ekey
YOUR FINGER. YOUR KEY.

en **OPERATING INSTRUCTIONS**

ekey Crestron

ID347/722/0/650: Version 1, 2019-07-25; Media Center ID: 3018

English

Original operating instructions – ID347/722/0/650

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1 General

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

1.1 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.

1.2 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 and 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. Subject to optical and technical modifications, any liability for errors and misprints is excluded.

Although these operating instructions cover some elements of operating the Crestron system in conjunction with ekey finger scanners, ekey's liability only extends to the finger scanners produced by ekey which are integrated in the system.

Our general terms and conditions apply as valid at the date of purchase. See http://www.ekey.net.

ekey biometric systems GmbH provides a 36-month warranty for material or processing defects. This warranty is only valid in the country where the product was purchased. The product may only be used with original ekey spare parts and accessories.

2 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
	Reference to sections of these instructions
	Reference to the mounting instructions
	Reference to the wiring diagram
□	Listing without specified order, 1st level
ekey home FS OM	Product names
Button	Buttons

Abbreviations:

CP	Control panel

3 Safety information

3.1 Life-threatening danger resulting from electricity

DANGER

All ekey 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 result in life-threatening danger due to electric shock.
Only certified electricians are authorized to carry out the electrical installation!

3.2 Safety against tampering

ATTENTION

Mount the controller in a safe internal area.
This prevents tampering from the outside.

4 Product description

4.1 System overview

Fig. 1: Overview of the system

Features:

- Own Crestron access system
- Access logging
- Customized access rights
- Centralized administration via the Crestron Touch Screen
- Programmable time slots
- Can store up to 100 fingerprints and 100 RFID transponders

4.2 Scope of delivery and required components

The ekey finger scanner for Crestron comes with the following components:

- ekey finger scanner for Crestron
- Mounting instructions
- Wiring diagram
- License key

4.3 Additional components required

- Crestron Controller (3-Series or 4-Series)
- Crestron Touch Screen(s)

4.4 Supported finger scanners

Product group	Illustration	Product name	
ekey FS OM		*ekey FS OM I Crestron* *ekey FS OM I RFID Crestron* *ekey FS OM E Crestron* *ekey FS OM E RFID Crestron*	*ekey FS UP I SC Crestron* *ekey FS UP I SC RFID Crestron* *ekey FS UP E SC Crestron* *ekey FS UP E SC RFID Crestron*

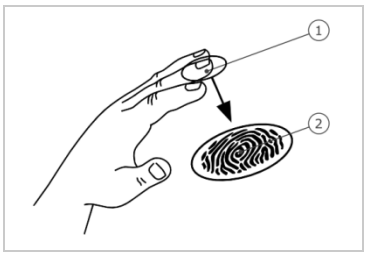
Table 1: Finger scanner outlet mounted for Crestron

Product group	Illustration	Product name
ekey FS IN		*ekey FS IN E Crestron* *ekey FS IN E RFID Crestron*

Table 2: Finger scanner integra for Crestron

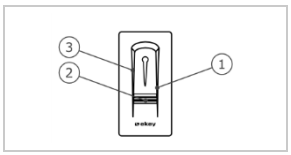
4.4.1 Function of the Crestron access control system

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



1 Front phalanx
2 Fingerprint

Fig. 3: Fingerprint



1 Right guiding edge
2 Sensor
3 Left guiding edge

Fig. 2: Finger swipe area

The Crestron system offers an interface for individual permission assignment and central administration via a Crestron Touch Screen. The system also logs the access events and enables the user to program custom time slots.

4.4.2 Components of the Crestron access control system

System components	Function
Finger scanner	Identification of fingers or RFID transponders
Crestron Controller	Controls the Crestron access control system
Crestron Touch Screen	Interface for managing registration units and access permissions. Displays recorded access logs and any other elements connected to the Crestron system.

