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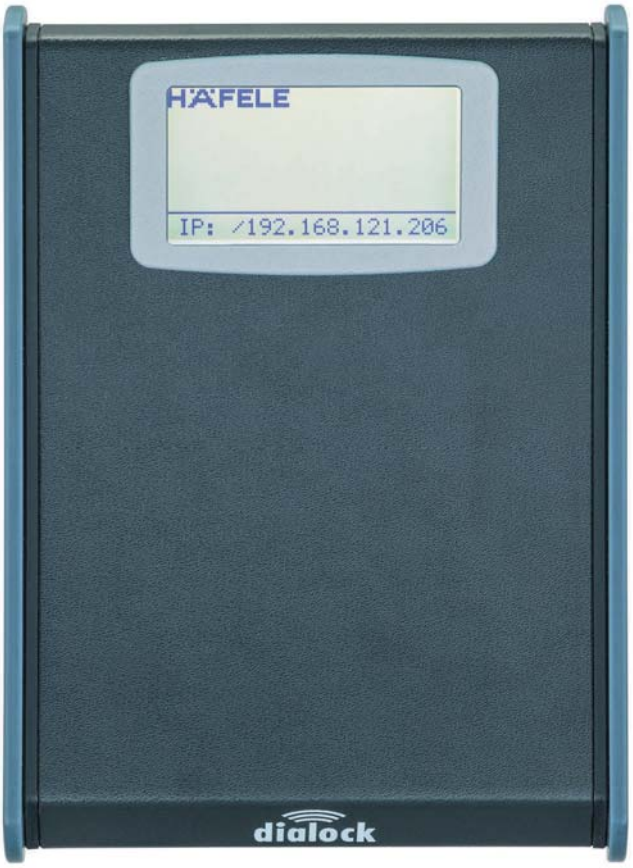
Kodierstation ES110

Encoding Station ES110

917.42.080



Deutsch (Betriebsanleitung) 2
English (Operating manual) 20

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Table of contents

1. Information for instructions 21
1.1 Information for the operating instructions 21
2. Overview 21
2.1 ES110 Brief description 21
3. Associated documents 22
4. Safety 22
4.1 Safety instructions and symbols in this document 22
4.2 General safety instructions 22
4.3 Intended use 23
4.4 Safety marking 23
4.5 Environmental protection 23
5. Description ES110 24
5.1 Scope of delivery 24
5.2 Overview and connector locations 25
5.3 Functional units 25
6. ES110 Set up 26
6.1 Power supply 26
6.2 Connecting to the local netwerk 27
6.3 Firmware Update 30
6.4 Changing password 31
6.5 Checking the communication and other ES110 functions 31
7. Technical data 35
7.1 Dimensions and weight 35
7.3 Power supply 35
7.4 Interface 35
7.5 Environmental conditions 36
8. Disposal 36
9. Appendix 36
9.1 FAQs 36
10. Approval according to Part 15 of the FCC rules 37

1. Information for instructions

1.1 Information for the operating instructions

These instructions make it possible to safely install and operate the ES110 encoding station as component of an access control system. The instructions are a constituent of the system, and must be kept in close proximity to the system in a location where they are accessible to the personnel at all times.

The personnel must have carefully read and understood these instructions before starting any work. A basic prerequisite for safe working is adherence to all of the specified safety instructions and handling instructions in these instructions.

The local occupational safety regulations and the general safety regulations for the area of application of the system also apply.

2. Overview

2.1 ES110 Brief description

Fig.: Encoding station ES110 - different views

Within the Dialock access control system the encoding station ES110 is used to program the transponder media used as keys.

Authorisation data created and administrated with the Dialock software are transmitted to the ES110 over the TCP/IP network, and written to the transponder media placed on the encoding station.

The ES110 can also be used to read data from transponder media being already programmed.

The data communication with the IT ressources (server) on which the access data are generated and administrated takes place via a TDP/IP network interface.

The following transponder media can be encoded or read: ISO 14443 (e.g. Mifare Classic) and ISO 15693 (e.g. Tag-it ISO, iCode).

3. Associated documents

As well as these assembly and mounting instructions, the following document is valid for the access control system:

- Dialock terminal operating instructions
- Dialock 2.0 user manual

4. Safety

4.1 Safety instructions and symbols in this document

The safety instructions in this docuemt follow a uniform concept. They start with a signal word indicating the degree of the danger. Then there follows the source of the danger and the measures to avoid the danger.

WARNING

Warning triangle and signal word “Warning” are used to warn of a possible dangerous situation resulting in severe personal injuries.

NOTE

The signal word "Note" is used to warn of product damages, material damages, damages to the environment, or to mark important additional information.

4.2 General safety instructions

The following safety instructions have to be adhered to during the use of theproduct in order to avoid damages.

Electrical safety

> Avoid liquids to spill over and into the ES110 (e.g. through liquid filled containers on the workplace.

> Do not open the device except for battery change.

> Repairs must only be carried out by trained personnel.

> Use only the cables supplied originally with the ES110.

> The ES110 must not be exposed to direct sunlight and/or high temperatures.

> Do not drop the device.

4.3 Intended use

The ES110 is solely intended to be used with Dialock access control systems.

The indented use also includes adherence to all of the specifications in these instructions.

Any other type of use is considered as a misuse of the system.

WARNING

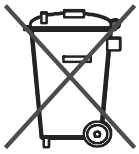
Danger in the event of misuse!

Misuse of the reader and the controller can lead to hazardous situations.

- Never install the ES110 in potentially explosive areas.
- Never install the ES110 in other environmental conditions than those that are permitted.

4.4 Safety marking

Crossed-out waste bin.



This symbol indicates that the respective component must not be disposed of with household waste.

4.5 Environmental protection

NOTE

Danger to the environment from erroneous handling of substances that can damage the environment!

