ekey home

en OPERATING INSTRUCTIONS

English

Table of contents

Information about these operating instructions

Read these operating instructions carefully before use. These operating instructions form a component of the product. Ensure that they are stored in a safe place. These operating instructions contain important information on the product; in particular, its proper use, safety, installation, activation, usage, maintenance, and disposal.

Please contact your dealer for further information about the product.

A large-font version of these operating instructions is available at http://www.ekey.net.

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.

Note

ekey biometric systems GmbH hereby declares that the product conforms to the relevant European Union directives.

Declaration of conformity

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

Warranty and manufacturer's guarantee

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Copyright protection

These instructions are aimed at persons who activate and perform maintenance on the ekey system, create users, and instruct users in how to operate the system.

Target group

Explanation of symbols, abbreviations, and terminology	**Symbols:**	
	1.	Step-by-step instructions
	[i]	References to sections in these operating 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:

CP	Control panel
FAR	False acceptance rate
FRR	False rejection rate
FS	Finger scanner
IN	integra
OM	Outlet-mounted
RFID	Radio-frequency identification
Sn.	Serial number
Vn.	Firmware version number
WM	Wall-mounted

Fingerprint	The biometric information extracted from the fingerprint
Identification method	Method that a registration unit uses to identify a person. Examples include fingers, RFID transponders, and user codes.
Matching	Comparison between the stored reference and the identification feature. If the two match, the device signals user recognition.
Normal mode	Default operating status in which the system is operated.
Registration unit	Finger scanner or code pad

Safety information

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 biometric access control system detects the characteristics (minutiae) of the fingerprint contours, compares them to the biometric information saved from the reference fingerprint image, and opens the door in the event of a match. One variant allows the user to be identified and the door opened by means of an RFID transponder.

The mental access control system detects the pin codes which are entered, compares them to the stored reference pin 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.

To ensure proper use, the ekey system must be installed in accordance with the mounting instructions and the wiring diagram. The installation must be performed in full and by a professional. The electrical engineer who installs the equipment must approve the ekey system for use, as well as any accessories that are installed.

The ekey system is suitable for use as outlined in these operating instructions. Any other kind of use is deemed improper use.

Proper use and areas of application

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

Product liability and limitation of liability

Classification of notices

<table>
<tr><td>⚠</td><td>**DANGER**</td></tr>
</table>

Safety notice: Denotes imminent danger which could lead to death or serious injuries.

<table>
<tr><td>⚠</td><td>**ATTENTION**</td></tr>
</table>

Notice: Denotes possible property damage which cannot result in injuries.

<table>
<tr><td>!</td><td>**NOTICE**</td></tr>
</table>

Notice: Denotes additional information and useful tips.

Notices

<table>
<tr><td>⚠</td><td>**DANGER**</td></tr>
</table>

Risk of electrocution: All *ekey home* devices are to be operated with Safety Extra Low Voltage (SELV). Only use power supplies rated protection class 2 according to VDE 0140-1.
Failure to do so will create a risk of fatal electrocution.
Only certified electricians are authorized to carry out the electrical installation work.

<table>
<tr><td>⚠</td><td>**ATTENTION**</td></tr>
</table>

Tamper-proofing: Do not mount the control panel outdoors.
If it is mounted outdoors, it could be tampered with.
Mount the control panel in a secure internal area.

Introduction to the system
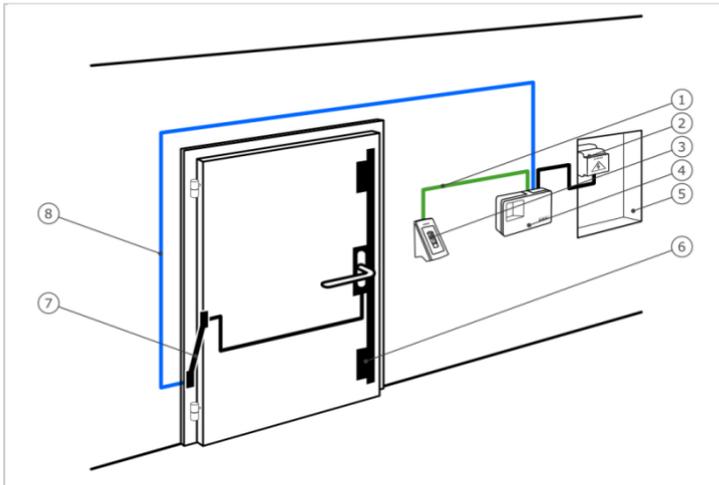
Fig. 1:   Overview of the system

1 Connecting cable from registration unit to control panel
2 Power supply
3 ekey registration unit
4 ekey control panel
5 Distribution box
6 Motorized lock
7 Cable transfer
8 Connecting cable from control panel to motorized lock

The system is comprised of a registration unit and control panel.

