



ID4/129/0/53: Version 2
 dated 22.6.2012

Note on the document

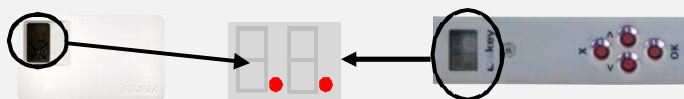
This quick-start guide as well as the additional information and instructions on the supplied DVD are not subject to updating. You can find the most up-to-date version of these documents on www.ekey.net. Subject to optical and technical modifications, any liability for misprints excluded.

1 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 plan 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!
- Connect the wires as described in the ekey home wiring plan supplied with the devices.
- 3.) Check the wiring.
 - 4.) Conclude mounting the devices. Close all the device housings which you had to open in order to be able to proceed with the wiring.
 - 5.) **Read carefully the following chapter "2 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.**
 - 6.) Connect the power adaptor to the mains.
The electrical connection of the system can only be carried out by a specialist!

A couple of seconds later, 2 red dots show up on the display of the *ekey home CP WM (IN)1(2,3)*.



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

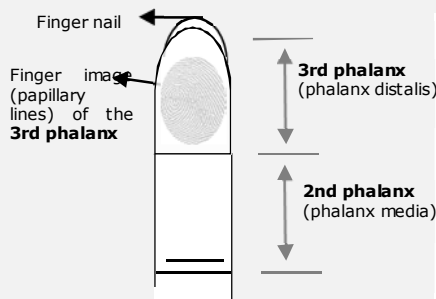


7.) Now start at point **A: INITIALIZE DEVICES** of „Programming the system“.

2 Operating the finger scanner

2.1.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.

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.

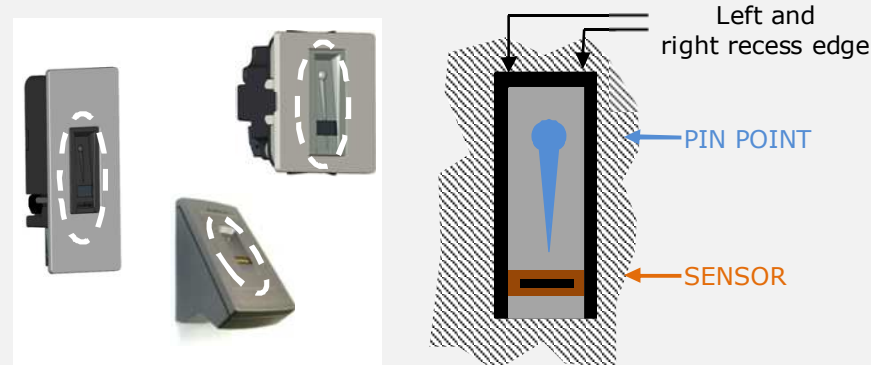
Imagine you wish to make a picture of someone, and this person

- 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.

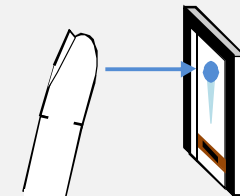
2.2 The finger recess – the control element



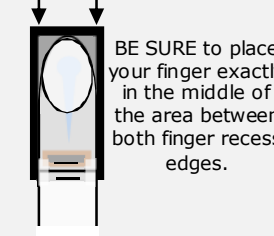
The finger recess allows to place the finger correctly so that a finger picture of good quality can be captured. It actually is the control element and consists of **pin point - sensor - right and left recess edges**.

2.3. Operating correctly the finger scanner

Lay your finger straight and flat on the finger recess.



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



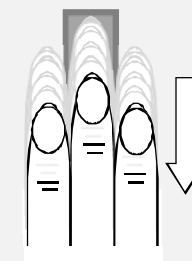
BE SURE to place your finger exactly in the middle of the area between both finger recess edges.



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.

