



**1 Note on this document**

This quick start guide is not subject to updating. Subject to optical and technical modifications, any liability for misprints excluded.

**2 Intended use**

The ekey home system consisting of *ekey home finger scanner*, *ekey home control panel* and *ekey power supply* is a biometric access control system available in different hardware makeups and component combinations. It captures the unique features (minutae) of the fingerlines, which are then compared to the master templates saved in the finger scanner. To authenticate a finger successfully, a certain degree of identicalness (threshold) has to be reached. Based on this, a given switching actuator is activated (relay output situated on the control panel). The system has been primarily developed for opening front doors, apartment doors, garage doors, etc. in a residential, corporate and limited industrial environment. It has to be installed in a fixed position, and in accordance with the accompanying mounting instructions and wiring diagrams.

**3 Product liability**

In the below listed cases, the security, the protection and the flawless operation of the device may be impaired. The liability for the operability of the equipment and its safe operation is transferred to the operator / administrator / user:

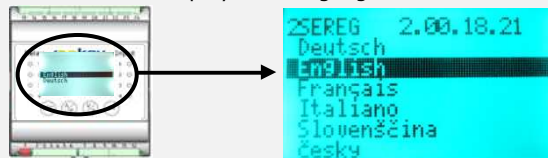
- The device is not operated, maintained and cleaned in accordance with the respective manual.
- The device is used outside of the application area specified herein, e.g. in automotive applications, hazardous areas, safety-critical applications (threat to life or physical condition).
- The operator carries out unauthorized changes on the devices.
- The device is not operated with the recommended voltage supply (safety extra low voltage - SELV).
- The system components are not connected electrically as stipulated in the respective wiring diagram.

**4 Start-up**

Before you start programming the system with the help of this quick start guide, the system must be mounted and wired according to the mounting instructions and wiring diagram supplied with the device. Please follow the steps below:

- 1.) Make everything you need ready to mount the devices as described in the mounting instructions supplied with the devices.
- 2.) Wiring  
**Do not connect the system to the mains yet! The electrical connection of the system can only be carried out by a specialist!**
- 3.) Check the wiring.
- 4.) Conclude mounting the devices. Close all the device housings which you have had to open in order to be able to proceed with the wiring.
- 5.) Read carefully the following chapter „5 Operating the finger scanner“. The correct operation (i.e. swiping the finger over the sensor) of the fingerprint scanner is decisive for the proper functioning of the whole system. Also see the short movie in the „Tips & Tricks“ folder on the DVD supplied with the product.
- 6.) Connect the power supply to the mains.  
**The electrical connection of the system can only be carried out by a specialist!**

The *ekey home CP DRM* displays the language selection



The *ekey home finger scanner* indicators are as follows:



*ekey home FS WM*  
*ekey home FS IN*  
*ekey home FS OM*  
flashing orange

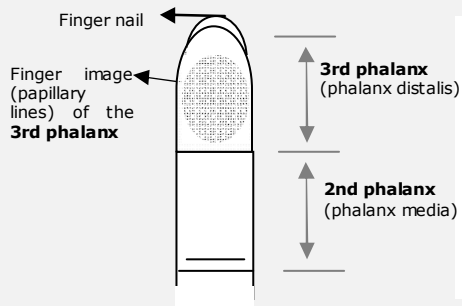
7.) Now start at point **A: INITIALIZING THE DEVICES** of „Programming the system“.

**5 Operating the finger scanner**



**5.1 Function of the finger scanner**

The function of the finger scanner is to capture and analyze the image of your finger, and then compare it with a reference template. Which part of your finger should be captured?



It is necessary to capture an image of the **3rd phalanx**. On the contrary, your finger scanner will not function properly. In order to ensure this, take care to operate the finger scanner correctly. It is fundamental to place your finger correctly in the finger recess and move it down across the sensor at the right speed. Ergonomically speaking the best fingers are the index, the middle finger and the ring finger. **The thumb and the little finger may not be used!**

A finger scanner works like a camera. It makes a picture of the bottom side, the papillary lines, of your finger's third phalanx. However, this picture must be of good quality, so that physical access can be granted whenever necessary.

