



# INSTRUCTIONS FOR FITTING, OPERATING AND MAINTENANCE

GARAGE DOOR OPERATOR

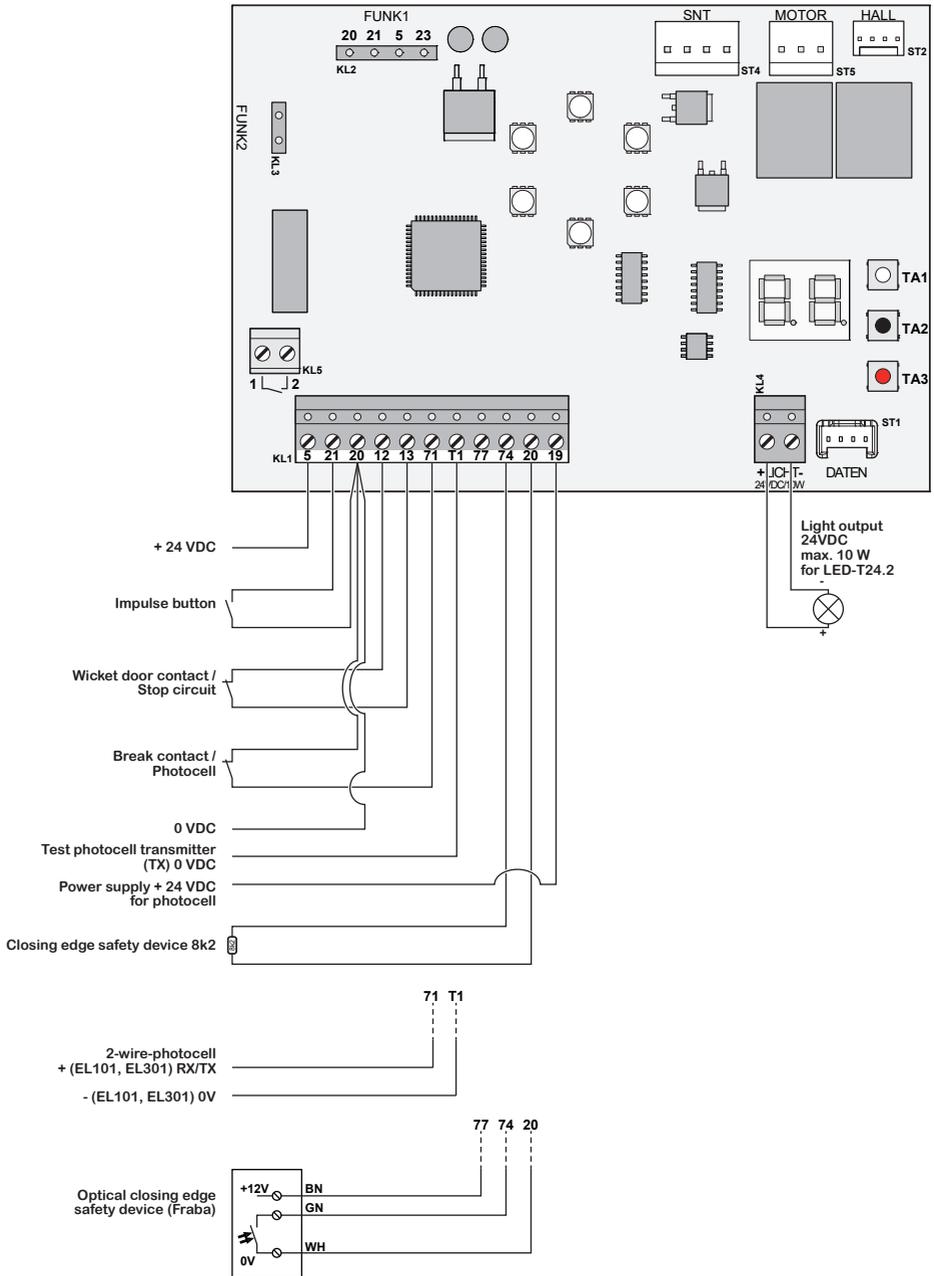
**4Ddoors**  
Just Got European



# TABLE OF CONTENTS

<b>CIRCUIT BOARD OVERVIEW MS550</b> .....	<b>4</b>
<b>INTENDED USE</b> .....	<b>5</b>
<b>NON-INTENDED USE</b> .....	<b>5</b>
<b>MENU OVERVIEW</b> .....	<b>6</b>
<b>ERROR TABLE</b> .....	<b>7</b>
<b>TEACHING IN THE OPERATOR</b> .....	<b>9</b>
<b>TEACHING IN THE PARTIAL OPENING FUNCTION</b> .....	<b>10</b>
<b>OPERATE MENU CONTROL SYSTEM MS550</b> .....	<b>11</b>
<b>DELETING DOOR DATA</b> .....	<b>12</b>
<b>TEACH IN REMOTE CONTROL - BDF140-1</b> .....	<b>12</b>
<b>FUNCTIONS OF THE RADIO CHANNELS</b> .....	<b>13</b>
<b>CLEAR MEMORY OF THE RADIO MODULE</b> .....	<b>13</b>
<b>OPERATION</b> .....	<b>14</b>
<b>INSTRUCTING USERS</b> .....	<b>15</b>
<b>SAFETY REVERSAL</b> .....	<b>15</b>
<b>BEHAVIOUR DURING A POWER FAILURE / BEHAVIOUR AFTER THE POWER RETURNS</b> .....	<b>15</b>
<b>INSPECTION AND MAINTENANCE</b> .....	<b>16</b>
<b>WARRANTY CONDITIONS</b> .....	<b>17</b>
<b>TECHNICAL DATA</b> .....	<b>18</b>

# CIRCUIT BOARD OVERVIEW MS550



## INTENDED USE

- The garage door operator is intended exclusively for impulse operation of spring-compensated sectional and up-and-over doors in the private / non-commercial sector.
- Note the manufacturer's 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. 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.
- The garage door operator is designed for operation in dry areas.

## NON-INTENDED USE

- The operator must not be used for doors without a safety catch.
- The garage door opener must not be installed outside. Parts of the door must not extend onto public footpaths or streets.
- The garage door opener must not be operated in explosive environments.
- The construction of the operator is not designed for operation with sluggish doors, i.e. doors that can hardly or not at all be opened or closed manually.

# MENU OVERVIEW

Legend:		☒ = Factory setting	" = Second	' = Minute	KL = Terminal
☒ After making changes in the menu, it is necessary to teach in the opener again!					
0	► Always select menu item 0 to save changes in the menus. See also <b>Operate menu control system MS550</b>				
1	Light barrier analysis	☒ 1: Contact photocell		2: Two-wire photocell	
2	Closing edge safety device analysis	☒ 1: 8k2 safety edge	2: OSE (opto-sensor safety edge)	3: VL1/VL2 (leading light barrier)	
3	Opening speed in OPEN direction ☒	☒ 1: Normal speed		2: Quick OPEN	
4	Soft-run speed in CLOSE direction	1: 30%		☒ 2: 50%	
5	Brief reverse at Door CLOSED	0: Off	1 ~3 mm	☒ 2 ~6 mm	3 ~9 mm
				4 ~12 mm	5 ~15 mm
6	Option relay function (KL5)	☒ 1: Warning light	2: Light function	3: CLOSE Door display	4: OPEN Door display
7	Input 23 function 4-pin connection / FUNK1(KL2)	☒ 1: Part Open command		2: Light control	
8	Defined choice of direction	☒ 0: No	1 Yes, FUNK1+FUNK2 input	2 Yes, FUNK1 input only	
9	Running direction logic ☒	☒ 1: Default // opens towards the opener		2: Gates // closes towards the opener	
