ekey

YOUR FINGER. YOUR KEY.

ekey home

en **OPERATING INSTRUCTIONS**

English

Translation of the original instructions – ID164/500/0/345

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General

Note

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.

Product liability and limitation of liability

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.

Warranty and manufacturer's guarantee

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
	References to sections of these instructions
	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
DRM	DIN-rail mounted
RFID	Radio-frequency identification
CP	Control panel
OM	Outlet-mounted
SaR	Status after reset

Registration unit	Finger scanner or code pad

Safety information

DANGER

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!

Risk of electrocution

ATTENTION

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.

Product description

System overview

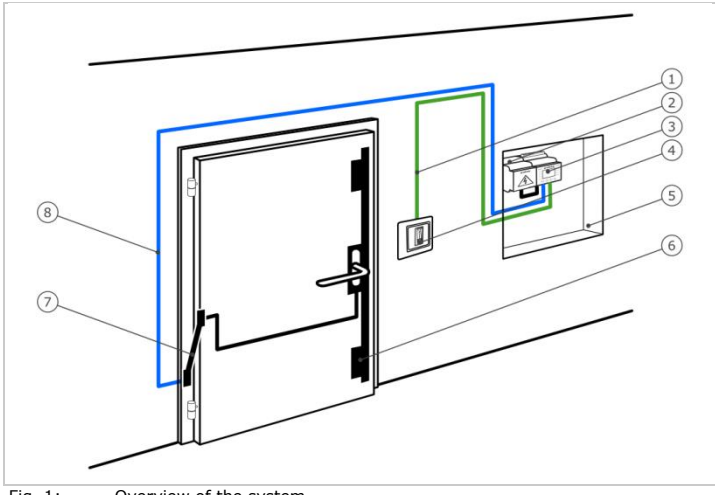


Fig. 1: Overview of the system

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

Scope of delivery

- □ Registration unit
- □ 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 areas of application

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

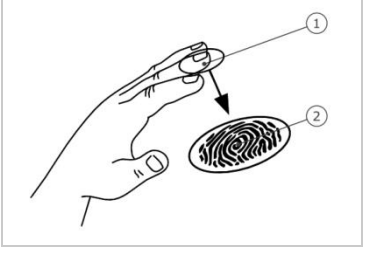
The biometric access control system detects the characteristics (minutiae) of the fingerprint contours, compares them to the biometric information saved from the reference fingerprint, and opens the door in the event of a match. One variant allows the user to be identified and the door opened by means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

The non-physical access control system detects the user codes which are entered, compares them to the stored reference user 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

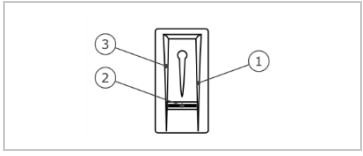
The finger scanner detects the fingerprint by means of a line sensor and subsequently processes it. It compares the result with that of the biometric information saved from the reference fingerprint image and opens the door in the event of a match. The finger scanner only works correctly and reliably with the front phalanx print. Swipe your finger steadily and evenly over the sensor in the correct position.

The 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:

- The index, middle, and ring fingers work best. The thumb and small 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':

NOTICE

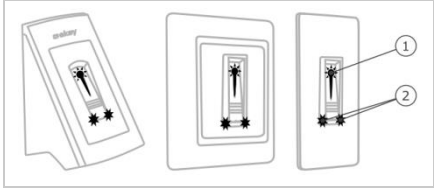
The 'holding up the RFID transponder' option is only available for finger scanners with an RFID function.

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 user code by means of the capacitive keypad. The user code opens the door. The code pad compares what has been entered with the stored reference codes. The code pad can handle user codes containing 4 to 8 digits. The digits in the user code cannot all be the same; at least one of them must be different.

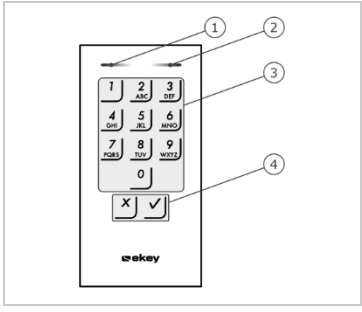
Controls, optical signals, and acoustic signals on the code pad

The code pad has 2 sections with controls.

Controls	Function
Input buttons	Enter user code.
Confirmation buttons	Confirm user code entry as positive or negative.

Table 2: Code pad controls

2 status LEDs signal the operating statuses (user code correct, user code incorrect, 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.

Control panel

Control panels are available in 2 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 DRM 1***	***ekey home CP DRM 2***
Figure		
Mounting type	Mounted in distributor box, DIN-rail mounted, 4HP 1 relay, 1 digital input	Mounted in distributor box, DIN-rail mounted, 4HP 2 relays, 2 digital inputs

Table 3: Control panel variants

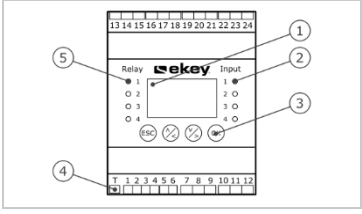
Function of the control panel

The control panel is the actuator of the system. The control panel switches one or two relays and makes one or two digital inputs available.

