

## BERNINA 700/720/740/765/770/790 - Firmware Update

### Note:

The instructions take you step-by-step through the download and the extraction of the firmware files to an USB memory stick (**FAT32 formatted**). These instructions are also valid for further firmware updates – hence, the file names and illustrations used may be different, depending on the update, the installed operating system and the used Internet browser.

In this installation manual, illustrations from Windows® 7 and Windows® Internet Explorer 9 are used.

### System requirements:

To update the firmware of the BERNINA sewing computer requires:

- Computer with Windows® 7 , Windows® 8, Windows® 8.1, Windows® 10 operating system.
- System type: 32 Bit or 64 Bit operating system
- BERNINA sewing computer
- Empty BERNINA USB-Memory key (>256 MB / **FAT 32 formatted**) <sup>1</sup>
- Free USB-Port on Computer side
- Internet connection to download the firmware

### Step 1: Formatting USB-Stick (FAT32):

**Important! USB stick must be FAT32 formatted. If it isn't, the firmware update won't complete successfully.**

The reason is that a FAT16-formatted USB stick won't be able to save more 80 embroidery patterns from the sewing computer. To avoid data loss for USB stick capacity reasons, we strongly recommend to always use a FAT32-formatted memory stick.

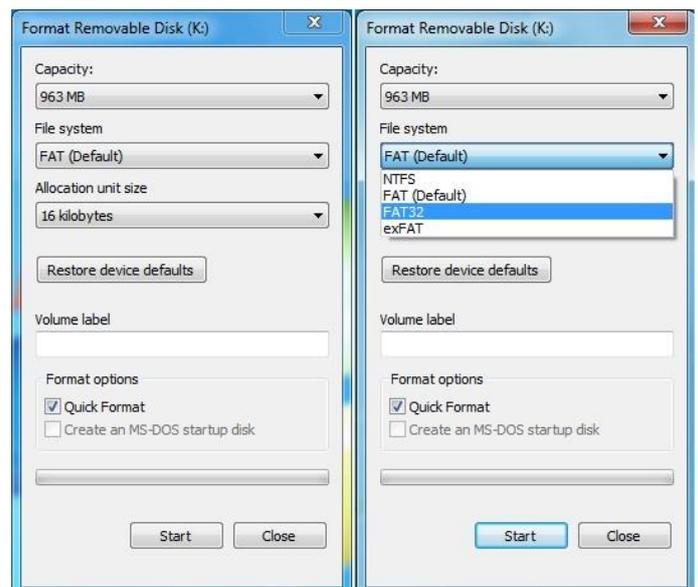
There won't be any capacity problems with a **FAT32-formatted USB stick**.

**WARNING: Formatting will erase ALL data on this disk.**



#### 1.1. How to FAT32- format an USB stick:

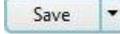
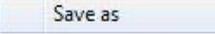
- Plug your USB stick into a free USB port on your PC.
- Wait until the stick is ready for operation.
- Open Windows Explorer.
- Right-click on the USB stick drive.
- Select 'Format' in the pop-up menu."
- The second window contains information regarding file system.
  - If **FAT32** appears in the bar, formatting won't be necessary.
  - If a different value than **FAT32** appears, set the value to FAT32 and carry out the formatting.
- Use  to start FAT32 formatting.  
**WARNING: Formatting will erase ALL data on this disk.**
- After successful formatting, the USB stick is ready for the firmware updating of the sewing computer.



## Step 2: Download firmware version file

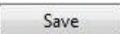
2.1. To start the download process, click on the link:  **Firmware BERNINA\_XXX Vxx.xx.xx (34.6MB) Fehler! Kein Text mit angegebener Formatvorlage im Dokument.**<sup>1</sup>

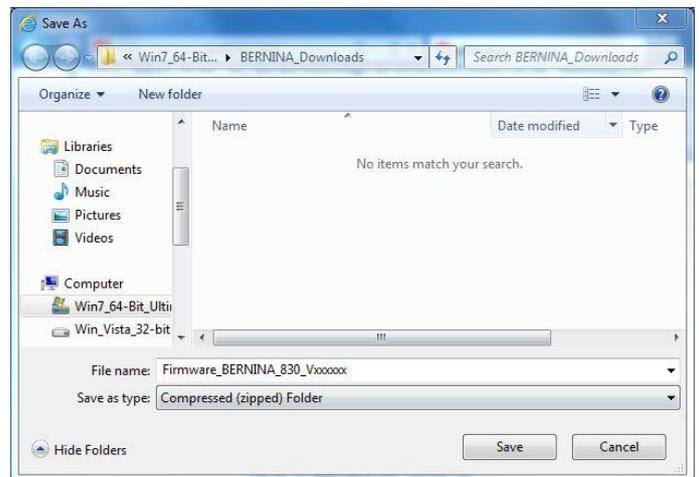
2.2. A dialog window will open:

Open the dropdown menu of  and select .