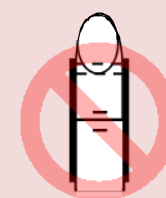


Now without changing the inclination of your finger, move it down across the sensor (the entire hand). Take care to swipe your finger at the right speed. **BEWARE:** The entire movement (swipe) should take about

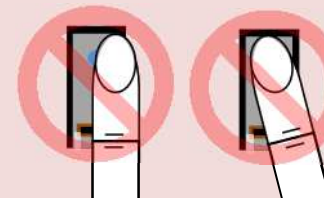
1-1,5sec.

Use this as a benchmark. You should not need much more or much less than that. 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.

2.4. What you should not do



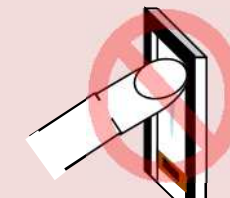
Place your third phalanx higher than the pin point



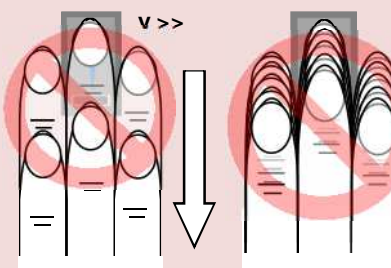
Not place your finger in the middle of the finger recess, or not place it parallel to the finger recess edges.



Rotate your finger in the finger recess.



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



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, because the fingerprint scanner gets less information.

3. Programming the system with the *ekey home CP WM 1(3)*

3.1.Function of the control panel

The function of the *ekey home CP WM (IN)1(2,3)* in the *ekey home* system is to program and parametrize the system. Using the

- 7-segment display and the
- 4 buttons,

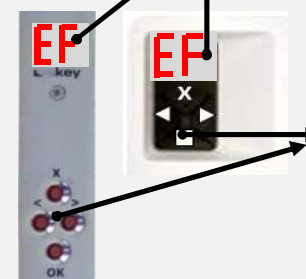
you can

- 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 on page 2.

3.2.Controls and their symbols

Symbol for the 7-segment display on the *ekey home CP*
 Represents that which is displayed on the control panel during the programming procedure and when it is operational.



The **OK** button allows you to register values and move to the next menu level.

The **Right arrow** button allows you to set values and navigate in the menu.

The **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.

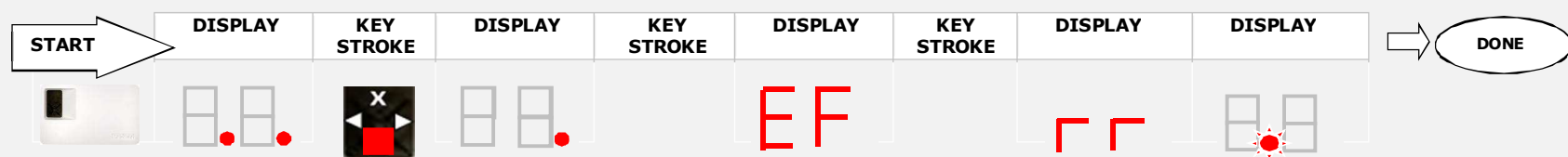
and with the *ekey home CP IN 1(2)*

3.3. Programming the system

Now start programming the system. **The menu sequences for each single function are explained below of 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.**

A: INITIALIZING THE DEVICES

The devices have to be initialized. Only after this can fingerprints be saved. Proceed as follows:



The devices have now been initialized. You may start enrolling users-> See **C**.

