IDENTIFICATION

FEIG ELECTRONIC

Application-Note

Firmware Update Tool

Version 8.10.00 and higher

Note

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System requirements:

- Personal computer with x86-CPU with at least 1GHz
- Vista (32/64Bit) with 256MB RAM or Windows® 7/8/10 (32/64Bit)
- Windows®-compatible VGA graphics card with (1024 x 768 recommended)
- Hard disk with at least 10MB free space

Contents

1 Licensing Agreement Concerning Use of Software “FEIG Firmware Update Tool”

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FEIG ELECTRONIC GmbH
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D-35781 Weilburg-Waldhausen
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Fon: +49 6471 / 3109-0
Fax: +49 6471 / 3109-99
e-mail: identification-support@feig.de
http://www.feig.de

2 Third-party Licensing agreements

2.1 Licensing agreement of openSSL organization

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==============

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==========

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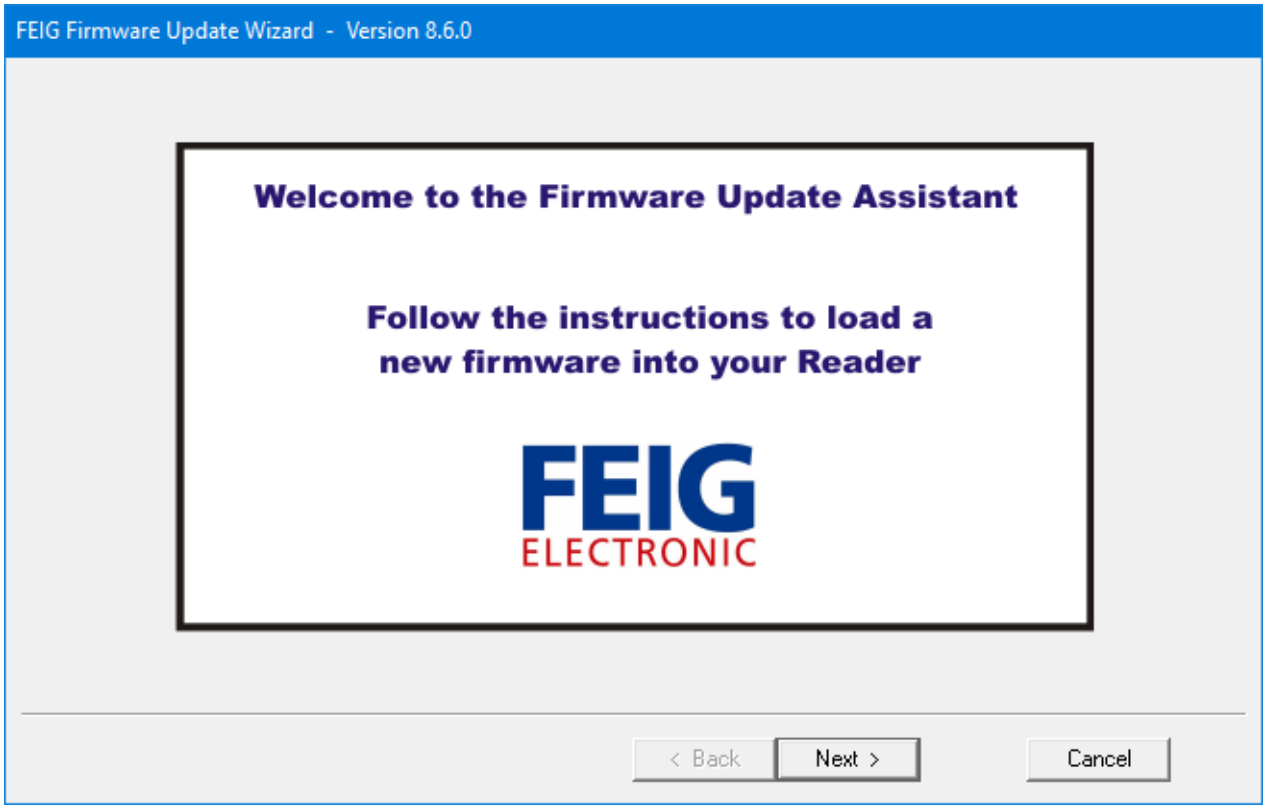
3 Safety Instructions / Warning - Read before start-up!

- ► The device may only be used for the intended purpose designed by the manufacturer.
- ► The operation manual should be conveniently kept available at all times for each user.
- ► Unauthorized changes and the use of spare parts and additional devices which have not been sold or recommended by the manufacturer may cause fire, electric shocks or injuries. Such unauthorized measures shall exclude any liability by the manufacturer.
- ► The liability-prescriptions of the manufacturer in the issue valid at the time of purchase are valid for the device. The manufacturer shall not be held legally responsible for inaccuracies, errors, or omissions in the manual or automatically set parameters for a device or for an incorrect application of a device.
- ► Repairs may only be executed by the manufacturer.
- ► Installation, operation, and maintenance procedures should only be carried out by qualified personnel.
- ► Use of the device and its installation must be in accordance with national legal requirements and local electrical codes.
- When working on devices the valid safety regulations must be observed.

