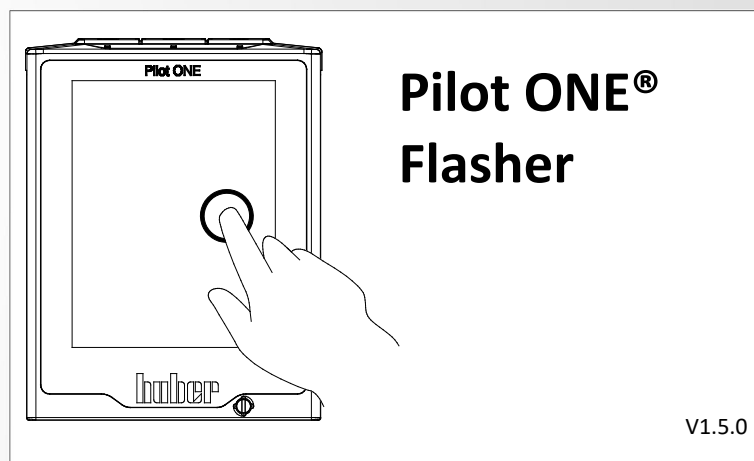




Inspired by temperature



Manual

huber

Pilot ONE[®] Flasher

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V1.5.0en/28.04.16//16.04

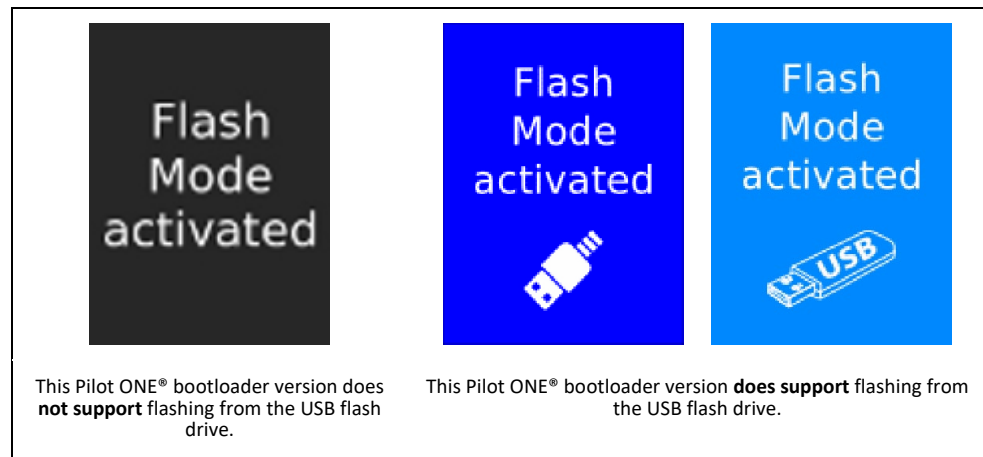
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1 Application

“Pilot ONE® Flasher” is a PC application under Microsoft Windows (Vista, 7, 8, 10). It offers the following options:

- **Downloading** the latest firmware version from the Huber Update Server. (See also on page 10, section »**Downloading the Pilot ONE® firmware**«).
- **Unzipping** the firmware files for flashing via USB stick. (See also on page 13, section »**Flashing with USB flash drive**«).
- **Flashing** Pilot ONE® with a new firmware version. (See also on page 10, section »**Flashing Pilot ONE®**«).

Overview of bootloader variants



Flashing the Pilot ONE® firmware requires a Windows PC with a USB port (Type A), and a USB connection cable, which has a mini-USB connector (Type Mini B). You can unzip the downloaded firmware files on a USB flash drive too. Use this USB flash drive to perform the flash process directly at the Pilot ONE®. This process is available from Pilot ONE® bootloader version Pilot_ONE.07.20160316.0. You can read out the current boot loader on the Pilot ONE® (category: Service → Software Version). You need an Internet connection to download the latest firmware.

Pilot ONE® Flasher supports the following languages:

- English
- German

INFORMATION

The language selected during the installation process corresponds to the Pilot ONE® Flasher application language. This setting can be changed later in the program.

2 Installation | Deinstallation

Ensure **Pilot ONE® is not connected to the PC** before starting the installation process. There are two installation variants available. However, it is recommended to use the installer that supports digitally signed firmware packages. This variant ensures the reliable use of firmware files.

- Using firmware packages **with** a digital signature
"install_Pilot_ONE_Flasher_01_yyyymmdd_i_enc.exe"
- Using firmware packages **without** a digital signature
"install_Pilot_ONE_Flasher_01_yyyymmdd_i_noenc.exe"

The Pilot ONE® Flasher version is indicated by y (year), m (month), d (day) and i (Index).

INFORMATION

You must uninstall an existing Pilot ONE® Flasher version **before** installing a new version. This uninstalls the USB driver too. What applies to the installation process applies to the deinstallation process too: Pilot ONE® must **not** be connected to the PC during the deinstallation process.

The installation process is divided into two sections.

- 1. Installing the software "Pilot ONE® Flasher".
- 2. Installing the USB DFU driver "libusb-win32".

