BOSCH

Technical Service Bulletin

Touch Screen Firmware Update

Models: Bosch SSB800 / 1000 / 1000TL

Please read these directions thoroughly prior to commencing the software update process.

If you have any questions regarding the information provided in this document, please contact the Bosch Technical Support Department by phone at 1-800-283-3787, or via email at boiler.techsupport@us.bosch.com

Before updating the 900TS00 touchscreen, it must be reprogrammed back to factory settings using this guide. This allows for bad blocks to be detected and not used in the future, which will prevent future errors.

To access the touchscreen, please turn off the power switch on the front of the boiler, open the front of the boiler. On the back of the door will be a metal panel which covers the back of the touchscreen (fig.1). To remove this panel, unscrew the four screws in each corner of the panel.
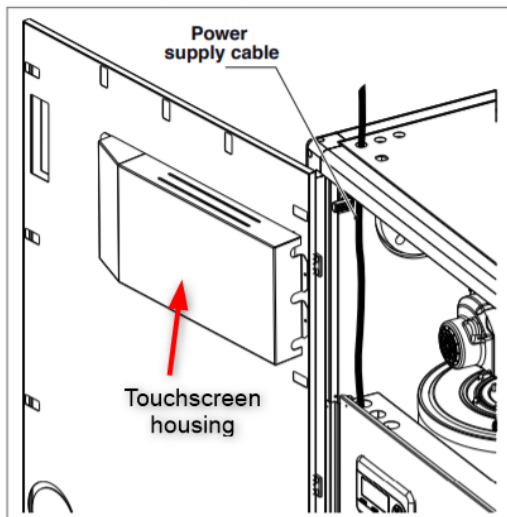

Figure 1

Check the touchscreen version to determine which version of the firmware package you will need. On the back of the touchscreen next to Part No. will be the version of the touchscreen (fig. 2). Make sure that you are using the proper firmware recovery package as using an incorrect version will lead to permanent damage.
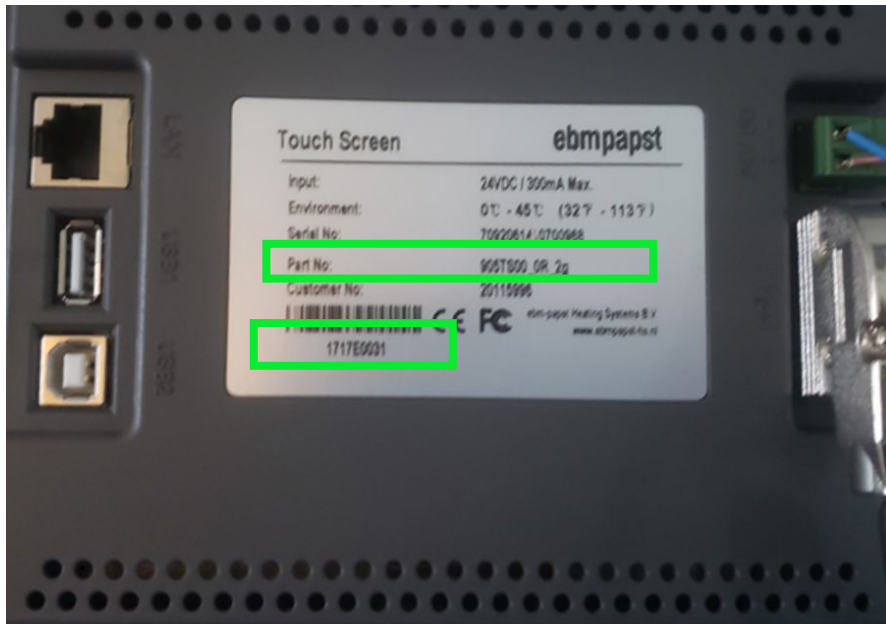
Figure 2

Important!

If you have a 900TS00_0R touchscreen and the number below the barcode is <u>less than **1816R0001**</u>, you must use the *900TS00_Firmware_Recovery* package. The USB included will already be set up to begin the firmware recovery for this version.

If you have a 900TS00_0R touchscreen and the number below the barcode is <u>**1816R0001** or greater</u>, you must use the *900TS02_Firmware_Recovery* package. Below are instructions for how to set up the USB drive to perform the firmware recovery for this version.

To perform this update, you will need a USB drive that can be formatted as FAT32 and has a capacity of 16 GB or less. This USB drive cannot have any other files saved on it.