4 Introduction

This program tool can be used to perform a firmware update by the IDENTIFICATION reader



4.1 Supported Readers

The following readers are supported:

FEIG HF and UHF reader:

- ID ISC.M02
- ID ISC.M02.M8-B
- ID ISC.MR/PR/PRH101
- ID ISC.MR102
- ID ISC.LR1002
- ID ISC.LR2500-A
- ID ISC.LR2500-B
- ID ISC.MU02.02
- ID ISC.PRH102
- ID ISC.PRHD102
- ID ISC.PRH200
- ID ISC.MRU102
- ID SPAD.U (with internal ID MRU102)
- ID ISC.LRU1002 (also in 2017 improved hardware)
- ID ISC.LRU3000 / LRU3500
- ID MAX.U1002 (also in 2017 improved hardware)
- ID ISC.ANT.U500/270-GA and -DM (with internal ID ISC.LRU1002)
- ID ISC.LRU500i-PoE and –BD
- ID MAX.U500i
- ID HyWEAR compact
- ID HyWEAR compact sR
- ID HyWEAR compact xT
- ID ECCO Smart HF-BLE
- D ECCO Smart 2D-HF-BLE

FEIG CPR reader:

- ID CPR.02
- ID CPR.M02
- ID CPR30.xx / ID CPR30+
- ID CPR40.xx
- ID CPR44.xx
- ID CPR46.xx
- ID CPR47.xx
- ID CPR50.xx
- ID CPR60.xx
- ID CPR74
- ID MAX50.xx

the classic reader (125kHz):

- ID RW/RWA40.30

the automatic antenna tuner:

- ID ISC.DAT ***(Please read first the application note: N50801-1e-ID-B.pdf)***

the UHF antenna multiplexer:

- ID ISC.ANT.UMUX ***(Please read first the application note:*** **N80301-0e-ID-B.pdf)**

the Gate People counter:

- ID ISC.ANT1690/600-GPC
- ID ISC.ANT1700/740-GPC

Note:

- ***This FEIGFirmwareUpdateTool supports only firmware files with the extension ".xml"!***
- ***This FEIGFirmwareUpdateTool supports also the automatic installation of firmware package files, which can contain more than one firmware parts (e.g. RFC, ACC, FPGA).***

4.2 Discontinued Support

The support of the following readers is discontinued. Please use an older version of the Update Tool.

4.2.1 Discontinued since v8.04.01

- ID ISC.MR200
- ID ISC.LR2000 / LRM2000
- ID ISC.MRU200 / MRU200i
- ID ISC.LRU1000
- ID ISC.LRU2000 / LRMU2000 / LRU2000i
- ID CPR.04
- ID CPR20.xx
- ID CPR52.xx
- myAXXESS standard
- myAXXESS onTop

4.3 Revision History of FEIG Firmware Update Tool

Revision	Date	Description
8.10.00	2022-04-08	Support for bootloader update and mandatory tool version for ID CPR30+ Mandatory tool version for PRH200 up from firmware version 01.07.00
8.09.00	2021-12-01	Final Support for ID CPR30+
8.08.03	2021-10-14	Support of ID CPR30+
8.08.02	2021-04-01	Support of ID ECCO Smart 2D-HF-BLE
8.08.00	2020-12-16	Support for update of Barcode firmware in HyWEAR compact xT Support of ID HyWEAR compact sR
8.07.00	2020-08-10	Support of ID ECCO Smart HF-BLE
8.06.00	2020-05-11	Support of ID HyWEAR compact xT Support of ID SPAD.U Support of ID CPR60 bugfix for LRU3000 in detect dialog
8.05.00	2019-11-21	Recommended version for ID HyWEAR compact
8.04.01	2019-08-06	Support for Wifi-Module Update in ID HyWEAR compact Removed support of old Reader types
8.02.00	2019-03-18	Support of ID HyWEAR compact
8.01.01	2019-01-14	Bugfix for XML document version 2
8.01.00	2018-12-17	Support for ID ISC.LRU500i-PoE and –BD and ID MAX.U500i
8.00.02	2018-05-07	Workaroud for ID ISC.MR102 with Firmware Version 2.09.00
8.00.00	2018-01-15	Support for XML document version 2.0 with additional metadata
7.09.01	2017-09-25	Increased Timeout for ID ISC.LRU1002/ID MAX.U1002
7.09.00	2017-09-07	Support of ID ISC.ANT.U500/270-GA and -DM
7.08.00	2017-01-13	Support of ID CPR.74 Support of ID ISC.LRU1002/ID MAX.U1002 with improved hardware
7.07.00	2016-09-27	Support of ID CPR74 Support of improved ID ISC.LRU1002
7.06.00	2015-06-02	Modifications for ACC v3.0.0 of ID ISC.LR2500-A: special firmware package to support update of partition 0. Please note the Product Change Note for this firmware version

