ekey

ekey home

English

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General

ekey biometric systems GmbH operates a quality management system in compliance with EN ISO 9001:2008 and is certified accordingly.

These instructions form a component of the product. Ensure that they are stored in a safe place. Please contact your dealer for further information about the product.

Safe operation and function of the devices can be impaired in the following situations. Liability due to malfunctioning is transferred to the operator/user in such cases:

- □ The system devices are not installed, used, maintained, or cleaned in accordance with the instructions
- □ The system devices are not used within the scope of proper use
- □ Unauthorized modifications are carried out on the system devices by the operator.

These operating instructions are not subject to updating. We reserve the right to make technical modifications and change the product's appearance; any liability for errors and misprints is excluded.

The version of our general terms and conditions in force on the date of purchase shall apply. See http://www.ekey.net.

Notices, symbols, and abbreviations

NOTICE	!
Denotes additional information and useful tips.	

DANGER	⚠
Denotes imminent danger which could lead to death or serious injuries.	

ATTENTION	⚠
Denotes possible property damage which cannot result in injuries.	

Symbols:

1.	Step-by-step instructions
[i]	References to sections of these instructions
[d]	References to the mounting instructions
[⚡]	References to the wiring diagram
□	Listing without specified order, 1st level
Displayed value	Displayed values
ekey home FS OM	Product names
MENU ITEM	Menu items
Button	Buttons

Abbreviations and terminology:

WM	Wall-mounted
FAR	False Acceptance Rate
FRR	False Rejection Rate
FS	Finger scanner
IN	integra
RFID	Radio-Frequency Identification
CP	Control panel
Sn.	Serial number
OM	Outlet-mounted
Vn.	Version number
Fingerprint	The biometric information extracted from the fingerprint

Safety information

Mount the control panel in a secure internal area. This prevents tampering from the outside.

Tamper-proofing

Product description

System overview
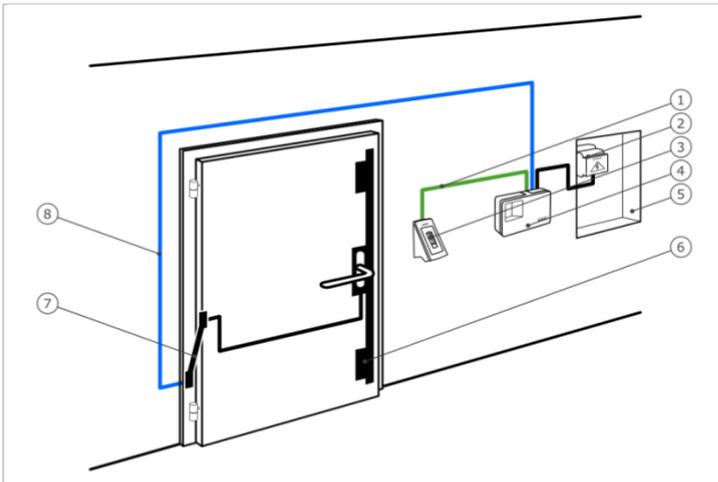
Fig. 1:   Overview of the system

    1 Connecting cable from registration unit to control panel
    2 Power supply
    3 Registration unit (finger scanner or code pad)
    4 Control panel
    5 Distributor
    6 Motorized lock
    7 Cable transfer
    8 Connecting cable from control panel to motorized lock

Scope of delivery	☐ Registration unit (finger scanner or code pad)
	☐ RFID transponder for finger scanners with RFID function
	☐ Control panel
	☐ Operating instructions, mounting instructions, wiring diagram
	☐ Optional: matching accessories (cable transfer, power supply, connecting cable, covers, etc.).

Proper use and area of application

This product is an access control system with a biometric or mental identification feature (finger scan or pin code). The system is comprised of a registration unit and control panel. It is available in various models and component combinations.

The finger scan access control system detects the characteristics of the fingerprint contours, compares them to the stored fingerprint image, and opens the door in the event of a match. One particular makeup allows the user to be identified and the door opened by means of an RFID transponder.

The non-physical access control system detects the pin codes which are entered, compares them to the stored reference codes, and opens the door in the event of a match.

The system is primarily designed for opening house doors, apartment doors, and garage doors in homes and businesses.

Finger scanner

Function of the finger scanner
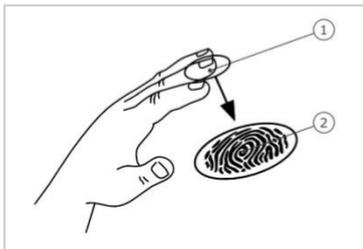
1 Front phalanx
2 Fingerprint

Fig. 2:   Fingerprint

The finger scanner detects the fingerprint by means of a line sensor and subsequently processes it. It then compares the result with the stored fingerprint image. The finger scanner only works correctly and reliably with the front phalanx print. Swipe your finger steadily and evenly over the sensor in the correct position.

The makeup with RFID function detects and identifies RFID transponders.

Finger scanner controls

Controls	Function
Finger swipe area	Store fingers by 'swiping the finger' evenly downward over the sensor. Identification by 'holding up the RFID transponder', which involves holding an RFID transponder over the finger swipe area of the finger scanner.
Sensor	System programming by 'Finger Touch', a short, rapid touch of the sensor with the finger.

Table 1:   Finger scanner controls
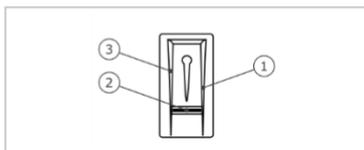
1 Right guiding edge
2 Sensor
3 Left guiding edge

Fig. 3:   Finger swipe area

Correct operation of the finger scanner

Incorrect operation will impair the function of the finger scanner.

'Swiping the finger':

Step	Figure	Description
1st		Hold your finger straight and place it centrally between the guiding edges. Do not twist the finger.
2nd		Place the joint of the front phalanx directly onto the sensor. Place your finger flat onto the finger swipe area.
3rd		Stretch out the neighboring fingers.
4th		Move your finger evenly downward over the sensor. Move the whole hand simultaneously. Swipe the front phalanx fully over the sensor in order to achieve optimal results. The movement takes approx. 1 second.

General hints for achieving a good-quality fingerprint
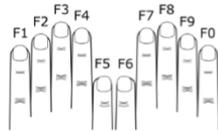
- □ Recommended finger numbering: .
- □ The index, middle, and ring fingers work best. The thumb and small finger work marginally or not at all.
- □ If the fingers are frequently wet, store the images with wet fingers.
- □ Children's fingerprints work from approx. 5 years of age.

'Finger Touch':

Step	Figure	Description
1st		Briefly touch the sensor with your finger.

'Holding up the RFID transponder':

❗	NOTICE

The 'holding up the RFID transponder' option is only available for finger scanners with an RFID function.

Step	Figure	Description
1st		Hold the RFID transponder face parallel to the finger swipe area of the finger scanner at a distance of 1 to 5 cm.

Optical signals on the finger scanner

There are 2 types of LED:

- □ Status LED for operating status
- □ Function LED for indicating the function of the overall system.
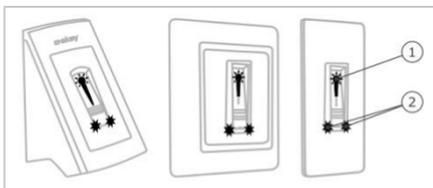
1 Status LED
2 Function LEDs

Fig. 4: Optical signals on the finger scanner

Function of the code pad

The code pad captures the pin code by means of the capacitive keypad. It compares what has been entered with the stored reference codes. The code pad can handle pin codes containing 4 to 8 digits. The digits in the pin code cannot all be the same; at least one of them must be different. There are 2 types of pin code: The admin code for configuring the system and the user code for opening the door.