The biometric access control system detects the characteristics (minutiae) of the fingerprint contours, compares them to the biometric information saved from the reference fingerprint image, and opens the door in the event of a match. One variant allows the user to be identified and the door opened by means of an RFID transponder.

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

□   One registration unit
□   RFID transponder for finger scanners with RFID functionality
□   One control panel
□   Operating instructions, mounting instructions, wiring diagram
□   Optional: matching accessories (cable transfer, power supply, connecting cable, covers, etc.).

Finger scanner

Product name	*ekey home FS WM*	*ekey home FS IN*	*ekey home FS OM*
Figure			

Table 1:   Finger scanner

Function of the finger scanner
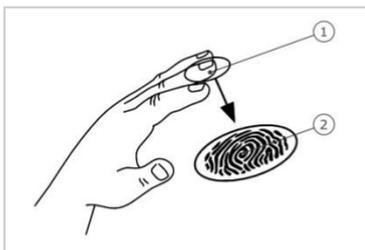
1 Front phalanx
2 Fingerprint

Fig. 2:   Fingerprint

The finger scanner detects the fingerprint by means of a line sensor and subsequently processes it. It compares the result with that of the biometric information extracted from the reference fingerprint image and opens the door in the event of a match. 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 models with RFID functionality detect and identify RFID transponders.

Finger scanner controls

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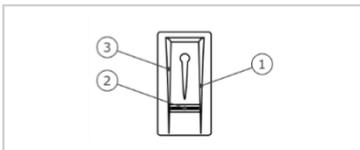
1 Right guiding edge
2 Sensor
3 Left guiding edge

Fig. 3:   Finger swipe area and sensor

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 s.

General hints for achieving a good-quality fingerprint:
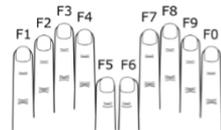
- □ Recommended finger numbering: .
- □ The index, middle, and ring fingers work best. The thumb and little finger supply fingerprints that are difficult to analyze.
- □ In the case of fingers that are frequently wet, store the images with wet fingers.
- □ Children's fingerprints work from approx. 5 years of age.

"Finger Touch"

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

"Holding up the RFID transponder"

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
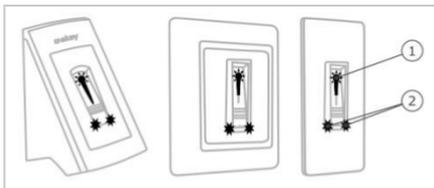
1 Status LED
2 Function LEDs

Fig. 4:   Optical signals on the finger scanner

Code pad

Function of the code pad

The code pad captures the pin code with the capacitive keypad. The code pad 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.

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

Table 3: 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.
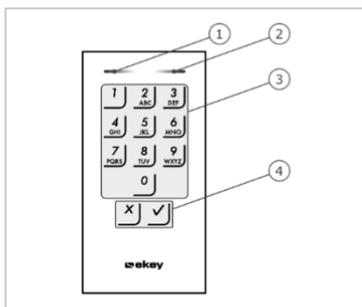
1 Left status LED
2 Right status LED
3 Input buttons
4 Confirmation buttons

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 menu items can be called via the buttons.

Button	Menu item
3 DEF	Changing the admin code
4 GHI	Resetting the system to default settings
5 JKL	Set the code pad (back-illumination, acoustic and optical signal when button is pressed, acoustic signal on opening)

Table 4:   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 5:   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. The *ekey home control panel integra* makes one or two digital inputs available.

Control panel controls

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

Table 6:   Control panel controls

1 Seven-segment display
2 Keypad
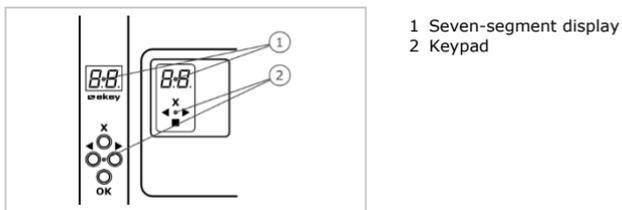
Fig. 6:   Overview of the *ekey home control panel wall-mounted* and the *ekey home control panel integra*

Button	X ◄·► ▪	◄ X ► ▪	◄ X ·► ▪	X ◄·►
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 7:   Control panel buttons

Menu items

The control panel offers various menu items:

$E u$	Enroll user	Stores users and identification methods.
$d u$	Delete user	Deletes all data for a user.
$5 c$	Security code	Sets the security code.
$1 n$	Information	Calls the serial or firmware version number.
$r r$	Reset	Resets the system to default settings.
$r t$	Relay time	Sets the switching duration.
$1 P$	Input	Sets the digital input (only for *ekey home control panel integra*)
$L E$	LED intensity	Setting finger scanner LED intensity
$t E$	Test mode	Performing test mode
$d E$	Demo mode	Performing demo mode
$\Pi\Pi$	Fair mode	Performing 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	Finger	99
	RFID transponder	99 (only for finger scanners with an 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 FS OM*)
Typical matching duration	s	1
RFID range with RFID finger scanners	mm	30
RFID standard with RFID finger scanners	-	ISO14443A
RFID transponder type with RFID finger scanners	-	MIFARE DESFire EV1 with at least 1 KB of memory

Table 8: 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 9: 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)
Relay switching voltage	VDC	42	42
Relay switching current	A	2	2
Operating temperature	°C	-20 to +70	-20 to +70
IP code	IP	20	20
Digital inputs	Quantity	-	1 (potential-free)

Table 10: Technical specifications: *ekey home control panel wall-mounted/integra*

Installation

Mount the system in accordance with the supplied mounting instructions.

Wire the system in accordance with the supplied wiring diagram.

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

Activation

You must activate the devices in order to operate your system. The system is operated using the *ekey home app*, the control panel menu, or admin codes.

Activating the system couples the control panel and 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.		2 points light up.
4th		Press OK.		1 point lights up on the right.
5th		Press ESC. The control panel is ready to store an identification method.	EF	For a finger scanner.
			EP	For a code pad.

Step	Action	Description	Display	
6th	Variant a **X**	For a new installation: Press ESC.	$\sqcap \sqcap$	-
	Variant b	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.		
		The identification methods are not deleted.		
	OR **X**	OR press ESC: All existing identification methods are deleted.		
7th	No action required.	-		1 point flashes on the left.

The devices have now been activated 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 mobile device.

! **NOTICE**

Automatic detection of a Bluetooth finger scanner: 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 35.

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

Performing test mode: You can only perform test mode under the following conditions:

- □ You have activated the system
- □ You have not yet coupled a mobile device

See Activating the system, page 19.

Testing the overall system

The test of the overall system is performed via the main menu.

Enter the security code to access the main menu.

See Entering the security code, page 35.

The system displays the main menu.

<u>With a finger scanner</u>

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 duration (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.

Alternative method of terminating test mode: Test mode is also 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

Using a code pad

Step	Action	Description	Display	
1st	◄ X ► ■	Press < or > until tE is displayed	*tE*	
2nd	◄ X ► ■	Press OK.	*tO*	
3rd	◄ X ► ■	Press OK.	*tO.*	
4th	1 2 3 / 4 5 6 / 7 8 9 / 0	Press any two buttons.	-	
5th	✓	Press ✓. All of the relays switch one after another for the defined relay switching duration (default setting: 3 s).	1 2 3	The status LEDs light up red.
6th	◄ X ► ■	Press ESC twice.	*8.8.*	1 point flashes on the left.

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

Alternative method of terminating test mode: Test mode is also 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.

Enter the security code to access the main menu.

  i

The system displays the main menu.

Step	Action	Description	Display
1st	◄×►	Press < or > until tE is displayed.	tE
2nd	×■	Press OK.	tG
3rd	◄×►	Press < or > until tS is displayed.	tS
4th	◄×►	Press OK.	o1
5th	×■	Press OK. Relay 1 switches for the defined relay switching duration (default setting: 3 s).	o1
6th	◄×►	Press < or > until o2 is displayed.	o2
7th	×■	Press OK. Relay 2 switches for the defined relay switching duration (default setting: 3 s).	o2
8th	◄×►	(Only for *ekey home control panel WM 3*) Press < or > until o3 is displayed.	o3
9th	×■	Press OK. Relay 3 switches for the defined relay switching duration (default setting: 3 s).	o3
10th	×■	Press ESC 3 times.	8.8. 1 point flashes on the left.

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

Alternative method of terminating test mode: Test mode is also 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 home app* – administration of the Bluetooth finger scanner by means of a mobile device
- ☐ ekey control panel menu – administration of the finger scanner by means of the control panel
- ☐ 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 app, page 25.

i	See Usage of the finger scanner with the control panel menu, page 35.

i	See Usage of the code pad with shortcuts, page 54.

Usage of the finger scanner with the app

The system must have been activated before you start your system administration.

See Activating the system, page 19.   ℹ️

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

Downloading 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.

Coupling a mobile device for the first time	For first-time coupling, you will need the device coupling code and the app security code. Both codes are factory-set as 9999.