7.05.00	2015-04-23	Modifications for ACC v3.0.0 of ID ISC.LRU3x00: special firmware package to support update of partition 0. Please note the Product Change Note for this firmware version
7.01.03	2014-06-27	Support of ID MAX.U1002
7.01.02	2014-05-06	Support of WLAN-Module Update for ID ISC.PRH200
7.01.01	2014-03-20	Support of Bootloader Update for ID ISC.PRH200
7.01	2013-12-06	Support of OBID myAXXESS onTop, ID ISC.LRU1002 and ID ISC.PRH200
7.00.02	2013-06-13	Support of ID CPR47.xx Support for multiple detected USB-Readers
6.10.02	2012-12-17	Modification for ID ISC.LRU3000: Update process modified for new CONFIGfs partition
6.10	2012-10-02	Modification for ID ISC.LR1002: Update process changed for multiple banks Support of ID CPR20.xx and ID CPR46.xx
6.09	2012-02-01	Support of ID ISC.LR1002 and OBID myAXXESS standard
6.08	2011-04-04	Modification for ID ISC.LRU3000/3500: Update process changed for ACC to support large partitions Support of ID ISC.MRU102-A / -USB / -PoE Support of People Counter Update via reader ID ISC.LR2500-A / -B
6.06	2011-03-21	Support of ID ISC.MR102-PoE and ID ISC.LR2500-A
6.05	2011-01-31	Support of ID ISC.MR102-A / -B / -USB, ID ISC.LR2500-B, ID CPR30.xx and ID CPR52.xx
6.04	2010-09-02	Support of ID CPR.44.0x-4SCUSB-B
6.03	2010-06-21	Support of People Counter ID ISC.ANT1690/600-GPC and ID ISC.ANT1700/740-GPC. Update possible via reader ID ISC.LR(M)2000 Improved update of FPGA controller if firmware in reader is missing or wrong

Please note:

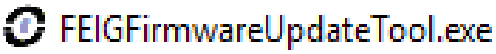
- ***For the Update, it is recommended to configure the Host Mode in the reader.***
- ***Close all other running Windows® programs onto the PC.***
- ***Before an update on the LAN interface is started, the Windows Firewall should be switched off temporary.***

- ***Update over WLAN is not recommended if another interface is available.***
- ***Avoid any converters like USB to RS232 or RS232 to TCP/IP if it is possible.***
- ***For RS232/485 the maximum baudrate should be 38400 baud.***
- ***It is not recommended to use an USB-Hub for an update over USB. It is strongly recommended to connect the reader directly with an USB port at the PC.***
- ***Do not interrupt the power supply until the update process has not been finished.***
- ***If existing we recommend to use the TCP/IP interface.***
- ***After the successful installation of the new firmware the current version of the ISOStart / CPRStart demo program should be used to test the reader. The current version can be downloaded from the download area of FEIG ELECTRONIC GmbH.***
- ***If the update was not successful and the old firmware has been already deleted please call the customer support of FEIG ELECTRONIC GmbH.***