A	Opener light and illumination period	0: OPEN 30" - CLOSE 5"	1: OPEN 90" - CLOSE 5"	☒ 2: OPEN 150" - CLOSE 5"	
		3: OPEN 240" - CLOSE 5"	4: OPEN 300" - CLOSE 5"	5: 30"	6: 90"
		7: 150"	8: 240"	9: 300"	
B	Response time of 24 VDC light output or option relay, if menu 5 = 2 (light function) is set!	0: 1"	1: 1'	2: 2'	3: 3'
		6: 10'	7: 15'	8: On/Off	☒ 9: same as opener light (menu A)
☛ With the On/Off function (menu B = 8) the light can only be switched off when the opener is stationary. If the lighting is switched on, it must be switched off again using a command again.					
C	Activate light function / opener light A = Channel 1 (R1) / Input 21 (KL1 / KL2) B = Channel 3 (R3) / Input 23 (KL2) Menu 7 = 2 1	☒ 1: A Starts opener + opener light → R* + external light → B* B Only switches on external light → B*.			
		2: A Starts opener + opener light → R*. B Only switches on external light → B*.			
		3: A Starts opener + opener light → R* + external light → B* B Switches on opener light + external light → B*.			
		4: A Starts opener + opener light → R*. B Switches on opener light + external light → B*.			
☛ External light relates to light sources connected via KL5 (option relay, if menu 5 = 2) and/or to KL4 (24 VDC, max 10 W).					
D	Option relay function with warning light connected Door movement - Prewarning period - CLOSE door	☒ 2: ON during door movement - FLASHES during prewarning period - OFF during CLOSE Door			
		1: On - On - Off	3: Flashes - On - Off	4: Flashes - Flashes - Off	5: On - On - On
		6: On - Flashes - On	7: Flashes - On - On	8: Flashes - Flashes - On	
E	Keep open time / Automatic closing	☒ 0: No keep open time		1: 10"	2: 20"
		4: 45"	5: 60"	6: 90"	7: 120"
				8: 150"	9: 180"
☛ This function is only permitted if a presence detector is installed as per EN 12453, table 1.					
F	Prewarning period in CLOSE direction	☒ 0: No prewarning period		1: 3"	2: 5"
		4: 15"	5: 20"	6: 30"	7: 40"
				8: 50"	9: 60"
X	Reset keep open time after CLOSE light barrier is broken	☒ 1: Keep open time is reset and starts again.			
		2: Keep open time is <b>not</b> reset → Remaining time elapses. Reset occurs if the light barrier is interrupted during the prewarning period.			
J	Quick Close after CLOSE light barrier is broken	☒ 0: Off	1: Quick Close after 1" prewarning period	2: 2"	3: 3"
		4: 4"	5: 5"	6: 6"	7: 7"
				8: 8"	9: 9"
☛ This function is only active if the intake is automatic.					
N	Reversing behaviour for force shutdown in Close direction	1: Obstacle clearance as far as Door OPEN end position (with AUTO CLOSING selected)			
		☒ 2: 300 mm obstacle clearance in OPEN Door direction			
P	Teach in a leading light barrier (VL1/VL2)	☒ 0: Do <b>not</b> teach in light barrier			
		1: Teach in light barrier			
☛ The teaching process can only be carried out if the advanced light barrier is activated (menu 2 = 3).					
<b>Exit menu:</b>					
► Using button TA1 or TA3, select menu item 0 → Display 0					
► Hold down button TA2 for ~ 3" → Display ST for ~ 3", then door status display.					
The changes are saved.					