If substances that can damage the environment are handled in the wrong way, particularly if they are not disposed of correctly, considerable damage can be caused to the environment.

- The instructions for handling substances that damage the environment and the disposal thereof that are mentioned below must be complied with at all times.

The following hazardous substances are used:

Electric and electronic components

Electric and electronic components can contain toxic materials. These components must be collected separately and handed in to local authority collection points, or disposed of by a specialist company.

5. Description ES110 5.1 Scope of delivery

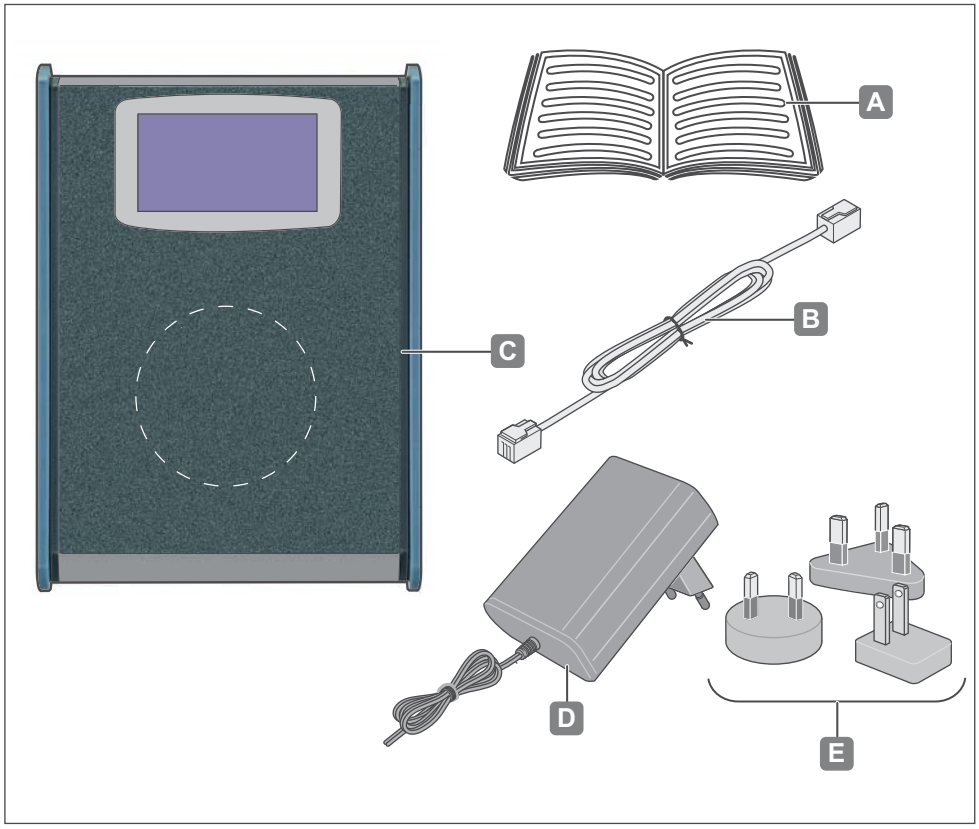


Fig.: Scope of delivery

A	User manual
B	Cat 5 Patch cable, 2 m
C	Encoding station ES110
D	Power supply PS 6
E	Adaptors, amongst others for USA, Latin America, Great Britain, Australia

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5.2 Overview and connector locations

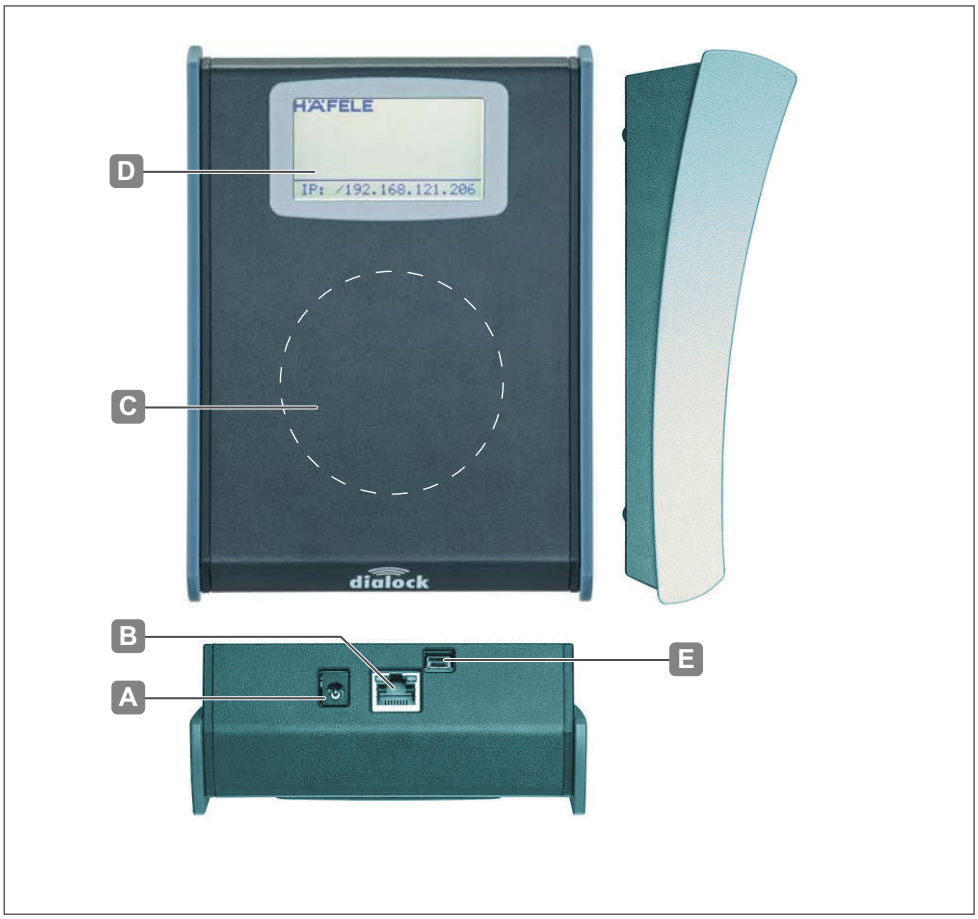

Fig.: ES 110 functional units

A	Power supply
B	RJ 45 Socket
C	RFID Interface
D	LC-Display
E	USB Interface

5.3 Functional units

Power supply (A)

Power supply: 5V DC.