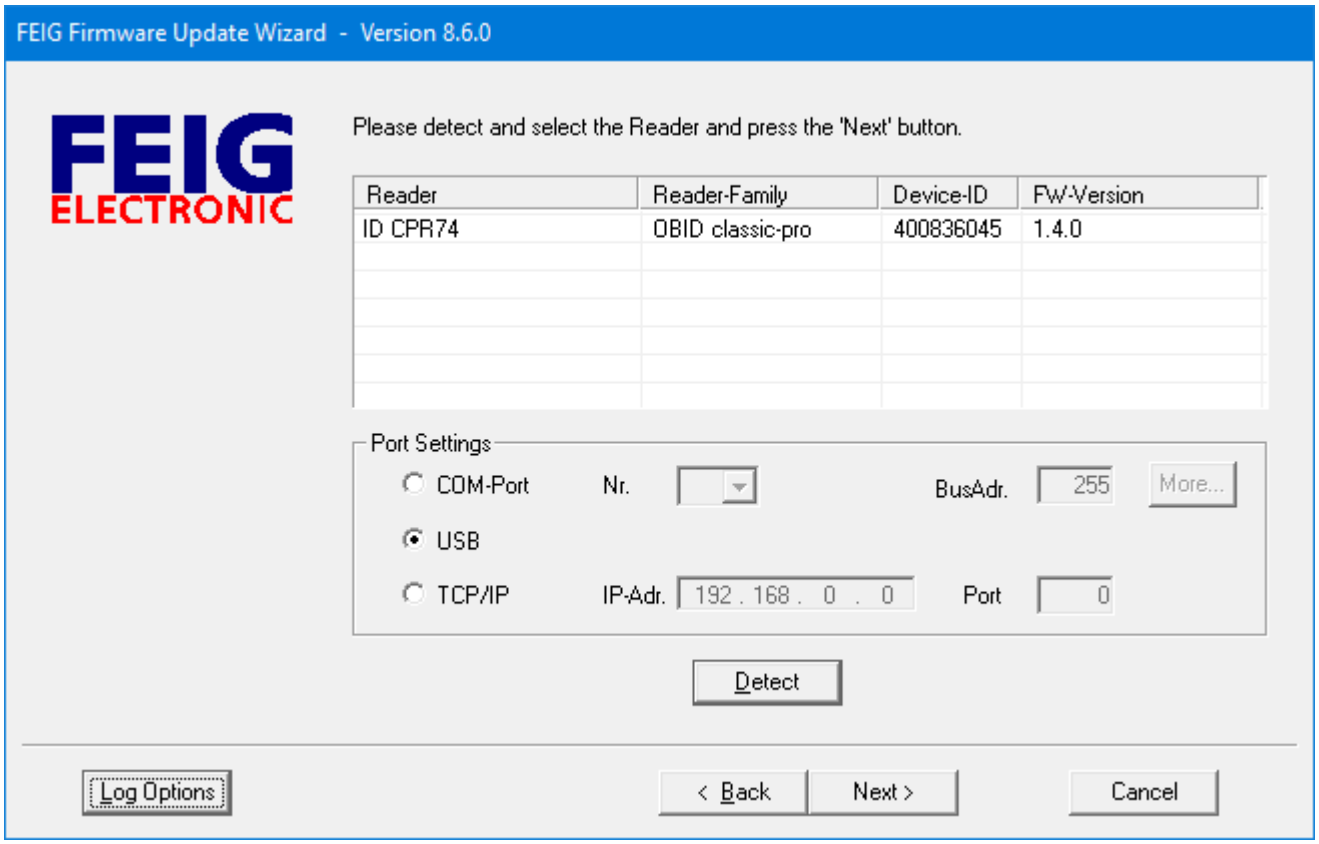
5 The update step by step

5.1 Detection and selection of the reader

1. Close any other running Windows programs onto your PC.
2. Start the program by double click on ***FEIGFirmwareUpdateTool.exe***:



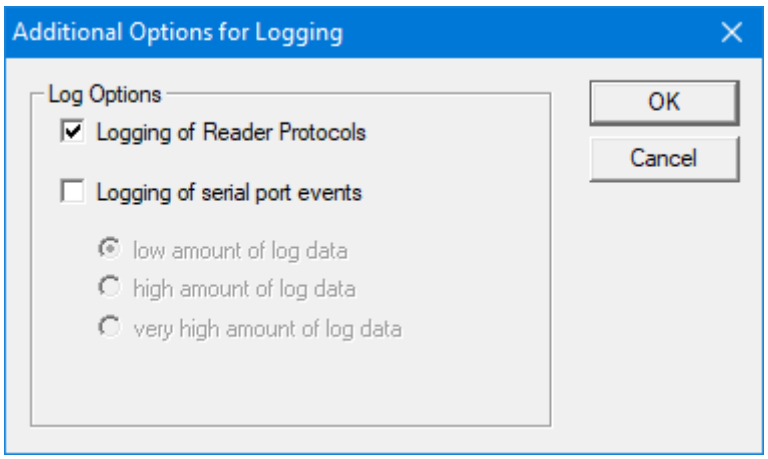
3. By using the RS232 / 485 interface enable the COM-Port and select the used COM-Port and Bus Address. If a RS232 to RS232TTL converter is used, click on the “More...” button and read the following chapters 5.1.2. Using RS232 to RS232TTL converter.
4. USB-interface: enable the USB Interface connection. It is strongly recommended to connect the reader directly with an USB port at the PC. The use of an USB-Hub can cause communication problems with the result of a damaged reader firmware.
5. For TCP/IP connection the TCP/IP must be enabled and the IP-Address and Port number must be set.
6. Click on the “Detect”-button. The connected reader must be displayed in the list.
7. Check the “Log Options” button and read chapter: 5.1.1. Additional Options for Logging



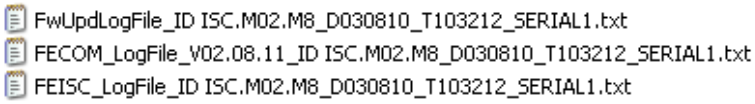
8. Click on the “Next”-button.

5.1.1 Additional Options for Logging

A logging option offers the possibility to store a log file while the update process runs.
Within the Option window you have the chance to select the amount of log data.
The most detailed information's are stored with the option "*very high amount of log data*". This offers FEIG ELECTRONIC GmbH the possibility to analyze the process in the case if a firmware update fails for any reason.



In the case of an error three log files will be stored in the folder of the FEIG Firmware Update Tool.
Example:



Please send these files to the IDENTIFICATION Customer support (obid-support@feig.de) for an analyze.

If the update finished without any problem the files will be deleted automatically.

5.1.2 Using RS232 to RS232TTL converter

The OBID i-scan® reader type ID ISC.ISC.M02 and the OBID® *classic-pro* reader types ID CPR.M02 and ID CPR.03 need a RS232 to RS232TTL (5V) converter:

RS232-TTL Converter

1962.000.00

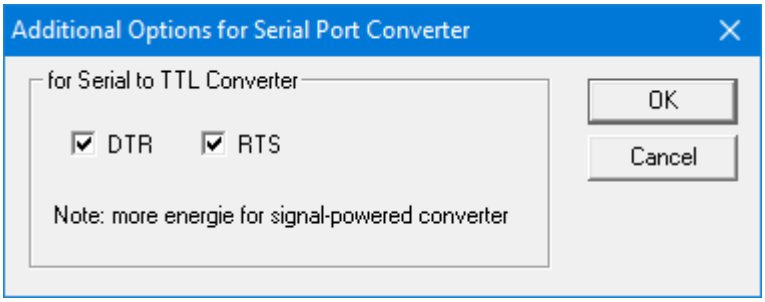
Model 232LPTTL

B&B Electronic Ltd.

The OBID i-scan® reader types ID ISC.CPR40.0x-CD 3.3 will need a RS232 to RS232TTL (3,3V) converter.

RS232-TTL Converter
xxxx.000.00
Model 232LPTTL33
B&B Electronic Ltd.