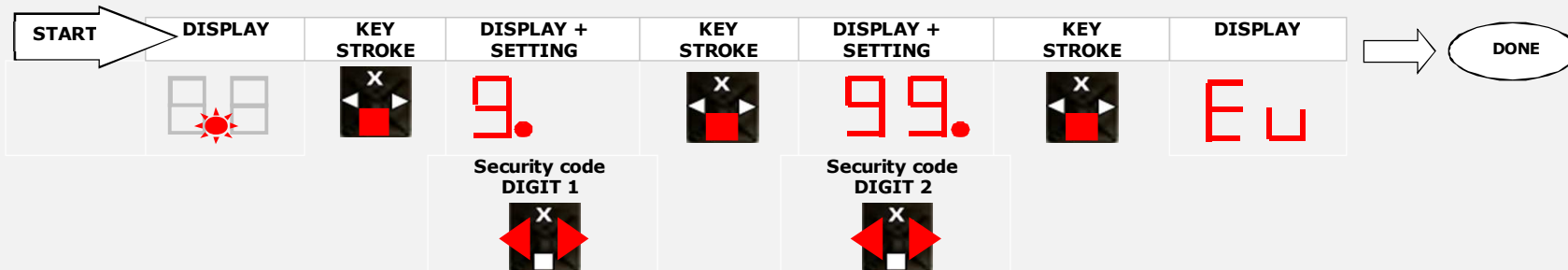


Security code
Factory setting

99

B: ENTERING THE SECURITY CODE

The security code is used to prevent unauthorized people having access to your system and thereby changing data. The factory default setting for this code is "99": change this code straight after having started up the system in order to ensure protection from manipulation. The necessary entries to change the code can be found in section **B**.



Now you can make the entries and data changes in your system.

Errors codes on the display:

E2

Error code „E2“: You have entered the wrong code three times in a row. The system will be completely locked for **30 mn**.

E0

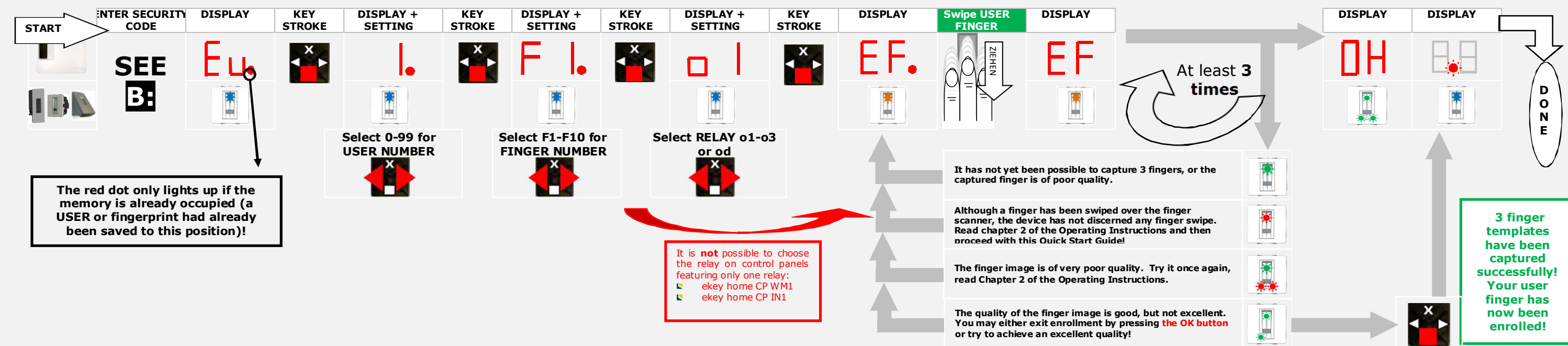
Error code „E0“: There is no data connection to the finger scanner. Check the wiring and make sure that all the devices are connected correctly to the mains!

C: RECORDING FINGERPRINTS (Eu)

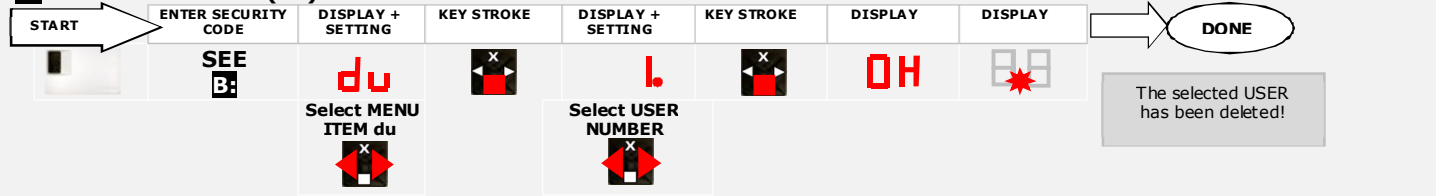
With Enroll User the following occurs:

- Allocation of a user to a memory space: **0 - 99**
- Selection of the fingerprint number: **F1 - F10 (F0)**
- Allocation of the fingerprint to a switching relay (with ekey home 2, 3 and PC): **o1 - o3; od (Relays 1 and 2 switch together with one finger)**
- Finger enrollment: a finger must have been captured at least **3 times**, before it can be saved as a template. Depending on the quality assessment this may have to be done regularly!

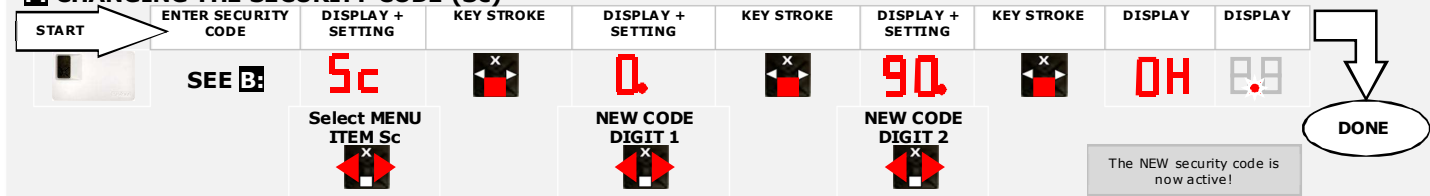
Recommended finger numbering F1-F0



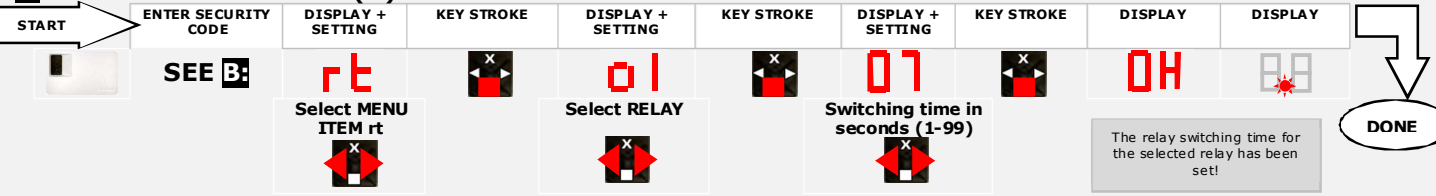
D: DELETING USERS (du)



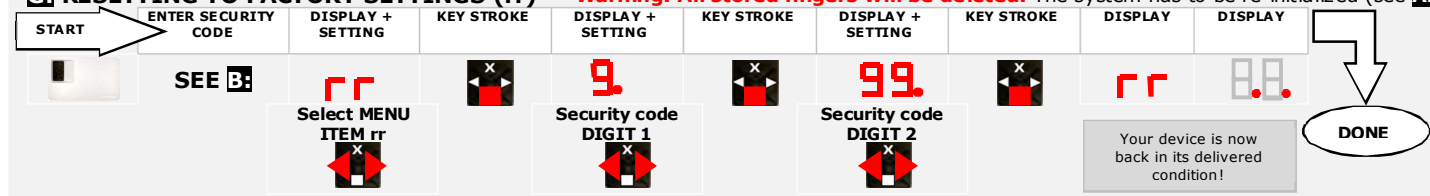
E: CHANGING THE SECURITY CODE (Sc)



F: RELAY SWITCHING TIME (rt) – The switching time of each relay can be set from 1 sec to 99 sec..If 0 is set then the relay works as a toggle relay.



G: RESETING TO FACTORY SETTINGS (rr)



Warning! All stored fingers will be deleted! The system has to be re-initialized (see **A**).