

# **KeContact**

**P30**

**e-series, b-series, c-series**

**Firmware Update Instructions V 1.02**

**Translation of the original instructions**



Automation by innovation.

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**KEBA AG Headquarters**

Gewerbepark Urfahr, 4041 Linz, Austria

+43 732 7090-0, [kecontact@keba.com](mailto:kecontact@keba.com), [www.keba.com/emobility](http://www.keba.com/emobility)

For information about our subsidiaries please look at [www.keba.com](http://www.keba.com).

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# 1 Introduction

Dieses Dokument ist gültig für P30 e-series, b-series und c-series.

The user must ensure that this document is valid for his present product.

## 1.1 Representation of safety instructions

At various points in this manual, you will see notes and precautionary warnings regarding possible hazards. The symbols used have the following meaning:



### **DANGER!**

indicates an imminently hazardous situation, which will result in death or serious bodily injury if the corresponding precautions are not taken.



### **WARNING!**

indicates a potentially hazardous situation, which can result in death or serious bodily injury if the corresponding precautions are not taken.



### **CAUTION!**

means that if the corresponding safety measures are not taken, a potentially hazardous situation can occur that may result in slight bodily injury.

### **Caution**

means that damage to property can occur if the corresponding safety measures are not taken.



### **ESD**

This symbol reminds you of the possible consequences of touching electrostatically sensitive components.

### **Information**

*Identifies practical tips and useful information. No information that warns about potentially dangerous or harmful functions is contained.*

## 1.2 Purpose of the document

This document describes how to perform a firmware update at P30 e-series, b-series and c-series. The firmware update can be installed on the charging station either via Ethernet or USB.

The current firmware is available on the KEBA website:  
[www.keba.com/emobility-downloads](http://www.keba.com/emobility-downloads)

#### **Information**

*This document is an extension to the supplied manuals of P30.*

***You must comply with all instructions and safety instructions in the supplied manuals!***

## **1.3 Requirements**

This document contains information for persons who have technical knowledge in the field concerned and are qualified to carry out the necessary operations.

## **1.4 Warranty**

Only general maintenance work that is expressly permitted by KEBA may be performed. Any other tampering to the device will result in a loss of the warranty claim.

A device with broken manufacturer's seals or removed lead seals may no longer be put into operation. The necessary steps for replacement or repair of the charging station by the specialist dealer or service partner must be initiated.

## **1.5 Notes on this document**

The instructions contained in this manual must be followed precisely. Failure to do so could result in the creation of potential sources of danger or the disabling of safety devices. Apart from the safety instructions given in this manual, the safety precautions and accident prevention measures appropriate to the situation in question must also be observed.

This document reflects the current state of knowledge at the time of publication. It is subject to changes in content due to technical developments. It is therefore recommended that you check regularly on the KEBA website to see whether a more recent version of the document is available for the product in question.

### **1.5.1 Contents of the document**

- Performing a firmware update

### **1.5.2 Not contained in this document**

- Commissioning and deinstallation of the charging station

- Operating behavior of the charging station
- Operation of the charging station
- Configuration of the charging station

## 1.6 Further documentation

Manuals and additional information are available on our website:  
[www.keba.com/emobility-downloads](http://www.keba.com/emobility-downloads)

## 2 Determining the firmware version

There are several ways to determine the firmware version currently installed on the charging station:

- The current firmware version is visible in the simplified web interface.
- The current firmware version is briefly displayed when the charging station starts indicated a color code on the LED bar. The description below shows how to derive the firmware version from the color code.
- For devices with display, the current firmware version is shown on the display when the charging station starts.

### Deriving the firmware version from the color code

The firmware version consists of a major version and a subversion. Example: 3.09 (major version = 3, subversion = 09)

The **major version** is derived from the colors used. The current major version 3 has the colors blue/orange.

The **subversion** must be calculated. Each segment on the LED bar and each displayed color has a specific significance.

Significance of the LED segments:

LED segment	Value
S1	8
S2	4
S3	2
S4	1

Significance of the colors:

Color	Value
Blue	1
Orange	0

To calculate the subversion, the significance of the LED segment must first be multiplied by the significance of the color. The obtained results must then be summed.

**Example:**  => firmware version **3.09**

### Determining the major version

Colors	Major version
blue/orange	3

## Determining the subversion

LED segment	S1	S2	S3	S4
Color	Blue	Orange	Orange	Blue
Significance of the LED segment	8	4	2	1
Significance of the color	1	0	0	1
Result (LED segment x color)	8	0	0	1
<b>Subversion</b>	<b>8 + 0 + 0 + 1 = 09</b>			



## 3 Update via Ethernet

An update via Ethernet is recommended if the charging station is already integrated into an existing network. Otherwise an update via USB is recommended, see chapter 4 Update via USB.

The following steps are necessary for an update via Ethernet:

- Connect to the network
- Perform update

### 3.1 Connect to the network

Connect the computer to the network where the charging station is located.

- Connect to the network via WLAN or Ethernet.
- Set a fixed (static) IP address or obtain the IP address from a DHCP server.