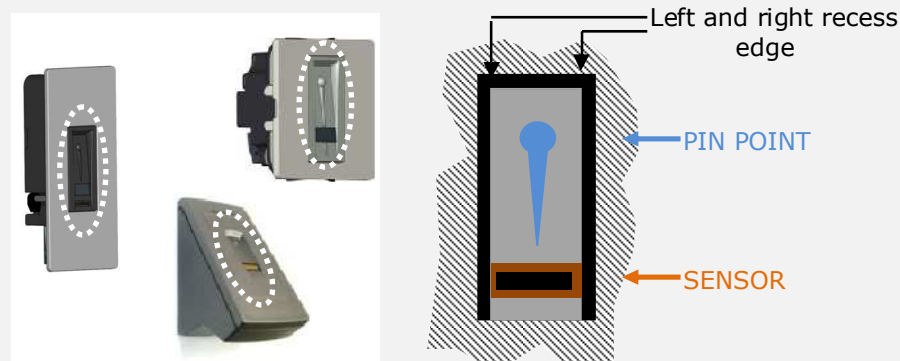
Imagine you wish to make a picture of someone, and this person

- keeps fidgeting
- runs by and you try to make a picture of him at that exact moment
- hides half of his face behind a tree
- etc.

What do you think these pictures will look like? On some of the pictures you will not even be able to recognize the person.

The finger scanner works in the same way. The finger scanner can only read all the information contained in your finger, and consequently open your doors securely and reliably, if you move your finger down across the sensor evenly and in the right position. Let us now look at where you should place your fingers and at which speed you should move them across the sensor, so that the „pictures“ of your fingers are perfect.

**5.2 The finger recess – the control element**



The finger recess allows to place the finger correctly so that a finger picture of good quality can be captured. It actually is the control element and consists of **pin point - sensor - right and left recess edges**.

**5.3 Operating correctly the finger scanner**

Place the middle of your third phalanx directly on the finger recess **pin point**.

Lay your finger straight and flat on the finger recess.

BE SURE to place your finger exactly in the middle of the area between both finger recess edges.

Take care to position your finger as flat as possible over the finger recess.

Ideally, when positioning your finger on the finger recess, stretch the remaining fingers, holding them close to the „swiping“ finger. This helps keep the „swiping“ finger even.

Now without changing the inclination of your finger, move it down across the sensor (the entire hand). Take care to swipe your finger at the right speed. BEWARE: The entire movement (swipe) should take about **1-1,5 sec.**

If you swipe your finger too fast, then the status LED on the pin point will light up red. Do not modify the position of the finger phalanges during the swipe (e.g. by bending the third phalanx). There is no need to exert any **stronger pressure**. Move your finger across the sensor as if you would wipe bread crumbs off a table.

**5.4 What you should not do**

Place your third phalanx higher than the pin point

Not place your finger in the middle of the finger recess, or not place it parallel to the finger recess edges.

Rotate your finger in the finger recess.

Place your finger at a too steep angle with the finger recess.

speed >> speed <<

Move your finger too fast or too slowly across the sensor.

**If you move your finger across the finger scanner in one of the ways mentioned here, then the scanner will not be able to extract the information it needs about your finger image. It will therefore not function properly:**

- Poor recognition performance:** You will have to swipe your finger several times across the sensor before being able to induce the door to open.
- Reference templates cannot be saved:** You are not able to save a finger in the system.

**6. Programming the system with the ekey home CP DRM**



**6.1 Function of the control panel**

The function of the *ekey home CP DRM* in *ekey home* is to program and parametrize the system. Using the

- LCD display and the
- 4 buttons, you can
- register users and enroll their fingers
- delete users
- enter the security code
- change the security code
- change the relay switching times
- reset to factory settings
- ...

The menu navigation is intuitive and very easy. You will find step-by-step detailed explanations of each specific menu function below.

**6.2 Controls and their symbols**

The LCD display guides you through the menu, displays status information and allows you to make specific settings.

- The **OK** button allows you to register values and move to the next menu level.
- The **down arrow / right arrow** button allows you set values and navigate in the menu.
- The **up arrow / left arrow** button allows you to set values and navigate in the menu.
- The **ESC** button allows you to exit a menu level or to cancel entries.