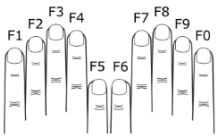
Table 3: Components of the Crestron access control system

4.4.3 Correct operation of the finger scanner

Incorrect operation will impair the function of the finger scanner.

Step	Figure	Description
1st		Hold your finger straight, 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 downwards 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 image

- Recommended finger numbering: 

.
- The index, middle and ring fingers work best. The thumb and little finger work marginally or not at all.
- If the fingers are frequently wet, save the images with wet fingers.
- Children's fingerprints work from approx. 5 years of age.

'Holding up the RFID transponder':

NOTICE

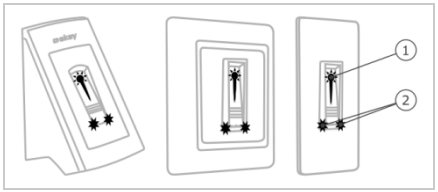
The 'holding up the RFID transponder' option is only available for finger scanners with an RFID function.

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.

4.4.4 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

5 Installation and activation

5.1 Activating the system

ATTENTION

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

Mount the system in accordance with the supplied mounting instructions.

Cable the system in accordance with the supplied wiring diagram.

6 Activating the finger scanner

Activating the registration units and the controller couples these devices.

In order to begin activation of the ekey finger scanner in the Crestron system, the activation of the Controller and of the Touch Screen must first be completed.

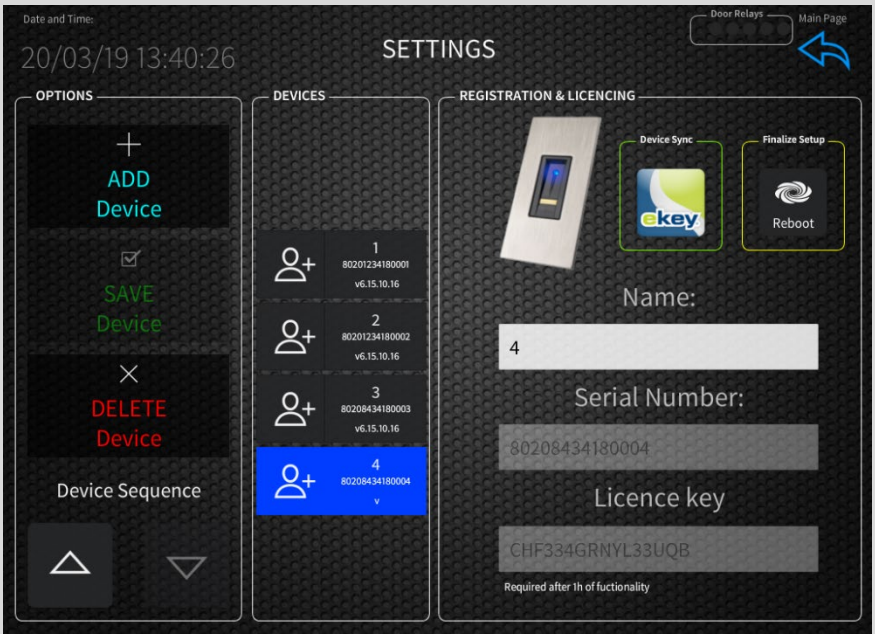
6.1 Activating the finger scanner

NOTICE

Notice: You need the serial number and license key to add the finger scanners. You will find the serial number on the back of the finger scanner. The license key is included in the scope of delivery and consists of 16 characters.

Step	Action	Display
1st	On the Crestron Touch Screen, tap on "Settings" (the gear icon in the top right corner).	
2nd	Under **OPTIONS**, tap on "ADD Device". Enter the name, serial number and license key of the device you would like to add. 	 The LED flashes orange
	If "SAVE Device" is not illuminated in green, the entries are incorrect or incomplete.	
3rd	Tap on "SAVE Device". 	 The LED lights up blue after successful integration.