RJ45 connector (B)

Ethernet interface for data communication with AC server, connected via RJ45 connector.

RFID interface (C)

RFID interface area below the display for the programing of transponders resting there.

Display (D)

Graphics LC display with backlight with 128 x 64 pixels organised in 6 lines with 20 alpha-numeric characters.

USB interface (E)

USB interface for manufacturing purposes, not to be used for operation.

Web-Interface

Web interface for the configuration of the ES110

Piezzo buzzer

Piezzo buzzer supporting the operator guidance.

6. ES 110 Set up

6.1 Power supply

NOTE

Device damages through wrong installation!

The ES110 can be damaged through wrong installation.

- The installation of the ES 110 in a local network as well as the configuration of the ES110 must only be carried out by a trained Dialock technician.

Power Supply with PS 6

NOTE

Device damages through wrong supply voltage!

In case of overvoltage the electronic circuitry of the ES110 can be permanently damaged.

- The input voltage of the ES110 must not exceed 5 V.

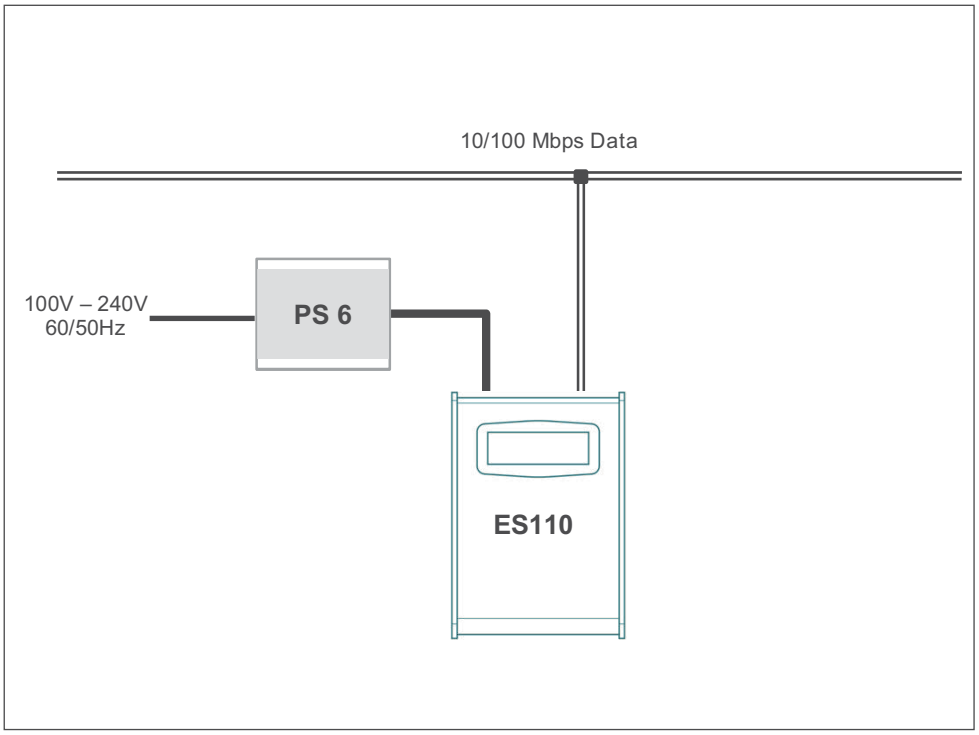

Fig.: ES110 power supply with PS 6

» Adjust PS 6 to 5V output voltage

» Connect PS 6 to ES110

» Connect ES110 via patch cablre to local network.
(See 6.2 Connecting to the local network)