Controls, optical signals, and acoustic signals on the code pad

The code pad has 2 sections with controls.

Controls	Function
Input buttons	Enter pin code; select menu item.
Confirmation buttons	Confirm pin code input as positive or negative; start menu.

Table 2:   Code pad controls

2 status LEDs signal the operating statuses (pin code correct, pin code incorrect, menu item, etc.). An acoustic signal transmitter signals that the button has been pressed and that access has been enabled.
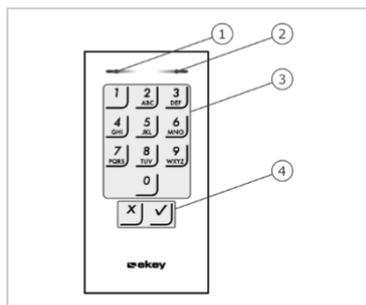
1 Left status LED
2 Right status LED
3 Input buttons
4 Confirmation buttons

Fig. 5:   Code pad overview

The back-illumination of the keypad is blue, dimmable, and switches on or off according to the lighting conditions.

Admin menu for the code pad

There is a range of menu items available in the Admin menu for programming purposes. These can be called via the buttons.

Button	Menu item
$\frac{3}{DEF}$	Change admin code
$\frac{4}{GHI}$	Reset the system to default settings
$\frac{5}{JKL}$	Set the code pad (back-illumination, acoustic and optical signal when button is pressed, acoustic signal on opening)

Table 3:   Admin menu for the code pad

Control panels

The control panels are available in 2 models, each with 2 relay variants. You can only operate a single registration unit per control panel. Any registration unit works with any control panel.

Product name	*ekey home CP WM 1*	*ekey home CP WM 3*	*ekey home CP IN 1*	*ekey home CP IN 2*
Figure				
Mounting type	Wall mounting, 1 relay	Wall mounting, 3 relays	Can be integrated, 1 relay, 1 digital input	Can be integrated, 2 relays, 1 digital input

Table 4:   Control panel models and variants

Function of the control panel

The control panel is the actuator of the system. It serves to switch one or more relays.

Control panel controls

Controls	Function
Seven-segment display and 4 buttons	Programming and configuring, relay control.

Table 5:   Control panel controls
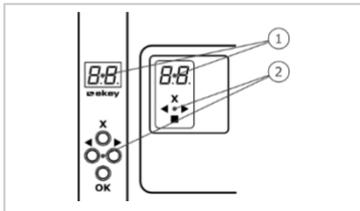
1 Seven-segment display
2 Keypad

Fig. 6:   Overview of the *ekey home CP WM* and the *ekey home CP IN*

Button				
Name	OK	Arrow pointing to the left	Arrow pointing to the right	ESC
Function	Save values, jump to the next menu level.	Navigate in the menu, set values.	Navigate in the menu, set values.	Leave a menu level, cancel input.

Table 6:   Control panel programming buttons

Menu items

The control panel offers various menu items:

`E u`	Enroll user	Stores users, fingers, RFID transponders, and user codes.
`d u`	Delete user	Deletes all data for a user.
`5 c`	Security code	Changes the security code.
`I n`	Information	Calls the serial and version number.
`r r`	Reset	Resets the system to default settings.
`r t`	Relay time	Sets the relay switching times.
`I P`	Input	Sets the digital input (only for *ekey home control panel integra*)
`L E`	LED intensity	Sets the LED intensity (does not apply for the *ekey keypad*)
`t E`	Test mode	Performs test mode
`d E`	Demo mode	Performs demo mode
`∏ ∏`	Trade fair mode	Performs trade fair mode

Technical specifications

Name	Unit	Values
Supply voltage	VDC	8-24
Power	W	Minimal (heating off): 1
		Maximal (heating on): 4 (WM, OM), 3 (IN)
Operating temperature	°C	-25 to +70
Memory	Fingers	99
	RFID transponders	99 (only for FS with RFID function)
Security	FAR	1:10,000,000
	FRR	1:100
IP code	IP	*WM*: 44
		IN: 54 (front side)
		OM: 44 (with *ekey frame OM*)
Typical recognition period	s	1
RFID (only for finger scanners with RFID function)	Range	30 mm
	Standard	ISO14443A
	Transponder type	MIFARE DESFire EV1 with at least 1 KB of memory

Table 7:   Technical specifications: *ekey home finger scanner*

Name	Unit	Values
Supply voltage	VDC	8-24
Power rating	W	1
Operating temperature	°C	-25 to +70
Memory	Pin codes	99
Pin code length	Quantity	4-8 digits
IP code	IP	54 (front side)

Table 8:   Technical specifications: *ekey home keypad integra 2.0*

Name	Unit	Values	
		ekey home CP WM	*ekey home CP IN*
Supply voltage	VDC	8-12	8-24
Power rating	W	1	1
Relay	Quantity	1 (3)	1 (2)
Switching voltage relay	VDC	42	42
Switching current relay	A	2	2
Operating temperature	°C	-20 to +70	-20 to +70
IP code	IP	20	20
Digital inputs	Quantity	-	1 (potential free)

Table 9:   Technical specifications: *ekey home control panel WM/IN*

Installation

ATTENTION	⚠

Mount and cable the product correctly before connecting power.
Failure to do so will create a risk of possible property damage!
Do not connect the power supply beforehand!

Mount the system in accordance with the supplied mounting instructions.	🗋

Cable the system in accordance with the supplied wiring diagram.	🗲

Step	Action	Display
1st	Ensure safe installation of the devices. Close the covers.	-

Commissioning

Commissioning the devices couples the control panel and the registration unit with one another.

Step	Action	Description	Display	
1st		Connect the power supply to the mains.	44	The control panel counts backwards.
2nd	No action required.	Default setting.		The status LED of the finger scanner flashes orange and the status LEDs of the code pad flash yellow alternately.
3rd	No action required.	Default setting.	8.8.	2 points light up.
4th	✕	Press OK.	8.8.	1 point lights up on the right.
5th	✕	Press ESC. The control panel is ready to store a finger, user code, or RFID transponder.	EF	For a finger scanner.
			EP	For a code pad.

Step	Action	Description	Display	
6th	Variant a	For a new installation: Press ESC.	`r r`	-
	Variant b / or	For an installation after the control panel has been replaced: Swipe a pre-stored finger over the finger scanner; OR enter a pre-stored user code on the keypad; OR hold a stored RFID transponder in front of the finger swipe area on the finger scanner. Fingers, user codes, and RFID transponders are not deleted. OR press ESC: All existing fingers, user codes, and RFID transponders are deleted.		
7th	No action required.	-	`8.8.`	1 point flashes on the left.

The devices have now been commissioned and are in normal mode.

If you are using a Bluetooth finger scanner, the finger scanner is ready to create the coupling between the finger scanner and smartphone/tablet.

! **NOTICE**

The control panel automatically detects whether the finger scanner attached to it is a Bluetooth finger scanner. The control panel shows you whether your finger scanner is a Bluetooth finger scanner when you enter the security code.

i See Entering the security code, page 21.

Test mode tests the overall system (tG) and the lock after it has been installed in the door (tS). It switches the relay(s) on and off and checks the electrical connections to the motorized lock.