INFORMATION

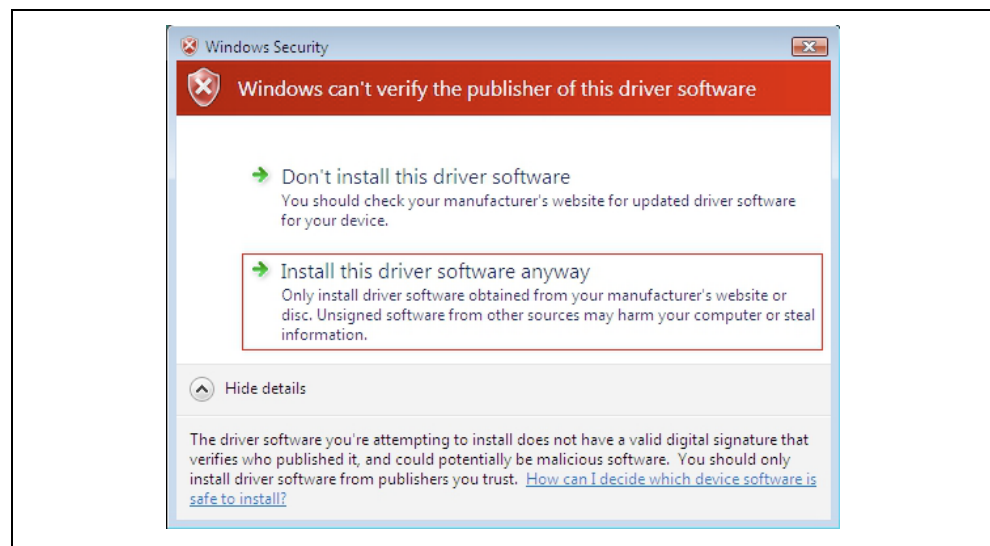
You **may** disable the "DFU driver" component during installation if Pilot ONE® Flasher is only used for downloading and unzipping the firmware files to a USB flash drive. This skips the driver installation and no administrator rights are required for installation.

INFORMATION

Enforcing the driver signature must be disabled before the installation process when installing Pilot ONE® Flasher under Windows 8 or later. The driver cannot be installed if this step is skipped. This procedure can be found on page 23, section »Reason: Driver Signature Enforcement is enabled«.

You must positively confirm this security message, if it appears during the installation of the driver software (install driver software anyway).

Windows Security Message



Device Driver Installation Wizard



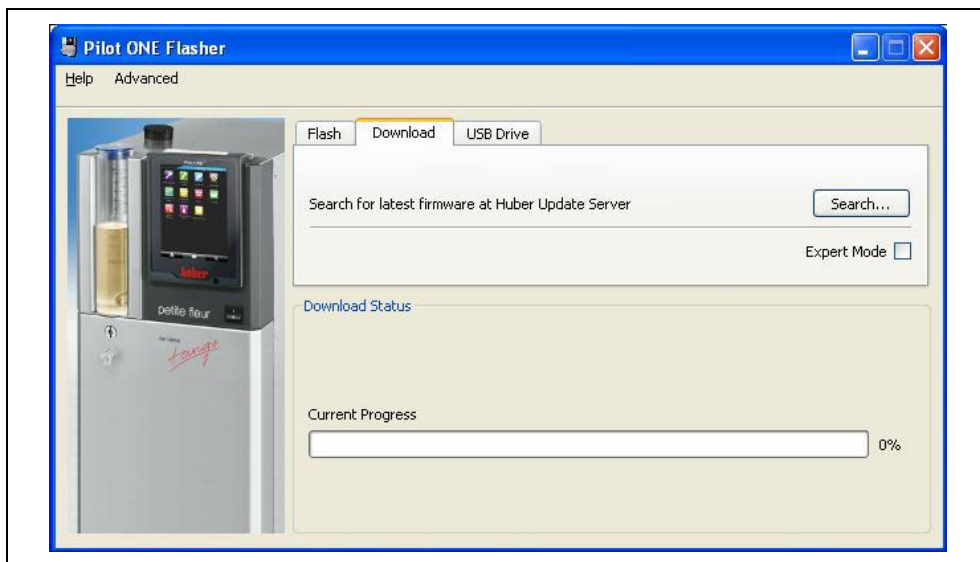
A system reboot is recommended after a successful installation so that the USB driver can be updated.

3 Downloading the Pilot ONE® firmware

You can use Pilot ONE® Flasher to download the latest firmware version from the Huber Update Server.

Use the “Search ...” button to connect to the server. This requires a working Internet connection.

Pilot ONE®-Flasher –
“Download”

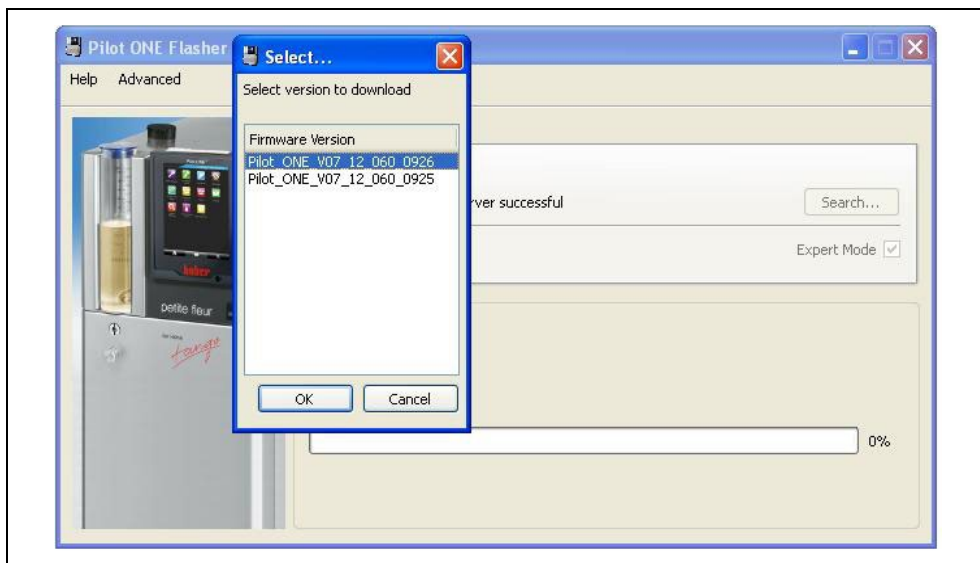


The available firmware is determined. You can then download and store it locally.