Power supply over PoE „Power over Ethernet“

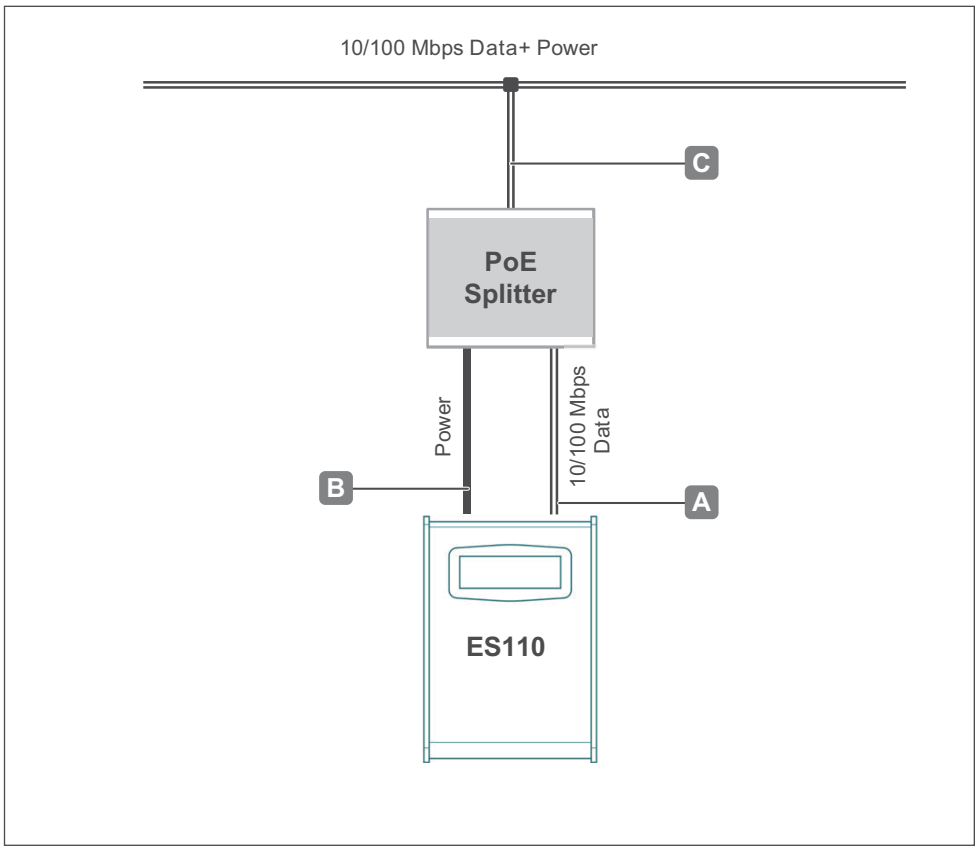

Fig.: Power supply ES110 „Power over Ethernet“

» Connect ES110 to PoE splitter with Cat 5 cable (A)

» Connect power cable to ES110 and PoE splitter (B)

» Connect PoE splitter to local network (C).
(See 6.2 Connecting to the local network)

6.2 Connecting to the local netwerk

Cable connection

The connection of the ES110 is made with the CAT 5 cable being delivered with the ES110 or any equivalent network cable. In case there is no network connection available for the ES110 an additional switch can be installed.

Behaviour of the ES110 after switching-on

After the power supply has ben plugged into the mains socket the output cable is connected to the ES110. Now the ES110 is showing the following information screens one after another:

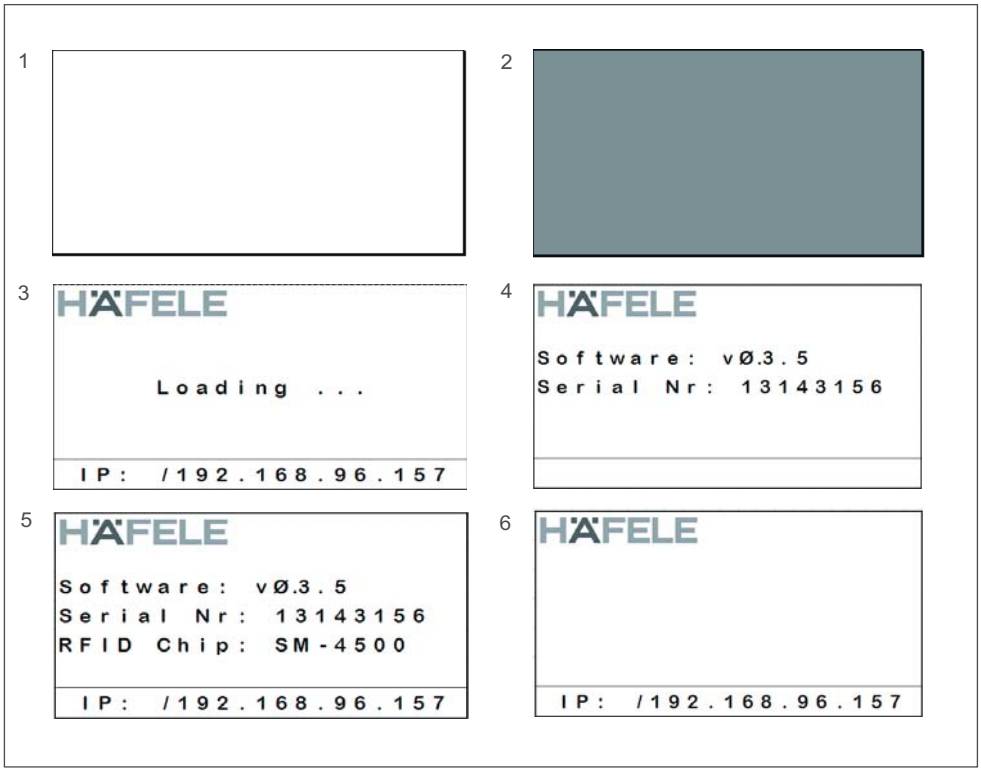

Fig.: Behaviour of the ES110 after switching on

The duration of the „Loading“ sequence depends on current network conditions.

Setting the IP adress

For the initial parametrisation of the ES110 through a PC in the same network the factory-set **IP address 192.168.121.206** is entered in the browser window. The connection with the ES110 is established and a log-in window appears. The default user name is **ES110**, the password is **config**.

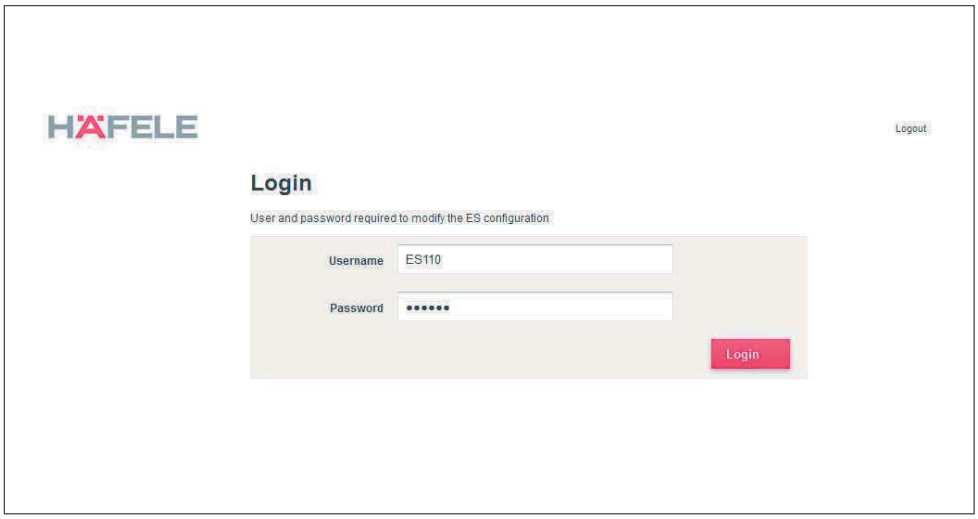

Fig.: Setting the IP adress

After data entry is confirmed by clicking the **Login** button the page **Device Informations** showing detailled Device Iinformations and the Configuration menue appears.

