OpenSprinkler Firmware Updater Instructions

Preparation

To start, you need a regular-size A male to B male USB cable. Most printers use this type of cable. See picture on the right.

Please run the osFWUpdater program in the subfolder that corresponds to your operating system:

- **On Windows: osFWUpdater.exe in the Windows subfolder.**
- **On Mac: osFWUpdater in the MacOSX subfolder.**
    - Note: if you encounter error **Application is damaged and can't be opened**, you need to temporarily change the settings in **Security and Privacy** (under **System Preferences**) to allow applications downloaded from anywhere. For details, check [this webpage](#).
- **On Linux: osFWUpdater_x64 in the Linux subfolder.**
    - Note: you need to either run the program in **sudo**, or add udev rules for the corresponding USB devices. An example udev rules is provided. If the pre-compiled executable doesn't run, you can re-build the program in the **Source** subfolder, by running **qmake**, then **make**.

Driver

- **Linux does not need driver for any version of OpenSprinkler.**
- **On Mac, you need to install driver for**
    - OpenSprinkler 2.2: CH341 driver → http://raysfiles.com/drivers/ch341ser_mac.zip
    - OpenSprinkler 2.1, 2.1: driver is not needed.
- **On Windows, you need to install driver for**
    - OpenSprinkler 2.2: CH341 driver → http://raysfiles.com/drivers/ch341ser.exe
      (Only needed for Windows XP; newer Windows OS do not need driver for CH341).
    - OpenSprinkler 2.1: USBasp driver → http://www.fischl.de/usbasp/
      (Windows 8 and 8.1 require disabling driver signature enforcement).
    - OpenSprinkler 2.0: USBtiny driver → https://learn.adafruit.com/usbtinyisp/drivers

Firmware Update

1. **If you have OpenSprinkler 2.1**: please enter bootloader first → turn off controller, press and hold pushbutton B2 while plugging in the USB cable; then **release the button within 1-2 seconds** after plugging in the cable. The screen should remain off. If the screen lights up, please repeat the procedure.

   All other versions of OpenSprinkler: just plug in the USB cable.

2. Run the osFWUpdater program. Click on **Download Firmware** to obtain the latest firmware.

3. Next, click on **Detect Device**. The software will automatically detect your OpenSprinkler version. If you encounter an error, check if the driver is installed, and if the USB cable is plugged in correctly.

4. **If you have OpenSprinkler 2.1**: please re-enter bootloader, then click on **Upload**.

   All other versions of OpenSprinkler: just click on **Upload**.

   Instead of auto-detect, you can also manually select a device version and firmware version from the dropdown lists.