3.1 Expert Mode

Use “Expert Mode” to search for a specific firmware version on the Huber Update Server. However, only select it in consultation with Customer Support. Optional: Enter the user ID in the dialog box that opens if Customer Support provided one.

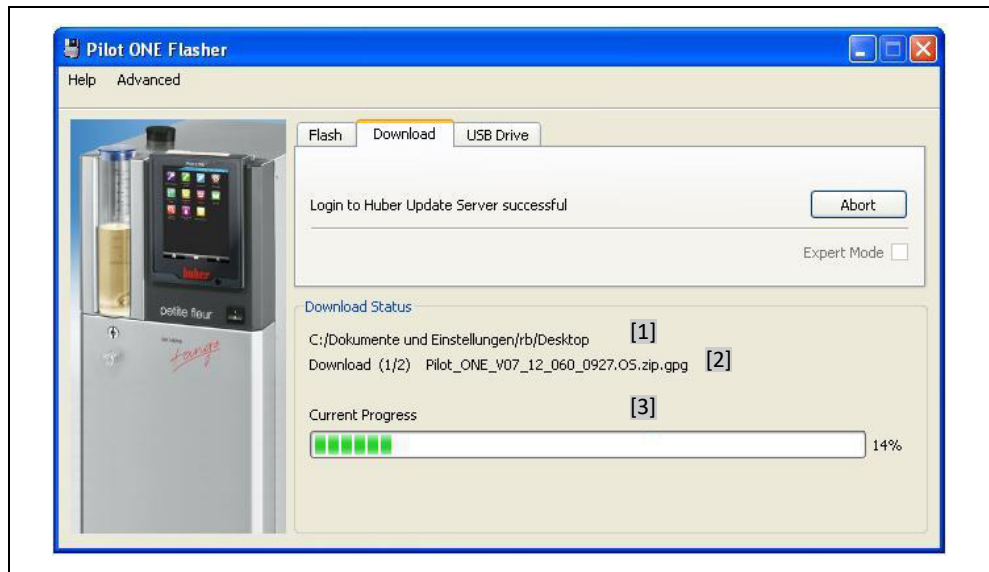
Pilot ONE® Flasher –
“Expert Mode”



To do so, enable “Expert Mode”. Use the “Search ...” button to connect to the server and available versions will be displayed. Select the desired version and press the “OK” button to start downloading this version.

3.2 Overview

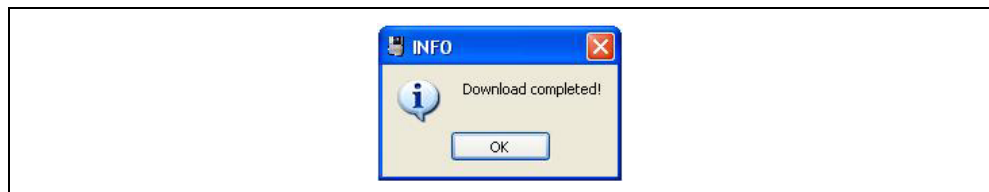
Pilot ONE® Flasher –
Overview “Download”



- [1] Display of the directory in which the files are stored.
- [2] Display of the file name of the currently downloading file.
- [3] Progress indicator for the current file.

The successful download is indicated by the message “Download completed!”

Pilot ONE®-Flasher –
“Download completed!”

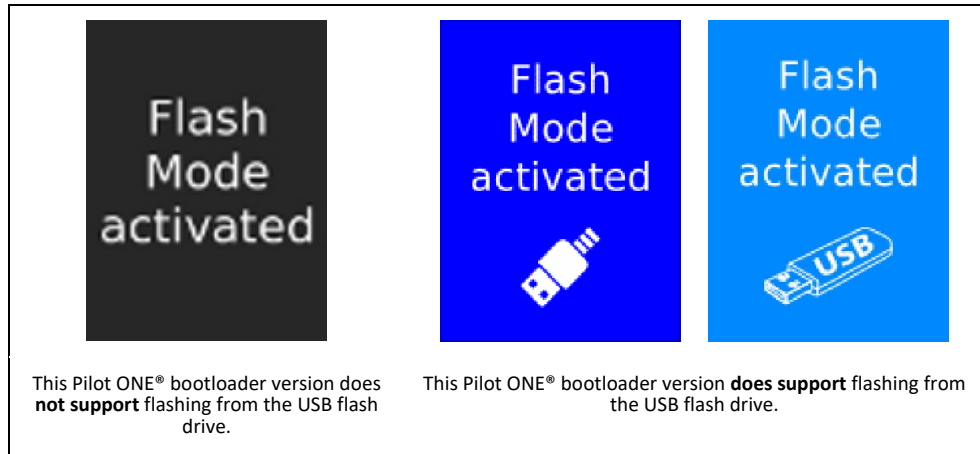


You can now use the downloaded firmware files to flash Pilot ONE® (see page 10, section »Flashing Pilot ONE®«).

