

# FIRMWARE UPDATE GUIDE

REV 08

This guide describes how-to update the firmware of your Thermocam on a PC running Windows XP or newer. If you use Linux, Mac OSX or in case the updater does not work on your PC, you can also use the Teensy Loader from PJRC: <https://www.pjrc.com/teensy/loader.html>.

1. Download and extract the firmware updater from this link: <https://github.com/maxritter/DIY-Thermocam/tree/master/Software/Firmware%20Updater>
2. Download and extract the newest version of the firmware from here: [https://github.com/maxritter/diythermocam\\_firmware/releases](https://github.com/maxritter/diythermocam_firmware/releases)
3. Download and install the Windows serial driver: <https://github.com/maxritter/DIY-Thermocam/raw/master/Software/DIY-Thermocam%20Driver.zip>
4. Connect the DIY-Thermocam to your computer with the enclosed USB cable and turn it on. The USB switch on the right side must be in the upper position. If this is the first time you connect it to your PC, wait for the driver installation to be completed.
5. The updater requires Microsoft .NET Framework 4.0 or greater. If it is not already installed on your PC, please download and install it from here: <https://www.microsoft.com/en-us/download/details.aspx?id=17851>
6. Run the "Updater.exe" from the extracted firmware updater archive. The updater needs internet access to download the available firmware versions from the server, but it will also work without.
7. Click "Load Hex File" and select the firmware file you want to flash. The file "Firmware\_V1.hex" is for the DIY-Thermocam V1, the file "Firmware\_V2.hex" for the DIY-Thermocam V2.
8. Press the "Flash" button and confirm the prompt with "Yes". Make sure the device is still turned on and connected to the PC.
9. Confirm the next prompt with "OK". The firmware flash procedure should start automatically.
10. During the update, do not touch the USB cable, close the updater or turn the device off!
11. Once the update is completed, the DIY-Thermocam will do a reboot with the new firmware.
12. Enjoy the new features of the updated firmware and always report bugs and feature requests.

If you fail to update the device with the official updater from above, download the Teensy Loader for Windows from here: <https://github.com/maxritter/DIY-Thermocam/tree/master/Software/Firmware%20Updater/Teensy%20Loader>.

Load the hex file with "teensy.exe", then launch "teensy\_reboot.exe" while the Thermocam is connected to the PC and turned on, the flash procedure should start. In case there is an error "File too big", upload "FileTooBig.hex" to the Teensy first and then the newest version of the firmware in the next step.