NOTICE	!

A test can only take place if no smartphone/tablet has been coupled.

Testing the overall system

The test of the overall system is performed via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.	i

The system displays the main menu.

With a finger scanner

Step	Action	Description	Display	
1st	◄ ✕ ►	Press < or > until tE is displayed	**tE**	
2nd	◄ ✕ ►	Press OK.	**tG**	
3rd	◄ ✕ ►	Press OK.	**tG.**	
4th		Swipe any finger over the sensor. All of the relays switch one after another for the defined relay switching time (default setting: 3 s).		The finger scanner lights up red.
5th	✕	Press ESC twice.		1 point flashes on the left.

The entire system has been tested. The system is in normal mode.

NOTICE	!

Test mode is terminated in the following cases:

□   If the finger scanner is not operated for around 1 minute
□   If the system is disconnected from the power supply

With a code pad

Step	Action	Description	Display
1st		Press < or > until tE is displayed	EE
2nd		Press OK.	EG
3rd		Press OK.	$EG.$
4th		Press any two buttons.	-
5th	✓	Press ✓. All of the relays switch one after another for the defined relay switching time (default setting: 3 s).	Status LEDs light up red.
6th		Press ESC twice.	1 point flashes on the left.

The entire system has been tested. The system is in normal mode.

!	**NOTICE**

Test mode is terminated in the following cases:

- ☐ If the code pad is not operated for around 1 minute
- ☐ If the system is disconnected from the power supply

Testing the lock

You can switch the relays individually. The test of the lock is performed via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.   [i]

The system displays the main menu.

Step	Action	Description	Display
1st		Press < or > until tE is displayed.	tE
2nd		Press OK.	tO
3rd		Press < or > until tS is displayed.	tS
4th		Press OK.	o1
5th		Press OK. Relay 1 switches for the defined relay switching time (default setting: 3 s).	o1
6th		Press < or > until o2 is displayed.	o2
7th		Press OK. Relay 2 switches for the defined relay switching time (default setting: 3 s).	o2
8th		(Only for *ekey home control panel 3*) Press < or > until o3 is displayed.	o3
9th		Press OK. Relay 3 switches for the defined relay switching time (default setting: 3 s).	o3
10th		Press ESC 3 times.	1 point flashes on the left.

The relays have been tested. The system is in normal mode.

NOTICE	[!]

Test mode is terminated in the following cases:

- □ If the registration unit is not operated for around 1 minute
- □ If the system is disconnected from the power supply

Operating concept

Different operating concepts are available, depending on the registration unit:

- □ ekey control panel menu – administration of the finger scanner by means of the control panel
- □ *ekey home app* – administration of the Bluetooth finger scanner by means of a smartphone/tablet
- □ ekey admin code – administration of the code pad by means of shortcuts.

Go to the operating concept that relates to the registration unit you have purchased.

| i | See Usage of the finger scanner with the control panel menu, page 20. |

| i | See Usage of the finger scanner with the app, page 37. |

| i | See Usage of the code pad with shortcuts, page 43. |

Usage of the finger scanner with the control panel menu

The devices must have been commissioned before you start your system administration.

| i | See Commissioning devices and establishing normal mode, page 15. |

The system is in normal mode. The control panel menu is used for programming the system.

Entering the security code grants you access to the main menu. The main menu is used to configure the system. The default security code is 99.

You can also determine whether your finger scanner is a Bluetooth finger scanner by entering the security code.

ATTENTION	⚠

Change the default security code immediately after commissioning!
If you do not change the security code, it may be possible for unauthorized persons to get into your main menu and then gain access to your premises.
Choose a new security code and keep it secret.

See Changing the security code, page 22.	ⓘ

The system is in normal mode.

Step	Action	Description	Display
1st	✖▸▪	Press OK.	9.8
2nd	◂✖▸▪	Press < or > to select the first digit of the security code.	9.8
3rd	✖▸▪	Press OK.	99.
4th	◂✖▸▪	Press < or > to select the second digit of the security code.	99.
5th	✖▸▪	Press OK. bt will only be displayed if your finger scanner is a Bluetooth finger scanner.	bt EU

The system displays the main menu. It automatically switches back to normal mode if you do not press a button within 90 s.

NOTICE	❗

If your finger scanner is a Bluetooth finger scanner, you can now choose a particular operating concept.

See Operating concept, page 20.	ⓘ

Changing the security code	The security code can be changed via the main menu. To get to the main menu, enter the security code.

i | See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	◄ ᵡ ► ■	Press $<$ or $>$ until Sc is displayed.	5ᴄ
2nd	◄ ᵡ ► ■	Press OK.	0.8
3rd	◄ ᵡ ► ■	Press $<$ or $>$ to select the first digit of the new security code. E.g.: 2.	2.8
4th	◄ ᵡ ► ■	Press OK.	20.
5th	◄ ᵡ ► ■	Press $<$ or $>$ to select the second digit of the new security code. E.g.: 5.	25.
6th	◄ ᵡ ► ■	Press OK.	0H

The new security code is stored. The system is in normal mode.

This function defines the intensity of the status LEDs on the finger scanner when in idle mode.

The LED intensity is set via the main menu. To get to the main menu, enter the security code.

$\boxed{\mathbf{i}}$

The system displays the main menu.

Step	Action	Description	Display
1st	◄▲►	Press $<$ or $>$ until LE is displayed.	*L E*
2nd	◄▲►	Press OK.	*1*
3rd	◄▲►	Press $<$ or $>$ to select the desired LED intensity. E.g.: 2. 0 = LED off 1 = LED dimmed (default setting) 2 = LED on	*2*
4th	▲	Press OK.	*L E*
5th	▲	Press ESC to return to the main menu.	*.* 1 point flashes on the left.

The LED intensity is stored. The system is in normal mode.

| **Setting relay switching times** | The switching time for each individual relay can be set anywhere between 1 and 99 s. By default, the switching time is set to 3 s. When the time is set to 0 s, the relay operates as a switch: The relay changes its switching status when a finger is detected and it remains in that status until another finger is detected. |

| ! | **NOTICE** |

When controlling an intrusion alarm system with relay switching time = 0, a power failure or reset will deactivate the intrusion alarm system. A reset is generated when you swipe an unrecognized finger over the finger scanner 10 times in a row.

The relay switching times are set via the main menu. To get to the main menu, enter the security code.

| i | |

The system displays the main menu.

Step	Action	Description	Display
1st	◄ˣ►	Press < or > until rt is displayed.	rt
2nd	◄ˣ►	Press OK.	o1
3rd	◄ˣ►	Press < or > to select the relay number. Relay selection is available on control panels with more than one relay.	o2
4th	◄ˣ►	Press OK.	8.3
5th	◄ˣ►	Press < or > to set the relay switching time. E.g.: 10.	10
6th	◄ˣ►	Press OK.	0H

The relay switching times are stored. The system is in normal mode.

| **NOTICE** | ! |

This function is only available for *ekey home control panel integra*.

The digital input of the control panel enables the following functions:

Request-to-exit button

The digital input functions as a remote opener for relay 1. In this case, the relay switches for the defined relay switching time or for as long as the digital input is enabled (e.g., request-to-exit button, permanent opening).

Feedback

The LEDs on the finger scanner indicate the status of the digital input for 30 seconds when an authorized finger is swiped over the sensor. If the digital input is enabled, the function LEDs light up red. If the digital input is disabled, the function LEDs light up green. If the status of the digital input changes within 30 seconds, this change is also signaled in the same way. This enables you to see that the alarm system is still appropriately sensitive, for example.