4 Flashing Pilot ONE®

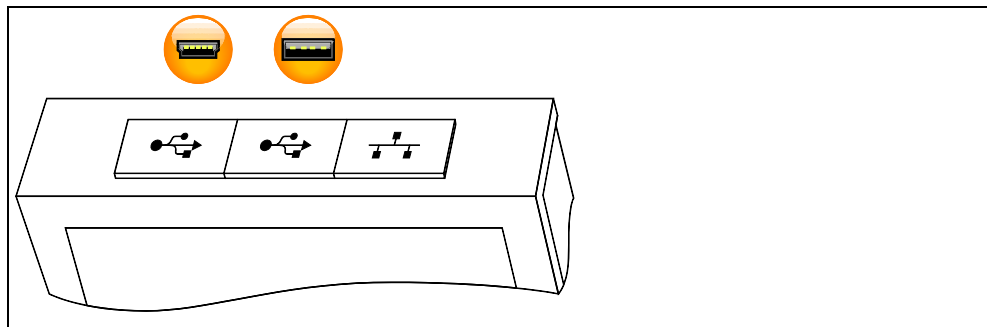
4.1 Pilot ONE® Flash Mode

Overview of bootloader variants



You must start Pilot ONE® in Flash Mode to start the flash process. Touch the touchscreen with 3 fingers within 3 seconds of switching on. Flash Mode will be activated and “Flash Mode activated” is indicated.

Interfaces: USB 2.0 device interface (flashing with PC, Mini-B plug); USB 2.0 host interface (flashing with USB flash drive, plug A)



4.2 Flashing with USB flash drive

You can flash the Pilot ONE® firmware via a USB flash drive directly at the Pilot ONE® in addition to flashing via a USB cable. To do so, unzip the firmware files to a (FAT32 formatted, min. 300 MB free memory) USB flash drive first.

4.2.1 Unzipping the firmware

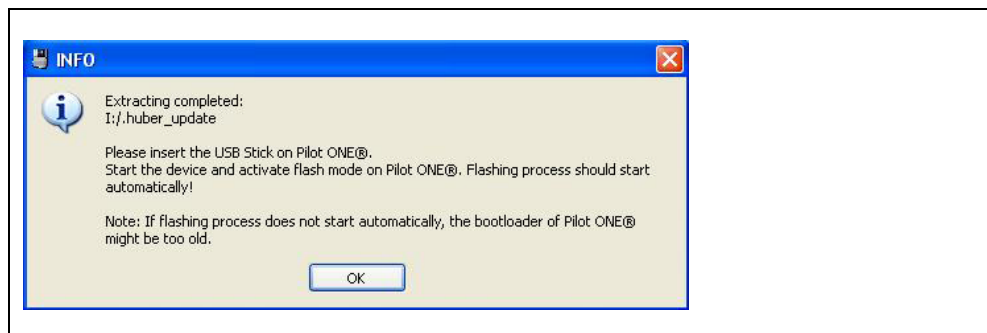
Pilot ONE® Flasher –
“Unzipping”



To unzip the firmware onto a USB flash drive, proceed as follows.

- Connect a USB flash drive to the PC.
- Use the “Search ...” button to select the firmware version you want to unzip onto the USB flash drive. The following files are required:
 Pilot_ONE_07_yyyymmdd_i.OS.zip.gpg or Pilot_ONE_07_yyyymmdd_i.OS.zip
 Pilot_ONE_07_yyyymmdd_i.PR.zip.gpg or Pilot_ONE_07_yyyymmdd_i.PR.zip
 Both files must be available in the same folder. Only one of the two files needs to be selected for the selection process (the other file is automatically added).
- Click the “Start” button.
- Select the USB drive.
- The files are unzipped into the folder “.huber-update” on the USB flash drive.

The following information appears when the unzipping process has been completed.


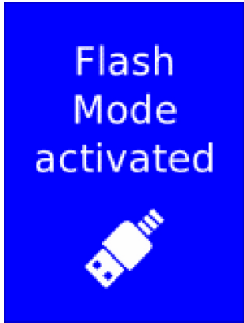



4.2.2 Flashing on the Pilot ONE®

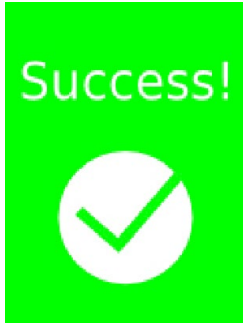
You must start Pilot ONE® in Flash Mode to start the flash process. The USB flash drive with the Pilot ONE® firmware must be plugged in to automatically start the flash process.

- Connect the USB flash drive with Pilot ONE®.
- Switch on Pilot ONE®.
- Touch the touchscreen with 3 fingers within 3 seconds of switching on. Flash Mode will be activated and "Flash Mode activated" is indicated.

Overview of bootloader variants

		
<p>Mit dieser Pilot ONE® Bootloader-Version wird das Flashen vom USB-Stick nicht unterstützt.</p>	<p>Mit dieser Pilot ONE® Bootloader-Version wird das Flashen vom USB-Stick unterstützt.</p>	

- The flash process automatically starts after 10 seconds, if the unzipped firmware files have been detected on the USB flash drive. Do not switch off Pilot ONE® during the flash process.
- On successful completion of the flash process, Pilot ONE® reports: "Software update successful. Please restart the machine..."



- Turn off Pilot ONE®, remove the USB flash drive and restart Pilot ONE®.