Controls and optical signals of the control panel

Controls	**Function**
LCD display and 4 buttons	Programming and configuring, relay control.

Table 4: Control panel controls



1 LCD display
2 Status LEDs for digital inputs (red)
3 Keypad
4 Toggle switch for termination
5 Status LEDs for relays (green)

Fig. 6: Overview of the *ekey home CP DRM*

Button	OK	^/<, v/>	ESC
Name	OK	Arrow pointing up, to the left, down, to the right	ESC
Function	Save values, jump to the next menu level.	Navigate in the menu, set values.	Leave a menu level, cancel input.

Table 5: Control panel programming buttons

The status LEDs signal the following statuses:

- The status of the relay. The status LED lights up green when the associated relay is enabled
- The status of the digital input. The status LED lights up red when the associated digital input is enabled (e.g., the request-to-exit button).

Menu items

The control panel main menu includes various menu items. These menu items vary depending on the selected registration unit:

Finger scanner

SAVE USER	Stores user, finger, and RFID transponder.
DELETE USER	Deletes all data for a user.
FAIR MODE	Performs fair mode.
SETTINGS	Applies various settings.
RESET	Resets the system to default settings.

Code pad

STORE USER CODE	Stores user codes.
DELETE USER	Deletes all data for a user.
FAIR MODE	Performs fair mode.
SETTINGS	Applies various settings.
RESET	Resets the system to default settings.

Sub-menu items from the SETTINGS menu item

The **SETTINGS** menu item in the control panel main menu includes various sub-menu items. These menu items vary depending on the selected registration unit:

Finger scanner

RELAY SWITCH TIMES	Sets the relay switch times.
DIGITAL INPUT	Sets the digital input or inputs.
LED INTENSITY	Sets the LED intensity.
TEST MODE	Performs test mode.
DEMO MODE	Performs demo mode.
SECURITY CODE	Sets the security code.
KNX SETTINGS	Sets *ekey home converter KNX RS-485*.
LANGUAGE	Sets the menu language.

Code pad

RELAY SWITCH TIMES	Sets the relay switch times.
DIGITAL INPUT	Sets the digital input or inputs.
CODE PAD	Sets the code pad: acoustic signal on opening, signaling that indicates when a button has been pressed, automatic back-illumination, back-illumination brightness
TEST MODE	Performs test mode.
DEMO MODE	Performs demo mode.
SECURITY CODE	Sets the security code.
KNX SETTINGS	Sets *ekey home converter KNX RS-485*.
LANGUAGE	Sets the menu language.

NOTICE

The control panel is optimized for energy consumption. The LCD display switches off completely if you do not press any buttons for approx. 2 minutes. The display switches on again as soon as you press a button.

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 FS 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 6: 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	User code	99
Length of user code	Quantity	4-8 digits
IP code	IP	54 (front side)

Table 7: Technical specifications: *ekey home keypad integra 2.0*

Name	Unit	Values
Supply voltage	VDC	8-24
Power rating	W	1
Relay	Quantity	1 (2)
Switching voltage relay	VAC/VDC	42
Switching current relay	A	2
Operating temperature	°C	-20 to +70
IP code	IP	20
Digital inputs	Quantity	1 (2) (potential-free)

Table 8: Technical specifications: *ekey home control panel DRM 1 (2)*

Installation

ATTENTION

The system devices are operated using electricity.
They could be destroyed if they are mounted and wired incorrectly.
Mount and wire the system devices correctly before connecting the power.

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.	-

Activation

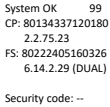
Activating devices and establishing normal mode

Activating the devices determines the menu language and couples the control panel and registration unit with one another. These settings cannot be changed again later apart from by resetting the system to the default settings.

Step	Action	Description	Display
1st		Connect the power supply to the mains.	2CPDRM 2.02.76.05 Deutsch English Français Italiano Slovenščina Česky The control panel displays the language selection.
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		Select the required language.	2CPDRM 2.02.76.05 Deutsch English Français Italiano Slovenščina Česky
4th		Press OK.	 The status LED of the finger scanner flashes orange and the status LEDs of the code pad flash yellow alternately.
5th	No action required.	The control panel is ready for coupling. The control panel counts backwards. You have 45 seconds to press OK.	Time until reset: 45s Coupling Press [OK]
6th		Press OK.	Time until reset: 20s Coupling Press [ESC]

Step	Action	Description	Display
7th	ESC	The control panel is ready to store a finger, user code, or RFID transponder.	Time until reset: 07s Swipe finger across the sensor or Press [ESC]
			Time until reset: 07s Enter user code or Press [ESC]
			Time until reset: 07s Swipe finger or Hold up the RFID or Press [ESC]
8th	Variant a ESC	For a new installation: Press ESC again within the 45 second window.	System OK 99 CP: 80134337120180 2.2.75.23 FS: 80222405160326 6.14.2.29 (DUAL) Security code: --
	Variant b  or ESC	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.	Coupling OK System OK 99 CP: 80134337120180 2.2.75.23 FS: 80222405160326 6.14.2.29 (DUAL) Security code: --

The devices have now been activated and are in normal mode:



System OK	The system is working faultlessly.
99	Number of fingers, RFID transponders, and user codes that can still be stored. You can store a maximum of 99 fingers and 99 RFID transponders or 99 user codes for a maximum of 99 users.
CP	Serial number and software version of the control panel.
FS or KP	Serial number and software version of the registration unit (finger scanner or code pad).
RFID, BT, or DUAL	The installed registration unit has RFID functionality, Bluetooth functionality, or both functionalities.