Block for relay 1

Relay 1 cannot be switched if the digital input is enabled (e.g., entrance blocking while the alarm system is enabled). The function LEDs on the finger scanner indicate the status of the digital input for 30 seconds when an authorized finger is swiped over the sensor. If the digital input is enabled, the function LEDs light up red. If the digital input is disabled, the function LEDs light up green. If the status of the digital input changes within 30 seconds, this change is also signaled in the same way. However, the relay does not switch automatically when the digital input changes from enabled to disabled.

The digital input is set via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21. [i]

The system displays the main menu.

Step	Action	Description	Display
1st	◄ x ► ■	Press $<$ or $>$ until IP is displayed.	IP
2nd	◄ x ► ■	Press OK.	Fr
3rd	◄ x ► ■	Press $<$ or $>$ to select the desired function: Fr = Request-to-exit button for relay 1; A = Feedback for relay 1; Ar = Block for relay 1. E.g.: A.	A
4th	◄ x ► ■	Press OK.	OH

The digital input has been set. The system is in the main menu.

Storing fingers and RFID transponders

The system enables a maximum of 99 fingers and 99 RFID transponders for a maximum of 99 users to be stored.

Storing fingers

Storing fingers allows the following actions to be taken:

- □ Assigning a memory space to a user
- □ Assigning a number to the finger (F1, F2, ..., F9, F0)
- □ Assigning a relay to the finger on the *ekey home CP WM 3* and the *ekey home CP IN 2*

!	NOTICE

- □ Store at least 2 fingers – one from each hand.
- □ Create a list of users.

Fingers are stored via the main menu. To get to the main menu, enter the security code.

i	See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	◀ ✕ ▶	Press < or > until Eu is displayed.	*E u*
2nd	✕	Press OK.	*8.1*
3rd	◀ ✕ ▶	Press < or > to select the user number. If the user has already stored a finger, a point lights up on the right.	*8.3*
4th	✕	Only for finger scanners with an RFID function: Press OK.	*E F*
5th	✕	Press OK.	*F.1*
6th	◀ ✕ ▶	Press < or > to select the finger number. If there is already a finger stored under this finger number, a point lights up on the right. The finger can be overwritten.	*F.3*
7th	✕	Press OK.	*o 1*
8th	◀ ✕ ▶	Press < or > to select the relay. od = double relay (relay 1 + 2). Relay selection is available on control panels with more than one relay.	*o 2*
9th	✕	Press OK. The control panel is ready to store the finger.	*E F*
			Status LED lights up orange

Step	Action	Description	Display	
10th		Swipe the finger over the sensor. Repeat this step at least twice. Between each individual finger swipe, the finger scanner lights up orange if the finger storing process is not complete.		Status LED lights up green/All LEDs light up green.
				Status LED and left-hand function LED light up green.
				Status LED lights up red/All LEDs light up red.
				Status LED lights up green, function LEDs light up red.
				Status LED lights up green, left-hand function LED lights up red.
	or	The quality of the fingerprint is acceptable. However, it may be possible to improve the quality by swiping the finger again. Press OK if you want to end the finger storing process.	-	
		The quality of the fingerprint is poor or the finger was not recognized. Swipe the finger over the sensor again.	-	
11th	No action required.	-	*0H*	
				Status LED lights up blue.
12th	No action required.	To store more fingers or users, start again from step 1.	-	
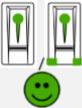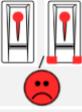
The fingers are stored. The system is in normal mode.

Storing RFID transponders

You can only store an RFID transponder for finger scanners with an RFID function.

An RFID transponder is able to trigger an action on the control panel, e.g., opening a door. You need a separate RFID transponder for each relay. The double relay function also requires a separate RFID transponder.

RFID transponders are stored via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.	i

The system displays the main menu.

Step	Action	Description	Display
1st	◀✕▶	Press < or > until Eu is displayed.	Eu
2nd	◀✕▶	Press OK.	8.1
3rd	◀✕▶	Press < or > to select the user number. If the user has already stored a finger or an RFID transponder, a point lights up on the right.	8.3
4th	◀✕▶	Press OK.	EF
5th	◀✕▶	Press < or > until EC is displayed.	EC
6th	◀✕▶	Press OK.	$o1$

Step	Action	Description	Display	
7th	◀X▶	Press $<$ or $>$ to select the relay. o1 = relay 1 o2 = relay 2 o3 = relay 3 od = double relay (relay 1 + 2). E.g.: o2. Relay selection is available on control panels with more than one relay. If there is already an RFID transponder stored under this relay, a point lights up on the right. The relay can be overwritten.	o2	
8th	◀X▶	Press OK. The control panel is ready to store the RFID transponder.	EC	
				Status LED lights up orange
9th	CARD	Hold the RFID transponder over the finger swipe area of the finger scanner at a distance of 1 to 5 cm.		All LEDs light up green. Short beep.
				Status LED lights up orange. Function LEDs light up green. Long beep.
				Status LED lights up red. Long beep.
🙁	CARD	The RFID transponder was not stored. Either you did not hold the RFID transponder over the finger scanner for long enough, or it was not close enough, or this RFID transponder has already been stored. Repeat the procedure beginning at step 1.	-	
10th	No action required.	-		Status LED lights up blue.

The RFID transponder is stored. The system is in normal mode.

When a finger scanner or the control panel is replaced, the RFID transponders must be stored again.

The primary purpose of the product is to open doors. This can be carried out using the finger scanner, an RFID transponder, or the digital input. The system is in normal mode.

Opening a door

Using the finger scanner

Step	Action	Description	Display	
1st		Swipe a stored finger over the sensor.		Status LED lights up green.
				Status LED lights up red.
		The finger was not recognized. Repeat step 1.	-	
2nd	No action required.	The door opens.		Status LED lights up blue.

The system is in normal mode.

Using an RFID transponder

Step	Action	Description	Display	
1st	CARD ✓	Hold a stored RFID transponder up to the finger swipe area of the finger scanner.	🟢 📶 😊	Status LED lights up green. Short beep.
			🔴 📶 ☹	Status LED lights up red. Long beep.
☹	CARD ✓	The RFID transponder was not recognized. Repeat step 1 with a valid RFID transponder. Alternatively, hold the RFID transponder closer to the finger scanner or for a longer period of time.	-	-
2nd	No action required.	The door opens.	🔵	Status LED lights up blue.

The system is in normal mode.

Using the digital input (request-to-exit button)

You can also open the door using the request-to-exit button for the digital input on the *ekey home CP IN*. The relay switches for the defined relay switching time. If the digital input is enabled for longer than the defined relay switching time, the relay switches for as long as the digital input is enabled.

Deleting a user will delete all fingers and all RFID transponders stored under their user number. It is not possible to delete individual fingers or RFID transponders from a user.

Users are deleted via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.	$\boxed{\mathbf{i}}$

The system displays the main menu.

Step	Action	Description	Display
1st	◄ x ►	Press < or > until du is displayed.	du
2nd	x ■	Press OK.	8.1.
3rd	◄ x ►	Press < or > to select the user number. E.g.: 3.	8.3.
4th	x ■	Press OK.	OH

The user has been deleted. The system is in normal mode.

You cannot delete individual RFID transponders. You can only delete users. Deleting a user also deletes the RFID transponders.