Step	Instruction	Display
1st	Start the *ekey home app*.	
2nd	Touch the input field (Android) or press Search (iOS). The app searches for available Bluetooth devices.	-
3rd	Select your ekey Bluetooth finger scanner.	-
4th	Android only: Press Login.	-
5th	Enter the default device coupling code 9999.	The status LED lights up blue, the left-hand function LED lights up orange.
6th	Press Next. The mobile device is coupled with the Bluetooth finger scanner.	
7th	Enter a new 6-digit device coupling code. For security reasons, you must change the default device coupling 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 mobile devices.	-
8th	Write your new device coupling code here: _____.	
9th	Press Change (Android) or Next (iOS).	
10th	Enter the default app security code 9999.	
11th	Press Next.	

The coupling between the Bluetooth finger scanner and the mobile device 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*.

Administration of the finger scanner with the *ekey home app*: 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.

You can change all security codes at any time:

Changing security codes

- □ the app security code
- □ the admin coupling code
- □ the user coupling code
- □ the control panel security code

App security code: The 4 to 6-digit app security code is required for the app security prompt. You can disable the prompt to enter the app security code under **ADMINISTRATION** if your mobile device supports secure lock mechanisms (fingerprint, code, etc.).

Step	Instruction
1st	Select **ADMINISTRATION**.
2nd	Select **CHANGE SECURITY CODES**.
3rd	Change the desired code.
4th	Press Change (Android) or Done (iOS).

The selected security code has been changed.

Storing a finger

You can store user fingers with the *ekey home app*.

Step	Instruction
1st	Select **ADMINISTRATION**.
2nd	Select **USER ADMINISTRATION**.
3rd	Press (Android) or ⊞ (iOS).
4th	Enter the user name.
5th	Press New access authorization.
6th	Select the relay to be switched.
7th	Select a finger.
8th	Press Store.
9th	Read the notice and press Start.
10th	Once your finger has been successfully registered, press OK.
11th	Press Done.

!	NOTICE

2 fingers per access point: Store a minimum of one finger from each hand per access point.

The user fingers have been stored.

The Bluetooth functionality can be disabled. Bluetooth functionality is set to enabled in the default settings.

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

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

- □ No mobile device is connected
- □ At least one finger has been stored

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

See Entering the security code, page 35. ⓘ

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

See Storing the user coupling code, page 31. ⓘ

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

The coupling between the Bluetooth finger scanner and the mobile device 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 Bluetooth finger scanners, you must reset the coupling between the Bluetooth finger scanner and the mobile device.

! **NOTICE**

Relay name and user images are deleted: When you reset the coupling, any relay names and user images that have been stored will be deleted. User names and authorizations will remain stored on the Bluetooth 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 Bluetooth finger scanner and the mobile device is reset.

You can now couple another Bluetooth finger scanner.

ℹ See Coupling additional mobile devices, page 29.

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 mobile device:

□ Open a door
□ Enable/disable the app security code
□ Change the app security code
□ Reset the coupling between the finger scanner and their mobile device.

Storing the user coupling code

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 (Android) or Done (iOS).

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 Bluetooth finger scanner and the mobile device. 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 Bluetooth finger scanner and the mobile device has been reset and the app security code set to 9999.

You can now recouple the Bluetooth finger scanner.

See Coupling additional mobile devices, page 29.

ℹ️

Protecting the system in the event that the mobile device is lost

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

Step	Instruction
1st	Start the *ekey home app* on the second mobile device.
2nd	Couple the second mobile device with the Bluetooth 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 (Android) or Done (iOS).

The admin/user coupling code in the system has now been changed.

This means that the lost mobile device is no longer able to establish a connection to the Bluetooth finger scanner. Your system is protected against access by unauthorized persons once again.

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

Using the app

The system is in normal mode.

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

The system is in normal mode.

Using the finger scanner

The system is in normal mode.

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

The system is in normal mode.

Using an RFID transponder

Only in the case of RFID finger scanners: You can only open a door using an RFID transponder for finger scanners with an RFID function.

The system is in normal mode.

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

The system is in normal mode.

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

You can also open the door using the request-to-exit button function of the digital input on the *ekey home control panel integra*. The relay switches for the defined relay switch duration. If the digital input is enabled for longer than the defined relay switch duration, the relay switches for as long as the digital input is enabled.

Usage of the finger scanner with the control panel menu

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

See Activating the system, page 19.	ℹ️

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

Entering the security code

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

ATTENTION	⚠️

Change the security code immediately: The security code enables access to the main menu.
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.
Change the default security code immediately after activation! Choose a new security code and keep it secret.

See Changing the security code, page 37.	ℹ️

NOTICE	❗

30-minute system lock if code is entered incorrectly 3 times: The system will remain locked for 30 minutes if you enter an incorrect security code 3 times in succession.

The system is in normal mode.

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

You have entered the correct security code. The system displays the main menu.

The system automatically switches back to normal mode if you do not press a button within 90 s.

!	**NOTICE**

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

i	See Operating concept, page 24.

The security code can be changed via the main menu.

Enter the security code to access the main menu.