### 3.2 Perform update

#### Information

*Some computers may experience problems with network, firewall, port settings, or other devices, especially TFTP servers.*

*To avoid problems, the charging station can be connected directly to the computer.*

*In case of firewall problems it is also possible to disable the firewall or add the program "e2flash.exe" as an exception.*

#### Information

*Firmware version, serial number and MAC address in the illustrations are only examples and vary depending on the device.*

Proceed as follows to perform the firmware update:

- 1) Extract the file `KEBA_P30_ETH_xxx.zip`.
- 2) Execute program `p30flash.cmd` by double-clicking it.  
The command prompt opens and the firmware update starts automatically.
- 3) Follow the instructions in the command prompt.
- 4) The program searches for the connected charging stations for approx. 40 seconds and displays found MAC addresses, IP addresses and information on the firmware version.

```
P30 flash utility v2.20 <C> KEBA AG Linz, Austria
Using KEBA Ethernet Boot Loader Download Utility <Version: 16>

-----

Using P30 firmware file 'kec_pdc-v3.8.4.bin'

-----

Searching for connected devices ...
Found devices:
KC-P30 16768789 3.07.1a1 41219 0 3063 62882
00:60:B5:35:31:DB 192.168.123.50 found on 192.168.123.34
```

- 5) Confirm the update by pressing the **y** key or the **Enter** key and wait until the update is complete.

```
Start programming of found devices ...
+++++
KC-P30 16768789 3.07.1a1 41219 0 3063 62882
00:60:B5:35:31:DB 192.168.123.50 found on 192.168.123.34

Program this device <[y]/n>: y
% Complete: 100%
```

- 6) After the update is complete, the program searches again for connected devices. The command prompt can be closed by pressing any key.

```
Searching for connected devices after programming ...
Found devices after programming:
KC-P30 16768789 3.08.4 16189 0 3034 28451
00:60:B5:35:31:DB 192.168.123.50 found on 192.168.123.34

Append report to 'report.txt' ...

-----

Programming device(s) successfully finished.
Drücken Sie eine beliebige Taste . . .
```

- 7) Check the firmware version of the charging station, see 2 Determining the firmware version.
- 8) Check that the charging station is functioning properly.

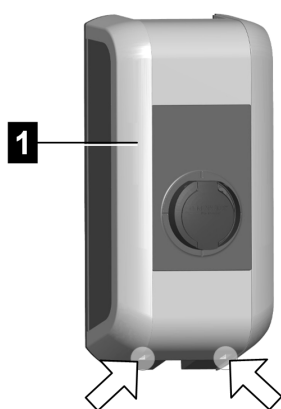
## 4 Update via USB

The following steps are necessary for an update via USB:

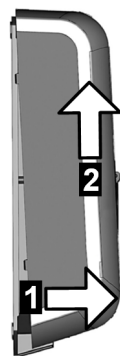
- Remove covers
- Perform update
- Mount covers

### 4.1 Remove covers

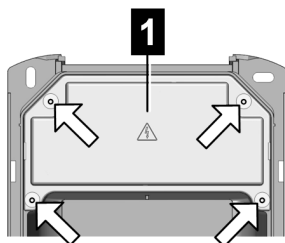
The USB interface is located in the connection panel of the charging station. To make the USB interface accessible, the housing cover and the connection panel cover must be removed. Proceed as follows:



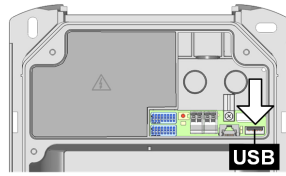
1) Unscrew the two screws on the bottom of the housing cover **1**.



2) Lift the housing cover at bottom max. 1 cm **1** and then push upwards **2**.



3) Unscrew the four screws of the connection panel cover **1** and remove the connection panel cover upwards.



The USB interface **USB** in the connection panel is now accessible.

## 4.2 Perform update

The following steps are necessary to perform the firmware update:

- Prepare USB stick
- Install update

### Prepare USB stick

An empty USB stick formatted with FAT32 is required.

Proceed as follows to prepare the USB stick

- 1) Download the latest firmware from the KEBA website:  
[www.keba.com/emobility-downloads](http://www.keba.com/emobility-downloads)
- 2) Extract the file `KEBA_P30_USB_xxx.zip`.
- 3) Copy the update files directly into the root directory of the USB stick (do not use folders).

### Install update

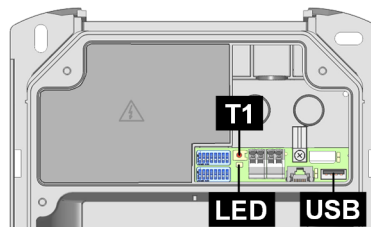


Fig. 4-1: Connection panel

<b>T1</b> ... Service button	<b>LED</b> ... Status LED
<b>USB</b> ... USB interface	

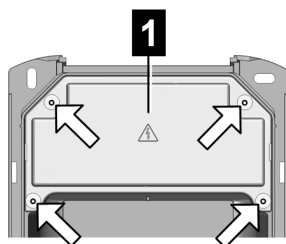
Proceed as follows to install the update:

- 1) Connect the prepared USB stick to the USB interface **USB** of the charging station.
- 2) Restart the charging station: To do this, press the service button **T1** until the first beep (approx. 1 second).
- 3) The firmware update is performed. The status LED **LED** below the service button flashes in different colors and time intervals. The update process can take up to one minute.