See Deleting user, page 33.	$\boxed{\mathbf{i}}$

Performing demo mode

Demo mode makes it possible to attract the attention of visitors to trade fairs and in exhibition halls by means of finger scanner LEDs lighting up or flashing, constant switching of the control panel display, and relays switching.

Demo mode is executed via the main menu. To get to the main menu, enter the security code.

| i | See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	◄‸►	Press < or > until dE is displayed.	dE
2nd	◄‸►	Press OK.	dL
3rd	◄‸►	Press < or > to select the desired demo variant: dL = demo LEDs – the LEDs light up and flash, and the control panel display switches constantly dr = demo relays – the LEDs light up and flash, the control panel display switches constantly, and the relays switch. E.g.: dr.	dr
4th	◄‸►	Press OK. The selected demo variant starts.	A5
5th	◄‸►	Press ESC twice to terminate demo mode and return to the main menu.	8.8.

Demo mode has been executed. The system displays the main menu.

Performing trade fair mode

Trade fair mode simplifies the user storing process for demo purposes.

| ! | **NOTICE**

□ Operation is not possible once trade fair mode is enabled
□ The system automatically returns to trade fair mode after a power failure
□ Trade fair mode only switches relay 1

Trade fair mode is executed via the main menu. To get to the main menu, enter the security code.

| i | See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display	
1st	◄ x ► ■	Press ◄ or ► until MM is displayed.	*ПП*	
2nd	◄ x ► ■	Press OK.	*П 1*	
3rd	◄ x ► ■	Press ◄ or ► to select the desired variant: M1 = fingers deleted after detection or 10 minutes M2 = fingers are stored for 10 minutes. E.g.: M2.	*П 2*	
4th	◄ x ► ■	Press OK.	*П. 1.П.2.*	
5th		Carry out a Finger Touch on the sensor.		Status LED lights up orange.
6th	No action required.	The selected trade fair mode has been enabled.	-	
7th		Swipe the finger over the sensor.		Status LED lights up green.
				Status LED lights up red.
☹		The quality of the fingerprint is poor or the finger was not recognized. Swipe the finger over the sensor again.	-	
8th	No action required.	–		Status LED flashes blue.
9th	◄ x ► ■	Press ESC twice to terminate trade fair mode and return to the main menu.	*Б.Б*	1 point flashes on the left.

Trade fair mode has been set and terminated again. The fingers stored while in trade fair mode have been deleted. The system displays the main menu.

The serial (Sn) and version (US) numbers of the control panel (CU) and finger scanner (FS) are called via the main menu. To get to the main menu, enter the security code.

| i | See Entering the security code, page 21. |

The system displays the main menu.

Step	Action	Description	Display
1st	◀ × ▶	Press < or > until In is displayed.	*In*
2nd	× ◀ ▶ ■	Press OK.	*Sn*
Sn.:	No action required.	Go to step 3.	-
Vn.:	◀ × ▶ ■	Press >.	*US*
3rd	× ◀ ▶ ■	Press OK.	*CU*
4th	× ◀ ▶ ■	Press OK. The serial or version number of the control panel is displayed.	*80 / 01*
5th	◀ × ▶ ■	Press > 6 or 3 times until you have read the entire serial or version number.	-
6th	× ◀ ▶ ■	Press ESC to return to the screen for selecting the serial or version number.	*CU*
7th	◀ × ▶	Press >.	*FS*
8th	× ◀ ▶ ■	Press OK. The serial or version number of the finger scanner is displayed.	*80 / 06*
9th	◀ × ▶	Press > 6 or 3 times until you have read the entire serial or version number.	-
10th	× ◀ ▶ ■	Press ESC 3 times to return to the main menu.	*In*

The serial or version number has been displayed. The system displays the main menu.

Usage of the finger scanner with the app

NOTICE
The *ekey home app* can only be used in conjunction with the Bluetooth finger scanner.

⚠️

The devices must have been commissioned before you start your system administration.

See Commissioning devices and establishing normal mode, page 15.

ℹ️

The finger scanner is ready to create the coupling between the Bluetooth finger scanner and the smartphone/tablet. The *ekey home app* is used for programming the system. Doors can also be opened via the app.

The app is available for Apple iOS and Google Android. Download the *ekey home app* from the App Store or Google Play. To find it, enter the search term ekey home app .

Downloading the app

Coupling the smartphone/ tablet for the first time

You need security codes for the coupling. The default admin coupling code and app security code is 9999 .

!	NOTICE

For security reasons, you must change the admin coupling code to a 6-digit code the first time you perform the system admin coupling process. Make a note of this code, as you will need it to couple additional smartphones/tablets.

Step	Action	Description	Display	
1st		Start the *ekey home app*.	-	-
2nd	Follow the instructions on the display	Couple the smartphone/tablet with the finger scanner using the default admin coupling code 9999.		Status LED lights up blue, left-hand function LED lights up orange.

The coupling between the finger scanner and the smartphone or tablet is established. The system is in normal mode. You can now start programming and managing the finger scan access control system via the *ekey home app*.

!	NOTICE

The intuitive *ekey home app* is now all you need for the administration of your Bluetooth finger scanner. Tap the required functions in the app and follow the instructions on the display.

The Bluetooth functionality can be disabled (default setting: enabled).

Step	Instruction
1st	Start the *ekey home app*.
2nd	Select **ADMINISTRATION**.
3rd	Select **SYSTEM STATUS**.
4th	Under **BLUETOOTH SETTINGS**, enable the setting Disable BT on finger scanner after 15 minutes of idleness.

This setting disables Bluetooth on the finger scanner after 15 minutes if one of the following situations arises:

- □ No smartphone/tablet is connected
- □ No finger is enrolled

You can re-enable Bluetooth by entering the security code in the control panel.

You can couple additional smartphones/tablets with the Bluetooth finger scanner using the 6-digit admin/user coupling code you have chosen.

See Storing a user coupling code, page 40.

Step	Action	Description	Display	
1st		Start the *ekey home app*.	-	-
2nd	Follow the instructions on the display	Couple the smartphone/tablet with the finger scanner using the 6-digit admin/user coupling code you have chosen.		Status LED lights up blue, left-hand function LED lights up orange.

The coupling between the finger scanner and the smartphone or tablet is established. You can now start programming and managing the finger scan access control system via the *ekey home app*.

Managing multiple Bluetooth finger scanners

The *ekey home app* allows you to manage multiple Bluetooth finger scanners. To switch between two finger scanners, you must reset the coupling between the finger scanner and the smartphone/tablet.

!	NOTICE

When you reset the coupling, any relay names and user images that have been stored will be deleted. User names and rights will remain stored on the finger scanner.

Step	Instruction
1st	Start the *ekey home app*.
2nd	Select **ADMINISTRATION**.
3rd	Select **RESET COUPLING**.
4th	Confirm that you wish to carry out the reset by selecting Continue.

The coupling between the finger scanner and the smartphone/tablet has been reset. You can now couple another Bluetooth finger scanner.

i	See Coupling additional smartphones/ tablets, page 39.

Storing a user coupling code

The option is available to store a user coupling code. This can be passed on to a person of your choosing, who can then use it to perform the following actions with their smartphone/tablet:

- □ Open a door
- □ Enable/disable the app security code
- □ Change the app security code
- □ Reset the coupling between the finger scanner and their smartphone/tablet

Step	Instruction
1st	Start the *ekey home app*.
2nd	Select **ADMINISTRATION**.
3rd	Select **CHANGE SECURITY CODES**.
4th	Enter the required user coupling code in the corresponding field.
5th	Confirm by selecting Change.

