

Instructions for fitting, operating and maintenance Garage door operator



EN



CONTENTS

1 1.1 1.2 1.3	About these instructions
1.4 1.5	Symbols used
2 2.1 2.2 2.3 2.4 2.5 2.6 2.7	Safety instructions 6 Intended use 6 Non-intended use 6 Fitter qualification 6 Safety instructions for fitting, 6 maintenance, repair and disassembly 7 Safety instructions for fitting. 7 Safety instructions for fitting. 7 Safety instructions for installation 7 Safety instructions for installation 7 Safety instructions for operation. 7
2.8 2.9	Safety instructions for using the hand transmitter
3 3.1 3.2 3.3 3.4 3.5 3.6	Fitting8Testing the door system8Clearance required9Fitting the garage door operator9Fitting the boom18Determining the end-of-travel positions23Emergency release25
4 4.1 4.2	Installation26Connecting terminals26Connecting accessories26
5 5.1	Initial start-up
6 6.1	Menus
7 7.1 7.2	Final work42Fixing the warning sign
8 8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8 8.9	Hand transmitter HSE 4 BiSecur43Changing the battery44Hand transmitter operation44Inheriting/transmitting a radio code44Hand transmitter reset45LED display45Cleaning the hand transmitter45Disposal45Technical data45EU declaration of conformity45

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9 9.1 9.2 9.3 9.4 9.5	Bluetooth [®] Enabling / disabling Bluetooth [®] BlueSecur application (app) Configuring Bluetooth [®] Operation Keys	46 46 47 47
9.6 9.7 9.8	External Bluetooth antenna EU Declaration of Conformity for Bluetooth Receivers Open source license	48
10 10.1 10.2 10.3	External receivers* Radio receiver ESE BiSecur Teaching in a radio code on the external radio receiver EU Declaration of Conformity	48 48
	for Receivers	
11 11.1 11.2 11.3	Operation Instructing users Functions of various radio codes Garage door operator behaviour	49
11.4	after 3 fast OPEN door runs in a row Behaviour during a power failure (without an emergency battery)	
11.5 11.6	Behaviour after the power returns (without emergency battery) Reference run	
12 12.1 12.2 12.3	Inspection and maintenance Tension of the toothed belt Checking safety reversal / reversing Change the light module	51 52
13	Dismantling and disposal	52
14	Warranty conditions	52
15	EC / EU Declaration of Conformity / Declaration of Incorporation	53
16	Technical data	54
17 17.1	Displaying errors, warnings and operating modes Operator light messages	
17.2	Display of errors and warnings	55
18	Operating condition display	
19	Menu and programming overview	57

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.

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

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

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-oftravel 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-oftravel 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:





a = Sectional door

b = Up-and-over door

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



Important notice to prevent injury to persons and damage to property

Permissible arrangement or activity

Non-permissible arrangement or



High exertion of force

Little force required

Inspect

activitv

Power failure

Power restoration

Check for smooth running



Use protective gloves

Factory setting



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7-segment display



8	Display is illuminated
))	Display flashes slowly



Display flashes quickly



Decimal flashes

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 IFC 60757:

WH	White		BK	Black
BN	Brown		BU	Blue
GN	Green		OG	Orange
YE	Yellow		RD/BU	Red / blue
Article de	signa	tions		
HS 5 BiSecur		5-button hand transmitter with status feedback		
ESE BiSecur		Bi-directional receiver		
IT 1b-1		Internal push button with illuminated impulse button		
IT 3b-1/PB 3		Internal push button with illuminated impulse button, additional buttons for light on/off and lock/unlock operator		
EL 101/EL	301	One-way photocell		
HOR 1-HCP		Option relay		
UAP 1-HC	P	Universal adapter print		
SLK		LED warning light, yellow		
SKS		Activating kit for closing edge safety device		
STK		Wicket door contact		
VL		Activating kit for leading photocell		
HNA 18-4		Emergency battery		

▲ Safety instructions 2 ATTENTION:

IMPORTANT SAFETY INSTRUCTIONS.

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

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 drv areas.

Non-intended use 2.2

The operator must not be used for doors without a safetv 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

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.

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 travelSee 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 VAC, 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

Danger of injury due to incorrectly selected door type

See warning in section 5.1

Danger of crushing in the boom

See warning in section 11

Danger of injury from the cord knob

See warning in section 11

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.

See warning in section 11

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

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.

