

## UHF Firmware Upgrade Guide

Software Release 17.12

Zurich  
Instruments

### Software Release 17.12 for the UHF Lock-in Amplifier

Zurich Instruments LabOne consists of both software that runs on your PC and software (firmware) that runs on the UHFLI Lock-in Amplifier itself. In order for the PC software to operate correctly it is necessary to update the UHFLI's firmware when installing LabOne. This step only has to be performed once. Starting with release 17.06, the firmware upgrade process has been integrated into the LabOne user interface. Alternatively, the firmware upgrade utility program can be used for this purpose. This guide explain how to upgrade the UHFLI's firmware using this program.

### Preparation

In order to upgrade the UHF's firmware, you must first take the following steps:

1. [Download](#) and install the appropriate version (32bit/64bit) of LabOne 17.12 on your PC. Administrator rights are necessary for the installation. Please see the UHF User Manual.
2. Either start the UHFLI Lock-in Amplifier or, if it was already running, switch off and restart the UHFLI Lock-in Amplifier.
3. Connect the UHF to the PC with the LabOne 17.12 installation via USB cable.

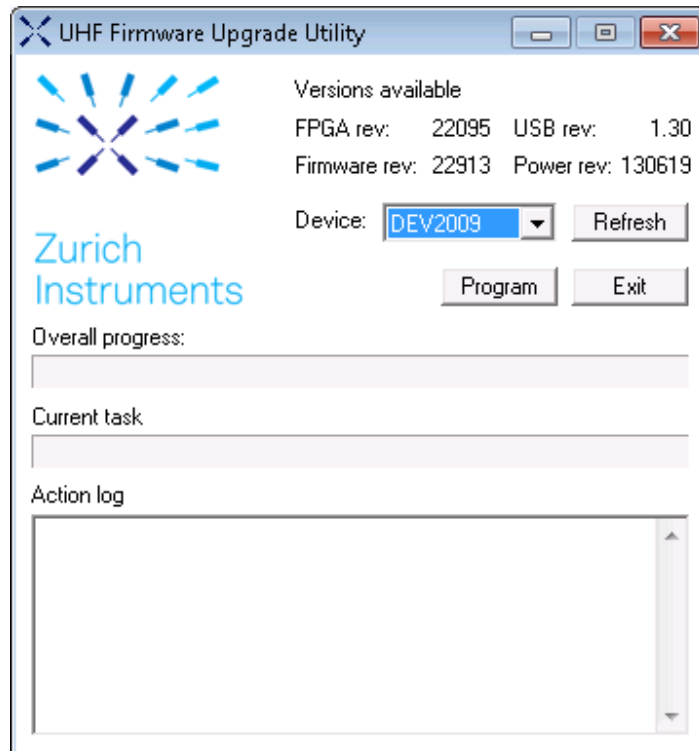
### Starting the UHF Firmware Upgrade Utility

The UHF Firmware Upgrade Utility is a program with graphical user interface used to perform a UHF firmware upgrade and is included in the 17.12 LabOne installation. Execute the file `uhf_flash.exe` in the LabOne installation folder (usually `C:\Program Files\Zurich Instruments\LabOne\DataServer\UHF_Flash`).

### Using the UHF Firmware Upgrade Utility

**Important:** Do not disconnect the USB cable to the UHFLI or power-cycle the UHFLI whilst performing any of the following steps.

Upon starting the Firmware Upgrade Utility it should detect the device that is connected to the PC via USB. The device ID is displayed next to "Device:".