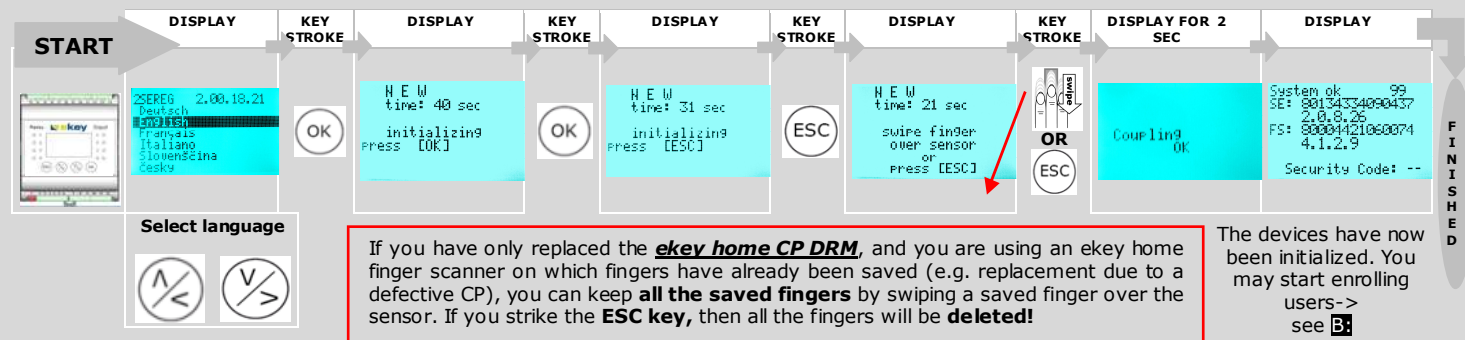
**6.3 Programming the system**

Now start programming the system. **The menu sequences for each single function are explained below in this document.** Let us not forget to mention the security code. You need it in order to be able to make changes in the system. **The factory default setting for this code is 99. Change this code to another one of your choice as soon as you have started up the system.**

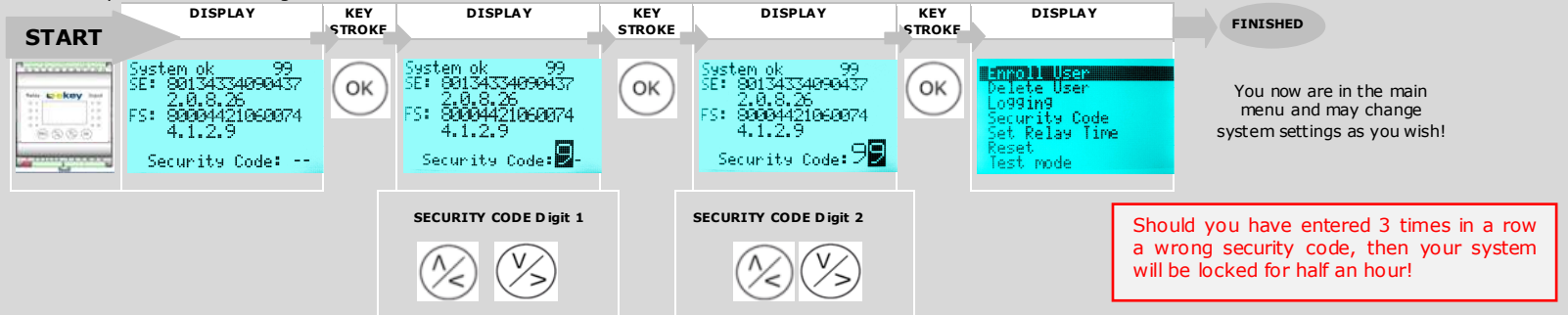
**Security code  
Factory setting  
99**



**A: INITIALIZING THE DEVICES-** The devices have to be initialized both for a new installation and when one of the devices has been replaced. Only after this has been done can fingerprints be saved. Please follow the steps below:



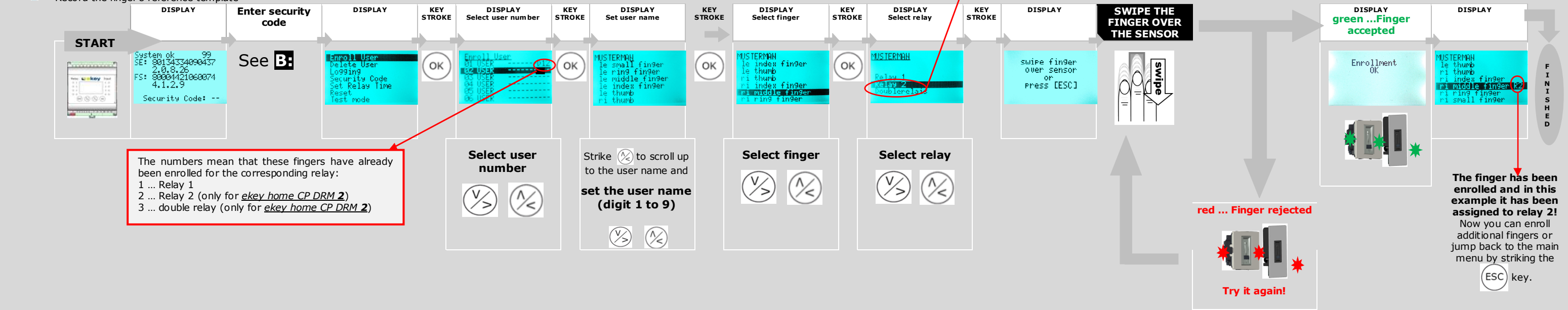
**B: ENTERING THE SECURITY CODE** – The security code allows you to avoid system manipulations by unauthorized people. The factory default setting for this code is „99“. Change this code as soon as you have started up the system, in order to be protected against manipulations. **C: CHANGING THE SECURITY CODE** explains how to change the code:



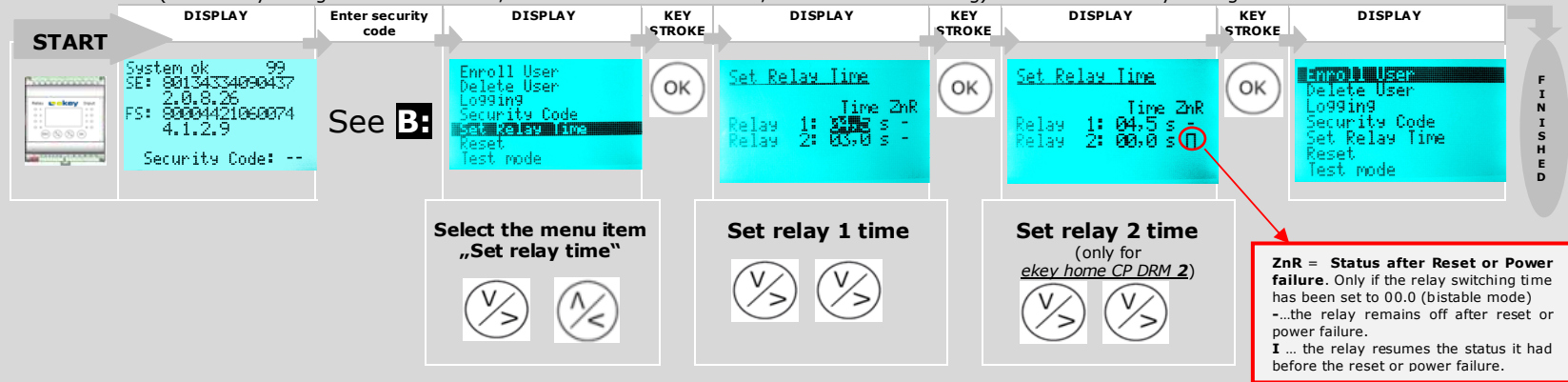
**C: RECORDING FINGERPRINTS-** When you record a user's fingerprints, you:

- Set the user name
- Select the finger to be used (you can save up to 10 fingers / user; but you cannot save more than 99 fingers in the whole system)
- Record the finger's reference template