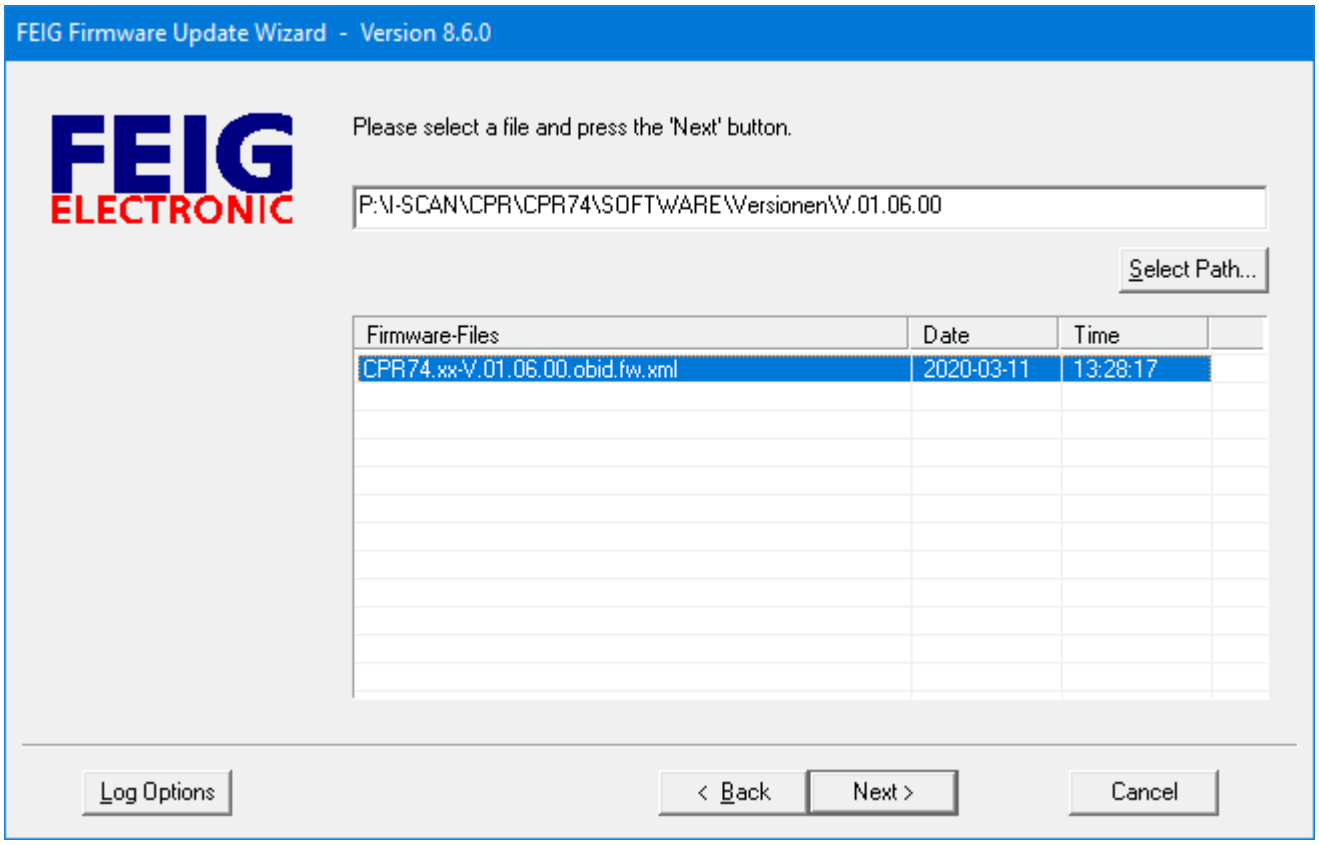
By using a notebook it is sometimes necessary to enable the DTR and RTS signals to provide the converter with sufficient power. To do this you have to mark the DTR and RTS checkbox:



Click on “OK”.

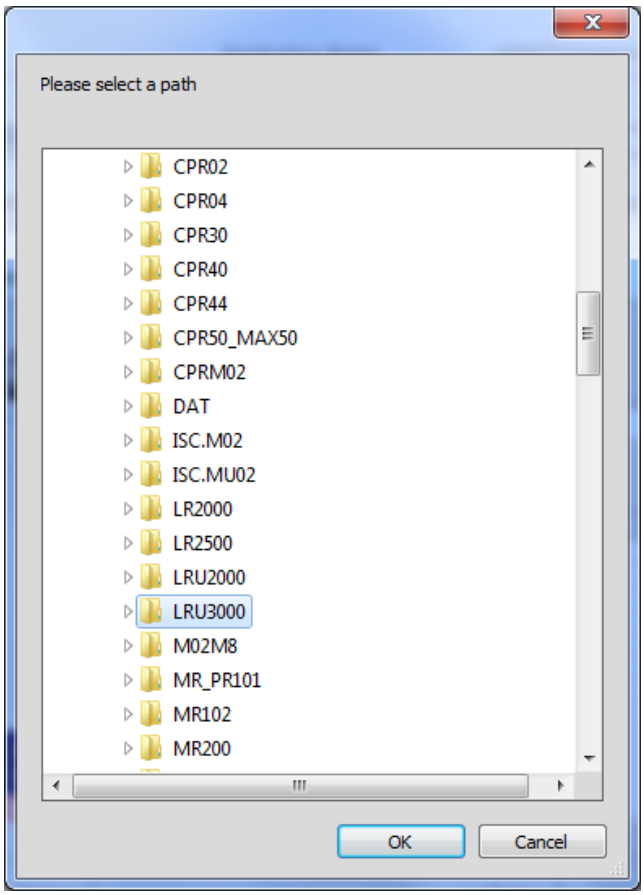
5.2 Selection of the new firmware

1. Click on the “**Select Path...”-**button and select the correct “***.xml**”-file for the connected reader type. You can use separate files for each controller like “RFC, ACC, FPGA” or you can use a firmware package which includes all firmware files for all controllers in one file.