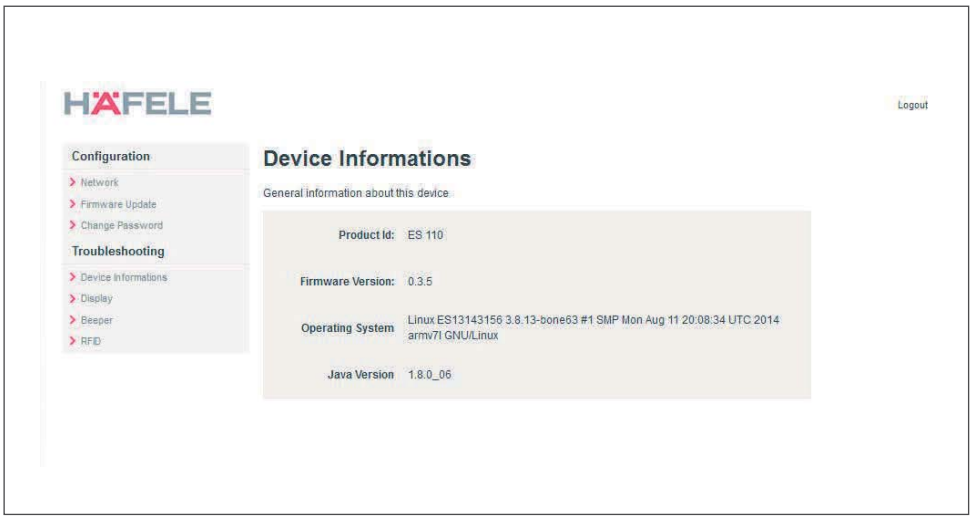

Fig.: Device Informations

The menue item **Network** has to be selected and the page **Network** opens with the factory set IP address.

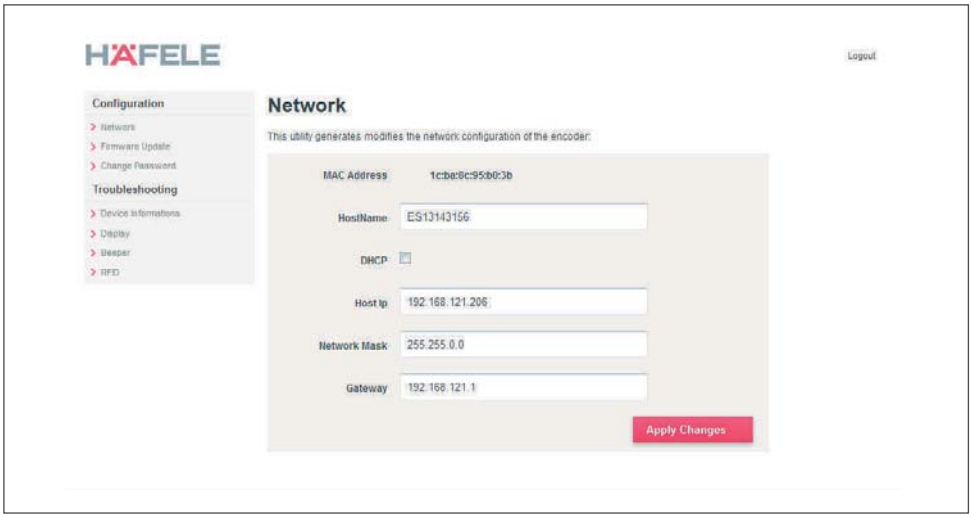

Fig.: Network

Now the new IP address is either entered statically, or the address setting can occur dynamically by activating **DHCP**:

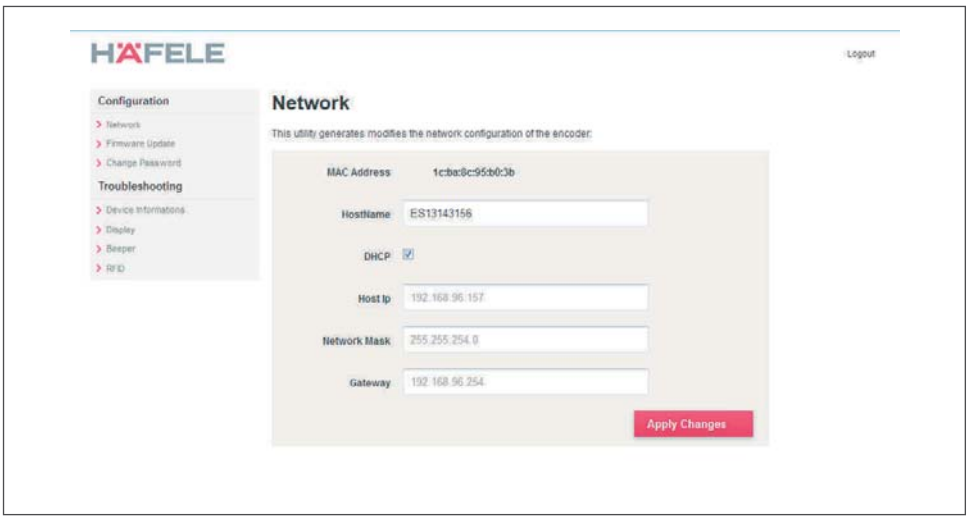

Fig.: IP adress setting/Activating DHCP

With **Apply Changes** data entries are applied.