# ERROR TABLE

Display (flashes)	Light / Warning lamp	Error / Warning	Possible cause	Remedy
01	Flashes 4x	Interruption of learning / reference run via operating button or timeout.	A command device was actuated during the learning/reference run.	Restart the learning/reference run, however no not actuate any command devices.
			No button has been pressed in learning mode for longer than 60 sec.	Restart the learning/reference run.
02	Flashes 4x	Timeout Hall pulse, control system not receiving Hall pulse.	Hall cable defective.	Check Hall cable, replace if necessary.
			Hall sensor defective.	Replace opener.
			Control system defective.	Replace opener or control system.
03	Flashes 4x	Too many Hall pulses with motor stopped. Motor being pulled or pushed.	Door open too wide.	Correct Door Open end position.
			Spring compensation not OK	Check spring compensation, and correct or replace if necessary.
04	Flashes 4x	Error on the Hall sensor.	Hall cable defective, short-circuit Channel 1 and Channel 2.	Check Hall cable, replace if necessary.
			Hallsensor defekt.	Replace motor or opener.
05	Flashes 1x	Wicket door contact was activated.	Stop or Emergency Stop circuit at terminals 12 and 13 was interrupted or broken during a door movement, see „6.6 Off switch / Wicket door contact“ on page 10.	Make Stop or Emergency Stop circuit.
			<b>➔ When there is no wicket door or Emergency Stop circuit connected, a wire jumper must be connected between terminals 12 / 13 .</b>	
06	Flashes 4x	Motor runtime too long.	Max. runtime of 140 sec. was insufficient for the movement.	Reduce movement length.
			Toothed belt cracked.	Replace toothed belt.
			Opener defective.	Replace opener.
07	Flashes 4x	Door movement too short for path learning.	The movement path being taught in is < 600 mm.	Correct movement path; teach in opener again.
08	Flashes 1x	CLOSE light barrier was activated.	Light barrier at terminals 20 and 71 was interrupted or activated.	Remove obstacle which triggered the light barrier and/or check or if necessary replace the light barrier.
			Incorrect analysis selected for the connected light barrier.	
<b>➔ Without light barrier connected (Terminals 20 / 71), menu <i>i</i> should be set to <i>i</i> and a wire jumper must be connected between terminals T1 / 71 .</b>				
09	Flashes 1x	CLOSE safety contact edge was activated.	Closing edge safety device (8k2) at terminals 20 and 74 was interrupted or activated, see	Remove obstacle which triggered the closing edge safety device and/or check or if necessary replace the closing edge safety device / supply line.
			<b>With the closing edge safety device connected (Terminals 20 / 74), menu <i>z</i> should be set to <i>i</i> and an 8k2 resistor must be connected between terminals 20 / 74.</b>	
10	Flashes 4x	Motor current exceeded.	The taught-in current was exceeded due to a defective door mechanism or broken spring.	Check door mechanism and/or springs and repair.
11	Flashes 4x	Too many Hall pulses.	You are attempting to teach in a movement path which has more than 8500 pulses (approx. 8500 mm).	Correct movement path; teach in opener again.
12	Flashes 4x	Relay sticking.	Motor relay of the opener control system sticking.	Replace control system.
13	Flashes 4x	Door position absent after restart.	The current position of the door is no longer recognised after a power cut.	Perform reference run
14	Flashes 4x	Invalid door position at restart.	The current position of the door during a learning or reference run is no longer recognised after a power cut.	Teach in opener again or perform reference run again. If the error occurs multiple times, replace the control system.
15	Flashes 4x	Error during testing of the 8k2 safety edge.	Test of closing edge analysis (8k2) was unsuccessful. Closing edge safety device 8k2 was activated during testing.	Inspect closing edge safety device / supply line, and replace if necessary.
16	Flashes 4x	Incorrect program operating status.	External interference (current peaks, overvoltage, or similar).	Perform reference run If the error occurs multiple times, replace the control system.
17	Flashes 4x	Error when indexing the force shutdown.	Internal error.	If the error occurs multiple times, replace the control system.
18	Flashes 3x	Door parameters were deleted manually by the operator.	Door parameters (force and path data) were deleted or the opener has not been taught in yet (this is only information and not an error).	Teach in the opener again, see <b>Teaching in the operator</b>
U				
19	Flashes 4x	Error measuring current.	Motor connection cable defective.	Check motor connection cable, replace if necessary.
			Motor defective.	Replace opener.
			Power supply defective,	Replace opener or power supply
			Control system defective.	Replace opener or control system.