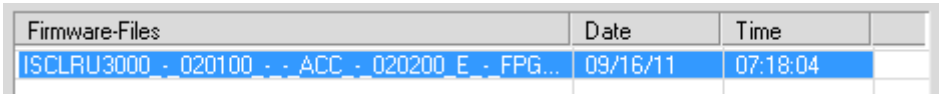


Please note that you have to use the new xml-file specification.
You can download the current version from our download area.

2. Choose the path were the new firmware is located.



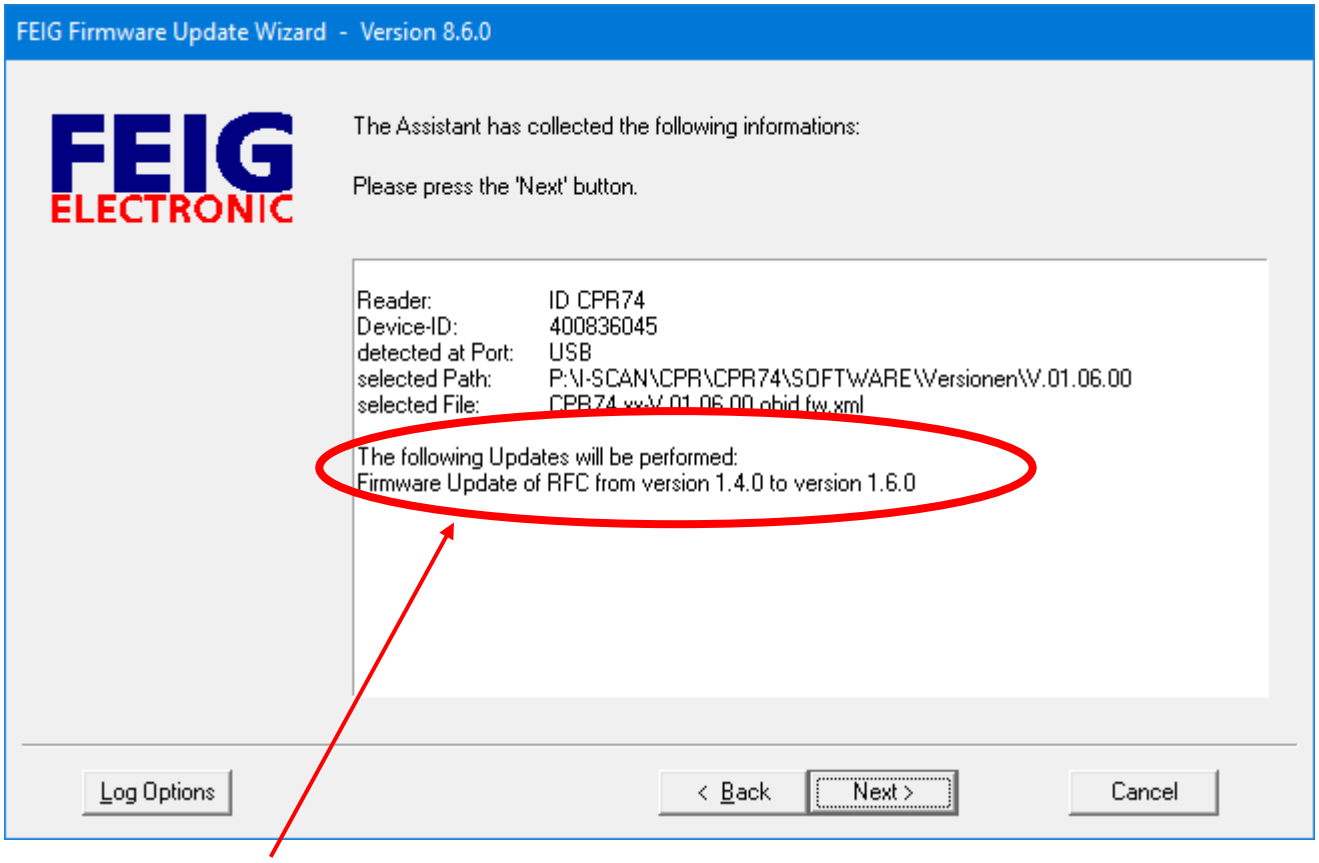
3. The correct firmware in the list must be marked:



4. Click on the “**Next**”-button.

5.3 Verifying of the data

1. Check the information in the next window. If all data are OK click on the “**Next**”-button.

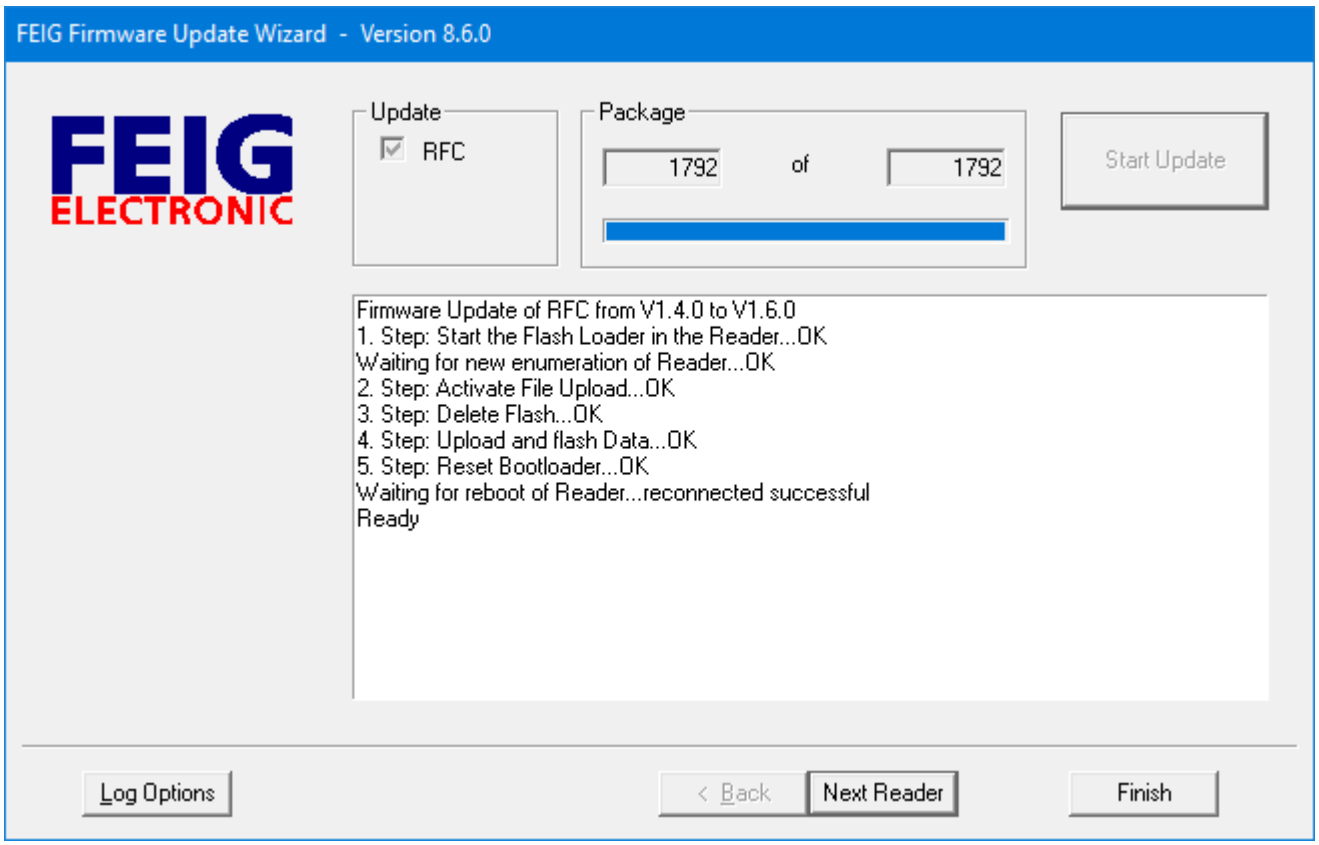


If you have a firmware package selected all included firmware files (FPGA, RFC or ACC) will be installed one after the other automatically.

5.4 Start update process

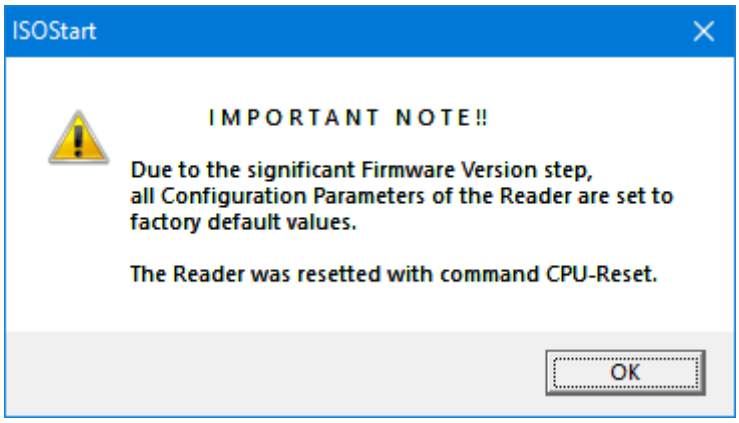
1. Click the “Start Update”-button. The progress bar indicates the progress of the update.

Do not interrupt this process!
Do not disconnect the power cable or the data cable!
While the update is running you cannot finish the program manually!
Please wait!
Do not close the program by using the Windows® Task Manager!