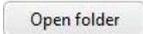


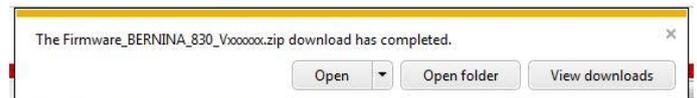
2.3. A dialogue window „save as...“ opens. Select a directory on the local hard disk (as example: C:\BERNINA\_Downloads), in which the file will be downloaded.

Confirm the selection with .

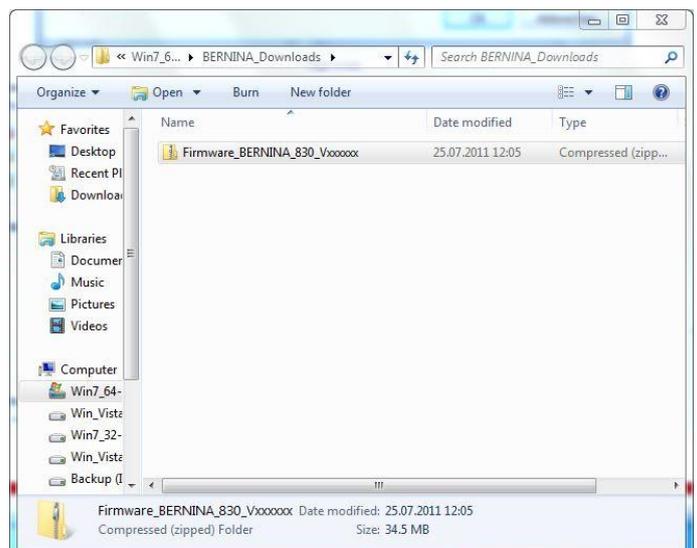


2.4. The file will be saved to the selected directory to your Computer. (As example C:\BERNINA\_Downloads). ***(The time for downloading the file is dependent on the band width of your Internet connection).***

2.5. Click on the  button.



2.6. Opening the folder:  
„Firmware\_BERNINA\_xxx\_Vxxxxxx.zip“.<sup>1</sup>

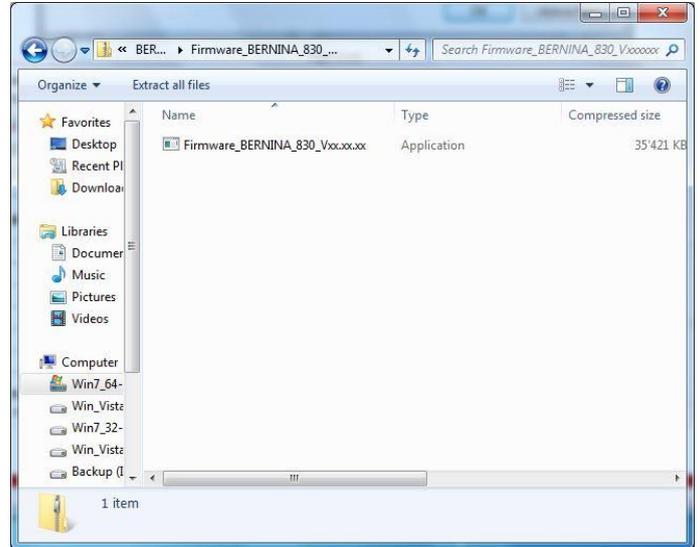


The „x“ is standing for a number, the visible numbers show you the firmware versions