Display (flashes)	Light / Warning lamp	Error / Warning	Possible cause	Remedy
20		Force shutdown during Open door run.	The door is running sluggishly / unevenly. There is an obstacle in the door area.	Correct the door travel. Remove obstacle, teach in opener again if necessary.
21		Operation and learning buttons selected at the same time.	Permanent pulse from an externally connected button during the teach-in process.	Replace the defective button, teach in the opener again, see <b>Teaching in the operator</b>
22	Flashes 2x	2 x force shutdown in succession during Open Door run. Error display only if autoclosing is selected.	The door is running sluggishly or unevenly.	Correct the door travel.
			There is an obstacle in the door area.	Remove obstacle, teach in opener again if necessary. The opener must be restarted with a command.
23	Flashes 4x	Manual reference run started via remote.	The taught-in remote control button was held down for at least 7 sec.	Perform reference run
24	Flashes 1x	"CLOSE" optical safety contact edge was activated.	An optical closing edge safety device (Fraba), connected to terminals 20, 74 and 77, was interrupted or activated	Remove the obstacle which triggered the closing edge safety device and/or check or if necessary replace the closing edge safety device / supply line.
			Incorrect analysis selected for the connected closing edge safety device.	
□ With the closing edge safety device connected (Terminals 20 / 74 / 77), menu 2 should be set to 1 and an 8k2 resistor must be connected between terminals 20 / 74.				
25	Flashes 4x	Error during speed measurement.	Wicket door contact on the motor connection cable or internal error.	Inspect motor connection cable and replace if necessary. If the error occurs multiple times, replace the control system.
26		Force shutdown during Close door run.	Door is running sluggishly or unevenly.	Correct the door travel.
			There is an obstacle in the door area.	Remove obstacle, teach in opener again if necessary.
27	Flashes 2x	2x force shutdown or 8k2/OSE in succession during Close Door run. Error display only if autoclosing is selected.	Door is running sluggishly or unevenly.	Correct the door travel.
			There is an obstacle in the door area.	Remove obstacle, teach in opener again if necessary. The opener must be restarted with a command.
			The closing edge safety device is defective.	Inspect closing edge safety device, replace if necessary. The opener must be restarted with a command.
28	Flashes 4x	Current calibration inaccurate.	Internal error.	Replace control system.
29	Flashes 4x	Error with Hall counter value.	External interference, e.g. current peaks, overvoltage, or similar.	If the error occurs multiple times, replace the control system.
30		Reset by watchdog.	Internal error.	If the error occurs multiple times, replace the control system.
32	Flashes 1x	Safety contact edge 8k2 was activated during OPEN.	An closing edge safety device (8k2), connected to terminals 20 and 74, was interrupted or activated	Remove obstacle which triggered the closing edge safety device and/or check or if necessary replace the closing edge safety device / supply line.
			□ With the closing edge safety device connected (Terminals 20 / 74 / 77), menu 2 should be set to 1 and an 8k2 resistor must be connected between terminals 20 / 74.	
34	Flashes 1x	Safety contact rail was activated during OPEN.	An optical closing edge safety device (Fraba) is connected to terminals 20, 74, and 77, but the incorrect analysis was selected.	Select the correct analysis for the connected closing edge safety device. In menu 2 set the value 2.
35	Flashes 2x	Safety device (8k2) was activated 2x in succession during Open Door run.	The closing edge safety device is defective, error display only if auto-closing is selected.	Inspect closing edge safety device, replace if necessary. The opener must be restarted with a command.
			There is an obstacle in the door area; error display only if auto-closing is selected.	
38	Flashes 1x	Error while testing the contact light barrier in CLOSE direction.	The test of the contact light barrier for the "Close" direction was unsuccessful.	Inspect light barrier and supply line of the light barrier, replace if necessary.
			Two-wire light barrier is connected.	