Setting up the USB:

1. Insert the USB drive into a USB port on a computer.
2. Find the USB drive from This PC in the file explorer.
3. Check the format of the USB by right clicking on the USB drive and selecting format.
4. If FAT 32 is already selected, you can proceed to step 5. If not, under file system, open the drop-down menu and choose FAT32, then click start at the bottom to reformat your USB drive.
5. From the [downloads page of the Bosch Climate website](#), download the firmware recovery file appropriate for your touch screen. (See instructions above to determine which firmware version you will need.)
6. At this time, also download the 900TS Project Program from the same location.

7. Extract the files from the zipped firmware recovery file. Inside you will find a folder labeled tpcbackup. Move this folder onto your USB drive.
8. Move the zipped project program file into the same location on your USB drive. When you are finished it will look like the picture below. (fig. 3)

Figure 3

9. Now you can eject the USB. First close any window containing the contents of the USB drive. Then look in the toolbar in the bottom right of the screen for this icon.

10. Right click this icon and select the option to eject. Wait until you see the message (fig. 4) telling you it is safe to remove the USB before disconnecting the USB drive from the computer.
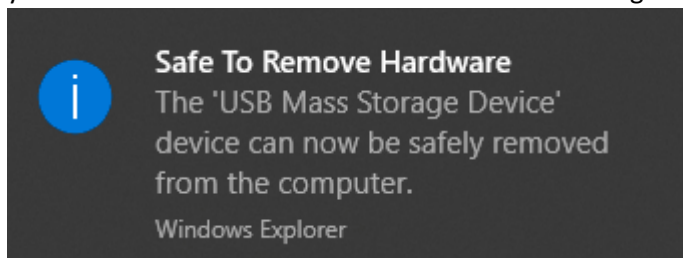

Figure 4

Firmware Programming

1. With the touchscreen powered off, insert the USB flash drive into the USB 1 port (fig. 5).
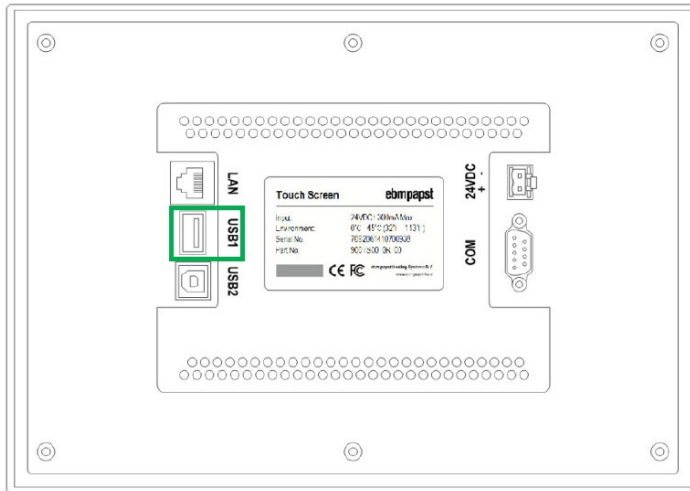

Figure 5

2. Press firmly on the touch screen with your finger. While holding down on the touch screen, power the touchscreen on using the switch to the left of the screen.

3. When the start-up screen appears, remove your finger from the touch screen.

4. If Chinese characters appear on the bottom of the screen, proceed to step 5, otherwise power off the touchscreen and repeat steps 2 and 3, making sure to remove your finger as soon as the touchscreen turns on.

5. The Firmware Recovery Application should open after a few seconds (fig. 6), touch anywhere on the screen to proceed with firmware recovery or power unit off to cancel the process.

Figure 6

Note: At the bottom of the screen you may see a message stating that this recovery is intended for the 900TS02 (fig. 7). <u>This is okay as long as the top of the screen and all other text says 900TS00</u>.

Figure 7

6. After continuing, a progress bar will appear on the screen. (fig. 8). If at any time the progress bar turns red, then the Firmware recovery has failed, remove power and repeat this process.

Figure 8

7. After the progress bar completes and this screen is displayed (fig. 9), the Firmware Recovery has finished. At this step it will beep continuously. Press anywhere on the touchscreen to reboot the touchscreen and finish the process.

Figure 9

8. After the touchscreen has rebooted, another progress window will appear. (fig. 10) Once Chinese characters appear at the bottom of the progress window, the 900TS will beep again. Then you can power off the 900TS and remove the USB flash drive. The firmware recovery process is complete.