The user coupling code was stored.

If you have forgotten the app security code, you can use the app to reset the coupling between the finger scanner and the smartphone/tablet. When this reset is performed, the app security code is also reset to the default value of 9999.

Resetting the app security code

Step	Instruction
1st	Start the *ekey home app*.
2nd	Enter an incorrect app security code.
3rd	Confirm by selecting Next.
4th	Select **RESET COUPLING**.
5th	Confirm that you wish to carry out the reset by selecting Continue.

The coupling between the finger scanner and the smartphone/tablet has been reset and the app security code set to 9999. You can now recouple the Bluetooth finger scanner.

See Coupling additional smartphones/
tablets, page 39.

| i |

If you have lost your smartphone/tablet, you can use a second smartphone/tablet to change the admin/user coupling code. This new code will stop any connections being established using the lost smartphone/tablet.

Protecting the system in the event that the smartphone/ tablet is lost

Step	Instruction
1st	Start the *ekey home app* on the second smartphone/tablet.
2nd	Couple the second smartphone/tablet with the finger scanner.
3rd	Select **ADMINISTRATION**.
4th	Select **CHANGE SECURITY CODES**.
5th	Enter a new 6-digit admin/user coupling code.
6th	Confirm by selecting Change.

The admin/user coupling code in the system has now been changed. This means that the lost smartphone/tablet is no longer able to establish a connection to the Bluetooth finger scanner. Your system is protected against access by unauthorized persons once again.

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Opening a door

The primary purpose of the product is to open doors. This can be carried out using the finger scanner, an RFID transponder, the app, or the digital input. The system is in normal mode.

Using the finger scanner

Step	Action	Description	Display	
1st		Swipe a stored finger over the sensor.		Status LED lights up green.
				Status LED lights up red.
😞		The finger was not recognized. Repeat step 1.	-	-
2nd	No action required.	The door opens.		Status LED lights up blue.

The system is in normal mode.

Using an RFID transponder

NOTICE

You can only open a door using an RFID transponder for finger scanners with an RFID function.

Step	Action	Description	Display	
1st	CARD	Hold a stored RFID transponder up to the finger swipe area of the finger scanner.		Status LED lights up green. Short beep.
				Status LED lights up red. Long beep.
😞	CARD	The RFID transponder was not recognized. Repeat step 1 with a valid RFID transponder.	-	-
2nd	No action required.	The door opens.		Status LED lights up blue.

The system is in normal mode.

Using the app

Step	Instruction
1st	Start the *ekey home app*.
2nd	Connect to the Bluetooth finger scanner.
3rd	Select **ACCESSES**.
4th	Slide the slider of the door to be opened to the right.
5th	The door opens.

The system is in normal mode.

Using the digital input (request-to-exit button)

You can also open the door using the digital input on the *ekey home CP IN*. The relay switches for the defined relay switching time. If the digital input is enabled for longer than the defined relay switching time, the relay switches for as long as the digital input is enabled.

Usage of the code pad with shortcuts

The devices must have been commissioned before you start your system administration.

| i |

The system is in normal mode. The keypad is used for programming the system.

Entering the admin code grants you access to the Admin menu. The Admin menu is used to configure the system. The default admin code is 9999.

Entering the admin code

| ATTENTION | ⚠ |

Change the default admin code immediately after commissioning.
If you do not make this change, you risk making it easier for unauthorized persons to access not only your Admin menu, but also your home.
Choose a new admin code and keep it secret.

| i |

The system is in normal mode.

Step	Action	Description	Display	
1st	✓	Press ✓ to start the process of entering the admin code.	▬ — ⬜ 1 2 3	Status LED lights up yellow on the left.
2nd	1 2 3 / 4 5 6 / 7 8 9 / 0	Enter the admin code on the keypad.	-	-
3rd	✓	Press ✓.	▬ — ⬜ 1 2 3 🙂	Status LED lights up green on the left.
			▬ — ▬ 1 2 3 🙁	Status LEDs light up red.
🙁	✓	The admin code was not recognized. Repeat the procedure beginning at step 1.	-	-

The system is in the Admin menu.

<table>
<tr><td>❗</td><td colspan="2">NOTICE</td></tr>
</table>

The system automatically switches back to normal mode if you do not press a button within 10 s.

Changing the admin code

This function allows you to change the existing admin code. The admin code may contain between 4 and 8 digits. The digits cannot all be the same; at least one of them must be different.

The admin code can be changed via the Admin menu. To get to the Admin menu, enter the admin code.

ℹ️

The system is in the Admin menu.

Step	Action	Description	Display	
1st	3 DEF	Press 3.	▬ — ⬜ 1 2 3	Status LED lights up green on the left.
2nd	✓	Press ✓.	▬ ▬ 1 2 3	Status LEDs light up green on the left and yellow on the right.
3rd	1 2 3 / 4 5 6 / 7 8 9 / 0	Enter the old admin code on the keypad.	-	-

Step	Action	Description	Display	
4th	✓	Press ✓.		Status LEDs light up yellow.
				Status LEDs light up red.
🙁	✓	The old admin code was not recognized. Enter the admin code from the beginning again.	-	-
5th	⌨	Enter the new admin code on the keypad.	-	-
6th	✓	Press ✓.		Status LEDs light up yellow on the left and green on the right.
				Status LEDs light up red.
🙁	✓	The desired admin code has already been assigned as a user code. Enter the admin code from the beginning again.	-	-
7th	⌨	Enter the new admin code again on the keypad.	-	-
8th	✓	Press ✓.		Status LEDs light up green.
				Status LEDs light up red.
🙁	⌨	The two entries do not match. The new admin code was not saved. Enter the admin code from the beginning again.	-	-
9th	No action required.	-		Status LEDs are off.

The new admin code is saved. The system is in normal mode.

Setting the automatic back-illumination

The brightness threshold for switching on the automatic back-illumination can be set using percentage values. By default, the brightness threshold is set to 10%. Enter the required percentage value:

- □ 0 = automatic back-illumination off
- □ 1 to 100 = brightness threshold settings between highly insensitive and highly sensitive.

| ! | **NOTICE** |

Alter the setting gradually to approach the required brightness threshold. The system responds very sensitively.

The automatic back-illumination is set via the Admin menu. To get to the Admin menu, enter the admin code.

| i | See Entering the admin code, page 43. |

The system is in the Admin menu.

Step	Action	Description	Display	
1st	5 1	Press 5, 1, and the value of the required brightness threshold. E.g.: 7, 0 for 70%.	1 2 3	Status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3 😃	Status LEDs light up green.
			1 2 3 😞	Status LEDs light up red.
😞	✓	Something has been entered incorrectly. The brightness threshold was not changed. Enter the admin code from the beginning again.	-	-
3rd	No action required.	-	1 2 3	Status LEDs are off.

The automatic back-illumination was set. The system is in normal mode.

The brightness of the back-illumination can be set using 4 predefined modes. By default, the back-illumination is set to 100%. Enter the number of the required illumination:

- □ 0 = back-illumination off
- □ 1 = back-illumination at 33%
- □ 2 = back-illumination at 66%
- □ 3 = back-illumination at 100%

The back-illumination brightness is set via the Admin menu. To get to the Admin menu, enter the admin code.

ℹ️

The system is in the Admin menu.