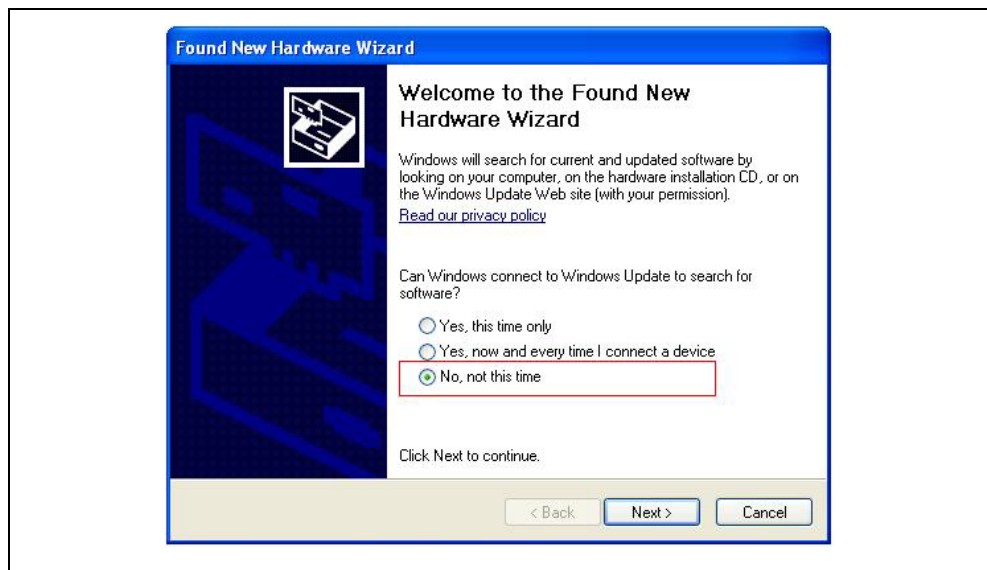
4.3 Flashing with a PC

4.3.1 USB driver activation

The new hardware is automatically detected and the Wizard (only Windows XP) for finding new hardware is started the first time you connect Pilot ONE® to a USB port after installation. Depending on the operating system, the driver activation is automatic. Make the following selections in the Wizard:

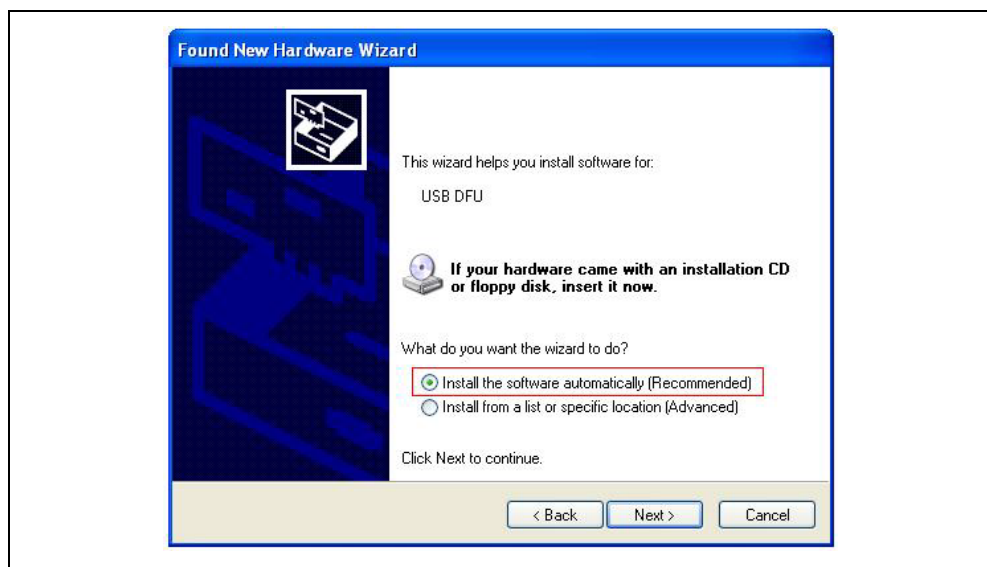
1. Do not connect to Windows Updates

Wizard for searching new hardware - do not connect to Windows Updates



2. Automatically installing the software - USB DFU is installed

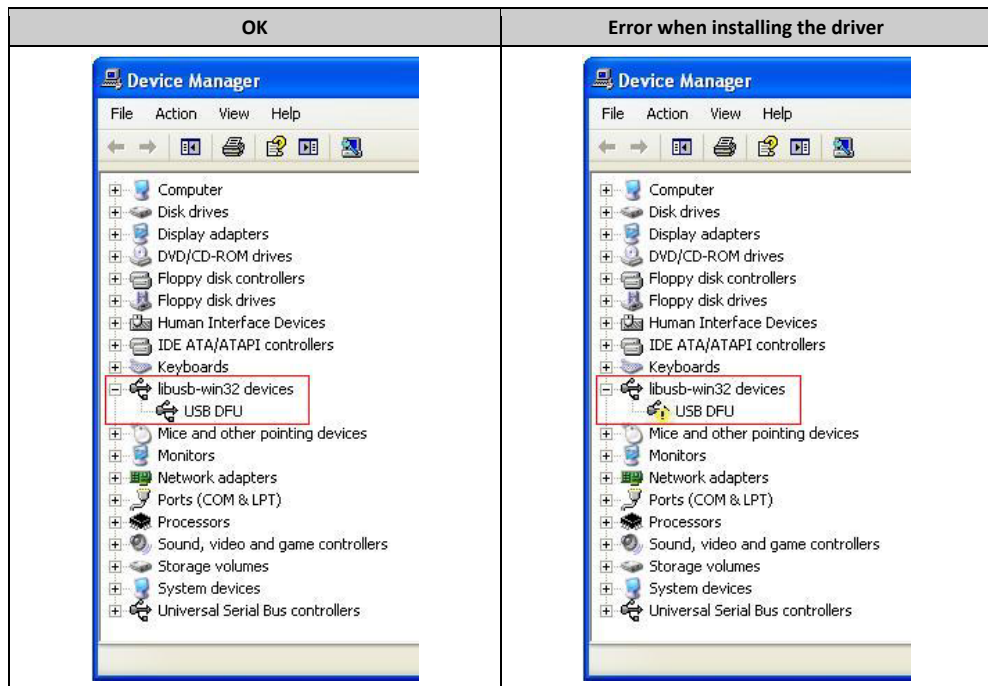
Wizard for searching new hardware - automatically installing software



After installing the driver, a message appears (on all Windows versions) that the driver software for the USB DFU device (Device Firmware Update) has been successfully installed and is ready to use. It is recommended to use the same USB port for flashing. This makes it unnecessary to repeatedly set up the device driver.