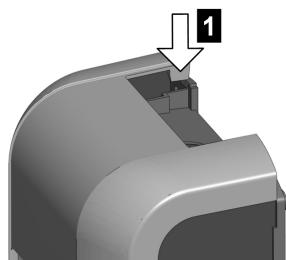
- 4) After the update has been installed, the status LED is permanently green.
- 5) Disconnect the USB stick from the charging station. This triggers a restart of the charging station.
- 6) Check the firmware version of the charging station, see 2 Determining the firmware version.

### 4.3 Mount covers

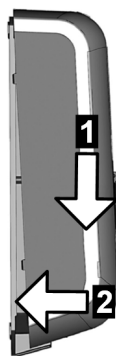
In order to operate the charging station correctly, all covers must be inserted and screwed tight. Proceed as follows:

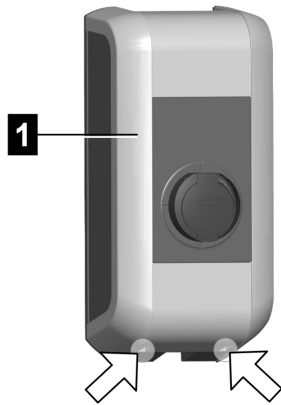


1) Insert connection panel cover **1** and tighten with 4 screws with 2 Nm. The tabs on the connection panel cover must be flush with the enclosing housing. Only then will the device be properly sealed.



2) Hook in the housing cover at the top **1** and close it at the bottom **2**. The housing cover must glide into the guides without considerable resistance. The housing cover must be correctly seated in the housing guide on all sides.





3) Fix the housing cover **1** with 2 screws at the bottom.

4) Check that the charging station is functioning properly.

## 5 Correcting update errors

If the update process fails, the firmware on the charging station may be corrupted. This chapter describes measures to be taken to be able to operate the charging station correctly again after an unsuccessful update process.

### Possible causes for a failed update

- There was a power failure during the update process.
- The USB stick was removed too early during the update process.
- A restart of the charging station was performed too early during the update process.
- The connection of the slave charging station to the master charging station is interrupted during the update process.

### Consequences of a failed update

- A firmware update via USB stick is no longer possible.
- The charging station no longer works as expected. This is indicated, for example, by a red light of the LED bar.



### Remedy

To restore the function of the charging station after a failed update, a **"Deep Firmware Update"** can be performed.

### 5.1 Perform Deep Firmware Update

The following steps are necessary for the deep firmware update:

- Prepare USB stick
- Install update

#### Prepare USB stick

An empty USB stick formatted with FAT32 is required.

Proceed as follows to prepare the USB stick

- 1) Download the latest firmware from the KEBA website:  
[www.keba.com/emobility-downloads](http://www.keba.com/emobility-downloads)
- 2) Extract the file `KEBA_P30_USB_xxx.zip`.
- 3) Copy the update files directly into the root directory of the USB stick (do not use folders).

## Install update

To install the update, the interfaces and controls in the connection panel of the charging station are required. To access them, the housing cover and the connection panel cover must be removed, see 4.1 Remove covers.

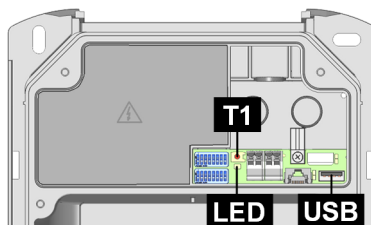


Fig. 5-2: Connection panel

<b>T1</b> ... Service button	<b>LED</b> ... Status LED
<b>USB</b> ... USB interface	

2 persons are required to install the update: While one person performs the necessary steps on the charging station, the other person must operate the line circuit breaker to switch the power supply off and on again.

Proceed as follows:

- 1) Switch off the power supply to the charging station via the line circuit breaker and wait until the LED bar is no longer lit.
- 2) Connect the prepared USB stick to the USB interface **USB** of the charging station.
- 3) Press the service button **T1** and keep it pressed during the next step.
- 4) Switch on the power supply to the charging station.
- 5) Release the service button when the status LED **LED** below the service button starts flashing.
- 6) The charging station now carries out the firmware update. The status LED below the service button flashes in different colors and time intervals. The update process can take up to one minute.
- 7) After the update has been installed, the status LED is permanently green.
- 8) Disconnect the USB stick from the charging station.
- 9) Restart the charging station: To do this, press the service button until the first beep (approx. 1 second).

The deep firmware update has been performed.

Finally, the removed covers must be remounted, see 4.3 Mount covers.