### Note

If there are several parallel errors, the first error is displayed. If an error is eliminated, a command (manual transmitter button, a connected operating button or the white circuit board button) may have to be entered in order to display the next error.



The general warning symbol indicates a danger that can lead to **injury** or **death**.



## DANGER!

Indicates a danger that can immediately lead to 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.

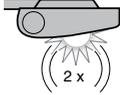
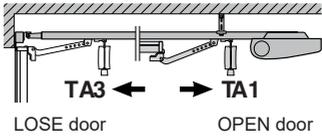


## ATTENTION!

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

## TEACHING IN THE OPERATOR

When teaching in, the operator is adjusted to the door. The travel length, required force for opening and closing, and any connected safety devices are automatically taught in and saved in a power failure-proof manner. The data is only valid for this door.

ACTION	DISPLAY / INFO
 <p>Insert mains plug.</p>	<p>The software version is displayed</p>
 <p>Hold down button TA2 for ~6 sec...</p>	<p>...until L fl ashes on the display. The opener light fl ashes at frequency of 2 Hz.</p>  
 <p>Release button TA2.</p>	
  <p>Hold down button TA3 or TA1, to move the door to the desired "open door" position. In its „OPEN“ position the door must maintain a minimum distance of approx. 50 mm to its limit stop.</p> <p>→ deadman function, see Learning mode.</p>	 <p>LOSE door                      OPEN door</p>
 <p>Briefly press button TA2 once.</p>	<p><b>The learning process begins;</b> the door closes, opens and then closes another 2x automatically. After 5 learning movements, the opener light switches on and the opener moves the door to the Door Open end position.</p>
<p>Programming is complete.</p>	

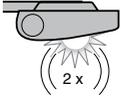
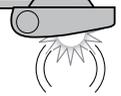
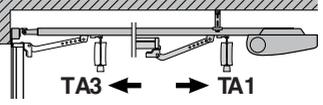


# WARNING!

Because the power shut down does not function during the teaching process, it is essential that the installer remains at the device to prevent anyone from getting close to the door.

## TEACHING IN THE PARTIAL OPENING FUNCTION

The opener is taught in and in the Door Closed end position.

ACTION	DISPLAY / INFO
 <p>Hold down button TA2 for ~6 sec...</p>	<p>...until L fl ashes on the display. The opener light fl ashes at frequency of 2 Hz.</p>  
 <p>Hold down button TA2 in addition to TA1...</p>	 
 <p>Release button TA1 and TA2.</p>	
  <p>Hold down button TA3 or TA1, to move the door to the desired "PART OPEN" position.</p> <p>→ deadman function, see Learning mode.</p>	 <p>LOSE door      OPEN door</p>
 <p>Briefly press button TA2 once. The PART OPEN position is saved.</p>	

The part open position is programmed.

# OPERATE MENU CONTROL SYSTEM MS550

ACTION	DISPLAY / INFO
<p>► Open menu selection window</p>  <p>Hold down button TA2 for ~3 sec. until <b>11</b> or <b>12</b> appears on the display.</p>	<p>e.g. </p> <p><b>Menu item</b> = left digit, notfl ashing  <b>Setting</b> = right digit, flashing            You are in the menu selection window.</p>
<p>► Open menu item / Change settings</p>	
  <p>Press button TA3 or TA1 to switch to the desired menu item.</p>	<p>Order of the menus, see, Menu overview</p>
 <p>Press button tA2. → The menu item is selected.</p>	<p>The set value is displayed.</p>
  <p>Press button TA1 or TA3 to change the menu setting.</p>	<p>Menu settings, see, Menu overview</p>
 <p>Briefly press button TA2 once. The PART OPEN position is saved.</p>	<p>You are back in the menu selection window.</p>
<p>◀ <b>Repeat this section, if you wish to make further changes in the menus.</b></p>	
<p>► Save changes in the menus / Exit the menus</p>	
  <p>Select menu item <b>0</b> with button TA3 or TA1.</p>	
 <p>Hold down button TA2 for ~3 sec.</p>	<p>Successful saving is indicated on the display by</p> 
 <p>Release button TA2.</p>	<p>The status of the door is displayed,</p>
<p>◀ <b>If button TA2 is only pressed briefly or no button is pressed for 60 sec., programming mode exits without saving the changes.</b></p>	

