B.
Berker

Readme – Update Tool

ATTENTION!

⚠️ **The firmware update R7 is only suitable for IP Control hardware from version V5.0 and higher (see back of the device).**

The device could be destroyed by loading the software.

Always check the device version before running the firmware update.

1   Firmware Updates with IP Control Update

It is possible to load new firmware into the device by means of the IP Control Update Tool. The Update Tool is a Java programme that can run on all operating systems. During this procedure, it is extremely important to read and observe the following information carefully. If the update procedure fails, IP Control might have to be returned to the manufacturer.

IPC_UpdateTool:

Start the update tool by opening the .exe file. No installation is required.

fw_ipc3-1.7.0.bin

Firmware for IP Control, Release 7 (effective 01/2014).

1.1   Java Security Advice

Since **Java version 1.7. update 45 (or higher)**, a security warning appears when calling the IP-Control applications (Visualisation, Editor, System):

"Do you want to run these applications?".

The background is the certificate specially created by the manufacturer, with which the Java files in the IP Control are signed. This procedure was common practice in the past in order to avoid unnecessary costs for the certification. By trusting the certificate when starting the IP-Control software for the first time, the trustworthy origin of the program data was sufficiently ensured. Unfortunately, it has emerged recently that this procedure can involve security gaps. For this reason, Oracle has decided only to allow programs to be run if they have been signed by an official source. This ensures that the creator of the software is an officially registered company.

To take these developments into account, **an appropriate update has been available for the IP-Control since January 2014**. We strongly recommend installing this update for all IP-Control devices **from hardware version V5.0** and higher.

The only alternative to the aforementioned update would be to update no higher than to Java-Version 1.7. update 17 (in this version, no check is yet made for officially certified Java applications). A "downgrade" of the Java version to 1.7 update 17 is not advisable, however, since outdated software can pose a risk for attacks from the Internet! For this reason, an older version should only be installed if visualisation clients and IP Control are a "closed system", in other words, no use of the Internet is intended, which potential attackers could utilize for the infiltration of malicious program code.

1.2   Important measures:

First create a current backup of your project if it has not already been done anyway. IP Control is reset to the factory settings by an update, the project data are therefore lost.

ℹ️   Please note that the passwords of the visualisation users are not copied during recovery. Please note that you can reenter these after the update procedure and project recovery.

01/2014

- For an update you need the Update Tool and the desired firmware image. This is delivered as a zip file together with a checksum file in order to check the correct transfer and avoid any errors. Both of these can be downloaded from **www.berker.de** in the download area under **commissioning software**. Both files have to be unzipped in a directory.

- We strongly recommend that you carry out the firmware update only within sight of the IP Control. IP Control reproduces a status feedback via its five LEDs during the update procedure. A firmware update via one or more networks is not possible, they must be in the same physical and logical network as the IP Control.

- If you operate your IP Control with DHCP, you should switch this off and assign IP Control a fixed IP address.

ℹ️ For the update you need the IP Control string and password of the user "admin".

ℹ️ During the firmware update, IP Control is reset to the factory settings, i.e. it retains its old IP address xxx.xxx.xxx.xxx but has been overwritten with the password "berker".

ℹ️ The entire update procedure lasts approximately 15 min.

1.3   Procedure

If all the necessary measures have been made, please proceed as follows:

ℹ️ Switch off all security software and/or firewall for the update procedure since this might disturb the communication. (The communication takes place on the UDP port 1735).

- **Creating backup**
  If you have not already done so, make a backup of the current project.

- **Opening update tool**
  Open the update tool. All relevant information and tips are summarised in the help text of the update tool.

- **Selecting IP Control**
  Select the desired IP Control in the left column and enter the IP Control string and admin password on the right.

ℹ️ On the left side below the help window all the IP Controls are displayed that the update tool can find in the local network. If the device is in the same network, the text has a green background, if it is not in the same network, it has a yellow background. Below the display is a display of the necessary IP Control parameters. Experienced IP Control users will know this from the Discovery Tool.

ℹ️ If several IP Control are installed, the IP Control can be identified visually by means of the "LED Test".

- **Starting rescue system**
  Press the button "Start in rescue system".

ℹ️ In the status window below, you will be shown which actions are being executed. If the IP Control system is already installed with a rescue system, it will be restarted with this. If the device has not yet been equipped with the system, this step will first be executed.

ℹ️ The selected device first appears in the list of the IP Control with a blue background. If the rescue mode is active, it appears there with a green background and with a red cross. On the device itself, the power LED orange lights up at this moment, the LAN LED flashes depending on the network traffic and the BMX LED flashes red.

- **Selecting firmware file**
  If the IP Control is in rescue mode, the view in the Update Tool changes and the request to select the correct firmware file appears on the right. When opening the image file, the

Update Tool checks whether the firmware image was transferred correctly during download by means of the md5-checksum included.

The update procedure can now be started by pressing the button "Start IP Control Update". After the firmware file is loaded into the device, the IP Control is busy checking the file for approx. 5 min. Now the BMX and EIB LED flash red simultaneously.

After successful checking, the installation begins. This procedure takes approx. 5 minutes again. During this time, the three middle LEDs flash red.

ℹ️ IP Control should not be disconnected from the power supply under any circumstances during the entire procedure. This can cause irreparable damage to the software, the device must be returned.

Factory settings
If the firmware is installed, the IP Control restarts. Afterwards, it is in the network with the factory settings. It therefore has the IP address assigned by you xxx.xxx.xxx.xxx but the password for the user "admin" is now "berker".

▪ **Recovering backup file**
Load your current backup into the device. All the settings are recovered, and the device restarts. Afterwards, it is available with all known settings but new firmware.

ℹ️ Please note that the backup file does not contain any information about the IP address settings. During the backup, only the port settings are saved but not the IP address settings (except for NTP timeserver).

▪ **Recovering user administration**
The user passwords must be reentered so that the user login on the Visualisation works perfectly again. Afterwards, the project must be saved once again.

ℹ️ During the recovery of your project file, please bear in mind that no projects from newer firmware versions may be loaded into older versions.