Danger of injuries due to faulty safety equipmentSee warning in section 7.2

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.

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

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).

Danger to life from the pull rope

A running rope may lead to strangulation.

 Remove the rope while fitting the operator (see Figure 1.3a).

Danger of injury due to unwanted door travel Incorrect assembly or handling of the operator may trigger unwanted door travel that may result in persons or objects being trapped.

Follow all the instructions provided in this manual.

Incorrectly fitted control devices (e.g. buttons) may trigger unwanted door travel. Persons or objects may be jammed as a result.



- Install control devices at a height of at least 1.5 m (out of the reach of children).
- Fit permanently installed control devices (such as buttons, etc.) within sight of the door, but away from moving parts.

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.



 With an off-centre reinforcement profile, fit the link bracket on the nearest reinforcement profile to the left or right.

 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 5×35 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!



- The clearance between the highest point of door travel and the ceiling (even when opening the door) must be at least 30 mm.
- Render the mechanical door lockings inoperable (Figure 1.3b).

ENGLISH

 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-andover doors with ornamental iron door handles.





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.

A second suspension is recommended with divided rails (available under accessories).



Depending on the **door hardware**, take the installation direction of the link bracket into account.



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.





- 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. 8 max. 1,8 m





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: $1 \times 0.5 \text{ mm}^2$
- 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:

23	Signal channel 2	Partial opening
5	+24 V DC	
21	Signal channel 1	Impulse
20	0 V	

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!









IT 3b

IT 3b

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.





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*

Figure 17

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*

Figure 18

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*

• Figure **19** and section 6.1.12 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.

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 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:

Menu Door type

- 01. = Sectional door
- 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 PRG button.
 - L is illuminated.
- 4. Press the button <a>.
 - 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, 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 , , , , , , PRG 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):

- 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.

 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

Menu 12	Lighting
Menu 13	Partial opening
Menu 14	Choosing OPEN direction
Menu 15	Choosing CLOSE direction
Menu 16	homee Brain

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 ^ / v 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 / v buttons to select the desired menu. Press and hold the / v buttons for fast run-through.

To activate the menu with individual functions:

Press the PRG 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 **PRG** button 1 ×. The active parameter flashes.
- 2. Select the desired parameters with the
- Press the PRG button 1 ×. The parameter is immediately active. The menu number illuminates.

To exit programming mode:

- 1. Press the / v 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
- **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:

- 0-2 Optimal force ratios. The door system runs easily.
- **3-9** Poor force ratios. 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**.





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
- Select the parameter of the desired function with the +
 buttons.

19	Delet	e radio
	00	Back without deleting
	01	Radio
	02	Bluetooth®
	03	-
	04	All

- 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

Ĥ	Approx. 260 mm before the CLOSED end-of-travel position
Area	Approx. 120 mm before each end-of- travel position

Ventilation

Ĩ	100 mm slide travel
Area	35-300 mm before the CLOSE end-of- travel position

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:

- 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.

23	Chan	Changing the position	
	00 Back without changing		
	01	Partial opening position	
	02 Ventilation position		

- 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 endof-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.

26	Illumination period		
	00	Deactivated.	
	01	30 seconds]
	02	60 seconds	ĥ
	03	120 seconds	
	04	180 seconds]
	05	300 seconds]
	06	600 seconds	

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.

27		Illumination period of the external illumination			
	00	00 Deactivated.			
	01	As with menu 26 ¹⁾			
	02	60 seconds			
	03	180 seconds			
	04	300 seconds	Î		
	05	600 seconds			

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.

28	Permanent ON – external light		
	00	00 Deactivated	
	01	01 Activated	

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.

29	Chase light		
	00	Deactivated	
	01	Activated during door run	
	02	Activated during start warning / advance warning	
	03	Activated during door run and start warning / advance warning	ĥ

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.

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

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.

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

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.

33	Adva	Advance warning direction		
	00	Advance warning in the CLOSE direction	ĥ	
	01	Advance warning in the OPEN + CLOSE direction		

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 prewarning 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.