Step	Action	Display
4th	Repeat these steps for each additional finger scanner.	



✓ Activation of the finger scanner is complete. The finger scanner is ready for operation.

NOTICE

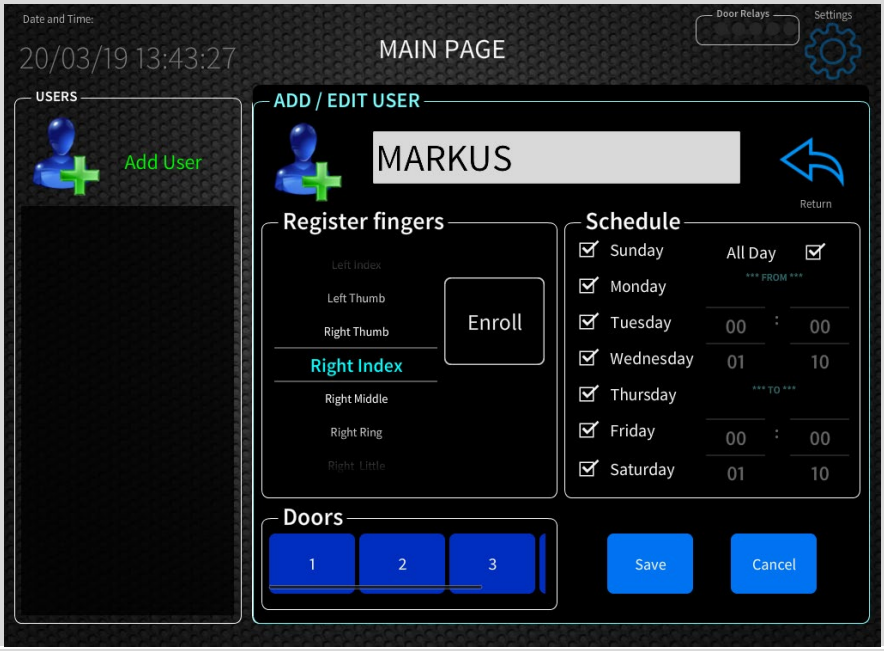
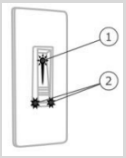
Notice: You can add up to a maximum of 10 finger scanners.

7 User administration

7.1 Identification methods

Under **USERS,** you can add users assign permissions, store identification methods and assign them to users. The system allows the storage of up to 200 identification methods, including 100 fingers and 100 RFID transponders.

7.2 Storing a user

Step	Action
1st	Tap on "Add User" on the left-hand side of the main page. On the right, the **ADD/EDIT USER** field will appear**.** 
2nd	Enter the name of the user under **ADD / EDIT USER**.
3rd	In the "Register fingers" field, select the finger that you would like to store. This procedure is described in more detail in the following section.
4th	Under "Doors", select which finger scanners should grant access to this user. Finger scanners that you do not select here will reject this stored finger.
5th	Under "Schedule", you can define time slots at your discretion. The status LED shines green during these time slots when a permitted piece of identification information is recognized, and access is granted. The function LEDs shine red when an otherwise permitted piece of identification information is recognized outside of the corresponding time slots, and access is denied.  1-Status LED; 2-Function LEDs