## DELETING DOOR DATA

If the teaching process is not completed successfully despite several attempts, we recommend resetting the imported data as follows:

1. Remove the mains plug and wait at least 10 seconds.
2. Insert the mains plug again.
3. After the seven segment display has switched on, press the black TA2 button within the next 5 seconds and then the white TA1 button; keep these buttons depressed until the drive lighting begins to flash three times.
4. Release the button; after the software version is displayed, "U" flashes on the display.
5. All data is now deleted.

### Note

In the supplied state, the door data is deleted and the drive may be taught immediately.

## TEACH IN REMOTE CONTROL - BDF140-1

ACTION	DISPLAY / INFO
 <p>In order to select the desired radio channel <i>r 1</i>, <i>r 2</i>, <i>r 3</i>, or <i>r 4</i> briefly press button TA3...</p>	<p>The software version is displayed</p>
<p>...1 x for <i>r 1</i></p>	<p><i>r 1</i> is displayed.</p>
<p>...2 x for <i>r 2</i></p>	<p><i>r 2</i> is displayed.</p>
<p>...3 x for <i>r 3</i></p>	<p><i>r 3</i> is displayed.</p>
<p>...4 x for <i>r 4</i></p>	<p><i>r 4</i> is displayed.</p>
<p>...5 x, to exit the menu <b>without making any changes.</b></p>	
 <p><b>Hold down the desired button on the remote control for ~ 3 sec..</b></p>	
 <p><b>Release button on the remote control.</b></p>	<p>After the teach-in process has been successfully completed, the status display is shown for the door</p>
<p>► Repeat the procedure to teach in additional remote controls.</p>	

## FUNCTIONS OF THE RADIO CHANNELS

Channel 1 <i>r 1</i>	Menu <b>8</b> = <b>0</b> Start command	Menu <b>8</b> = <b>0</b> Defined Open (Open-Stop-Open...)
	"Outwards" request with traffic light control MS3EB connected	
Channel 2 <i>r 2</i>	Menu <b>8</b> = <b>0</b> Part Open command	Menu <b>8</b> = <b>0</b> Defined Close (Close-Stop-Close...)
	"Inwards" request with traffic light control MS3EB connected	
Channel 3 <i>r 3</i>	Actuate 24 VDC light output or option relay for light function (if Menu <b>5</b> = <b>2</b> ). The function can be selected in menu b.	
Channel 4 <i>r 4</i>	Defined Close command, Close-Stop-Close... or interruption of the keep open time with automatic closing selected.	

### Note

Max. 120 codes can be taught into the radio module memory. Once the memory is full, the display flashes *r 1*, *r 2*, *r 3* or *r 4* when you attempt to teach in additional codes.

With traffic light control MS3EB-G connected, the Part Open function is deactivated, from which point Channel 1 is interpreted as an outwards request and Channel 2 as an inwards request.

Menu **7** must be set to *i*, Menu **8** must be set to **0**.

## CLEAR MEMORY OF THE RADIO MODULE

- ▶ Hold down button **TA3** for ~10 sec. → Countdown begins
  - ▶ after ~2 sec. and counts down from 8 (*d8*, *d7*...).
  - ▶ After the period has elapsed, all channels are cleared,  
→ *de* appears on the display.
  - ▶ Release button TA3, → Status of the door is displayed
- ☛ If the button is released before the countdown is complete, the memory will not be cleared!
  - ☛ All taught-in remote controls are now cleared from memory; it is not possible to clear individual remote controls!

### Note

Max. 120 codes can be taught into the radio module memory. Once the memory is full, the display flashes *r 1*, *r 2*, *r 3* or *r 4* when you attempt to teach in additional codes.

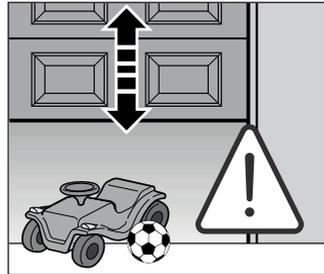
With traffic light control MS3EB-G connected, the Part Open function is deactivated, from which point Channel 1 is interpreted as an outwards request and Channel 2 as an inwards request.