NOTICE

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

See Operating concept, page 20.

Performing test mode

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

NOTICE

A test can only take place if a mobile device has not been coupled.

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.

The system displays the main menu.

Step	Action	Description	Display
1st		Press ^ or v until **SETTINGS** is selected.	Save user Delete user Fair mode Settings Reset
2nd		Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
3rd		Press ^ or v until **TEST MODE** is selected.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
4th		Press OK.	Test mode Relay 1: Disabled Relay 2: Disabled
5th		Press ^ or v to select the desired relay. Relay selection is only available on *ekey home control panel DRM 2*. Both relays are disabled.	Test mode Relay 1: Disabled Relay 2: Disabled
6th		Press OK. The selected relay is enabled.	Test mode Relay 1: Disabled Relay 2: Enabled
7th		Press ESC twice. Relay 1 and, if present, relay 2 are now disabled again.	Save user Delete user Fair mode Settings Reset

The relays have been tested. The system displays the main menu.

NOTICE

Test mode is also terminated when 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 registration unit by means of the control panel
- *ekey home app* – administration of the Bluetooth finger scanner by means of a mobile device.

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

See Usage of the registration unit with the control panel menu, page 21.

See Usage of the finger scanner with the app, page 59.

Usage of the registration unit with the control panel menu

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

See Activating devices and establishing normal mode, page 16.

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

Entering the security code

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.

ATTENTION

Change the default security code immediately after activation!
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 23.

The system is in normal mode.

Step	Action	Description	Display
1st		Press OK.	System OK 99 CP: 80134337120180 2.2.75.23 FS: 80222405160326 6.14.2.29 (DUAL) Security code: 9-
2nd		Press < or > to select the first digit of the security code.	System OK 99 CP: 80134337120180 2.2.75.23 FS: 80222405160326 6.14.2.29 (DUAL) Security code: 9-
3rd		Press OK.	System OK 99 CP: 80134337120180 2.2.75.23 FS: 80222405160326 6.14.2.29 (DUAL) Security code: 99
4th		Press < or > to select the second digit of the security code.	System OK 99 CP: 80134337120180 2.2.75.23 FS: 80222405160326 6.14.2.29 (DUAL) Security code: 99
5th		Press OK.	Save user Delete user Fair mode Settings Reset

The system displays the main menu. It automatically switches back to normal mode if you do not press a button within 3 min.

Changing the security code

The security code can be changed 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 **SETTINGS** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
3rd	∧/< / ∨/>	Press ∧ or ∨ until **SECURITY CODE** is selected.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
4th	OK	Press OK.	Security code New security code:0-
5th	∧/< / ∨/>	Press < or > to select the first digit of the new security code. E.g.: 5.	Security code New security code:5-
6th	OK	Press OK.	Security code New security code: 50
7th	∧/< / ∨/>	Press < or > to select the second digit of the new security code. E.g.: 2.	Security code New security code: 52
8th	OK	Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
9th	ESC	Press ESC.	Save user Delete user Fair mode Settings Reset

The new security code is stored. The system displays the main menu.

Setting the LED intensity of the finger scanner

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

The LED intensity is set 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	^/< / v/>	Press ^ or v until **SETTINGS** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
3rd	^/< / v/>	Press ^ or v until **LED INTENSITY** is selected.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
4th	OK	Press OK.	LED intensity LED on LED dimmed LED off
5th	^/< / v/>	Press ^ or v to select the desired LED intensity.	LED intensity LED on LED dimmed LED off
6th	OK	Press OK. The desired brightness has been set.	LED intensity LED on LED dimmed LED off
7th	ESC	Press ESC twice.	Save user Delete user Fair mode Settings Reset

The LED intensity has been set. The system displays the main menu.

Setting the back-illumination of the code pad

The back-illumination on the code pad can be set. You can set the brightness threshold and brightness of the back-illumination.

Enabling or disabling back-illumination

The back-illumination on the code pad can be enabled or disabled.

NOTICE

If you want to set the brightness threshold and brightness of the back-illumination, you need to enable the back-illumination.

The back-illumination is enabled or disabled using 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 Λ or V until **SETTINGS** is selected.	Store user code Delete user Fair mode Settings Reset
2nd		Press OK.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
3rd		Press Λ or V until **CODE PAD** is selected.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
4th		Press OK.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
5th		Press Λ or V until **ILLUMINATION** is selected.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
6th		Press OK until the desired setting is selected: Y = enabled, N = disabled.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
7th		Press ESC twice.	Store user code Delete user Fair mode Settings Reset

The back-illumination on the code pad is enabled or disabled. The system displays the main menu.

Setting the brightness threshold of the back-illumination

The brightness threshold for switching on the automatic back-illumination can be set.

NOTICE

You can only set the brightness threshold of the back-illumination if you have enabled the back-illumination on the code pad.

See Enabling or disabling back-illumination, page 25.

