td>Check the closing edge safety device/leading photocell, exchange or connect as needed</td>
</tr>
<tr>
<td>8.10</td>
<td>Voltage error (over/undervoltage)</td>
<td>In battery operation: signalling</td>
<td>Charge battery, check voltage source</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the event of power supply undervoltage: Internal error without signalling</td>
<td></td>
</tr>
<tr>
<td>8.11</td>
<td>Spring</td>
<td>Spring tension decreasing</td>
<td>Check and adjust the spring tension</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spring break</td>
<td>Exchange the springs</td>
</tr>
<tr>
<td>8.12</td>
<td>No reference point</td>
<td>The power limit was activated in the CLOSE direction 3 × in a row.</td>
<td>Move the door to the OPEN end-of-travel position</td>
</tr>
<tr>
<td>8.13</td>
<td>The operator has not been taught in</td>
<td>No error</td>
<td>Teach in the operator (see section 5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The operator has not been taught in yet</td>
<td></td>
</tr>
<tr>
<td>8.14</td>
<td>Maintenance display flashes in every end-of-travel position</td>
<td>No error</td>
<td>Have the door system inspected and maintained by a qualified person in accordance with manufacturer specifications.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The maintenance interval set by the fitter has been exceeded.</td>
<td></td>
</tr>
</tbody>
</table>
### 18 Operating condition display

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator has not been taught in</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>Learning runs are necessary</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator performs the required learning run in the CLOSE direction</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator performs the required learning run in the OPEN direction</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator is in the OPEN end-of-travel position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator is in the CLOSE end-of-travel position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator moves in the OPEN direction</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator moves in the CLOSE direction</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The automatic timer is active</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>1. The operator is in the CLOSE end-of-travel position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>2. The pre-warning phase is active</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>1. The operator is in the OPEN end-of-travel position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>2. The pre-warning phase is active</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator is in an intermediate position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>1. The operator is in an intermediate position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>2. The pre-warning phase is active</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator is in the partial opening position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator is in the ventilation position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator moves to the partial opening position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>The operator moves to the ventilation position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>1. The operator is in the partial opening position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>2. The pre-warning phase is active</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>1. The operator is in the ventilation position</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>2. The pre-warning phase is active</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>Impulse input from a radio code (flashes 1x)</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>Sends the door position feedback to the hand transmitter (flashes 1x)</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>Standby (flashes continuously)</td>
</tr>
<tr>
<td>☟ ☟ ☟</td>
<td>Performing BUS scan</td>
</tr>
</tbody>
</table>

### 19 Menu and programming overview

The listed factory settings apply to **sectional doors**.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>☟ ☟ ☟</td>
<td>☟</td>
<td>☟</td>
<td>Open / exit programming mode</td>
</tr>
</tbody>
</table>

#### Selecting a door type

![Selecting a door type](image)
<table>
<thead>
<tr>
<th>Symbol Menu Act Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default settings such as speed, soft stop, reversing behaviour of the safety devices, reversal limit etc. are pre-set)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning runs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning runs after service / maintenance or changes to the door system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teach-in hand transmitter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulse</td>
</tr>
<tr>
<td>Light</td>
</tr>
<tr>
<td>Partial opening</td>
</tr>
<tr>
<td>Symbol</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Deleting all radio codes**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 Back without deleting</td>
<td><img src="#" alt="Act" /></td>
<td></td>
</tr>
<tr>
<td>01 Radio</td>
<td>All hand transmitters</td>
<td></td>
</tr>
<tr>
<td>02 Bluetooth®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04 All</td>
<td>All functions</td>
<td></td>
</tr>
</tbody>
</table>

---

**Parameters**

- **00**: Back without deleting
- **01**: Radio
- **02**: Bluetooth®
- **03**: –
- **04**: All
### Changing the position

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>23</td>
<td></td>
<td><img src="image" alt="Act" /></td>
</tr>
<tr>
<td>Parameters</td>
<td>00 Back without changing</td>
<td>01 Change partial opening position</td>
<td>02 Changing the ventilation position</td>
</tr>
</tbody>
</table>

### Operator light deactivated

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>25</td>
<td></td>
<td><img src="image" alt="Act" /></td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td><img src="image" alt="Act" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td></td>
<td>Note section 6.1.7</td>
<td></td>
</tr>
</tbody>
</table>

### Illumination / illumination period (internal relay)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>26</td>
<td></td>
<td><img src="image" alt="Act" /></td>
</tr>
<tr>
<td>Parameters</td>
<td>00 Deactivated</td>
<td>01 30 seconds</td>
<td>02 60 seconds</td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td><img src="image" alt="Act" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td></td>
<td><img src="image" alt="Act" /></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td></td>
<td><img src="image" alt="Act" /></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td></td>
<td><img src="image" alt="Act" /></td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Act" /></td>
<td></td>
<td><img src="image" alt="Act" /></td>
<td></td>
</tr>
</tbody>
</table>