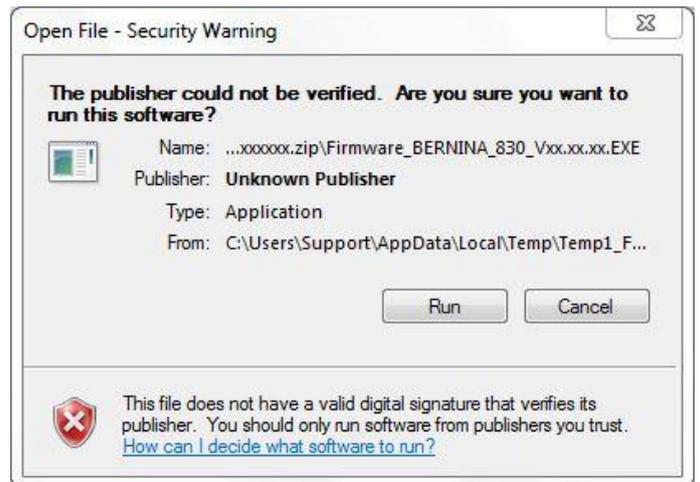
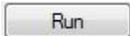
### Step 3: Extract the firmware files

3.1. Plug on the Computer an empty USB-Memory Stick (min. 256 MB / FAT32 formatted) in one of the free and available USB-Ports.

3.2. To extract the files, click on the file:  
 „Firmware\_BERNINA\_xxx\_Vxxxxxx.exe“<sup>1</sup>.



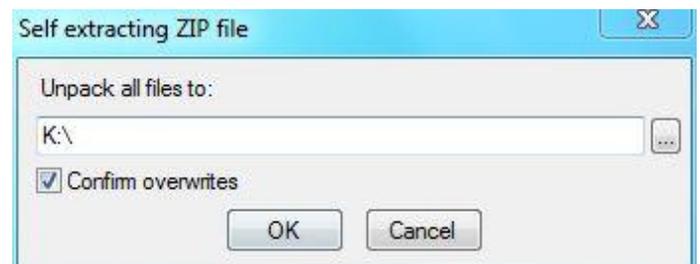
3.3. Confirm the security information with

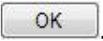


3.4. The self-extracting Zip file starts the following dialogue:

Select by clicking on the button  the drive, where the empty USB-Memory stick is connected. (As example drive K :).

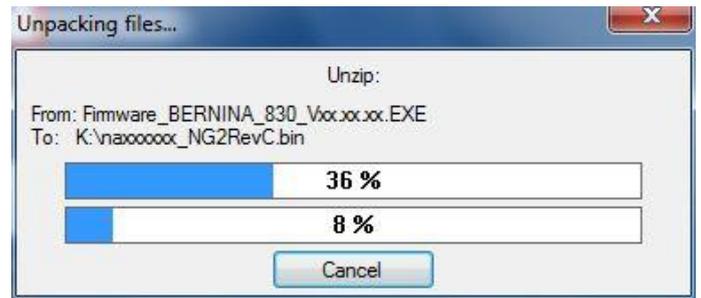
**Attention: The firmware files may NOT be unpacked in one on the USB-Memory stick available subdirectory.**



3.5. Confirm the selection with .

<sup>1</sup> The „x“ is standing for a number, the visible numbers show the firmware versions

3.6. The files become unpacked to the selected USB-Memory Stick.



### Step 4: Checking the files

4.1. After the extraction, you will find the following four (3) files, in the root of your USB-Memory Stick:

- vaxxxxxx\_xxxxxx\_Berninaxxx.bin<sup>1</sup> (Application)
- vdxxxxxx\_xxxxxx\_Berninaxxx.bin<sup>1</sup> (Data)
- xbxxxxxx\_Universalbootloader.bin<sup>1</sup> (Bootloader)

(On your files, instead of the letter x will be shown numbers).

### Step 5: Update firmware of the BERNINA

5.1. The files are now ready to use for updating your BERNINA sewing computer.

5.2. Connect the USB-Memory Stick to your sewing computer

5.3. Go to the "Setup-Program" of your BERNINA Sewing computer.



5.4. Touch the following 3 buttons on the display



5.5. Touch now the Update button on the left hand side



5.6. The Update procedure will be started and takes some minutes.

**Please do not switch off the machine or disconnect the USB-Memory Stick while the update is running.**

### Step 6: Checking the firmware version:



6.1. Go to the "Setup-Program" of your BERNINA Sewing computer.



The „x“ is standing for a number, the visible numbers show you the firmware versions

6.2. Touch the following 3 buttons on the display

6.3. On the information screen of your BERNINA you will see the following information:

Version software: Vxx.xx.xx <sup>1</sup>  
Version data: Vxx.xx.xx <sup>1</sup>  
Version bootloader: Vxx.xx.xx <sup>1</sup>  
EMB Appl. version: Vxx.xx.xx <sup>1</sup>

**(EMB Appl version only shown if the embroidery module is attached).**