The brightness threshold can be set 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 **SETTINGS** is selected.	Store user code Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
3rd	∧/< / ∨/>	Press ∧ or ∨ until **CODE PAD** is selected.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
4th	OK	Press OK.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
5th	∧/< / ∨/>	Press ∧ or ∨ until **BRIGHTN. THRESH.** is selected.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
6th	∧/< / ∨/>	Press OK until the desired percentage value is displayed: 10% = highly insensitive, 100% = highly sensitive, 50% = default setting.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 80% Brightness : 33%
7th	ESC	Press ESC twice.	Store user code Delete user Fair mode Settings Reset

The brightness threshold of the back-illumination is set. The system displays the main menu.

NOTICE

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

Setting the brightness of the back-illumination

The back-illumination brightness can be set.

NOTICE

You can only set the brightness of the back-illumination if you have enabled the back-illumination on the code pad.

See Enabling or disabling back-illumination, page 25.

The brightness can be set 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 Λ or V until **SETTINGS** is selected.	Store user code Delete user Fair mode Settings Reset
2nd		Press OK.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
3rd		Press Λ or V until **CODE PAD** is selected.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
4th		Press OK.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
5th		Press Λ or V until **BRIGHTNESS** is selected.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 100%
6th		Press OK until the desired percentage value is displayed: 00% = off, 33% = 33% on (default setting), 66% = 66% on, 100% = 100% on.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 100%
7th		Press ESC twice.	Store user code Delete user Fair mode Settings Reset

The back-illumination brightness is set. The system displays the main menu.

Setting the signaling that indicates when a code pad button has been pressed

The signaling that indicates when a button has been pressed can be set acoustically and optically.

The signaling that indicates when a button has been pressed is set 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 **SETTINGS** is selected.	Store user code Delete user Fair mode Settings Reset
2nd		Press OK.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
3rd		Press ∧ or ∨ until **CODE PAD** is selected.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
4th		Press OK.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
5th		Press ∧ or ∨ until **ACOUSTIC BUTTONS** is selected.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
6th		Press OK until the desired acoustic signal setting is selected: Y = enabled, N = disabled.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
7th		Press ∧ or ∨ until **LUMINOUS BUTTONS** is selected.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
8th		Press OK until the desired optical signal setting is selected: Y = enabled, N = disabled.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
9th		Press ESC twice.	Store user code Delete user Fair mode Settings Reset

The signaling that indicates when a button has been pressed is set. The system displays the main menu.

Enabling or disabling the code pad signal on opening

The acoustic signal for opening the door can be enabled or disabled.

The acoustic signal for opening the door is set 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	^/< / v/>	Press ^ or v until **SETTINGS** is selected.	Store user code Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
3rd	^/< / v/>	Press ^ or v until **CODE PAD** is selected.	Settings Relay switch times Digital input Code pad Test mode Demo mode Security code
4th	OK	Press OK.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
5th	^/< / v/>	Press OK until the desired setting is selected: Y = enabled, N = disabled.	Code pad Opening signal : Y Acoustic buttons : Y Luminous buttons : Y Illumination : Y Brightn. thresh.: 50% Brightness : 33%
6th	ESC	Press ESC twice.	Store user code Delete user Fair mode Settings Reset

The acoustic signal for opening the door is enabled or disabled. The system displays the main menu.

Setting relay switch times

The switch time for each individual relay can be set anywhere between 0.5 and 99 s. By default, the switch 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 matched and it remains in that status until another finger is matched. In this mode, you can define whether the system returns to its previous status after a power failure or reset (SaR – status after reset).

NOTICE

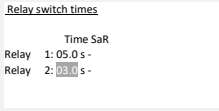
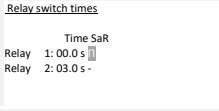
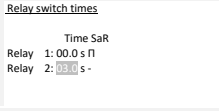
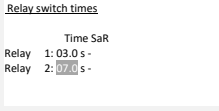
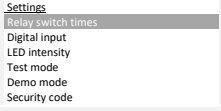
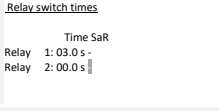
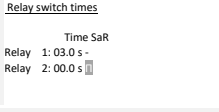
When controlling an intrusion alarm system with relay switch time = 0 and SaR = - (disabled), a power failure or reset will disable the intrusion alarm system. A reset is generated when you swipe an unrecognized finger over the finger scanner 10 times in a row. To prevent this from happening, enable the SaR function (Π).

The relay switch times are set 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	^/< / v/>	Press Λ or V until **SETTINGS** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
3rd	OK	Press OK.	Relay switch times Time SaR Relay 1: 03.0 s - Relay 2: 03.0 s -
4th	^/< / v/>	Press Λ or V to set relay switch time 1. E.g.: 05.0.	Relay switch times Time SaR Relay 1: 05.0 s - Relay 2: 03.0 s -

Step	Action	Description	Display
5th	Variant a: Time = 1-99 s 	Press OK. Then go to step 6.	
	Variant b: Time = 0 s 	Press OK.	
		Press Λ or V to enable SaR.	
		Press OK.	
6th		Press Λ or V to set relay switch time 2. E.g.: 07.0. Relay selection is only available on *ekey home control panel DRM 2*.	
7th	Variant a: Time = 1-99 s 	Press OK. Then go to step 8.	
	Variant b: Time = 0 s 	Press OK.	
		Press Λ or V to enable SaR.	
		Press OK.	
8th		Press ESC.	