---

www.garagedooronline.co.uk 01926 463888
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>e.g. hand transmitter, key switches, internal push button etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameters</td>
<td>00 Deactivated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01 As with menu 26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 60 seconds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>03 180 seconds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>04 300 seconds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>05 600 seconds</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameters</td>
<td>00 Deactivated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01 Activated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parameters</td>
<td>00 Deactivated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01 Activated during door run</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 Activated during start warning/advance warning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>03 Activated during door run and start warning/advance warning</td>
</tr>
</tbody>
</table>

---

**Permanent ON – external illumination**

---

**Chase light**
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>HOR 1-HCP or UAP 1-HCP (3rd relay)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Additional functions with relay circuit board</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Parameters</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>00</strong> Deactivated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Menu 25 is automatically deactivated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>01</strong> External illumination function</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No maintenance display (In)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>02</strong> OPEN end-of-travel position reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>03</strong> CLOSE end-of-travel position reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>04</strong> Partial opening end-of-travel position reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>05</strong> Momentary signal at the time of OPEN or partial opening command</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>06</strong> Error message on the display (malfunction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>07</strong> Start warning / advance warning 1) permanent signal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>08</strong> Start warning / advance warning 1) flashing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>09</strong> Relay energises during travel and de-energises in the end-of-travel positions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>10</strong> Maintenance interval signal (display In)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>11</strong> As with menu 26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Menu 25 is automatically deactivated. No maintenance display (In)</td>
</tr>
</tbody>
</table>

1) Advance warning only if activated in menu 32.
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-warning time</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image1" alt="Symbol" /></td>
<td><img src="image2" alt="Menu" /></td>
<td><img src="image3" alt="Act" /></td>
<td><img src="image4" alt="Notice" /></td>
</tr>
<tr>
<td>1-90 s</td>
<td>32</td>
<td><img src="image5" alt="Parameters" /></td>
<td></td>
</tr>
<tr>
<td>00</td>
<td>Deactivated</td>
<td><img src="image6" alt="Diagram" /></td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>Advance warning 1 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Advance warning 2 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>Advance warning 3 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>Advance warning 4 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>Advance warning 5 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>Advance warning 10 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>Advance warning 15 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>Advance warning 20 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>Advance warning 30 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Advance warning 60 s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| <strong>Advance warning direction</strong> | | | |
| <img src="image7" alt="Symbol" /> | <img src="image8" alt="Menu" /> | <img src="image9" alt="Act" /> | <img src="image10" alt="Notice" /> |
| <img src="image11" alt="Diagram" /> | 33 | <img src="image12" alt="Parameters" /> | |
| 00 | Advance warning in the CLOSE direction | | |
| 01 | Advance warning in the OPEN and CLOSE direction | | |</p>
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic timer – hold-open phase</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Parameters**
  - 00 Deactivated
  - 01 Hold-open phase 5 s
  - 02 Hold-open phase 10 s
  - 03 Hold-open phase 15 s
  - 04 Hold-open phase 20 s
  - 05 Hold-open phase 60 s
  - 06 Hold-open phase 90 s
  - 07 Hold-open phase 120 s
  - 08 Hold-open phase 180 s
  - 09 Hold-open phase 240 s
  - 10 Hold-open phase 300 s

- **Notice**
  - Note the information in section 6.1.15

- **Menu 32, parameter 03 is automatically activated.**

| Automatic timer – partial opening |

- **Parameters**
  - 00 Deactivated
  - 01 As with menu 34
  - 02 Hold-open phase 5 min
  - 03 Hold-open phase 15 min
  - 04 Hold-open phase 30 min
  - 05 Hold-open phase 45 min
  - 06 Hold-open phase 60 min
  - 07 Hold-open phase 90 min
  - 08 Hold-open phase 120 min
  - 09 Hold-open phase 180 min
  - 10 Hold-open phase 240 min

- **Notice**
  - Note the information in section 6.1.16

- **Menu 32, parameter 03 is automatically activated.**
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Menu</th>
<th>Act</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control buttons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parameters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>00</td>
<td>Deactivated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>01</td>
<td>Activated</td>
<td></td>
</tr>
<tr>
<td>Reset</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parameters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>00</td>
<td>Back without reset</td>
<td></td>
</tr>
<tr>
<td></td>
<td>01</td>
<td>BUS scan HCP-BUS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>Parameters from menu 20 – 36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>Factory reset</td>
<td></td>
</tr>
</tbody>
</table>
SupraMatic 4

HÖRMANN KG Verkaufsgesellschaft
Upheider Weg 94-98
33803 Steinhagen
Germany