FIRMWARE UPDATE GUIDE

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 (Replaces steps 4 to 11).

1. Download and extract the firmware updater, the newest firmware and the device driver from the corresponding folder inside the Github repo: https://github.com/maxritter/DIY-Thermocam/

2. Connect the DIY-Thermocam to your computer with the enclosed USB cable and turn it on. If this is the first time you connect it to your PC, wait for the driver installation to be completed.

3. The DIY-Thermocam should appear as USB serial device in the Windows Device Manager. If this is not the case, install the device driver you downloaded earlier and try to connect it again.

4. You need to change the comport of the DIY-Thermocam USB serial device to "COM10". Follow this tutorial to do so: http://plugable.com/2011/07/04/how-to-change-the-com-port-for-a-usb-serial-adapter-on-windows-7/

5. After you changed the comport, turn the device off and on again.

6. 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

7. 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 works without.

8. Make sure the device is turned on, in live mode and connected to the PC. Then press the button „Connect" inside the firmware updater application and wait for the device to be recognized.

9. 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.

10. Press the "Flash" button and confirm the prompt with "Yes".

11. Confirm the next prompt with "OK". The firmware flash procedure should start automatically.

12. During the update, do not touch the USB cable, close the updater or turn the device off!

13. Once the update is completed, the DIY-Thermocam will do a reboot with the new firmware.

14. Enjoy the new features of the updated firmware and always report bugs and feature requests.

15. In the unlikely case that the update failed and the device does not start any more:
    a. Load the firmware file again and start the flash procedure, the status should display "Waiting for device..."
    b. Short the pins P & G on the Teensy for one second (https://github.com/maxritter/DIY-Thermocam/raw/master/Images/Website/TeensyProgram.png) or the PROGRAM jumper