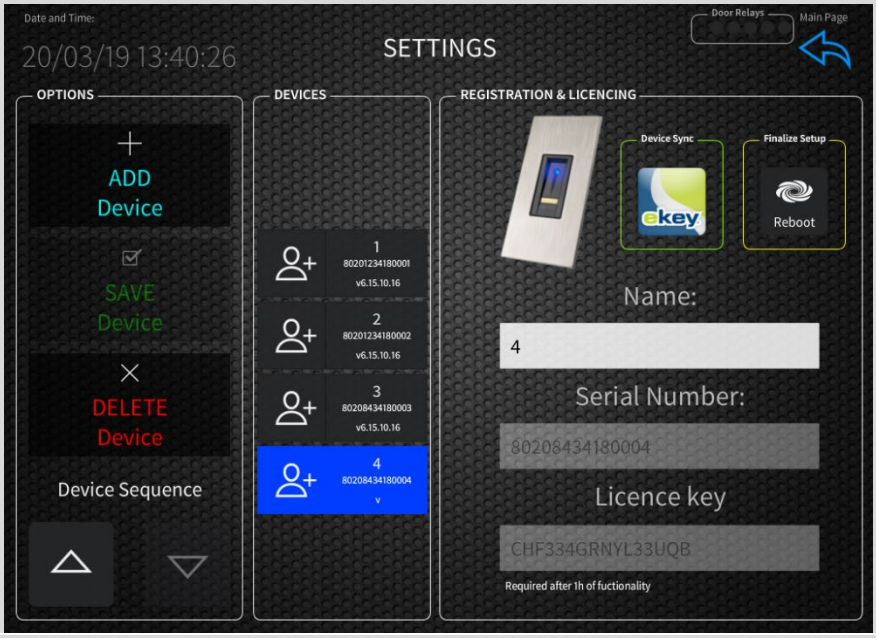
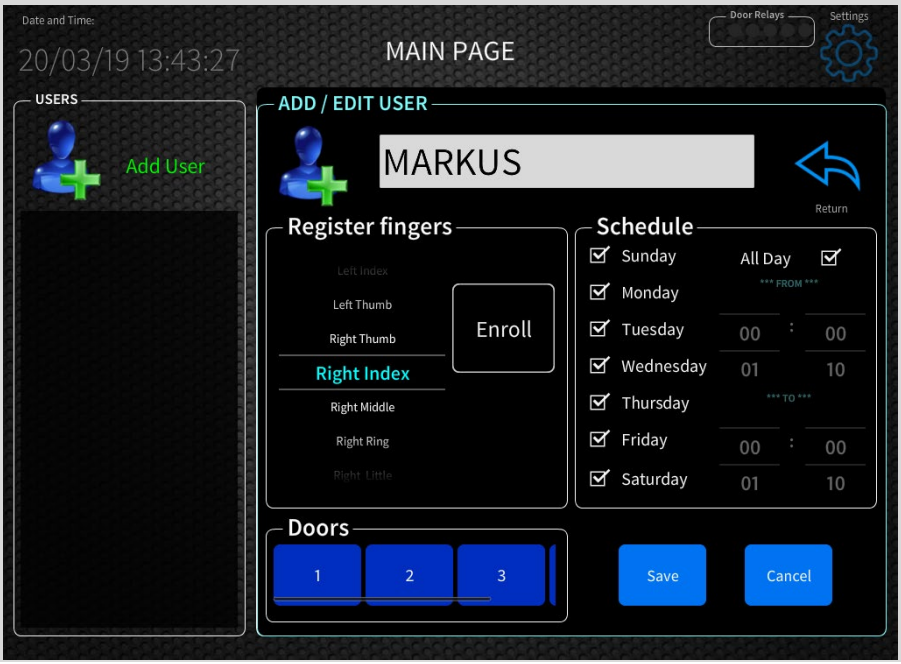
7.3 Storing identification methods