$\boxed{\mathbf{i}}$

Changing the security code

The system displays the main menu.

Step	Action	Description	Display
1st	◀ ✕ ▶	Press < or > until Sc is displayed.	5c
2nd	◀ ✕ ▶	Press OK.	0.8
3rd	◀ ✕ ▶	Press < or > to select the first digit of the new security code. E.g., 2.	2.8
4th	◀ ✕ ▶	Press OK.	20.
5th	◀ ✕ ▶	Press < or > to select the second digit of the new security code. E.g., 5.	25.
6th	◀ ✕ ▶	Press OK.	0H

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

Setting finger scanner LED intensity

The intensity of the status LEDs on the finger scanner when it is in idle mode can be set.

The LED intensity of the finger scanner is set via the main menu.

Enter the security code to access the main menu.

$\boxed{\mathbf{i}}$ See Entering the security code, page 35.

The system displays the main menu.

Step	Action	Description	Display
1st	◄ ►	Press < or > until LE is displayed.	𝐿 𝐸
2nd	X ■	Press OK.	8.1
3rd	◄ ►	Press < or > to select the desired LED intensity of the finger scanner. E.g., 2. 0 = LED off 1 = LED dimmed (default setting) 2 = LED on	8.2
4th	X ■	Press OK.	𝐿 𝐸
5th	X ■	Press ESC to return to the main menu.	1 point flashes on the left.

The LED intensity of the finger scanner has been set. The system is in normal mode.

The switching duration for each individual relay can be set anywhere between 1 and 99 s. By default, the switching duration 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 an identification method is matched and it remains in that status until another identification method is matched.

NOTICE	!

Relay switching duration = 0: When controlling an intrusion alarm system with relay switching duration = 0, a power failure or reset will deactivate the intrusion alarm system. A reset is generated when you use an unrecognized identification method with the registration unit 10 times in a row.

The switching duration is set via the main menu.

Enter the security code to access the main menu.

See Entering the security code, page 35. 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.	3
5th	◄ x ▶	Press < or > to set the relay switching duration. E.g., 10.	10
6th	◄ x ▶	Press OK.	OH

The relay switching duration was set. The system is in normal mode.

Setting the digital input

You can set the configuration of the digital input as follows.

Request-to-exit button

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

Feedback

The LEDs on the registration unit indicate the status of digital input for 30 seconds when an authorized finger is swiped over the sensor or when an authorized user code is entered on the keypad. If digital input is enabled, the function LEDs on the finger scanner and the status LEDs on the code pad light up red. If digital input is disabled, the function LEDs on the finger scanner and the status LEDs on the code pad 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 intrusion alarm system is still appropriately sensitive, for example.

Block for relay 1

Relay 1 can no longer be switched while digital input 1 is enabled. The LEDs on the registration unit indicate the status of digital input 1 for 30 seconds when an authorized finger is swiped over the sensor or when an authorized user code is entered on the keypad. If digital input 1 is enabled, the function LEDs on the finger scanner and the status LEDs on the code pad light up red. If digital input 1 is disabled, the function LEDs on the finger scanner and the status LEDs on the code pad light up green. If the status of digital input 1 changes within 30 seconds, this change is also signaled in the same way. However, the relay does not switch automatically when digital input 1 changes from enabled to disabled.

Feedback from an intrusion alarm system which is still enabled can be performed by this function. Access via relay 1 is only possible if the intrusion alarm system has been disabled. Because relays 2 and 3 (relay 3 is only available for the *ekey home control panel wall-mounted 3*) can be operated, zones not monitored by the intrusion alarm system may be accessible. One of the relays can also be used for disabling/enabling the intrusion alarm system.

The digital input is set via the main menu.

Enter the security code to access the main menu.

See Entering the security code, page 35.

The system displays the main menu.

Step	Action	Description	Display
1st	◀✕▶	Press < or > until IP is displayed.	1P
2nd	◀✕▶	Press OK.	Fr
3rd	◀✕▶	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	◀✕▶	Press OK.	OH

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

| | Storing the identification method | The system enables a maximum of 198 identification methods to be stored. These include 99 fingers and 99 RFID transponders for a maximum of 99 users. |

Storing the identification method

The system enables a maximum of 198 identification methods to be stored. These include 99 fingers and 99 RFID transponders for a maximum of 99 users.

Storing a finger

Storing fingers allows the following actions to be taken:

- □ Assigning a storage space to a user
- □ Assigning a number to the finger (F1 , F2 , ..., F9 , F0)
- □ Assigning a relay to the finger on the *ekey home control panel wall-mounted 3* and the *ekey home control panel integra 2*

Fingers are stored via the main menu.

Enter the security code to access the main menu.

i | See Entering the security code, page 35.