Step	Action	Description	Display	
1st	5 JKL 2 ABC	Press 5, 2, and the number of the required mode. E.g.: 1 for 33%.	1 2 3	Status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3 😀	Status LEDs light up green.
			1 2 3 ☹️	Status LEDs light up red.
☹️	✓	Something has been entered incorrectly. The brightness was not changed. Enter the admin code from the beginning again.	-	-
3rd	No action required.	-	1 2 3	Status LEDs are off.

The back-illumination brightness was set. The system is in normal mode.

4 predefined modes can be used to set the acoustic and optical signaling that indicates when a button has been pressed. By default, the acoustic and optical signals indicating that a button has been pressed are enabled. Enter the number of the required mode:

- □ 0 = acoustic and optical signals disabled
- □ 1 = acoustic signals on and optical signals disabled
- □ 2 = acoustic signals off and optical signals enabled
- □ 3 = acoustic and optical signals enabled

The signaling to indicate that a button has been pressed is set via the Admin menu. To get to the Admin menu, enter the admin code.

| $\boxed{i}$ | See Entering the admin code, page 43. |

The system is in the Admin menu.

Step	Action	Description	Display	
1st	$\frac{5}{JKL}$ $\frac{4}{GHI}$	Press 5, 4, and the number of the required mode. E.g.: 0 for acoustic and optical signals disabled.	1 2 3	Status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3 😊	Status LEDs light up green.
			1 2 3 🙁	Status LEDs light up red.
🙁	✓	Something has been entered incorrectly. The signaling was not changed. Enter the admin code from the beginning again.	-	-
3rd	No action required.	-	1 2 3	Status LEDs are off.

The optical and acoustic signaling to indicate that a button has been pressed was set. The system is in normal mode.

The acoustic signal for opening can be enabled or disabled. By default, the acoustic signal is enabled. Enter the number of the required status:

- □ 0 for disabled
- □ 1 for enabled

The acoustic signal for opening is set via the Admin menu. To get to the Admin menu, enter the admin code.

The system is in the Admin menu.

Step	Action	Description	Display	
1st	5 5	Press 5, 5, and the number of the required status.	1 2 3	Status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3 😊	Status LEDs light up green.
			1 2 3 ☹	Status LEDs light up red.
☹	✓	Something has been entered incorrectly. The signaling was not changed. Enter the admin code from the beginning again.	-	-
3rd	No action required.	-	1 2 3	Status LEDs are off.

The acoustic signal for opening was set. The system is in normal mode.

Storing a user code	The system enables a maximum of 99 user codes to be enrolled.

A user code is any pin code which is used for triggering an action on the control panel, e.g., opening a door. The user code may contain between 4 and 8 digits. The digits cannot all be the same; at least one of them must be different.

⚠	**NOTICE**

To ensure the access control system remains secure, please remember the following when selecting a user code:

- □ Use long user codes
- □ Use only numbers if possible
- □ Do not use trivial codes

User codes are stored via the control panel main menu. To get to the main menu, enter the security code.

The system displays the main menu.

Step	Action	Description	Display
1st	◄ˣ►	Press < or > until Eu is displayed.	*E u*
2nd	◄ˣ►	Press OK.	*8.1*
3rd	◄ˣ►	Press < or > to select the user number. If the user has already stored a user code, a point lights up on the right.	*8 3*
4th	◄ˣ►	Press OK.	*o 1*
5th	◄ˣ►	Press < or > to select the relay. od = double relay (relay 1 + 2). Relay selection is available on control panels with more than one relay.	*o 2*

Step	Action	Description	Display	
6th		Press OK.	*EP*	
				Status LEDs light up green.
7th		Enter the required user code on the keypad.	-	-
8th	✓	Press ✓.		Status LED lights up green on the right.
				Status LEDs light up red.
😞	✓	The user code is already present. Start again at step 1.	-	-
9th		Enter the required user code again on the keypad.	-	-
10th	✓	Press ✓.		Status LEDs light up green.
				Status LEDs light up red.
😞	✓	The two entries do not match. The user code was not stored. Start again at step 1.	-	-
11th	No action required.	-		Status LEDs are off.

The user code is stored. The system is in normal mode.

The primary purpose of the product is to open doors. This can be carried out using the code pad or even – in the case of the *ekey home control panel integra* – using the digital input. The system is in normal mode.

Using the code pad

Step	Action	Description	Display	
1st		Enter a stored user code on the keypad.	-	-
2nd	✓	Press ✓.		Status LEDs light up green.
				Status LEDs light up red.
		The user code was not recognized. Repeat the procedure beginning at step 1.	-	-
3rd	No action required.	The door opens.		Status LEDs are off.

The system is in normal mode.

!	**NOTICE**

If the code is entered incorrectly three times, there will be a 1-minute lock. If the code is entered incorrectly another 3 times, there will be a 15-minute lock. Each additional incorrect entry will result in a further 15-minute lock. You can unlock the code pad again by entering the admin code twice instead of the user code.

Using the digital input (request-to-exit button)

You can also open the door using the digital input on the *ekey home CP IN*. The relay switches for the defined relay switching time. If the digital input is enabled for longer than the defined relay switching time, the relay switches for as long as the digital input is enabled.

You can only delete individual users. Once you have deleted a user, the user code saved for this user is also deleted.

Users are deleted via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.   ⅰ

The system displays the main menu.

Step	Action	Description	Display
1st	◀ ▶	Press < or > until du is displayed.	*du*
2nd	▼	Press OK.	*8.8.1.*
3rd	◀ ▶	Press < or > to select the user number. E.g.: 3.	*8 3.*
4th	▼	Press OK.	*0H*

The user has been deleted. The system is in normal mode.

| | **Performing demo mode** | Demo mode makes it possible to attract the attention of visitors to trade fairs and in exhibition halls by means of code pad LEDs lighting up and flashing, constant switching of the control panel display, and relays switching. |

Demo mode is executed via the control panel main menu. To get to the main menu, enter the security code.

> ℹ️ See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	◄ ✕ ► ■	Press ◄ or ► until dE is displayed.	*dE*
2nd	◄ ✕ ► ■	Press OK.	*dL*
3rd	◄ ✕ ► ■	Press ◄ or ► to select the desired demo variant: dL = demo LEDs – the LEDs light up and flash, and the control panel display switches constantly dr = demo relays – the LEDs light up and flash, the control panel display switches constantly, and the relays switch. E.g.: dr.	*dr*
4th	◄ ✕ ► ■	Press OK. The selected demo variant starts.	*AS*
5th	✕ ◄ ► ■	Press ESC twice to terminate demo mode and return to the main menu.	*▪▪* 1 point flashes on the left.

Demo mode has been executed. The system displays the main menu.

Trade fair mode simplifies the user storing process for demo purposes.

NOTICE

- □ Operation is not possible once trade fair mode is enabled
- □ The system automatically returns to trade fair mode after a power failure
- □ Trade fair mode only switches relay 1

Trade fair mode is executed via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display	
1st	◀ ▶	Press < or > until MM is displayed.	*NN*	
2nd	◀ ▶	Press OK.	*N.N*	
3rd	◀ ▶	Press OK.	*N.N*	
4th	No action required.	Trade fair mode has been enabled.		Status LEDs light up yellow.
5th		Enter a 4-digit user code on the keypad.		
6th	✓	Press ✓.		Status LEDs light up green.
				Status LEDs light up red.
		The user code was entered incorrectly. Repeat the procedure beginning at step 1.	-	-
7th	No action required.	-		Status LEDs are off.
8th	◀ ▶	Press ESC to terminate trade fair mode and return to the main menu.	*NN*	

Trade fair mode has been set and terminated again. The user codes stored while in trade fair mode have been deleted. The system displays the main menu.