The relay switch times are set. The system displays the main menu.

Setting *ekey home converter KNX RS-485*

You can set 10 KNX events for your *ekey home converter KNX RS-485*.

See *ekey converter KNX RS-485 ID224* operating instructions, chapter entitled "Using *ekey home control panel DRM*".

Setting the digital input or inputs

Three different functions can be set for the digital input(s) of the control panel: Exit button, Feedback, and Blocking R1. Digital input 1 switches relay 1 and digital input 2 switches relay 2.

NOTICE

Digital input 2 is only available for *ekey home control panel DRM 2*.

Request-to-exit button

The digital input functions as a remote opener. In this case, the relay switches for the defined relay switch time or for as long as the digital input is enabled (e.g., request-to-exit button, permanent opening). This function applies to digital input 1 and *to the ekey home control panel DRM 2* for digital input 2.

Feedback

This function only applies to digital input 1. Digital input 2 is automatically set as a request-to-exit button.

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 light up red. If digital input 1 is disabled, the function LEDs light up green. If the status of digital input 1 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

This function only applies to digital input 1. Digital input 2 is automatically set as a request-to-exit button.

Relay 1 cannot be switched if digital input 1 is enabled (e.g., entrance blocking while the alarm system is enabled). The function 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 light up red. If digital input 1 is disabled, the function LEDs 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.

The digital input(s) is/are set 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 v until **SETTINGS** is selected.	Save user Delete user Fair mode Settings Reset
2nd		Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
3rd		Press ^ or v until **DIGITAL INPUT** is selected.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
4th		Press OK.	Digital input Exit button Feedback Block for relay 1
5th		Press ^ or v to select the desired function of the digital input. E.g.: Feedback.	Digital input Exit button Feedback Block for relay 1
6th		Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
7th		Press ESC.	Save user Delete user Fair mode Settings Reset

The digital input or inputs is/are set. The system displays the main menu.

Saving users

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:

- Store one or several fingers of one user
- Assign a relay to the finger on the *ekey home control panel DRM 2*.

NOTICE

Store at least 2 fingers – one from each hand.

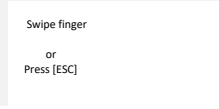
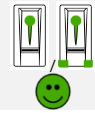
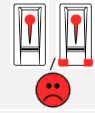
Fingers are stored via the main menu. To get to the main menu, enter the security code.

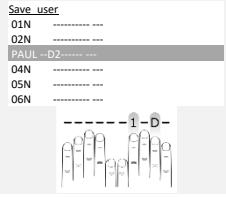
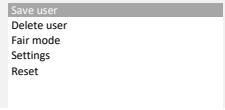
See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	^/< / v/>	Press ^ or v until **SAVE USER** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Save user 01N ---------- --- 02N ---------- --- 03N ---------- --- 04N ---------- --- 05N ---------- --- 06N ---------- ---
3rd	^/< / v/>	Press ^ or v to select the user number or user name.	Save user 01N ---------- --- 02N ---------- --- 03N ---------- --- 04N ---------- --- 05N ---------- --- 06N ---------- ---
4th	OK	Press OK.	03N Finger RFID
5th	^/< / v/>	Press ^ or v to select a finger.	03N Finger RFID
6th	OK	Press OK. The finger list is displayed.	03N Enabled R le thumb ri thumb ri index finger ri middle finger ri ring finger

Step	Action	Description	Display
7th	^/<	Press ^ until the user number or user name is selected.	03N Enabled R le small finger le ring finger le middle finger le index finger le thumb
8th	OK	Press OK.	03N Enabled R le small finger le ring finger le middle finger le index finger le thumb
9th	^/< / v/>	Press ^ or v to select the first character.	S3N Enabled R le small finger le ring finger le middle finger le index finger le thumb
10th	OK	Press OK.	S3N Enabled R le small finger le ring finger le middle finger le index finger le thumb
11th	^/< / v/>	Repeat steps 9 and 10 another 3 times until the user name is complete. Blank spaces are allowed.	PAUL Enabled R le small finger le ring finger le middle finger le index finger le thumb
12th	^/<	Press v to view the user status.	PAUL Enabled R le small finger le ring finger le middle finger le index finger le thumb
13th	OK	Press OK. You can select from either Enabled or Disabled. This allows you to define whether the user is enabled or disabled. A disabled user's fingerprints are deactivated but still stored in the system. By pressing OK, you can switch between Enabled and Disabled.	PAUL Enabled R le small finger le ring finger le middle finger le index finger le thumb
14th	^/< / v/>	Press ^ or v to select a finger.	PAUL Enabled R le small finger le ring finger le middle finger le index finger le thumb
15th	OK	Press OK. The relay list is displayed.	PAUL le index finger Relay 1 Relay 2 Double relay

Step	Action	Description	Display
16th		Press ^ or v to select a relay. Double relay = relay 1 + 2. Relay selection is available on control panels with more than one relay.	
17th		Press OK. The control panel is ready to store the finger.	
			 Status LED lights up orange.
18th		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.
		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.	-

Step	Action	Description	Display
19th	No action required.	-	 Status LED lights up blue. 
20th	No action required.	To store more fingers for this user, see step 4. The enrolled fingers and the assigned relay number can be read once the storing process is complete.	
21st	ESC	Press ESC.	