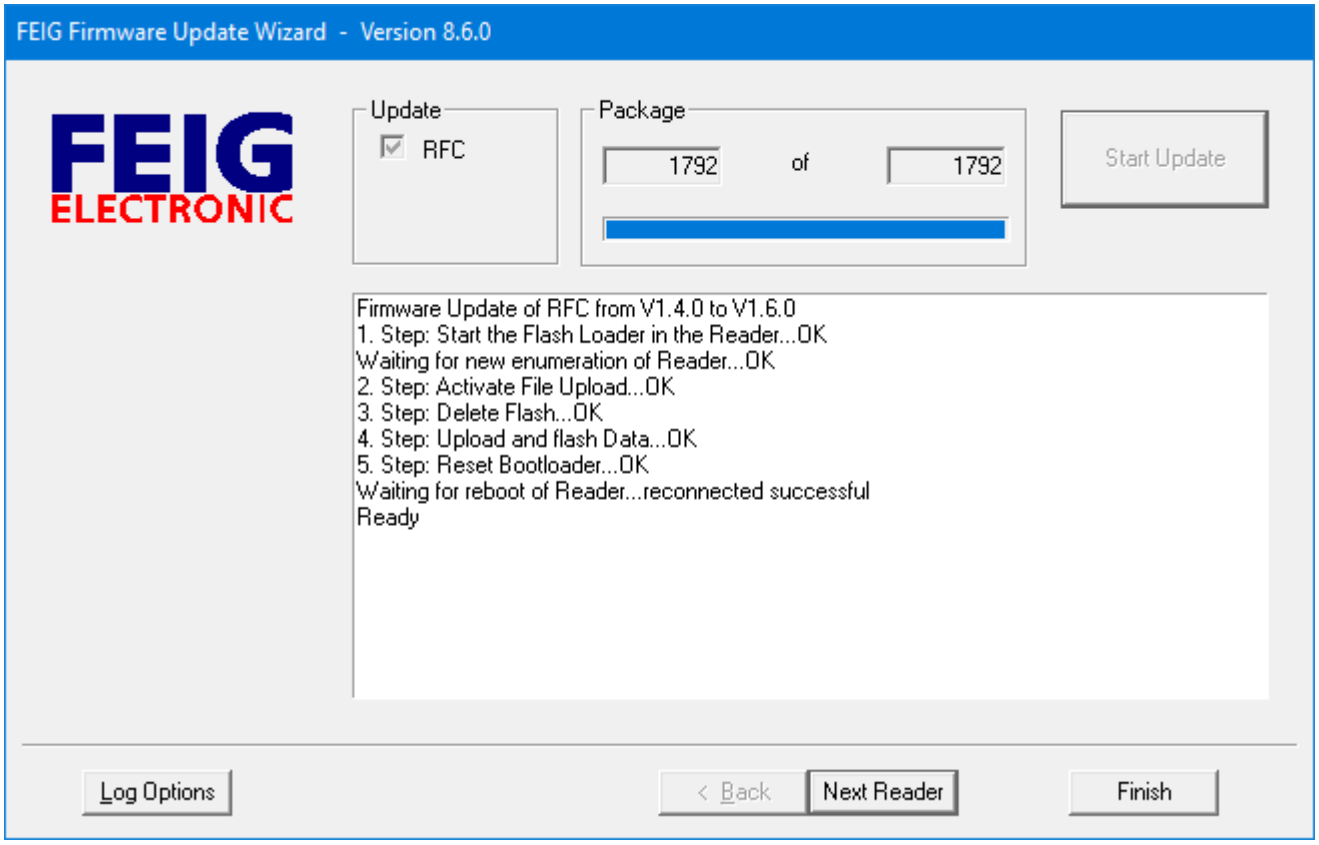


5.4.1 Finishing Update

If a significant firmware version step has taken place all configuration parameters will be set to factory default values. Afterwards the reader needs to be rebooted manually. If this is necessary the Update Tool will offer you the possibility to do this by software command.



After receiving the message “**Ready**” the tool can be closed by clicking on the “Finish”-button.



Now you can finish the **FEIG Firmware Update Tool** or you can click on “Next Reader” and can perform a second update on the same or a second reader.

After the successful installation of the new firmware the current version of the ISOStart demo program should be used to test the reader. The current ISOStart version can be downloaded from the download area of FEIG ELECTRONIC GmbH.

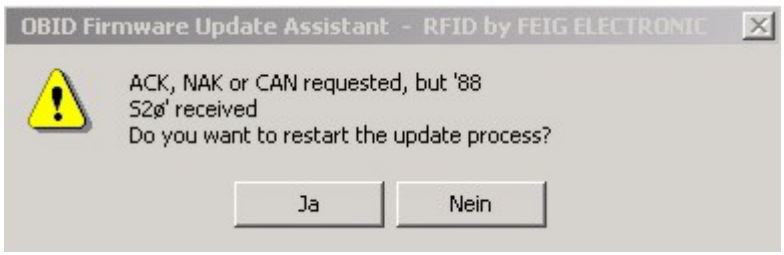
6 If the update failed

6.1 Restart Update

If the update process does not come to the end with the message “Ready”, please do **not** perform a CPU-Reset or switch OFF and On the reader.

The program gives you the possibility to run the update process a second time.

After receiving a message like it is shown in the picture below please Click the “**Yes**”-button and try it again.



6.2 Update using the hardware flash loader

If the update failed again you can perform an update using a hardware flash loader as it is described in the firmware update application note of the corresponding reader.

This is only possible by the reader:

- ID ISC.PR/MR/PRH101 ***(see application note: N60500-1e-ID-B.pdf)***
- ID ISC.M02 ***(see application note: N21101-xy-ID-B.pdf)***
- ID CPR.M02 ***(See application note: N30201-xy-ID-B.pdf)***
- ID CPR.02 ***(See application note: N30201-xy-ID-B.pdf)***
- ID ISC.MRU200 ***(See application note: N80060-0e-ID-A.pdf)***

Other reader types have to be send to FEIG ELECTRONIC GmbH for repair.