**Figure 1: The UHF Firmware Upgrade Utility upon start-up.**

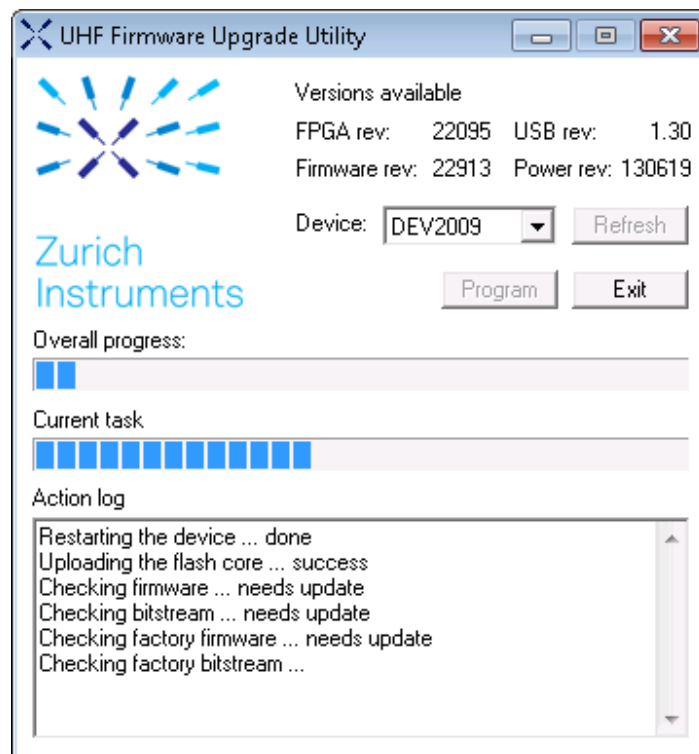
### **Select the device you would like to upgrade**

Select which device you would like to upgrade via the pull-down menu. If no device is listed, please try the following steps:

1. Ensure that the USB cable is properly connected.
2. Try power-cycling the device.
3. Click the “Refresh” button.

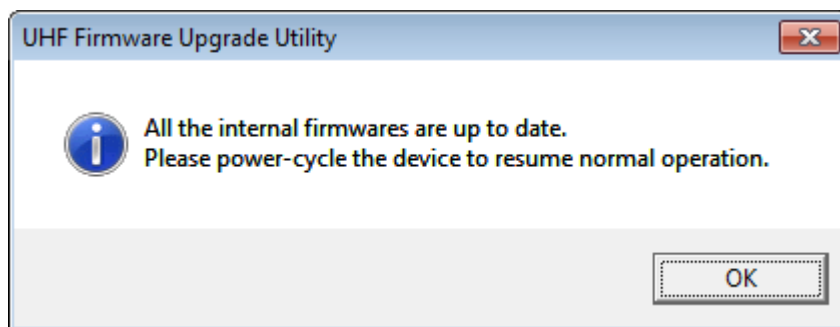
### **Program the firmware of the connected device**

Click the “Program” button to check the version of the current firmware and install the new firmware on the device.

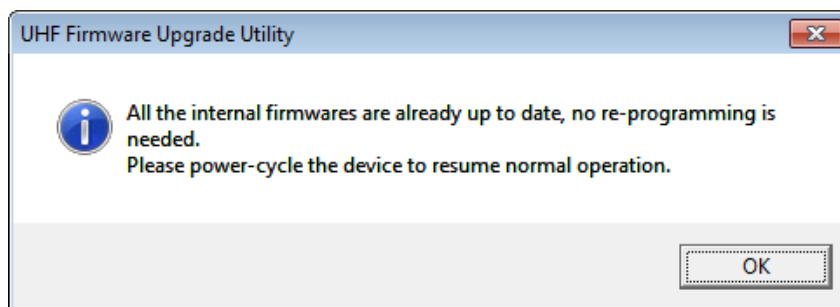


**Figure 2: Verifying the UHF firmware version.**

**Important:** After clicking “Program” and the update is finished it is always necessary to power-cycle the UHF to resume normal operation, even if the firmware was previously up-to-date.



**Figure 3: Pop-up box indicating successful installation of the new firmware.**



**Figure 6: Pop-up box indicating that the firmware was already up-to-date.**

### **Close the UHF Firmware Upgrade Utility**

Click the “Exit” button to close the UHF Firmware Upgrade Utility.

**Support:** If you encounter any issues whilst upgrading the UHFLI firmware, please contact:

[support@zhinst.com](mailto:support@zhinst.com).