You can use Windows Device Manager (Control Panel → System → Hardware → Device Manager) to check whether the driver has been properly activated.

Device Manager –
Activation verification



You can try to activate the driver manually, if the driver installation was faulty (right click on USB DFU → Update Driver) or uninstall the software and start the installation process again. Make sure to follow the installation requirements:

- Do **not** connect Pilot ONE®.
- The driver installation must complete **successfully**.

4.3.2 Starting to flash Pilot ONE®

Use the “Search ...” button to select the file to be used for the flash process.

Pilot ONE® Flasher –
“Flashing”



The following files are required:

- Pilot_ONE_07_yyyymmdd_i.OS.zip.gpg
- Pilot_ONE_07_yyyymmdd_i.PR.zip.gpg

If you use Pilot ONE® Flasher **without** a digital signature, the following files are required:

- Pilot_ONE_07_yyyymmdd_i.OS.zip
- Pilot_ONE_07_yyyymmdd_i.PR.zip

The version number is indicated in the file name by y (year), m (month), d (day) and i (Index).

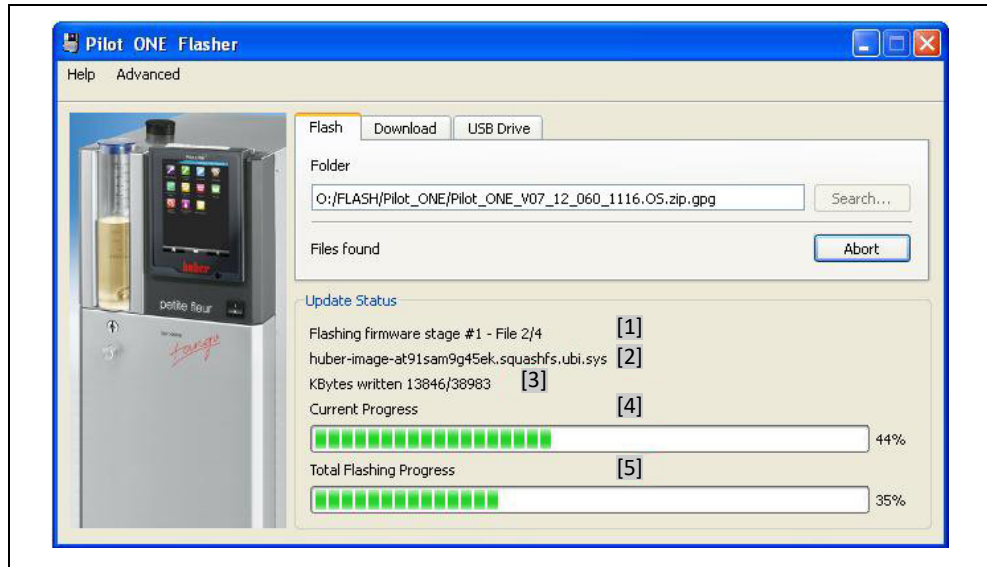
Both files must be available in the same folder. Only one of the two files needs to be selected for the selection process (the other file is automatically added). The current firmware version is compared with the selected firmware version if both files exist and are valid. You can start the flash process by pressing the “Update” button, if a connection already exists to Pilot ONE®. You must first establish a connection to Pilot ONE® and confirm it by pressing “Connect”, if no connection exists to Pilot ONE® at this time.

INFORMATION

For a flash process to be successful, it is necessary to not add or remove any other USB devices during this time. This can otherwise and often does causes a break in communication and an incomplete transfer of the firmware. Also make sure that the connection to Pilot ONE® is not disconnected during this process and do not turn off Pilot ONE®.

4.3.3 Overview

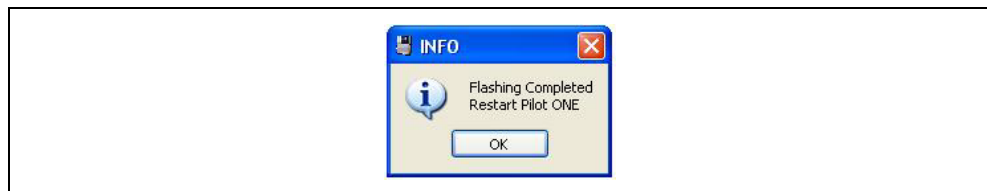
Pilot ONE® Flasher – Overview “Flashing”



- [1] Index of the current file | Total number of files
- [2] Name of the current file
- [3] Transferred kilobytes | Total kilobytes
- [4] Progress indicator for the current file.
- [5] Progress indicator for the entire flash process

The message “Flashing completed” indicates the flash operation has been completed successfully.

Pilot ONE® Flasher – “Flashing completed”



You can now turn off Pilot ONE® and disconnect the USB cable. The updated firmware is activated once after switching on Pilot ONE® in Normal Mode.

4.3.4 What to do in case of an Abort

Proceed as follows, if the flash process has been aborted by the user or an error.