Menu **7** must be set to *i*, Menu **8** must be set to **0**.

# 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.
- ▶ Only drive or pass through remote control door systems if the door is in the Open end-of-travel position!
- ▶ Never stay standing under the open door.



## CAUTION!

### Danger of crushing in the boom

Do not reach into the boom with your fingers during door travel, as this can cause crushing.

- ▶ Do not reach into the boom during door travel



## 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.



## ATTENTION!

### Damage due to the cord of the mechanical release

If the cord of the mechanical release becomes caught on a roof carrier system or other parts of the vehicle or door, this can lead to damage.

- ▶ Make sure that the cable cannot become caught.

### Note

As a general rule, conduct the initial function tests and the initial start-up or extension of the radio system inside the garage.

## INSTRUCTING USERS

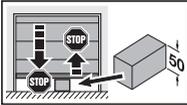
- ▶ All persons using the door system must be shown how to operate the garage door operator properly and safely.
- ▶ Demonstrate and test the mechanical release as well as the safety reversal.

## SAFETY REVERSAL



- ▶ 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 stop and initiate the safety reversal.



- ▶ Position a test object with a height of approx. 50 mm 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.

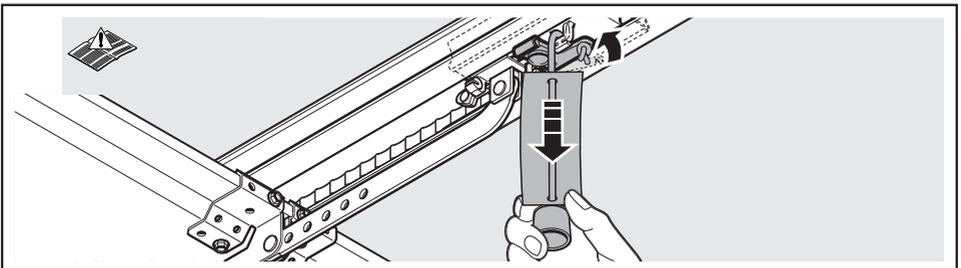
- ▶ In the event of a failure of the safety reversal, a specialist must be commissioned immediately for the inspection and repair work.

## BEHAVIOUR DURING A POWER FAILURE / BEHAVIOUR AFTER THE POWER RETURNS

- ▶ To be able to open or close the garage door by hand during a power failure, it must be disengaged from the slide carriage while the door is closed.
- ▶ After the power returns, the slide carriage for automatic operation must be re-engaged.

### MANUAL OPERATION

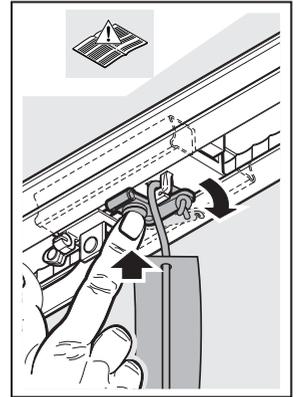
The slide carriage is disengaged from the belt lock to enable the door to be moved by hand. For disengaging the slide carriage: Pull on the cord of the mechanical release.



## AUTOMATED OPERATION

The belt lock is engaged in the slide carriage to enable the door to be moved with the operator. For preparing the slide carriage for engaging:

- Press the green knob.
- Move the belt in the direction of the slide carriage until the belt lock engages.



## INSPECTION AND MAINTENANCE

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



### WARNING!

#### **danger of injury due to unexpected door travel!**

Unexpected door travel may occur during inspection and maintenance work if the door system is inadvertently actuated by other persons.

- ▶ Disconnect the mains plug 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. Contact your supplier for this purpose.

A visual inspection may be carried out by the operator.

- ▶ Check all safety and protective functions monthly.
- ▶ Check safety devices without self-testing every six months.
- ▶ Any malfunctions and / or defects must be remedied **immediately**.

# WARRANTY CONDITIONS

## WARRANTY

We shall be exempt from our warranty obligations and product liability in the event that the customer carries out his own structural alterations or undertakes improper installation work or arranges for same to be carried out by others without our prior approval and contrary to the fitting guidelines we have provided. Moreover, we shall accept no responsibility for the inadvertent or negligent use of the operator and the accessories nor for improper maintenance of the door and its counterbalance. Batteries and light bulbs are also not covered by the warranty.

