

This guide will show you how to flash your DIKTAAT on macOS or Linux without using the [web app](#).

Thank you Emmanuel G. and Tom. B. for taking your time and helping me out here, I owe ya!

If you're still having issues, please get in touch: mzourack@gmail.com

– Matěj Mžourek

macOS

1. **Install avrdude:** Open Terminal ( + Space → type “Terminal”) and run the command `brew install avrdude`
2. **Prepare the firmware:** Place your .hex file (e.g. *DIKTAAT_FW_1V1.hex*) somewhere easy to find, like your Downloads folder. The firmware file can be downloaded [here](#).
3. **Find the device port:** Plug in your DIKTAAT, then run `ls /dev/cu.*` in Terminal before and after plugging it in; the new line that appears (e.g. `/dev/cu.usbserial-110`) is your device port.
4. **Open Terminal in the folder with your .hex file:** In Finder, go to the folder that contains the .hex file, right-click (or Control-click) inside the folder, and choose **Services** → **New Terminal at Folder** (or **Open in Terminal** on newer macOS versions). This opens Terminal already set to that location.
5. **Flash the firmware:** Run `avrdude -v -p m328p -c arduino -P /dev/cu.usbserial-110 -U flash:w:DIKTAAT_FW_1V1.hex:i` replacing the port and filename with your own.
6. **Factory reset:** After the flashing procedure is done, unplug DIKTAAT and hold RESET during the next power up.

Linux

1. **Install Arduino CLI:** Open your terminal and run `sudo apt install arduino-cli` (or follow instructions at <https://arduino.github.io/arduino-cli> for your distro).
2. **Prepare the firmware:** Download the .hex file (e.g. DIKTAAT_FW_1V1.hex — this name is just an example) and save it somewhere easy to find, such as your Downloads folder. The firmware file can be downloaded [here](#).
3. **Connect your DIKTAAT:** Plug it into your computer using a USB cable.
4. **Find the device port:** Run `arduino-cli board list` to see all connected boards and their ports (you should see something like `/dev/ttyUSB0` or `/dev/ttyACM0`).
5. **Check port permissions:** Run `ls -l /dev/ttyUSB0` (replace with your actual port). Note the group listed (commonly `dialout` or `uucp`).
6. **Make sure your user is in that group:** Run `groups` to see which `groups` your user belongs to. If the group from step 5 isn't listed, add yourself with:
`sudo usermod -aG <groupname> <username>`
(replace `<groupname>` and `<username>` accordingly), then log out and back in.
7. **Open Terminal in the folder with your .hex file:** In your file manager, open the folder containing the .hex file, right-click and select **Open in Terminal** to start Terminal in that location.
8. **Upload the firmware:** Run
`arduino-cli upload -v -b arduino:avr:nano -p /dev/ttyUSB0 -i DIKTAAT_FW_1V1.hex`
Replace `/dev/ttyUSB0` with your actual port and `DIKTAAT_FW_1V1.hex` with your actual file name.
9. **Factory reset:** After the flashing procedure is done, unplug DIKTAAT and hold RESET during the next power up.