The fingers are stored. The system displays the main menu.

Storing RFID transponders

NOTICE

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

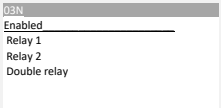
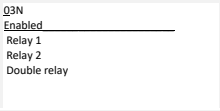
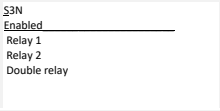
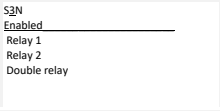
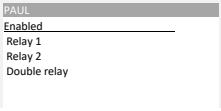
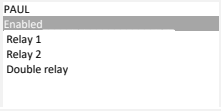
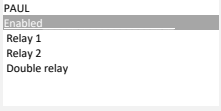
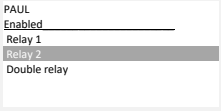
An RFID transponder is able to trigger an action on the control panel, e.g., opening a door. You need a separate RFID transponder for each relay. The double relay function also requires a separate RFID transponder.

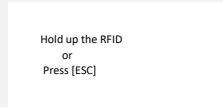
RFID transponders are stored via the main menu. To get to the main menu, enter the security code.

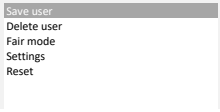
See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	^/< / v/>	Press ^ or v until **SAVE USER** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Save_user 01N ---------- --- 02N ---------- --- 03N ---------- --- 04N ---------- --- 05N ---------- --- 06N ---------- ---
3rd	^/< / v/>	Press ^ or v to select the user number or user name.	Save_user 01N ---------- --- 02N ---------- --- 03N ---------- --- 04N ---------- --- 05N ---------- --- 06N ---------- ---
4th	OK	Press OK.	03N Finger RFID
5th	^/< / v/>	Press ^ or v to select RFID.	03N Finger RFID
6th	OK	Press OK. The relay list is displayed.	03N Enabled Relay 1 Relay 2 Double relay

Step	Action	Description	Display
7th		Press ^ until the user number or user name is selected.	
8th		Press OK.	
9th		Press ^ or v to select the first character.	
10th		Press OK.	
11th		Repeat steps 9 and 10 another 3 times until the user name is complete. Blank spaces are allowed.	
12th		Press v to view the user status.	
13th		Press OK. You can select from either Enabled or Disabled. This allows you to define whether the user is enabled or disabled. A disabled user's RFID transponders are deactivated but still stored in the system. By pressing OK, you can switch between Enabled and Disabled.	
14th		Press ^ or v to select a relay. Double relay = relay 1 + 2. Relay selection is available on control panels with more than one relay.	

Step	Action	Description	Display
15th		Press OK.	  Status LED lights up orange.
16th	No action required.	The control panel is ready to store the RFID transponder. You cannot store an RFID transponder that you have already stored for another user.	-
17th		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.
		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 17.	-
18th	No action required.	-	 Status LED lights up blue. 

Step	Action	Description	Display
19th	No action required.	To store more RFID transponders for this user, see step 4. The enrolled storage spaces for RFID transponders and the assigned relay number can be read for the final three positions on the line once the storing process is complete.	
20th	ESC	Press ESC.	

The RFID transponders are stored. The system displays the main menu.

NOTICE

- When a finger scanner is replaced, the RFID transponders must be stored again.
- 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.

Storing user codes

The system enables a maximum of 99 user codes to be stored for a maximum of 99 users.

Storing user codes enables the following actions to be taken:

- To store one to three user codes from one user
- To assign a relay to the user code on the *ekey home control panel DRM 2*.

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

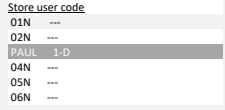
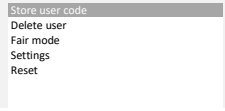
User codes are stored via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.

The system displays the main menu.

Step	Action	Description	Display
1st	∧/< / ∨/>	Press ∧ or ∨ until **STORE USER CODE** is selected.	Store user code Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Store user code 01N --- 02N --- 03N --- 04N --- 05N --- 06N ---
3rd	∧/< / ∨/>	Press ∧ or ∨ to select the user number or user name.	Store user code 01N --- 02N --- 03N --- 04N --- 05N --- 06N ---
4th	OK	Press OK. The relay list is displayed.	03N Enabled Relay 1 Relay 2 Double relay
5th	∧/< / ∨/>	Press ∧ until the user number or user name is selected.	03N Enabled Relay 1 Relay 2 Double relay
6th	OK	Press OK.	03N Enabled Relay 1 Relay 2 Double relay
7th	∧/< / ∨/>	Press ∧ or ∨ to select the first character.	S3N Enabled Relay 1 Relay 2 Double relay