6.3 Firmware Update

As soon as the function **Firmware Update** has been selected the page Firmware Update takes place. With the function **Browse** the firmware file, which must be stored on the PC (e.g. after download from www.DIALOCK SUPPORT.de) can be uploaded to the ES110 with **Update**.

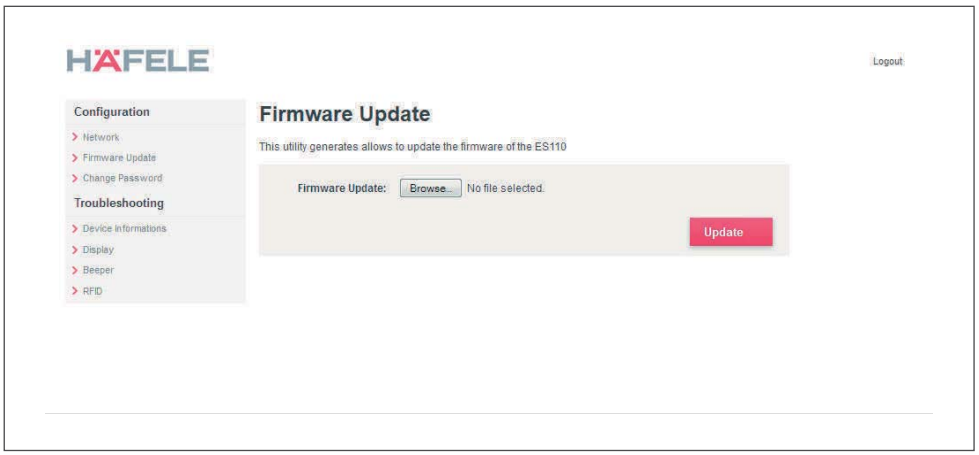

Fig.: Firmware Update

6.4 Changing password

The factory-set password should immediately be replaced by an own, individual password:

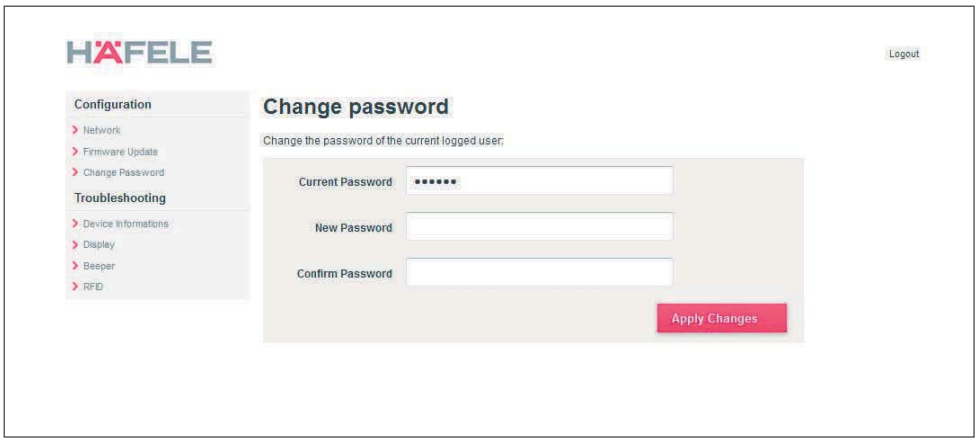

Fig.: Changing password

6.5 Checking the communication and other ES110 functions

The communication check is initiated by calling the function in the submenu **Troubleshooting.**

Device Informations

In this window the current network configuration can be retrieved from the ES110.

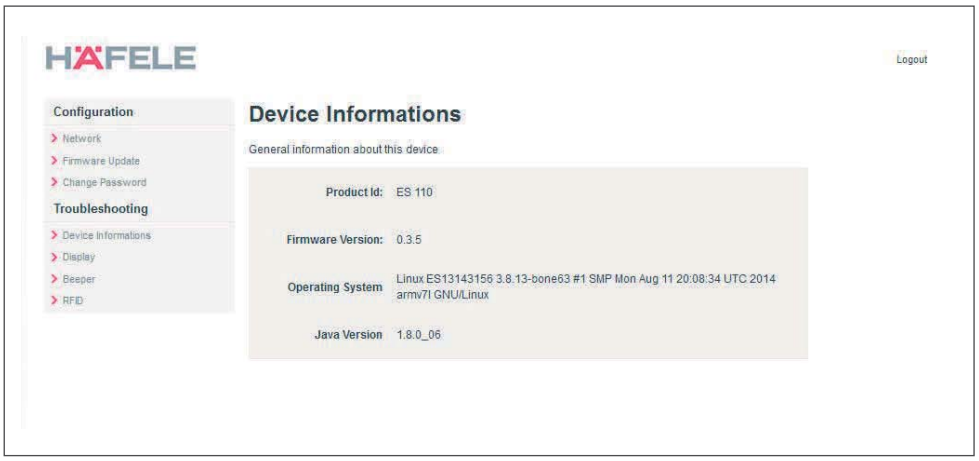

Fig.: Device information

Display

In this window a short text can be entered and sent to the ES110. With the designation of an X and Y position value the text can be positioned in the display.