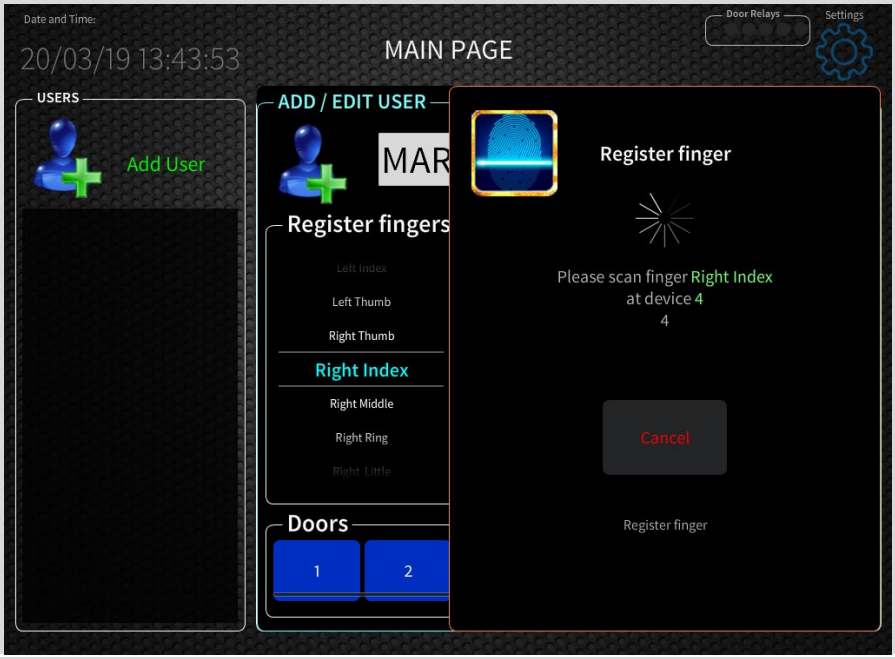
7.3.1 Storing fingers

NOTICE

Notice: Store at least two fingers per user: one on each hand.

The process for storing fingers is initiated on the **MAIN PAGE**.

Step	Action
1st	Tap on "Settings" (the gear icon in the top right corner), then under **DEVICES** on the finger scanner that you would like to use to store fingers. 
2nd	Navigate back to the **MAIN PAGE** (arrow in the top right corner).
3rd	Under **USERS**, select an existing user by tapping and holding your finger on the username (approx. 2 s), or add a new User by tapping on "Add User".
4th	By tapping on "Enroll" you begin the storing process for the finger you have selected. 

Step	Action
5th	Swipe your finger across the sensor of the selected finger scanner. 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. During finger storage (after the first finger has been swiped over the sensor), no more than 10 sec may pass between each swipe. Otherwise, the finger storing process will be aborted. 
6th	The finger scanner lights up green briefly and then returns to blue. The process of storing the finger is now complete.

✓ The finger has been stored and can be used at any finger scanner to which the user is granted access permission. You can now store additional fingers or manage the permissions of this user.

7.3.2 Storing RFID transponders

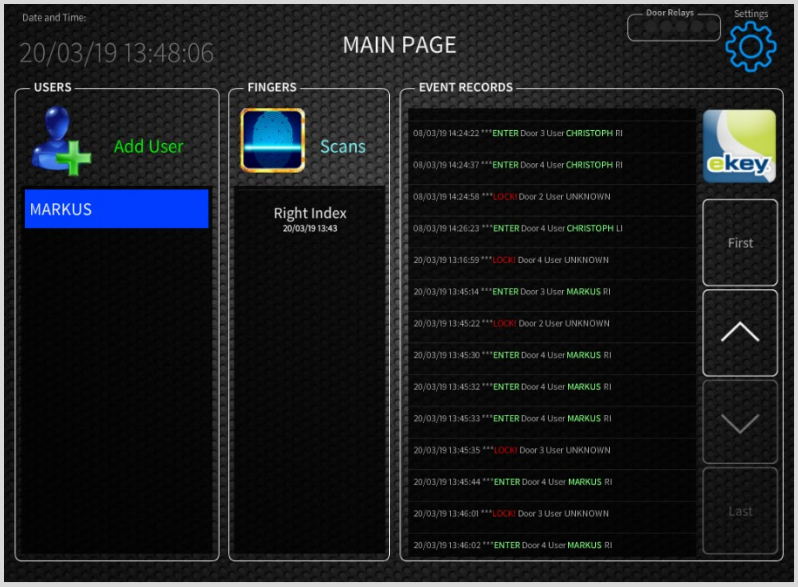
Follow the same instructions as for storing fingers, but instead of swiping your finger over the sensor, hold the RFID transponder next to the finger swipe area of the finger scanner at a distance of between 1 and 5 cm.

