easyE4 Firmware V1.10

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Original Release Notes

is the German-language edition of this document

Translation of the original Release Notes

All versions of this document that are not in German are translations of the original Release Notes.

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1   easyE4 Firmware

1.1   Supported devices

These release notes refer to the firmware update V1.10 for the following base unit devices of the easyE4 product range:

- EASY-E4-UC-12RC1
- EASY-E4-UC-12RCX1
- EASY-E4-DC-12TC1
- EASY-E4-DC-12TCX1
- EASY-E4-AC-12RC1
- EASY-E4-AC-12RCX1

> This firmware update offers several new features and bugfixes.
> We recommend to all users of easyE4 base unit devices with firmware versions V1.00 and V1.01 to migrate to the new version.

1.2   New features in version V1.10

For updating the firmware, follow the steps below:

▶   Copy the firmware file easyE4.fw to the root directory of a SD-card. Do not change the file name.

▶   Follow the instructions in chapter 8 of the easyE4 device manual MN50009 to perform the firmware update.

1.3   Legal disclaimer

All the information in this release notes has been prepared to the best of our knowledge and in accordance with the state of the art. However, this does not exclude the possibility of there being errors or inaccuracies. We assume no liability for the correctness and completeness of this information. In particular, this information does not guarantee any particular properties.

It is assumed that the user of this manual is thoroughly familiar with the information found in the manuals for incorporating the control relay into automation processes. Hazards posed by the control relay cannot be ruled out if the safety instructions are not observed – especially if the control relay is installed and commissioned by inadequately qualified personnel or if it is used improperly. Eaton assumes no liability for any damages resulting from cases such as these

1.4 Changes in easyE4 Firmware V1.10

1.4.1 New features in version V1.10

- This new firmware version offers several new features which are only named here. For a detailed description refer to the updated easyE4 manual. The new features are generally only available if the firmware is used in combination with easySoft V7.10 or higher.

1.4.1.1 Support for additional languages

The device menu and the web client feature support for these additional languages:

- Russian
- Czech
- Hungarian
- Romanian
- Turkish
- Portugese

1.4.1.2 New function blocks

For all 4 programming languages the following new function blocks (FBs) are introduced with this update:

- AC – Astronomical clock
- AV – Average Calculation
- PM – Performance Map
- RE – Recipe - Data Sets

1.4.1.3 Additional web server features

The easyE4 web server was enhanced by the following features:

- New web client functionality.
  - Parameter list: Define your own list of operands and function block parameters in the web client containing only data relevant to your application.
  - Display inputs of function blocks as part of the parameter list
    The full set of I/O data is now displayed in the web client.
  - Display and manipulate NET markers
  - Change network settings
- A new Web API to facilitate our customers to integrate the easyE4 in their own software frameworks or solutions, e.g. it is possible to write your own application specific smartphone app based on the Web API.
- Support for encrypted communication (https with TLS 1.2).

1.4.1.4 Firmware update of extension modules

It is now possible to update the firmware of extension modules through the base unit device. The prerequisite for this are extension modules running a firmware version V1.10 or higher.

1.4.2 Important changes in version V1.10

This firmware version features the following important changes and improvements compared to the previous version V1.01.

1.4.2.1 E-Mail (FB AL or system messages)

- The use of e-mails in an easyE4 program does not affect the usage of the function blocks PW and PO anymore. We recommend all users of the function blocks PW and PO to update to this firmware version.
- The use of e-mails in an easyE4 program does not affect the download of new programs to the device anymore. In the previous version after a program download the new program was occasionally rejected by the device, if the use of e-mail functionality was active whilst the download.
- An e-mail for the system message „Operating state changed" is correctly send right after device start.

1.4.2.2 Function blocks

FB DB

- When using FB DB with the programming languages ST, FDB and LD the output of DB can not only be connected to marker words but also to inputs of function blocks.
- When using FB DB with the programming language EDP it is possible to assign new values to the output QV based on a trigger input signal.

FB D

- When using the "timing relay value display" the time format „±HH:MM" is displayed properly.
- When using rolling text in FB D the switch between different text entries is properly done also when only exactly one text was selected through the associated variable.
- It is easier to enter negative number in input fields.
- Colored (rolling) texts are rendered properly if the FB D content is displayed in the web client or easySoft communication view.

FB DC

- The output QP shows the correct value of the associated internal control parameter.

FB TB

- The output TE indicating an empty table will only be set if the function block has been activated (EN=1).

FB PW

- The error output E1 is set directly in case of an invalid configuration of PW through its inputs. This is done no matter if the FB is active (EN=1) or inactive (EN=0). This behaviour is compatible to the devices from the easy800 product range.
- The error output E1 is set if a negative „minimum on duration time" is assigned to the FB input ME.

FB CF

- If the FB is deactivated through input EN all outputs are reset.
- If the input RE is used to reset the FB this action is performed on the rising edge of RE.

1.4.2.3   EDP programming on the device

The user can configure the P-keys as operands when programming on the device.

1.4.2.4   User function blocks

Array operations are supported when programming an UFB using the programming language ST, e.g.:

```
MD1:=1;

QA[MD1]:=IA1;
```

1.4.2.5   Device menu

A deactivated web server is now properly reflected as inactive in the information menu on the device.

It is possible to change the TCP/IP addressing mode from Auto-IP to DHCP in the device menu whilst the device does not have an active Ethernet connection.

1.4.2.6   easySoft interface

It is possible to check the hardware information of extension modules in the communication view of easySoft without affecting the I/O data of the extension module. We recommend all users of extension modules to update to this firmware version.

The synchronization of the system time of all NET devices of a NET group at once is supported. It can be triggered through the key "NET synchron." from the easySoft communication view.

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