34	Automatic timer		
	00	Deactivated	Ĥ
	01	Hold-open phase of 5 seconds	
	02	Hold-open phase of 10 seconds	
	03	Hold-open phase of 20 seconds	
	04	Hold-open phase of 30 seconds	
	05	Hold-open phase of 60 seconds	
	06	Hold-open phase of 90 seconds	
	07	Hold-open phase of 120 seconds	
	08	Hold-open phase of 180 seconds	
	09	Hold-open phase of 240 seconds	
	10	Hold-open phase of 300 seconds	

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		
	00	Deactivated	
	01	Hold-open phase as set in menu 34	
	02	Hold-open phase of 5 minutes	
	03	Hold-open phase of 15 minutes	
	04	Hold-open phase of 30 minutes	
	05	Hold-open phase of 45 minutes	
	06	Hold-open phase of 60 minutes	
	07	Hold-open phase of 90 minutes	
	08	Hold-open phase of 120 minutes	
	09	Hold-open phase of 180 minutes	
	10	Hold-open phase of 240 minutes	

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 \wedge + \checkmark buttons can be deactivated and activated on the operator. External control elements and the hand transmitter remain active.

36	Control buttons on the operator		
	00	00 Deactivated	
	01 Activated		Ĩ

6.1.18 Menu 37: Reset

37	Reset		
	00	00 Back without reset	
	01	01 Reset / BUS scan HCP-BUS	
	02	Reset / parameters of menus 20-36	
	03	03 Factory 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

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:



- Stop the door with both hands while it is closing. The door system must stop
- and initiate the safety reversal.
 Stop the door with both hands while it is **opening**. The door system must switch

off and take the load off.



 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.

Hand transmitter HSE 4 BiSecur



8

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 remotecontrol 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).

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.

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.



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.

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.

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.

NOTICE

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.

Battery status display on the hand transmitter

The LED flashes red twice; the radio code continues to be transmitted.	The battery should be replaced soon.
The LED flashes red twice.	The battery must
Following this, the radio code	be replaced
is no longer transmitted.	immediately.

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.

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

Blue (BU)

State	Function
Illuminated for 2 seconds	A radio code is being transmitted
Flashes slowly	Hand transmitter is in teach-in mode
Flashes quickly after slow flashing	A valid radio code was detected during the teach-in procedure
Flashes slowly for 4 seconds, Flashes quickly for 2 seconds Illuminated for a prolonged period	Reset is being performed and completed

Red (RD)

State	Function
Flashes 2 ×	The battery is almost empty

Blue (BU) and Red (RD)

State	Function
	Hand transmitter is in inherit / transmit mode

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

Туре	Hand transmitter HSE 4 BiSecur
Frequency	868 MHz
Power supply	1 × 3 V battery, type CR 2032, lithium
Perm. ambient	
temperature	0 °C to + 50 °C
Max. humidity Protection category	93%, non-condensing IP 20

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 subtron 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 subtron 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

Operating system		Software version
Android	Smartphone	from 5
iOS	Smartphone	from 9

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.
		For the communication
		between app and receiver.
Location	Android	For the Bluetooth function.

9.2.3 User roles

Admin The first user who connects with th 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.
User	Receive access rights (keys) from the admin.

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 StoreSM or GoogleTM 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 StoreSM or GoogleTM Play.

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

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

- 1. The one-time key is valid immediately and can be used just once, within 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)

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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
1.	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.

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

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.

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 abovementioned 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.

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.

5nd impulse: The door runs in the direction of the endof-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 endof-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.

Danger of injury due to unexpected door run An unexpected door run may occur during inspection and maintenance work if the door evert

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:





 Stop the door with both hands while it is closing. The door system must stop and initiate the safety reversal.

 Stop the door with both hands while it is **opening**. The door system must switch off and take the load off.

 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



Туре	Operator light module
	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.

16 Technical data

Mains voltage	230/240 V. 50/60 Hz						
	<1 W						
Standby							
Frequency	Radio system: 868 MHz						
	Bluetooth: 2.4 GHz						
Max. humidity	93%, non-condensing						
Protection category	Only for dry rooms						
Automatic safety cut-out	Is automatically taught in for both directions separately						
End-of-travel position	Self-learning						
cut-out/power limit	Wear-free, as it has no mechanical switches						
	 Additionally integrated travel time limit of 90 s, side sliding sectional door 180 s Automatic safety cut-out, readjusting at every door run. 						
Rated load	See data label						
Pull and push force	See data label						
Motor	Direct current motor with hall sensor						
Switching power supply	With thermal protection						
Connection	 Screw terminal for external devices with protective low voltage, such as intern and external push buttons with impulse operation 						
	Screwless connection technology for external 2-wire buttons and photocells						
Special functions	 Photocell or closing edge safety device can be connected Option relay, adapter print and additional HCP BUS participants can be connected 						
Quick release	Actuated from inside with pull cord in the event of a power failure						
Universal fittings	For up-and-over doors and sectional doors						
Door travel speed	Max. 14 cm/s ¹⁾ for travel in the CLOSE direction						
	 Max. 25 cm/s¹) for travel in the OPEN direction 						
Airborne sound emission of the garage							
door operator	\leq 70 dB (A)						
Side guide	Extremely flat with 30 mm						
	 With integrated anti-lift kit With maintenance-free toothed belt 						
1) Depending on energies two	With maintenance-free toothed beit						