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*

Step	Action	Description	Display	
7th		Press OK.	*oI*	
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.	*o2*	
9th		Press OK. The control panel is ready to store the finger.	*EF*	
				The status LED lights up orange
10th		Swipe the finger over the sensor. See "Swiping the finger" in "Correct operation of the finger scanner", page 10. 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.		The status LED lights up green/All LEDs light up green.
				The status LED and the left-hand function LED light up green.
				The status LED lights up red/All LEDs light up red.
				The status LED lights up green, the function LEDs light up red.
				The status LED lights up green, the left-hand function LED lights up red.
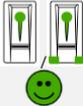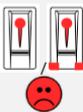
Step	Action	Description	Display
😐	X ■ or ✓	The quality of the fingerprint is acceptable. However, it may be possible to improve the quality by swiping the finger again. Press OK if you want to end the finger storing process.	-
☹	✓	The quality of the fingerprint is poor or the finger was not recognized. Swipe the finger over the sensor again.	-
11th	No action required.	-	*OH* The 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.

!	**NOTICE**

Testing fingers: Test the newly stored fingers on the finger scanner immediately.

Storing an RFID transponder

!	**NOTICE**

RFID function: 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.

Enter the security code to access the main menu.

i	See Entering the security code, page 35.

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 or an RFID transponder, a point lights up on the right.	*8.3*
4th		Press OK.	*E F*
5th		Press < or > until EC is displayed.	*E C*
6th		Press OK.	*o 1*
7th		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.	*o 2*
8th		Press OK. The control panel is ready to store the RFID transponder.	*E C* The status LED lights up orange

Step	Action	Description		Display	
9th		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.
		See "Holding up the RFID transponder" in "Correct operation of the finger scanner", page 11.			The status LED lights up orange. The function LEDs light up green. Long beep.
					The status LED lights up red. Long beep.
		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.	-			The status LED lights up blue.

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

	NOTICE

Replacing the control panel: When the control panel is replaced, the stored RFID transponders can only be used again if the new control panel has the same serial number as the old one. More information about this can be obtained from your dealer.

	NOTICE

Testing RFID transponders: Test the newly stored RFID transponder on the finger scanner immediately.

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.

Using the finger scanner

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

The system is in normal mode.

Using an RFID transponder

Step	Action	Description	Display	
1st		Hold a stored RFID transponder up to the finger swipe area of the finger scanner.		The status LED lights up green. Short beep.
				The status LED lights up red. Long beep.
		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.		The status LED lights up blue.

The system is in normal mode.

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

You can also open the door using the request-to-exit button function of the digital input on the *ekey home control panel integra*. The relay switches for the defined relay switch duration. If the digital input is enabled for longer than the defined relay switch duration, the relay switches for as long as the digital input is enabled.

Deleting a user will delete all identification methods stored under their user number. It is not possible to delete individual identification methods from a user.

Users are deleted via the main menu.

Enter the security code to access the main menu.

See Entering the security code, page 35. | i |

Deleting a user

The system displays the main menu.

Step	Action	Description	Display
1st		Press < or > until du is displayed.	d u
2nd		Press OK.	1.
3rd		Press < or > to select the user number. E.g., 3.	3.
4th		Press OK.	OH

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

You cannot delete individual identification methods. You can only delete users. Deleting a user also deletes the identification methods.

Deleting an identification method

See Deleting a user, page 49. | i |

| | Performing demo mode | Demo mode makes it possible to attract the attention of visitors to trade fairs and in exhibition halls: The finger scanner LEDs light up and flash, the control panel display switches constantly, and the relays switch. |

Performing demo mode

Demo mode makes it possible to attract the attention of visitors to trade fairs and in exhibition halls: The finger scanner LEDs light up and flash, the control panel display switches constantly, and the relays switch.

Demo mode is executed via the main menu.

Enter the security code to access the main menu.

[i] See Entering the security code, page 35.

The system displays the main menu.

Step	Action	Description	Display
1st	◄x►	Press < or > until dE is displayed.	dE
2nd	x■	Press OK.	dL
3rd	◄x►	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	x■	Press OK. The selected demo variant starts.	AS
5th	x■	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.

Fair mode simplifies the user storing process for demo purposes.

NOTICE

!

Unique features of the fair mode:

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

Fair mode is executed via the main menu.

Enter the security code to access the main menu.

See Entering the security code, page 35.

i

The system displays the main menu.

Step	Action	Description	Display
1st		Press < or > until MM is displayed.	⌐⌐
2nd		Press OK.	⌐¹
3rd		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.	⌐²
4th		Press OK.	⌐.¹.⌐²..
5th		Carry out a Finger Touch on the sensor.	The status LED lights up orange.
6th	No action required.	The selected fair mode has been enabled.	-

Step	Action	Description	Display	
7th		Swipe the finger over the sensor.		The status LED lights up green.
				The 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.	-		The status LED flashes blue.
9th		Press ESC twice to terminate fair mode and return to the main menu.		1 point flashes on the left.