Reset the system to default settings

You can reset the system to its default settings via the control panel, the code pad, or the app (Bluetooth finger scanners only). Use whichever device is most easily accessible.

!	NOTICE

- □ All fingers, user codes, and RFID transponders are permanently deleted. The admin code is reset to its default setting of 9999 using the code pad.
- □ The security code is set to 99.
- □ The control panel and registration unit are no longer coupled together.
- □ The relay switching times are set to 3 s.
- □ The LED intensity of the finger scanner is reset to 1 (LED dimmed).
- □ For a Bluetooth finger scanner, the admin coupling code is reset to the default setting of 9999.
- □ The brightness threshold of the automatic back-illumination is reset to 10% and the brightness value of the back-illumination to 100% using the code pad.
- □ The acoustic and optical signaling that indicates when a button has been pressed, and the acoustic signal for door opening, are both enabled again using the code pad.

Resetting to default settings permanently deletes all rights and resets the system settings to their defaults. Your system is then in the condition in which it was delivered to you once more.

Settings are reset to the default via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	◄ᵡ► ■	Press < or > until rr is displayed.	*r r*
2nd	◄ᵡ► ■	Press OK.	*0.*
3rd	◄ᵡ► ■	Press < or > to select the first digit of your security code. E.g.: 9.	*9.*
4th	◄ᵡ► ■	Press OK.	*90.*
5th	◄ᵡ► ■	Press < or > to select the second digit of your security code. E.g.: 9.	*99.*
6th	◄ᵡ► ■	Press OK.	*8.8.* 2 points light up.

The system has been reset to its default settings. You can now recommission the system.

See step 3 of Commissioning devices and establishing normal mode, page 15.

ⓘ

The process of resetting to the default settings is initiated via the Admin menu of the code pad. To get to the Admin menu, enter the admin code.

| i | See Entering the admin code, page 43.

The system is in the Admin menu.

Step	Action	Description	Display	
1st	**4** GHI	Press 4.	▬ — 1 2 3	Status LED lights up green on the left.
2nd	✓	Press ✓.	▬ ▬ 1 2 3	Status LEDs light up red.
3rd	1 2 3 4 5 6 7 8 9 0	Enter the admin code on the keypad.	-	-
4th	✓	Press ✓.	— — 😊 1 2 3	Status LEDs are off.
			▬ ▬ 😞 1 2 3	Status LEDs light up red.
😞	✓	The admin code was not recognized. The system was not reset. Enter the admin code from the beginning again.	-	-
5th	No action required.	-	☀ ☀ 1 2 3	Status LEDs flash yellow alternately.

The system has been reset to its default settings. You can now recommission the system.

| i | See step 3 of Commissioning devices and establishing normal mode, page 15.

The process of resetting to the default settings is initiated via the app.

NOTICE	!

The app can only be used for resetting in the case of Bluetooth finger scanners.

Step	Instruction
1st	Start the *ekey home app*.
2nd	Connect to the Bluetooth finger scanner.
3rd	Select **ADMINISTRATION**.
4th	Select **RESET SYSTEM**.
5th	Confirm that you wish to carry out the reset by selecting Continue.

The system has been reset to its default settings. You can now recommission the system.

Updating the software

We are working to improve our products and add new functions all the time. Correspondingly, updates are made available for the registration unit and control panel software. More information about this can be obtained from your dealer.

Error displays and troubleshooting

Display	Meaning	Remedy
E0	No data connection to the registration unit.	Check the wiring and the power supply.
E1	99 fingers, pin codes, or RFID transponders have already been stored. The memory is full.	Delete some fingers.
E2	An incorrect security code has been entered 3 times. The system is locked for 30 minutes.	After 30 minutes, enter the correct security code. The 30-minute lock will only count down if the power supply and data connection are present throughout.
E3	Incorrect device coupling	Perform the coupling process again. One of the devices has been tampered with.
nu	Need update	The control panel requires a firmware update.

If these remedies do not solve the problem, contact your dealer. If the system has to be returned to ekey biometric systems GmbH, ensure that it is correctly packaged. Improper packaging can lead to the warranty being voided.

Display		Meaning	Remedy
	Status LED lights up red.	The finger or RFID transponder was not recognized.	Swipe the finger over the sensor again. Check that your RFID transponder is the valid one.
	Status LED instantly lights up red.	No fingers or RFID transponders are stored.	Store a minimum of one finger or RFID transponder.
	Status LED flashes orange.	No bus connection to the control panel.	Check the wiring or commission the device.
	Status LED flashes red/green.	The sensor of the finger scanner without RFID function is soiled or broken.	Clean the sensor.
	Status LED lights up blue, left-hand function LED flashes red/green.	The sensor of the finger scanner with RFID function is soiled or broken, but the RFID function still works.	Clean the sensor.

If these remedies do not solve the problem, contact your dealer. If the system has to be returned to ekey biometric systems GmbH, ensure that it is correctly packaged. Improper packaging can lead to the warranty being voided.

Code pad

Display		Meaning	Remedy
	Status LEDs light up red.	The user code was not recognized.	Enter the user code on the keypad again.
	Status LEDs light up red.	The numbers in the desired user code are all the same. E.g.: 1111, 3333.	Enter a new user code containing at least one number that is different from the others. E.g.: 1115, 3733.
	Status LEDs light up red.	The desired user code is too short or too long. E.g.: 321, 987654321.	Enter a new user code with a minimum of 4 digits and a maximum of 8 digits. E.g.: 4321, 87654321.
	Status LEDs light up red.	An error occurred when entering menu items or values.	Carefully read the description of the required function again.
	Status LED lights up red on the right.	An incorrect user code has been entered 3 times. 1-minute or 15-minute system lock.	After the 1-minute or 15-minute lock, enter a correct user code. The 1-minute or 15-minute lock will only count down if the power supply and data connection are present throughout.
	Status LEDs flash yellow alternately.	No bus connection to the control panel.	Check the wiring or commission the device.

If these remedies do not solve the problem, contact your dealer. If the system has to be returned to ekey biometric systems GmbH, ensure that it is correctly packaged. Improper packaging can lead to the warranty being voided.

Maintenance

The system is largely maintenance-free.

The sensor surface of the finger scanner is essentially self-cleaning due to repeated use (swiping of fingers). However, if the finger scanner becomes soiled, clean it with a damp (not wet), non-abrasive cloth. Q-tips, microfiber cloths, and glasses-cleaning cloths are suitable for this purpose. Cotton-containing materials, paper towels, tissues, kitchen sponges, damp dish towels, and kitchen roll are not suitable. Use clean water without adding detergent. Treat the sensor surface with care.

For safety, clean fingerprints and dirt off the code pad from time to time using a damp (not wet), non-abrasive cloth. Use clean water without adding detergent.

Disposal

Pursuant to Directive 2002/96/EC of the European Parliament and Council of January 27, 2003 on the sale, return, and environmentally friendly disposal of waste electrical and electronic equipment (WEEE), electrical and electronic equipment supplied after August 13, 2005 is to be recycled. It must not be disposed of with household waste. As disposal regulations within the EU can differ from country to country, please contact your dealer for further information as necessary.

Declaration of conformity

ekey biometric systems GmbH hereby declares that the product conforms to the relevant European Union directives. The declarations of conformity for the individual products can be downloaded from http://www.ekey.net/downloads.

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