Step	Action	Description	Display
8th		Press OK.	S3N Enabled Relay 1 Relay 2 Double relay
9th		Repeat steps 7 and 8 another 3 times until the user name is complete. Blank spaces are allowed.	PAUL Enabled Relay 1 Relay 2 Double relay
10th		Press V to view the user status.	PAUL Enabled Relay 1 Relay 2 Double relay
11th		Press OK. You can select from either Enabled or Disabled. This allows you to define whether the user is enabled or disabled. A disabled user's user codes are deactivated but still stored in the system. By pressing OK, you can switch between Enabled and Disabled.	PAUL Enabled Relay 1 Relay 2 Double relay
12th		Press ^ or V to select a relay. Double relay = relay 1 + 2. Relay selection is available on control panels with more than one relay.	PAUL Enabled Relay 1 Relay 2 Double relay
13th		Press OK.	Enter user code twice and either confirm with [OK] or press [ESC]  Status LEDs light up green.
14th		Enter the required user code on the keypad.	- -

Step	Action	Description	Display	
15th	✓	Press ✓.		Status LED lights up green on the right.
				Status LEDs light up red.
	OK	The user code is already present. Repeat the procedure beginning at step 15.	-	-
16th		Enter the required user code again on the keypad.	-	-
17th	✓	Press ✓.		Status LEDs light up green.
				Status LEDs light up red.
	OK	The two entries do not match. The user code was not stored. Enter the security code and start again at step 1.	-	-
18th	No action required.	-		Status LEDs are off.
				
19th	No action required.	To store more user codes for this user, see step 4. The enrolled storage spaces for user codes and the assigned relay number can be read once the storing process is complete.		
20th	ESC	Press ESC.		

The user codes are stored. The system displays the main menu.

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 code pad, 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		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.
		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 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 security code in the control panel.

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

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

Deleting users, fingers, and RFID transponders

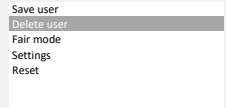
Deleting a user will delete all fingers and all RFID transponders stored under their user name. You can also choose to delete just the fingers or just the RFID transponders of a user.

A user, fingers, and RFID transponders are deleted 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 **DELETE USER** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Delete user 01N ---------- --- 02N ---------- --- PAUL --D2------ 12D 04N ---------- --- 05N ---------- --- 06N ---------- ---
3rd	∨/>	Press ∨ until the desired user is selected.	Delete user 01N ---------- --- 02N ---------- --- PAUL --D2------ 12D 04N ---------- --- 05N ---------- --- 06N ---------- ---
4th	OK	Press OK.	Delete user Delete all Delete finger Delete RFID
5th	∧/<, ∨/>	Press ∧ or ∨ to select the action you require. Delete finger and Delete RFID are only displayed if you have stored fingers and RFID transponders. The user name is only deleted if you select Delete all.	Delete user Delete all Delete finger Delete RFID
6th	OK	Press OK.	PAUL RFID Delete? [OK]
7th	OK	Press OK. The deletion process is executed.	Delete user 01N ---------- --- 02N ---------- --- PAUL --D2------ --- 04N ---------- --- 05N ---------- --- 06N ---------- ---

Step	Action	Description	Display
8th		Press ESC.	

The user, fingers, or RFID transponders have been deleted. The system displays the main menu.

Deleting users and user codes

You can only delete individual users. Once you have deleted a user, the user codes saved for this user are 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.

The system displays the main menu.

Step	Action	Description	Display
1st	∧ / ∨	Press ∧ or ∨ until **DELETE USER** is selected.	Store user code Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Delete user 01N --- 02N --- PAUL 1-D 04N --- 05N --- 06N ---
3rd	∧ / ∨	Press ∨ until the desired user is selected.	Delete user 01N --- 02N --- PAUL 1-D 04N --- 05N --- 06N ---
4th	OK	Press OK.	Delete user Delete all
5th	OK	Press OK.	PAUL Delete? [OK]
6th	OK	Press OK. The deletion process is executed.	Delete user 01N --- 02N --- 03N --- 04N --- 05N --- 06N ---
7th	ESC	Press ESC.	Store user code Delete user Fair mode Settings Reset

The user has been deleted. The system displays the main menu.

Performing demo mode

Demo mode makes it possible to attract the attention of visitors to trade fairs and in exhibition halls by means of the registration unit LEDs lighting up and flashing, and relays switching.

Demo 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	^/< / v/>	Press ^ or v until **SETTINGS** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
3rd	^/< / v/>	Press ^ or v until **DEMO MODE** is selected.	Settings Relay switch times Digital input LED intensity Test mode Demo mode Security code
4th	OK	Press OK.	Demo mode Disabled
5th	OK	Press OK to select the desired demo mode variant: LED on or Relay. LED on: Registration unit LEDs light up and flash Relay: Registration unit LEDs light up and flash, and relays switch.	Demo mode Relay
6th	No action required	The desired demo mode variant starts.	-
7th	OK	Press OK until Disabled is displayed.	Demo mode Disabled
8th	ESC	Press ESC twice.	Save user Delete user Fair mode Settings Reset

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

Performing fair mode

Fair mode simplifies the user storing process for demo purposes.

NOTICE

- 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.

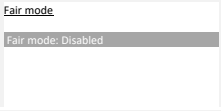
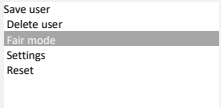
Fair mode is executed via the main menu. To get to the main menu, enter the security code.

See Entering the security code, page 21.

The system displays the main menu.