Fair mode has been executed. The fingers stored while in fair mode have been deleted. The system displays the main menu.

The serial (Sn) and firmware version numbers (US) of the control panel (CU) and finger scanner (FS) are called via the main menu.

Enter the security code to access the main menu.

ℹ️

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 firmware version number of the control panel is displayed.	*80 / 01*
5th		Press > 6 or 3 times until you have read the entire serial or firmware version number.	-
6th		Press ESC to return to the screen for selecting the serial or firmware version number.	*CU*
7th		Press >.	*FS*
8th		Press OK. The serial or firmware version number of the finger scanner is displayed.	*80 / 06*
9th		Press > 6 or 3 times until you have read the entire serial or firmware version number.	-
10th		Press ESC 3 times to return to the main menu.	*In*

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

Usage of the code pad with shortcuts

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

| i | See Activating the system, page 19. |

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

Entering the admin code

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.

| ⚠ | **ATTENTION** |

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

| i | See Changing the admin code, page 56. |

The system is in normal mode.

Step	Action	Description	Display	
1st	✓	Press ✓ to start the process of entering the admin code.		The status LED lights up yellow on the left.
2nd	(keypad)	Enter the admin code on the keypad.	-	-
3rd	✓	Press ✓.		The status LED lights up green on the left.
				The 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.

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.

| ! | NOTICE |

Length of 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.

Enter the admin code to access the Admin menu.

| i | See Entering the admin code, page 54.

The system is in the Admin menu.

Step	Action	Description	Display	
1st	$\frac{3}{DEF}$	Press 3.		The status LED lights up green on the left.
2nd	✓	Press ✓.		The status LEDs light up green on the left and yellow on the right.
3rd	(keypad)	Enter the old admin code on the keypad.	-	-
4th	✓	Press ✓.		The status LEDs light up yellow.
				The status LEDs light up red.
🙁	✓	The old admin code was not recognized. Enter the admin code from the beginning again.	-	-
5th	(keypad)	Enter the new admin code on the keypad.	-	-

Step	Action	Description	Display	
6th	✓	Press ✓.		The status LEDs light up yellow on the left and green on the right.
				The 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	(keypad)	Enter the new admin code again on the keypad.	-	-
8th	✓	Press ✓.		The status LEDs light up green.
				The status LEDs light up red.
🙁	(keypad)	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.	-		The 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.

The automatic back-illumination is set via the Admin menu.

Enter the admin code to access the Admin menu.

| i | See Entering the admin code, page 54. |

The system is in the Admin menu.

Step	Action	Description	Display	
1st	$\frac{5}{JKL}$ 1	Press 5, 1, and the value of the required brightness threshold. E.g., 7, 0 for 70%.	1 2 3	The status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3 🙂	The status LEDs light up green.
			1 2 3 🙁	The 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	The status LEDs are off.

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

| ! | **NOTICE** |

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

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:

Setting the brightness of the back-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.

Enter the admin code to access the Admin menu.

See Entering the admin code, page 54.	$\boxed{i}$

The system is in the Admin menu.

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

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

Setting the signaling that indicates when a button has been pressed

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.

Enter the admin code to access the Admin menu.

| i | See Entering the admin code, page 54. |

The system is in the Admin menu.

Step	Action	Description	Display	
1st	5 JKL 4 GHI	Press 5, 4, and the number of the required mode. E.g., 0 for acoustic and optical signals disabled.	1 2 3	The status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3 😊	The status LEDs light up green.
			1 2 3 ☹	The 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	The 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 the door 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 the door is set via the Admin menu.

Enter the admin code to access the Admin menu.

ⓘ

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	The status LED lights up green on the left.
2nd	✓	Press ✓.	▬ ▬ 😊 1 2 3	The status LEDs light up green.
			▬ ▬ 😟 1 2 3	The 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	The status LEDs are off.

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

| **Storing user codes** | The system enables a maximum of 99 user codes to be stored. |

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** |

Selecting a user code: 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.

Enter the security code to access the main menu.

| i | See Entering the security code, page 35. |

The system displays the main menu.

Step	Action	Description	Display
1st	◄ᵡ►	Press < or > until Eu is displayed.	*Eu*
2nd	◄ᵡ►	Press OK.	*8.1*
3rd	◄ᵡ►	Press < or > to select the user number. If the user has already stored a user code, a point lights up on the right.	*83*
4th	◄ᵡ►	Press OK.	*o1*
5th	◄ᵡ►	Press < or > to select the relay. od = double relay (relay 1 + 2). Relay selection is available on control panels with more than one relay.	*o2*

Step	Action	Description	Display	
6th		Press OK.	*E P*	
				The status LEDs light up green.
7th		Enter the required user code on the keypad.	-	-
8th		Press ✓.		The status LED lights up green on the right.
				The 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 ✓.		The status LEDs light up green.
				The 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.	-		The status LEDs are off.