- Switch off Pilot ONE®.
- Switch on Pilot ONE® again.
- Touch the touchscreen with 3 fingers within 3 seconds of switching on. Flash Mode will be activated and “Flash Mode activated” is indicated.
- Restart flashing Pilot ONE® (see page 10, section »Flashing Pilot ONE®«).

5 Pilot ONE® bootloader

In certain cases it is necessary to flash the Pilot ONE® bootloader in addition to performing the standard flash process. However, this process should be done wisely and only when suggested by Customer Support.

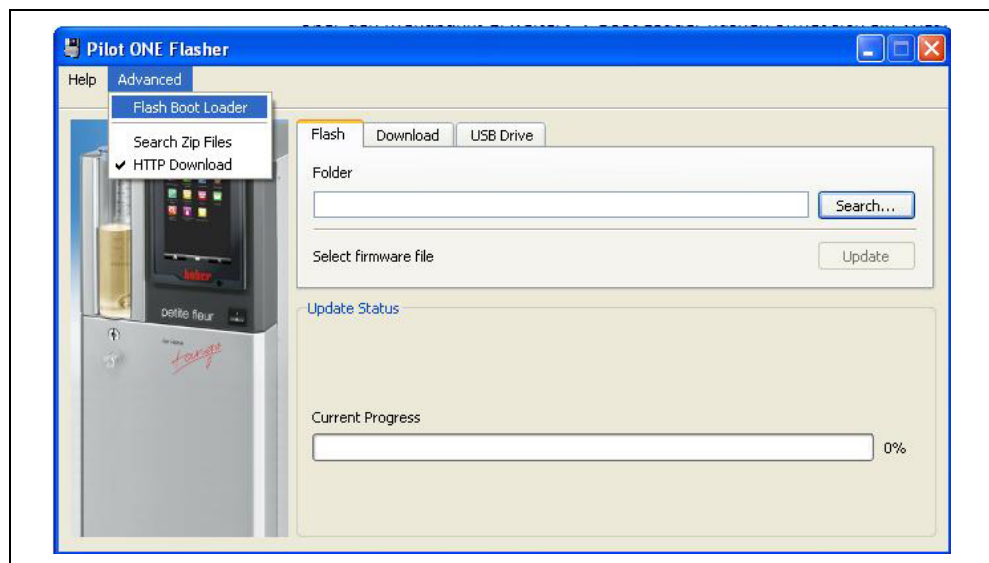
Pilot ONE® cannot start correctly if an error or crash occurs during such a flash process. Furthermore, no new flash process will be possible. In this case, Pilot ONE® must be returned for servicing to be reset to the factory configuration.

INFORMATION

You can flash the Pilot ONE® bootloader only via the USB connection cable. Flashing via USB flash drive is not supported.

A Wizard opens via the menu item “Flash Bootloader” → “Advanced” and leads through the further procedure.

Pilot ONE® bootloader –
“Flash Bootloader”



The home page of the Wizard shows the most important information for flashing the Pilot ONE® bootloader. You must check the boxes and thus confirm having read this text. Then you get to the selection page of the Wizard. It contains two options:

- Downloading the current Pilot ONE® bootloader and the current Standard Pilot ONE® firmware
- Flashing the Pilot ONE® bootloader and firmware

5.1 Downloading the Pilot ONE® bootloader

You must download the latest version of the bootloader from the Huber Update Server before flashing the Pilot ONE® bootloader. This requires an existing connection to the Internet. You can use the downloaded bootloader file for flashing immediately or at a later time.

The Pilot ONE® bootloader file is named as follows

- Pilot_ONE_07_yyyymmdd_i.BL.zip.gpg

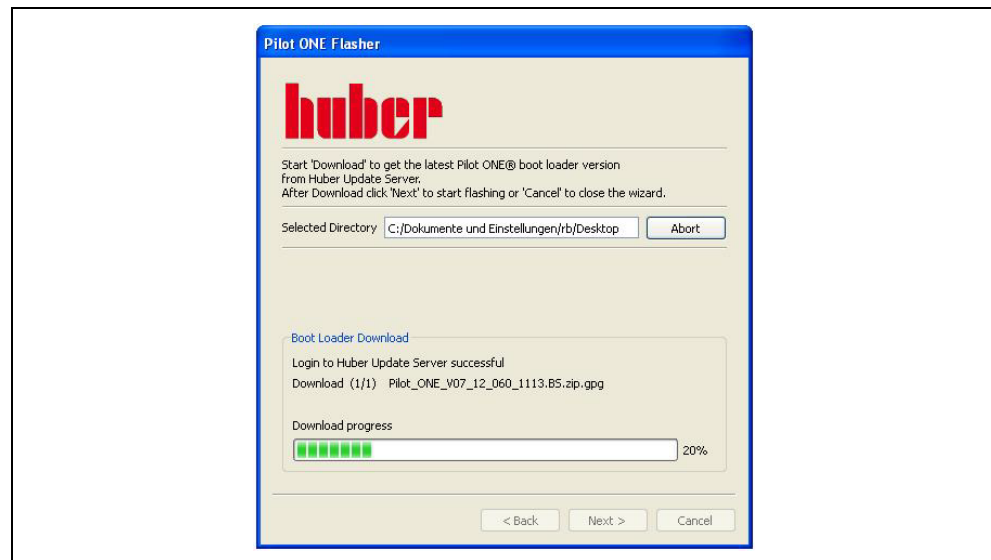
When using the Pilot ONE® Flasher **without** a digital signature

- Pilot_ONE_07_yyyymmdd_i.BL.zip

The version number is indicated in the file name by y (year), m (month), d (day) and i (Index). The latest firmware is downloaded in addition to the current Pilot ONE® bootloader. It should be noted that there is generally a difference between the bootloader version and the firmware version.