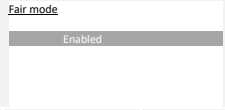
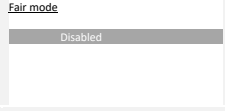
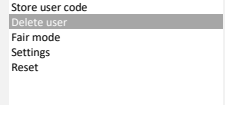
With a finger scanner

Step	Action	Description	Display
1st	^ / v	Press ^ or v until **FAIR MODE** is selected.	Save user Delete user Fair mode Settings Reset
2nd	OK	Press OK.	Fair mode Disabled
3rd	OK	Press OK until the desired setting is selected: Disabled = Fair mode disabled 10 min = Fingers are stored for 10 min Once = Fingers deleted after detection or 10 min E.g.: Once.	Fair mode Once
4th		Carry out a Finger Touch on the sensor.	 Status LED lights up orange.
5th	No action required.	The selected fair mode has been enabled.	-

Step	Action	Description	Display	
6th		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.		-
7th	No action required.	The finger was stored.		Status LED flashes blue.
8th		Press OK to select Disabled again and to end fair mode.		
9th		Press ESC.		

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

Using a code pad

Step	Action	Description	Display	
1st		Press ∧ or ∨ until **FAIR MODE** is selected.		
2nd		Press OK.		
3rd		Press OK until Enabled is selected.		
4th	No action required.	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		Press OK to select Disabled again and to end fair mode.		
8th		Press ESC.		

Fair mode has been executed and terminated again. The user codes stored while in fair mode have been deleted. 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 activated before you start your system administration.

See Activating devices and establishing normal mode, page 16.

The 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*.

NOTICE

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.

NOTICE

As soon as the *ekey home app* is connected to the *ekey home finger scanner integra Bluetooth*, the buttons are locked on the control panel. If you found yourself in the administration of the *ekey home control panel DRM*, administration would quit without saving the data.

Changing security codes

You can change all security codes at any time:

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

NOTICE

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.

Disabling Bluetooth

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.

Coupling additional mobile devices

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 65.

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.

See Coupling additional mobile devices, page 63.

Storing the 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 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.

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.

Resetting the app security code

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.

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 63.

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

NOTICE

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.

Resetting the system to default settings

You can reset the system to its default settings either via the control panel or the app (only in connection with a Bluetooth finger scanner). Use whichever device is most easily accessible.

NOTICE

- All fingers, RFID transponders, and user codes are permanently deleted
- The security code is set to 99
- The control panel and registration unit are no longer coupled together
- The relay switch times are set to 3 s
- The LED intensity of the finger scanner is reset to LED dimmed
- Back-illumination is enabled using the code pad. The brightness threshold of the back-illumination is reset to 50% and the brightness value of the back-illumination to 33%
- The acoustic and optical signaling that indicates when a button has been pressed, as well as the acoustic signal for door opening are both enabled again using the code pad
- CV KNX available is reset to N in the KNX settings.

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.

Via the control panel

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		Press ∧ or ∨ until **RESET** is selected.	Save user Delete user Fair mode Settings Reset
2nd		Press OK.	Reset Reset to default settings Press [OK]
3rd		Press OK.	2CPDRM 2.02.76.05 Deutsch English Français Italiano Slovenščina Česky

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

See step 3 of Activating devices and establishing normal mode, page 16.

Via the app

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 reactivate the system.

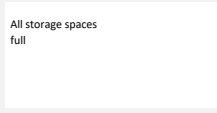
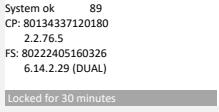
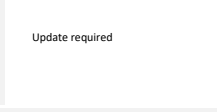
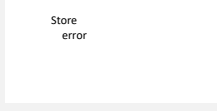
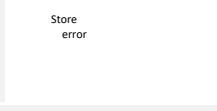
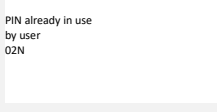
See step 3 of Activating devices and establishing normal mode, page 16.

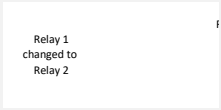
Updating the software

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
	No data connection to the registration unit.	Check the wiring and the power supply.
	99 fingers, RFID transponders, or user codes have already been stored. The memory is full.	Delete some fingers, RFID transponders or user codes.
	An incorrect security code has been entered 3 times. The system is locked for 30 minutes.	After 30 minutes, enter the correct code. The 30-minute lock will only count down if the power supply and data connection are present throughout.
	An update is required.	The control panel requires a firmware update.
	You have exceeded the 70 seconds in which it is possible to store the finger, RFID transponder, or user code.	Start the storing process from the beginning.
	The two entries do not match when storing the user code.	Re-enter the required user code twice.
	The selected user code is already in use by another user. The corresponding user name is displayed.	Select another user code.

Display	Meaning	Remedy
	The selected user code was already in use by the same user for the other relay or for the double relay. The selected user code is now only valid for the most recently selected relay.	If you would like to continue using this user code for the initially selected relay, choose another code that has not yet been used for the new relay.

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.

Finger scanner

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.
	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.
	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 activate 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.

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 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 gently 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.

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.

Declaration of conformity

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

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ID164/500/0/345: Version 2, 2016-01-13
Media Center ID: 3002

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