Figure 10

Note: At this point the touchscreen will boot with an entirely different operating system and will look different. This is normal and will be rectified during the Project Programming Procedure (next step).

Setting up the USB for the next step (Project Programming Procedure)

1. Insert the USB drive into a USB port on a computer.
2. Bring up the USB drive from This PC in the file explorer.
3. Open the USB drive and remove the file labeled tpcbackup. If you do not plan on reusing the USB to update another unit, this file can be deleted. Otherwise, this file should be saved either on the computer, or by compressing the file on the USB drive.
4. Next, extract the contents of the folder labeled 905TS00_2.j.05.zip by right clicking on the zip file and selecting extract here. This will create a folder labeled 905TS00_2.j.05
5. Open this folder to find a folder labeled tpcbackup and a file ulog.txt. Move these two files out of this folder and to the root directory of the USB, the first folder that opens when you open the USB drive.
6. Then, delete the now empty folder labeled 905TS00_2.j.05. This should leave you with these files in the root directory of the USB (fig.11) If any other unzipped files are in this directory, they must be removed before beginning the Project Programming Process.

Name	Date modified	Type	Size
905TS00_2.j.05.zip	6/30/2021 10:47 AM	zip Archive	2,648 KB
ulog.txt	3/23/2021 3:12 PM	Text Document	1 KB
tpcbackup	6/15/2021 1:48 PM	File folder	

Figure 11

7. Now you can eject the USB. First close any window containing the contents of the USB drive. Then look in the toolbar in the bottom right of the screen for this icon.

8. Right click this icon and select the option to eject. Wait until you see the message (fig. 12) telling you it is safe to remove the USB before disconnecting the USB drive from the computer.
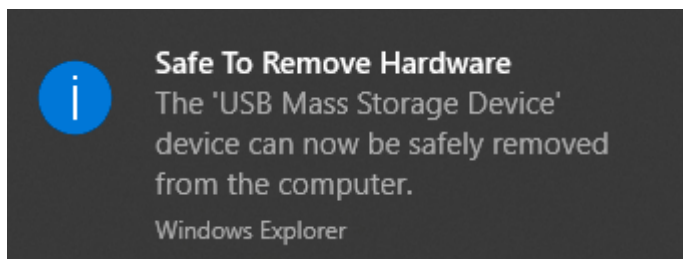
Safe To Remove Hardware
The 'USB Mass Storage Device' device can now be safely removed from the computer.
Windows Explorer

Figure 12

Project Programming Procedure

1. With touchscreen power off, insert the USB flash drive into the USB 1 port. (fig. 13)
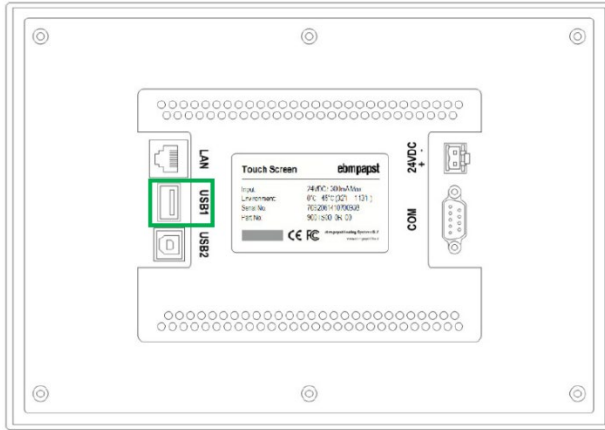

Figure 13

2. Power on the touchscreen using the switch to the left of the screen, after a few seconds a window with Chinese characters will appear. (fig. 14)
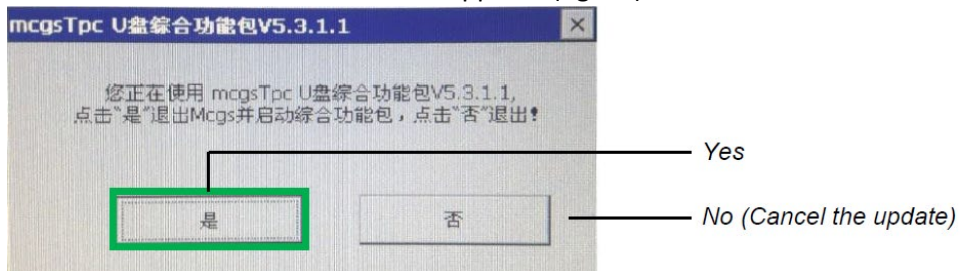

Figure 14

3. Tap the left box, which will show the Chinese character '是' to begin the process, or tap the right box to cancel the update.