## 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:

- 60 months or 200.000 cycles for the operator mechanics, motor and motor control
- 24 months on radio equipment, accessories and special systems

There is no warranty on consumables (e.g. fuses, batteries, lamps). 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

A claim under this warranty is only valid for the country in which the equipment was bought. 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. Reimbursement of expenditure for dismantling and fitting, testing of corresponding parts, as well as demands for lost profits and compensation for damages, are excluded from the warranty.

The receipt of purchase substantiates your right to claim under the warranty. Replaced parts become our property

## PERFORMANCE

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 nondefective goods, to carry out repairs, or to grant a price reduction.

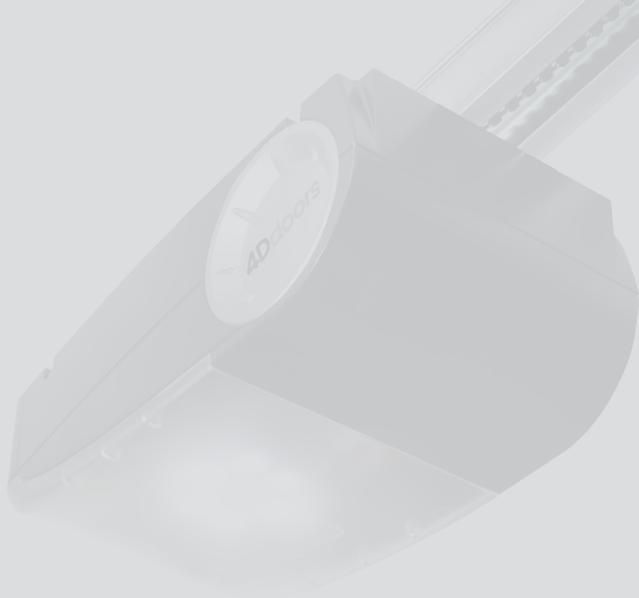
Damages caused by the following are excluded:

- 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

# TECHNICAL DATA

<b>Mains voltage</b>	230/240V, 50 Hz, Standby < 0,5 W	
<b>Protection category</b>	Only for dry rooms	
<b>Temperature range</b>	-20 °C to +60 °C	
<b>Automatic safety cut-out</b>	Is automatically taught in for both directions separately.	
<b>End-of-travel position cut-out force limit</b>	Self-learning, wear-free, as it has no mechanical switches. Additionally integrated run time limitation to approx. 60 s. Automatic safety cut-out, readjusting at every door run.	
<b>Rated load</b>	<b>250 N</b>	
<b>Pull and push force</b>	<b>GA203:</b>	750 N
	<b>GA204:</b>	750 N
	<b>GA403:</b>	1000 N
	<b>GA404:</b>	850 N
<b>Power</b>	<b>GA203:</b>	0,3 kW
	<b>GA204:</b>	0,3 kW
	<b>GA403:</b>	0,4 kW
	<b>GA404:</b>	0,4 kW
<b>Duty cycle</b>	KB 2 min.	
<b>Motor</b>	Direct current motor with hall sensor	
<b>Connection</b>	Removable connection technology for external equipment with 24 V DC low safety voltage, such as internal and external buttons with impulse operation.	
<b>Special functions</b>	<ul style="list-style-type: none"> <li>• Stop/off switch</li> <li>• Photocell (Contact or 2-wire)</li> <li>• Closing edge safety device (8k2 or OSE)</li> <li>• Option relay; optional for warning lights, additional external lighting, door CLOSED or door OPEN display.</li> <li>• External LED-Light 24 VDC / max. 10W</li> </ul>	
<b>Emergency release</b>	Actuated from inside with pull cord in the event of a power failure	
<b>Universal fittings</b>	For up-and-over doors and Sectional doors	
<b>Door travel speed*</b>	<ul style="list-style-type: none"> <li>• In CLOSE direction max. 14 cm/s</li> <li>• In OPEN direction max. 22 cm/s</li> </ul>	
* Dependent on door size and weight		
<b>Airborne sound emission of the garage door operator</b>	≤ 70 dB (A)	
<b>Operator boom</b>	Extremely flat (no more than 30 mm high) with integral door security kit. Boom in toothed belt or synthetic belt version.	





# 4Ddoors

office@4ddoors.com • www.4ddoors.com

4D Doors reserve the right to make changes to the products and accessories without notice and without obligation to change existing products or orders.

Details are correct at time of printing. For more details on this product or others in our range including warranty details and conditions, please visit the website [www.4ddoors.com](http://www.4ddoors.com)

©2014 4D Garage Doors Pty Ltd. All rights reserved. The 4D door logos, "Affordable Ingenuity" wordage, are trademarks and registered trademarks of 4D Garage Doors Pty Ltd.

No part of this brochure may be reproduced without prior permission.