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

NOTICE	⚠

Testing the user code: Test the newly stored user code on the code pad immediately.

Opening a door

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	[keypad]	Enter a stored user code on the keypad.	-	-
2nd	✓	Press ✓.	[green LEDs] 1 2 3 😃	The status LEDs light up green.
			[red LEDs] 1 2 3 🙁	The status LEDs light up red.
🙁	[keypad]	The user code was not recognized. Repeat the procedure beginning at step 1.	-	-
3rd	No action required.	The door opens.	[LEDs off] 1 2 3	The status LEDs are off.

The system is in normal mode.

! **NOTICE**

Consequences of several incorrect user code entries: 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 function)

You can also open the door using the request-to-exit button function of the digital input on the *ekey home control panel integra*. The relay switches for the defined relay switch duration. If the digital input is enabled for longer than the defined relay switch duration, 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.

Enter the security code to access the main menu.

See Entering the security code, page 35.

The system displays the main menu.

Step	Action	Description	Display
1st	◀▸	Press ⟨ or ⟩ until du is displayed.	𝖽𝗎
2nd	◂▸	Press OK.	𝟪.𝟣.
3rd	◀▸	Press ⟨ or ⟩ to select the user number. E.g., 3.	𝟪.𝟥.
4th	◂▸	Press OK.	𝖮𝖧

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: The code pad LEDs light up and flash, the control panel display switches constantly, and the relays switch.		

Demo mode is executed via the control panel main menu.

Enter the security code to access the main menu.

ℹ️ See Entering the security code, page 35.

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.	8.8. 1 point flashes on the left.

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

Fair mode simplifies the user storing process for demo purposes.

NOTICE

Unique features of the fair mode:

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

Fair mode is executed via the main menu.

Enter the security code to access the main menu.

See Entering the security code, page 35.

The system displays the main menu.

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

Fair mode has been executed. The user codes stored while in fair mode have been deleted. The system displays the main menu.

Resetting the system to default settings

All authorizations are permanently deleted and the system settings are reset to their defaults. Your system is then in the condition in which it was delivered to you once more.

!	NOTICE

Effect of resetting to the default settings:

- □ All identification methods are deleted irretrievably. 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 switching duration is 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.

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

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

	NOTICE	⚠

Only for Bluetooth finger scanners: 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 reactivate the system.

See step 3 of Activating the system, page 19. ℹ

Resetting the system to default settings en│69

Via the control panel	Settings are reset to the default via the main menu.

Enter the security code to access the main menu.

i   See Entering the security code, page 35.

The system displays the main menu.

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

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

i   See step 3 of Activating the system, page 19.

The process of resetting to the default settings is initiated via the Admin menu of the code pad.

Enter the admin code to access the Admin menu.

| i |

The system is in the Admin menu.

Step	Action	Description	Display	
1st	4 GHI	Press 4.	1 2 3	The status LED lights up green on the left.
2nd	✓	Press ✓.	1 2 3	The 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 😊	The status LEDs are off.
			1 2 3 😞	The 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	The status LEDs flash yellow alternately.

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

| i |

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

Control panel

Display	Meaning	Remedy
E0	No data connection to the registration unit.	Check the wiring and the power supply.
E1	99 fingers, RFID transponders, or user codes have already been stored. The memory is full.	Delete fingers, RFID transponders, or user codes.
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
	The 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.
	All LEDs light up red for 1 minute.	System lock. You used an unrecognized identification method 10 times in a row.	Wait for 1 minute. The system is then in normal mode.
	The status LED lights up red immediately.	No fingers or RFID transponders are stored.	Store a minimum of one finger or RFID transponder.
	The status LED flashes orange.	No bus connection to the control panel.	Check the wiring or activate the device.
	The status LED flashes red/green.	The sensor of the finger scanner without RFID function is soiled or broken.	Clean and/or dry the sensor.
	The status LED lights up blue, the 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 and/or dry 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
▬ ▬ 1 2 3	The status LEDs light up red.	The user code was not recognized.	Enter the user code on the keypad again.
▬ ▬ 1 2 3	The 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.
▬ ▬ 1 2 3	The 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.
▬ ▬ 1 2 3	The status LEDs light up red.	An error occurred when entering menu items or values.	Carefully read the description of the required function again.
— ▬ 1 2 3	The 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.
☀ ☀ 1 2 3	The status LEDs flash yellow alternately.	No bus connection to the control panel.	Check the wiring or activate 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 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment, 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.

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