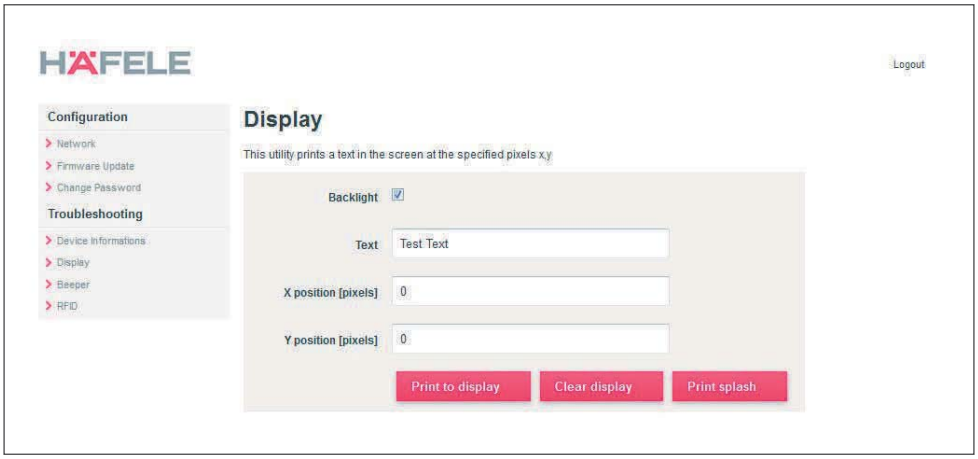

Fig.: Positioning text

Beeper

In this window the duration of a signal tone (beep), e.g. 100 ms, can be entered and sent to the ES110 as a command. The ES110's beeper sounds for the set time

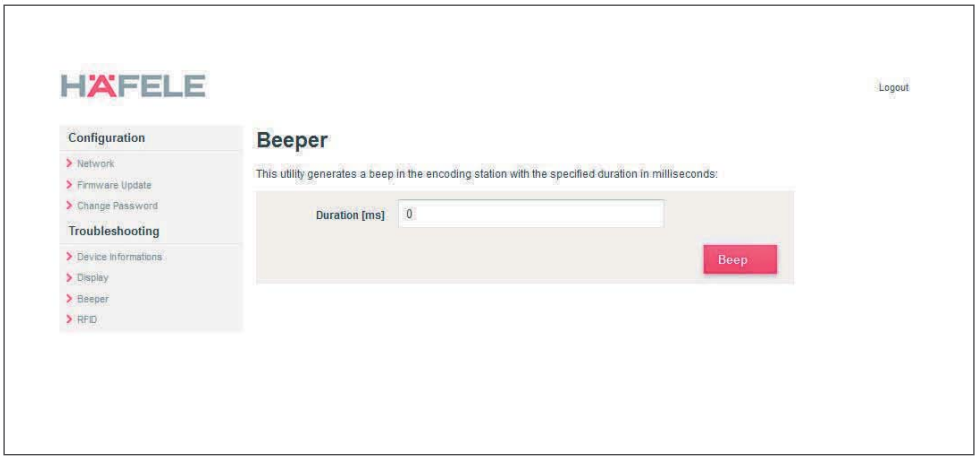

Fig.: Entering the duration of the sound

RFID

In this window the RFID interface used to program the transponder media can be tested. Selecting **RFID** opens the window **RFID**.

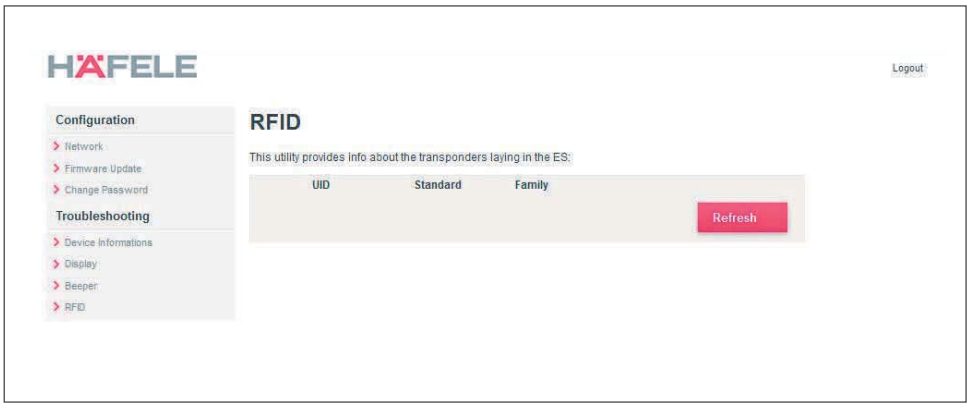

Fig.: Testing the RFID interface

If a transponder is placed on the ES110 and **Refresh** is clicked on, the transponder is read and the basic data are displayed.

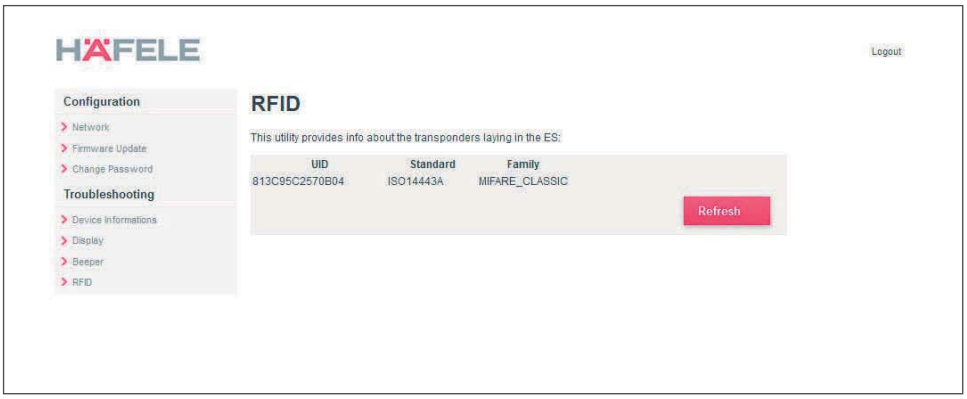

Fig.: Reading the transponder data

Error message

If the ES110 does not recognise a network e.g. because of a missing cable or a defective network component an error message is displayed. In such a case the network needs to be inspected by the network administrator.