7.4 Managing existing users

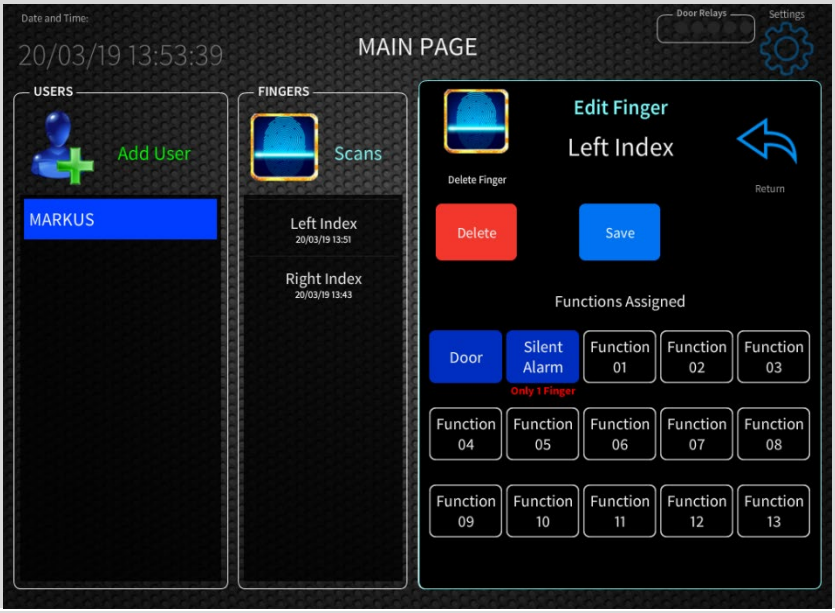
7.4.1 Deleting a user/finger and changing permissions

You can delete a user or finger, change permissions or add new permissions at any time.

Step	Action
1st	First, highlight the user in question on the main page by tapping on the username. Then, under "Fingers", select the finger you would like to delete or assign a function or relay to.



2nd	The "Edit Finger" field will appear.



3rd	In the "Functions Assigned" area, you can assign functions and relays to the finger or deselect them at your discretion. □ Tap "Save" to complete the process of adding or removing functions. □ Tap "Delete" to delete the selected finger. □ Tap "Return"(arrow at top right) to exit this section without saving any changes you have made.

8 Logs

You can view the most recent access events. These events are updated in real time and displayed on the screen, with the most recent at the top.

9 Maintenance

The system is largely maintenance-free. The sensor surface 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.

10 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 13/08/2005 is to be recycled and may 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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www.ekey.net

ekey biometric systems

Austria
ekey biometric systems GmbH
Lunzerstraße 89, 4030 Linz, Austria
Phone: +43 732 890 500 0
office@ekey.net

Eastern Adriatic region
ekey biometric systems d.o.o.
Vodovodna cesta 99, SI-1000 Ljubljana
Phone: +386 1 530 94 89
info@ekey.si

Germany
ekey biometric systems Deutschland GmbH
Industriestraße 10, D-61118 Bad Vilbel
Phone: +49 6187 906 96 0
office@ekey.net

Italy
ekey biometric systems Srl.
Via Copernico, 13/A, I-39100 Bolzano
Phone: +39 0471 922 712
italia@ekey.net

Switzerland & Liechtenstein
ekey biometric systems Schweiz AG
Landstrasse 79, 9490 Vaduz, Liechtenstein
Phone: +41 71 560 54 80
office@ekey.ch

United States
ekeyUSA Systems, LLC
1950 Northgate Blvd. STE D2
Sarasota, FL, 33637
Phone: +1 (941) 870-4757
E: info@ekeyUSA.com

www.ekey.net

Made in Austria