1) Depending on operator type, door type, door size and door leaf weight

17 Displaying errors, warnings and operating modes

17.1 Operator light messages

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

17.2 Display of errors and warnings

Display	Error/warning	Possible cause	Remedy
8.8	Not possible to set the reversal limit	When setting the SKS / VL reversal limit, an obstacle is in the way	Remove the obstacle
		The position of the reversal limit is > 200 mm before the CLOSE end-of-travel position	Pressing the or button acknowledges the error. Select a position < 200 mm before the CLOSE end-of-travel position
	Setting the partial opening position not possible	The partial opening position is too close to the CLOSE end-of-travel position (≤ 120 mm slide travel)	The partial opening position must be > 120 mm
	Setting the ventilation position not possible	The ventilation position is too close to the CLOSE end-of-travel position (≤ 16 mm slide travel)	The ventilation position must be > 16 mm
00	Safety equipment on SE1	No safety devices are	Connect a safety device.
		connected	Deactivate the safety device in the menu by performing a reset (menu 37).
		The safety device signal is	Set / position the safety device
		interrupted before travel	Check the connecting leads and, if necessary, replace them
		The safety device is defective	Replace the safety device
88.	Power limit in the CLOSE direction	The door is too sluggish or does not move smoothly	Correct the door travel
		Obstacle in door area	Remove the obstacle and teach in the operator again, if necessary
$ \mathbf{OO} $	Static current circuit	The wicket door is open	Close the wicket door
	interrupted	The magnet has been fitted the wrong way	Fit the magnet correctly (see the instructions for the wicket door contact)
		The testing result is not OK	Exchange the wicket door contact
		Static current circuit interrupted on the accessory connected to the BUS jack.	Check accessory on the BUS jack
88	Power limit in the OPEN direction	The door is too sluggish or does not move smoothly	Correct the door travel
		Obstacle in door area	Remove the obstacle and teach in the operator again, if necessary

Display	Error/warning	Possible cause	Remedy	
88	System error	Internal error	Perform a factory reset and teach in the operator again; if necessary, replace it	
	Travel time limit	The belt is torn	Exchange the belt	
		The operator is defective	Exchange the operator	
88	Communication error	Communication with control element or	Check the connecting leads and, if necessary, replace them	
		additional print is faulty	Check the control element or additional print and, if necessary, replace them.	
00	Control elements/	Error during input	Check and change the input	
	operation	Input of invalid value	Check and change the input value	
	Travel command not possible	The operator was locked for the control elements	Release the operator for the control elements	
		and a travel command was issued	Check the IT3b connection	
88.	Specific to taught-in safety devices	Self-testing safety device is interrupted	Check the safety device and, if necessary, replace it	
		Closing edge safety device/leading photocell actuated	Remove the obstacle	
		Closing edge safety device/leading photocell defective or not connected	Check the closing edge safety device / leading photocell, exchange or connect as needed	
88.	Voltage error (over / undervoltage)	In battery operation: signalling In the event of power supply undervoltage: Internal error without signalling	Charge battery, check voltage source	
00	Spring	Spring tension decreasing	Check and adjust the spring tension	
		Spring break	Exchange the springs	
8.8.	No reference point	The power limit was activated in the CLOSE direction $3 \times$ in a row.	Move the door to the OPEN end-of-travel position	
8.8.	The operator has not been taught in	No error The operator has not been taught in yet	Teach in the operator (see section 5)	
88	Maintenance display flashes in every end-of- travel position	No error The maintenance interval set by the fitter has been exceeded.	Have the door system inspected and maintained by a qualified person in accordance with manufacturer specifications.	