Clicking on the “Download” button connects to the Huber Update Server. The current version of the Pilot ONE® bootloader is displayed upon successful connection. Select the destination directory to download it to and the download will start. The latest available Pilot ONE® firmware version is displayed when the download is complete. You can download it too.

Pilot ONE® bootloader –
“Download Progress”



You can either start flashing or stop the Wizard when the download completed successfully.

5.2 Flashing the Pilot ONE® bootloader

The following points must be checked before flashing the Pilot ONE® bootloader can be started:

- Is the current version of the Pilot ONE® bootloader available?
- Is a Pilot ONE® firmware available?
- Is the hardware used, the PC with USB port (Type A) and USB connecting cable (Type A / Type Mini-B), in good working condition? This should be the case, if previous flash operations were performed without problems.

Make sure the connection between PC and Pilot ONE® is not disconnected during the flash process. Furthermore, the flash process should not be aborted prematurely. The flashing procedure corresponds to the standard flash process.

The Pilot ONE® bootloader file to be used must be selected before the flash process can be started. The pilot ONE® firmware to be transferred after the bootloader is then selected. The flash process is started by clicking the “Update” button when all files are available and a connection to Pilot ONE® exists.

Pilot ONE® bootloader –
“Flash Bootloader”



The Wizard is stopped by pressing the button “Finish” after flashing completed successfully. Pilot ONE® must be switched off and then restarted to accept the changes.

6 Possible probleme

6.1 No USB device found in DFU mode | Device not found after RESET

This indicates a problem with the driver or USB port used, provided the connection to the USB connection cable was not disconnected and Pilot ONE® was not switched off. These are the solution approaches:

- Switch Pilot ONE® off and on again. Activate the Flash Mode and repeat the flash process.
- Check whether the driver is correctly displayed in the Device Manager (Control Panel → System → Hardware → Device Manager)
libusb-win32 devices ? USB DFU
- Establish a connection using a different USB port (the driver might have to be newly set up)
- Restart the PC.
- Uninstall and reinstall Pilot ONE® Flasher.

6.2 Device not connected

This indicates a faulty installation / activation of the driver, provided the connection to the USB connection cable was not disconnected and Pilot ONE® is in Flash Mode. Verify this in the Device Manager (see page 13, section »USB driver activation«) or optionally uninstall the software and start the installation process again (see page 8, section »Installation | Deinstallation«).

6.3 More than one USB device in DFU mode

Several devices in DFU mode are connected via USB. Ensure only one device is connected and repeat the flash process.

6.4 Disconnection during the flash operation

Among other causes, a faulty USB port or USB connection cable may cause disconnection during the flash operation. Note the maximum cable length (3 meters) for USB communication.

INFORMATION

Remove redundant (e.g. Ethernet) cables during the flash process.

6.5 Restriction

Do not use the Pilot ONE® Flasher in a virtual operating environment.

6.6 You cannot install the driver under Windows 8 / Windows 10

6.6.1 Reason: Driver Signature Enforcement is enabled

INFORMATION

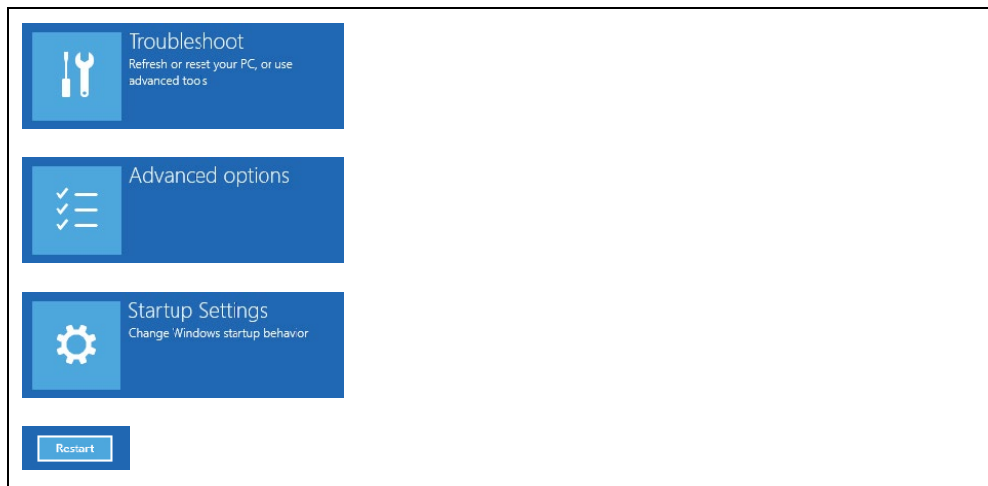
The following steps must be performed before the Pilot ONE® Flasher installation program is started.

The following steps turn off Driver Signature Enforcement:

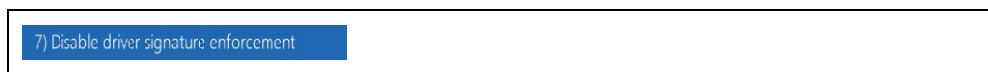
- 1. Press the “On/Off” button and click “Restart” while holding the Shift key down.



- 2. Select each of the following items in sequence:



- 3. The system reboots. Now select menu item 7.



- 4. Log in as usual and restart the Pilot ONE® Flasher installation program.

6.6.2 Problems after installing the driver

Check the driver in the Device Manager and, if necessary, install it again, if you encounter problems and the connection is not working properly after installing the driver.

Inspired by **temperature** designed for you

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