4. In the next window (fig.15), tap the middle button, which has the Chinese characters, '用 户 工 程 更 新'.
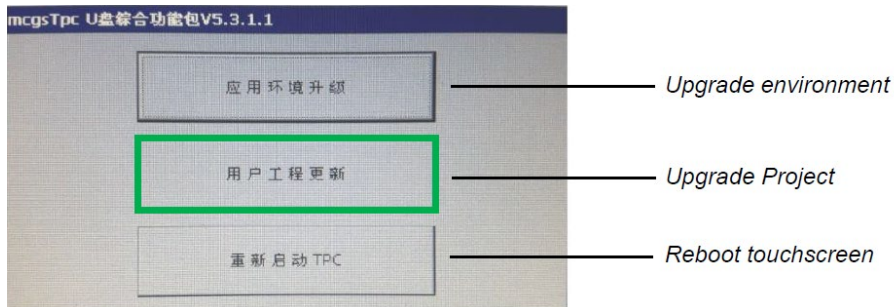

Figure 15

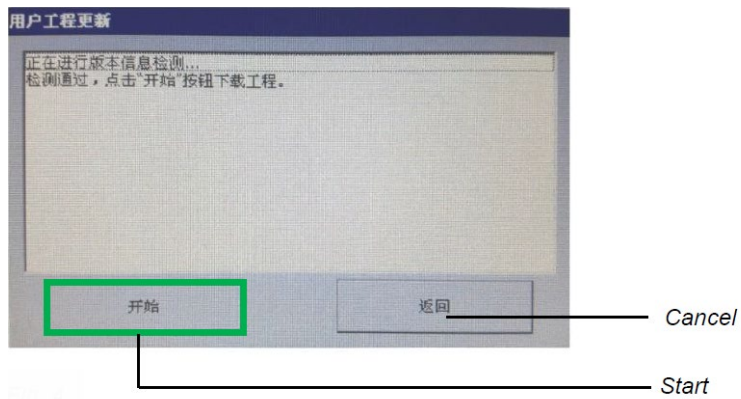5. In the next window,(fig. 16) press the left button "开始" to start.

Figure 16

6. In the next window (fig.17), press the button in the upper left which reads '开始下载'to begin the firmware update.
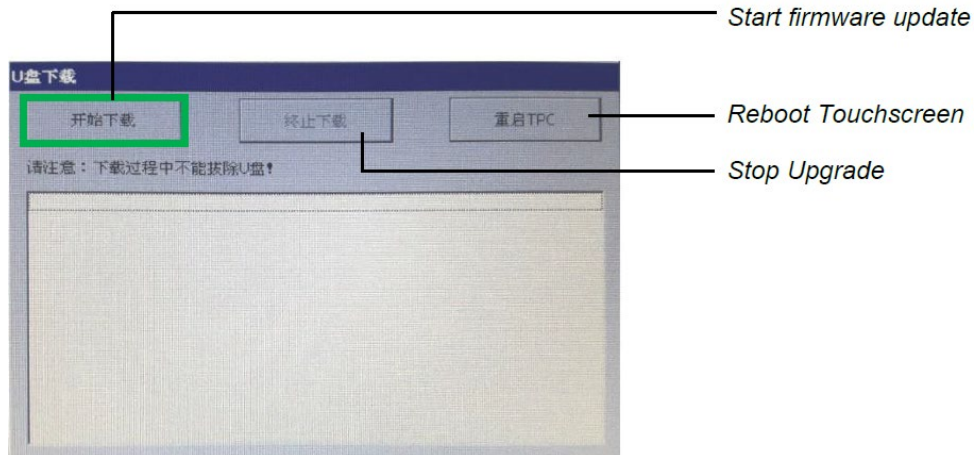

Figure 17

7. After the update finishes, the touchscreen will reboot. During this reboot make sure to remove the USB drive from the touchscreen or the update process will restart when touchscreen powers on again. If this happens the window from step 2 will reappear, hit the right button to cancel the update.
8. Process Complete. You may return the boiler to service.