Operating condition display 18

	-		
8.8	The operator has not been taught in	88	Learning runs are necessary
	The operator performs the required learning run in the CLOSE direction	(\mathbf{BB})	The operator performs the required learning run in the OPEN direction
8.8.	The operator is in the OPEN end-of-travel position	8.8	The operator is in the CLOSE end-of- travel position
E((B))	 The operator moves in the OPEN direction The automatic timer is active 		The operator moves in the CLOSE direction
(((3)))	 The operator is in the OPEN end-of- travel position The pre-warning phase is active 		 The operator is in the CLOSE end-of- travel position The pre-warning phase is active
8.8.	The operator is in an intermediate position		 The operator is in an intermediate position The pre-warning phase is active
8.8	The operator is in the partial opening position	88	The operator is in the ventilation position
	The operator moves to the partial opening position	(88)	The operator moves to the ventilation position
	 The operator is in the partial opening position The automatic timer is active 		
	 The operator is in the partial opening position The pre-warning phase is active 	((88))	 The operator is in the ventilation position The pre-warning phase is active
8.8,	Impulse input from a radio code (flashes 1 ×)	8,8.	Sends the door position feedback to the hand transmitter (flashes 1×)
((8. 5.))	Standby (flashes continuously) Performing BUS scan		

19 Menu and programming overview The listed factory settings $\overleftarrow{\mathbf{M}}$ apply to sectional doors.

Symbol	Menu	Act	Notice
	88		Open / exit programming mode
Selecting a door type			
R .	88		É

Symbol	Menu	Act	Notice
	8.8		- Default settings
	88	$\begin{array}{c} \hline \\ \hline $	such as speed, soft stop, reversing
	88		behaviour of the safety devices, reversal limit etc. are pre-set)
	85.	$ \begin{array}{ c c } \hline \hline$	
Learning runs			
7×	88	$ \begin{array}{c} \hline \\ \hline $	Learning runs after service / maintenance on or changes to the door system.
Teach-in hand transmitter	r		
	88	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ $	Impulse
	88		Light
	88	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} $	Partial opening

Symbol	Menu	Act	Notice
	88	$ \begin{array}{c} $	Choosing OPEN direction
	85	$\begin{array}{c} \hline \hline$	Choosing CLOSE direction
	88	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} $	All radio codes and functions are provided and taught in.
Deleting all radio codes	1		
S S S S	88	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	All hand transmitters All functions





Symbol	Menu			Act	Notice
Additional functions with	Additional functions with relay circuit board				
		8 1 5 s	<i>1</i> 17 17	$\begin{array}{c} \hline 0 \\ \hline \hline \\ \hline \\$	
			00	Deactivated	Menu 25 is automatically deactivated.
			01	External illumination function	No maintenance display (In)
			02	OPEN end-of-travel position reporting	
			03	CLOSE end-of-travel position reporting	
			04	Partial opening end-of-travel position reporting	
		Parameters	05	Momentary signal at the time of OPEN or partial opening command	
		arar	06	Error message on the display (malfunction)	
	88	Å	07	Start warning / advance warning ¹⁾ permanent signal	
			08	Start warning / advance warning ¹⁾ flashing	
			09	Relay energises during travel and de-energises in the end-of-travel positions	
88			10	Maintenance interval signal (display In)	
			11	As with menu 26	Menu 25 is automatically deactivated. No maintenance display (In)
		-{)) ^ ĩ;×̃;Ω	BQ <u>Pig ^</u> 7 * <u>·</u>		
		60 s	₽		
				1) Advance warning	only if activated in menu 32.





Symbol	Menu	Act	Notice
Control buttons			
00 00		$\begin{array}{c} \hline \hline$	
		S OO Deactivated	
	88	Solution 00 Deactivated 01 Activated Image: Constraint of the second seco	
	50		
Reset			
		$\begin{array}{c} \textbf{\textbf{B}} \textbf{\textbf{B}} \textbf{\textbf{C}} \textbf{T} \textbf{T}} \textbf{\textbf{C}} \textbf{\textbf{C}} \textbf{\textbf{C}} \textbf{\textbf{C}} \textbf{T} \textbf{T} \textbf{T} \textbf{T} \textbf{T} \textbf{T} \textbf{T} $	
		20 Back without reset	
	88	00 Back without reset 01 BUS scan HCP-BUS 02 Parameters from menu 20-36 03 Eastern reset	
		02 Parameters from menu 20 – 36	

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TR10B026 RE/08.2019