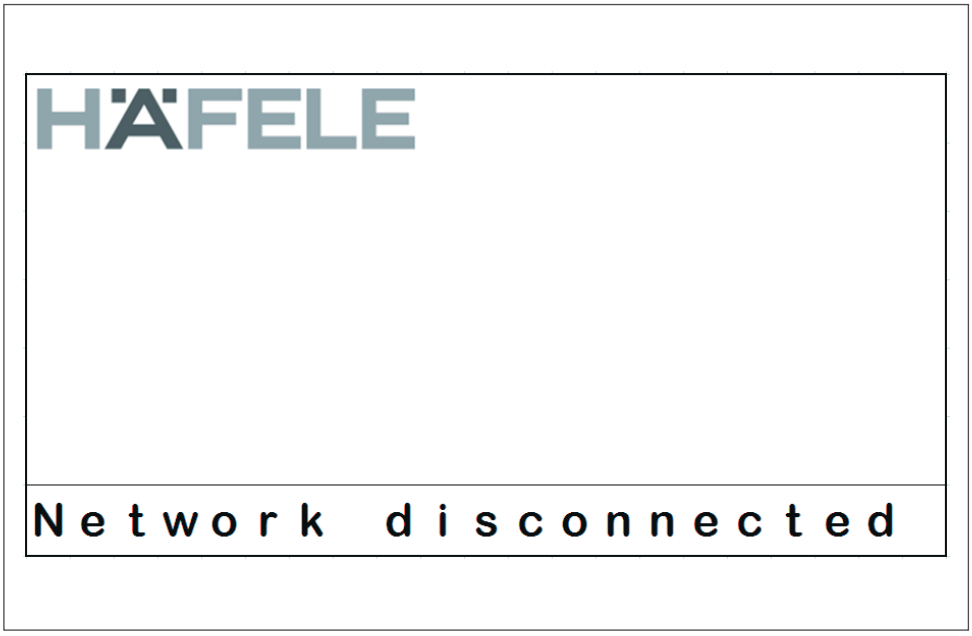

Fig.: Error message

7. Technical data

7.1 Dimensions and weight

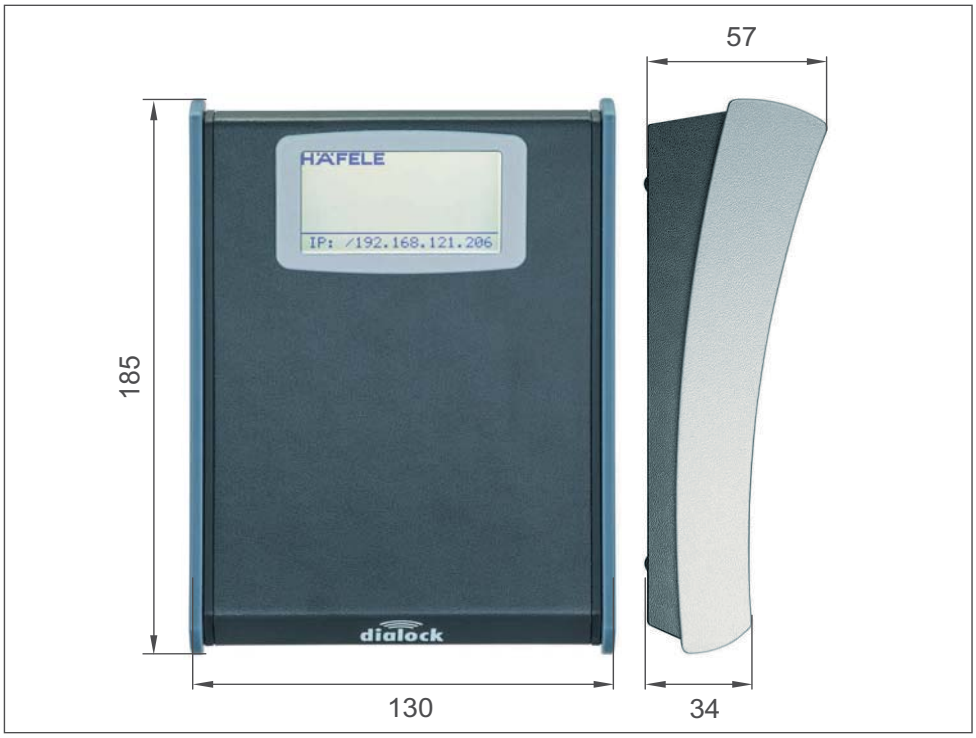

Fig: Dimensions ES110

Dimensions	in „mm“
Weight	360 g

7.2 LC-Display

Typ	128 x 64 dots, Dot Matrix Display
Format	6 lines x 20 characters
Color	characters black; background withe
Background	selectable
Language	English

7.3 Power supply

Power supply	5 VDC Power supply PS 6 (delivered with ES110)
PoE splitter	PoE with PoE splitter (to be ordered separately, article number 730-2003-00013)

7.4 Interface

Connector	RJ 45 socket
Type	TCP/IP interface

7.5 Environmental conditions

Storage temperature range	-25 – 70 °C
Operating temperature range	10 – 50 °C
Humidity	10 – 95% (non condensing)

8. Disposal

NOTE

Danger to environment from incorrect disposal!

The environment could be put at risk if disposal is not carried out correctly

- Have electrical scrap and electronic components disposed of by certifications specialist companies.
- In case of doubt, obtain information about environmentally friendly disposal from the local authorites or dedicated specialist disposal companies.

If no return or disposal agreement exists, take dismantled components for recycling:

- Scrap all metals.
- Send plastic components for recycling.
- Sort other components according to material type prior to disposal.

9. Appendix

9.1 FAQs

10. Approval according to Part 15 of the FCC rules

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTICE
This device complies with Part 15 of the FCC Rules [and with Industry Canada licence-exempt RSS standard(s)].
Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE
Changes or modifications made to this equipment not expressly approved by (manufacturer name) may void the FCC authorization to operate this equipment.

NOTE:
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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