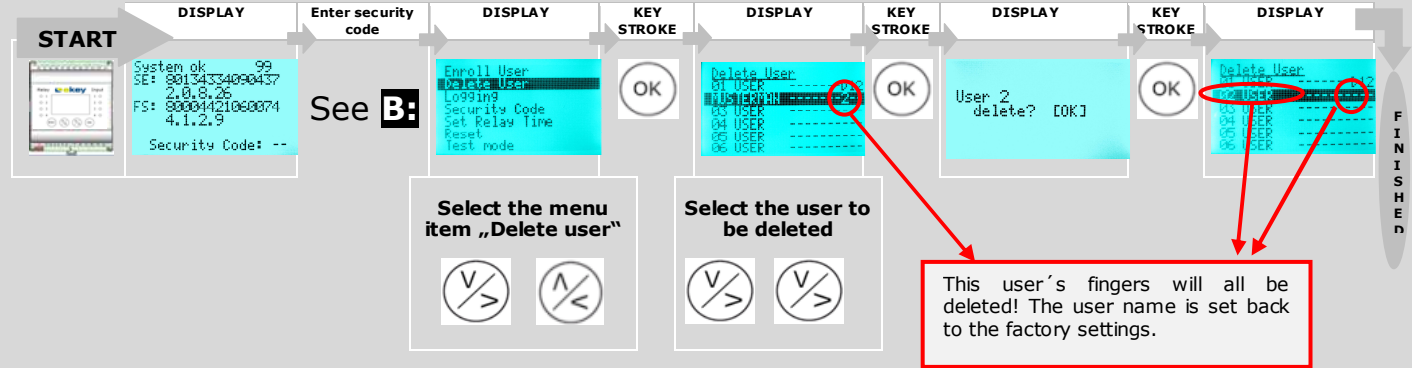
Repeat until complete user name is set (9 digits)



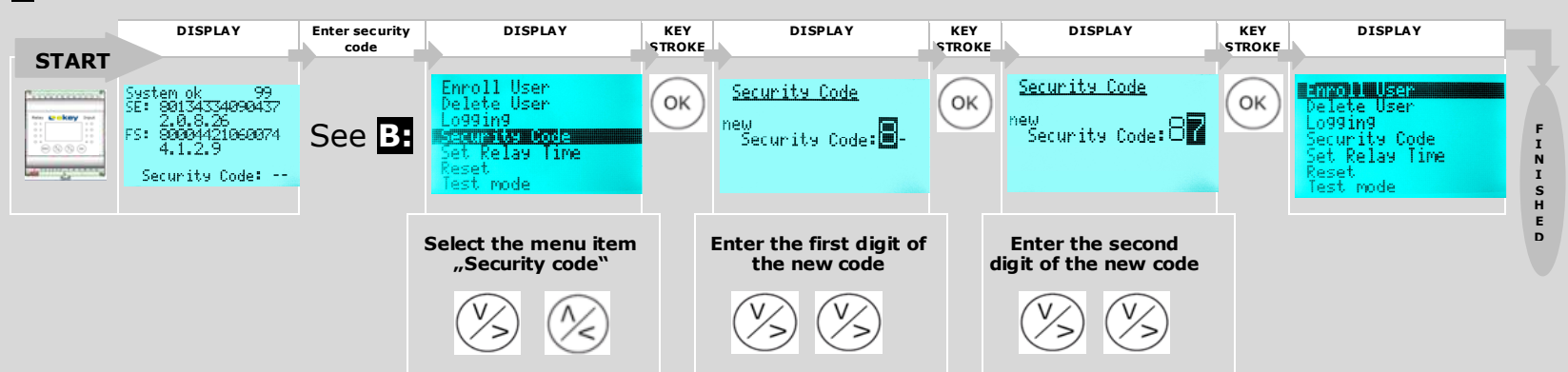
**D: DEFINING THE RELAY SWITCHING TIMES-** The switching time of each relay can be set from 1 sec to 99 sec. If you select 0 sec, then the relay operates in bistable mode (= the relay changes its switch status, which then remains as such, until the next switching). The default factory setting is 3 sec.



**E: DELETING USERS-** It is only possible to delete users. It is not possible to delete individual fingers of one same user!



**F: CHANGING THE SECURITY CODE-** Change the security code. Factory setting is „99“.



**G: RESETTING TO FACTORY SETTINGS - WARNING! All the fingers which have been enrolled will be deleted!**

