

NUX NES-1 Firmware Update Guide (Version 3.0)

What's New in Firmware V3?

- **Upgraded Sounds** – Enhanced dynamic response and accuracy across multiple instrument sounds for a more expressive playing experience.
- **Optimized Reverb Effects** – Improved overall sound quality and spatial feel.
- **New Fingering Option: Flute** – Supports a wider range of playing styles.
- **Improved DAW Compatibility** – Resolved connection issues when using the NUX NES-1 with a DAW.

IMPORTANT

1. Please read and follow this guide step by step.
2. NUX NES-1 V3 firmware is only compatible with NUX NES-1 units running firmware version V2 or later.
3. NUX NES-1 units with V1 firmware are not supported. Please contact NUX support for upgrade options.
4. This guide and the accompanying screenshots were created using a macOS computer, but the steps are identical for Windows users.

Recipe

- ✓ A computer running Windows 7 or later, or macOS 10.10 or later.
- ✓ NUX NES-1 with a fully charged battery.
- ✓ A USB-C to USB-A data/sync cable (not included), or a USB-C to USB-C data/sync cable, depending on the available USB port on your computer.
- ✓ A little patience ¹

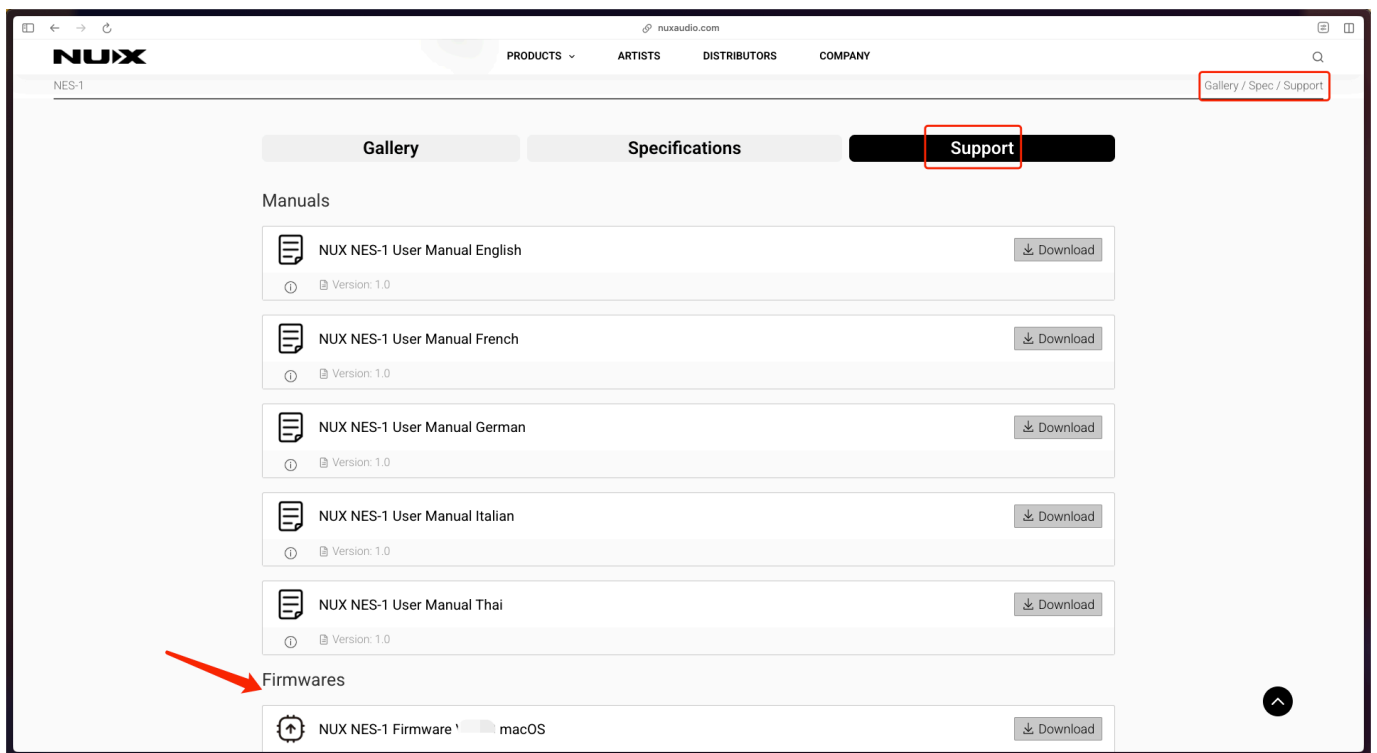
Steps Overview

1. Update MCU Firmware
2. Update DSP Firmware
3. Update Soundbank
4. Recalibrate the Pitch Roller

Step by step guide

Download the Firmware Update Kit & Get Ready for the Update

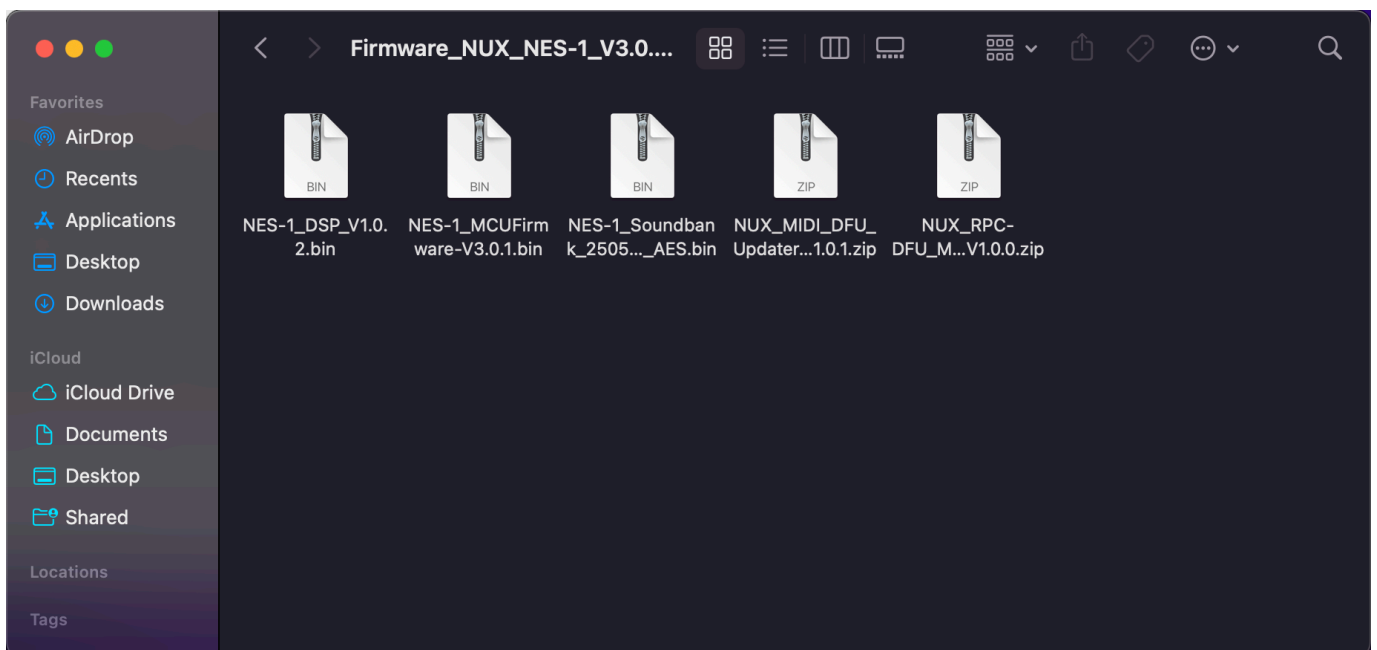
1. Visit the [NUX NES-1](#) webpage using your preferred web browser.
2. Scroll down slightly and click the **Gallery/Spec/Support** tab to navigate to the Support section of the product page. Then, click the **Support** tab to access manuals, firmware updates, firmware update guides.



3. Download the appropriate firmware update kit for your operating system—either Windows or Mac.

4. Unzip the downloaded file to reveal the following:

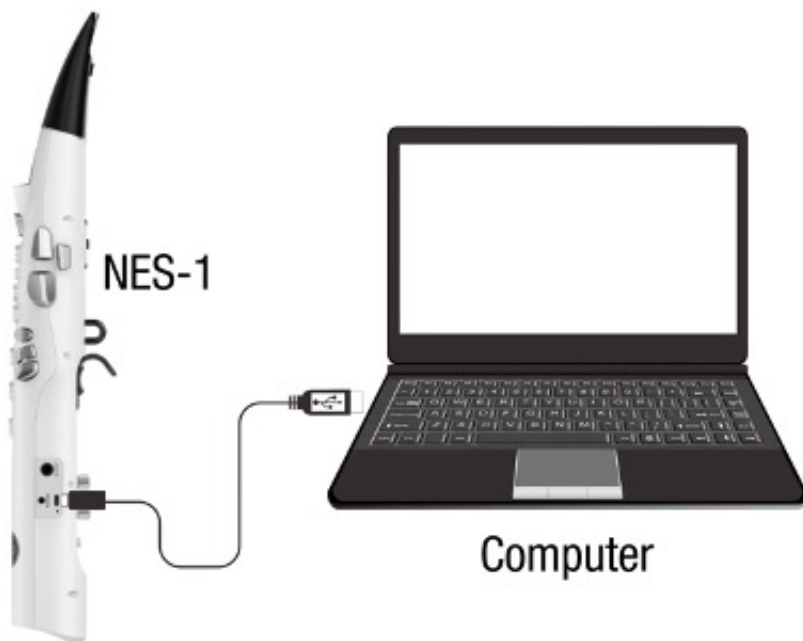
- **BIN files:** `NES-1_DSP_V1.0.2.bin`, `NES-1_MCUFirmware-V3.0.1.bin`, `NES-1_Soundbank_250515_4K_AES.bin`
- **ZIP files:** `NUX_MIDI_DFU_Updater_MacOS_V1.0.1.zip`, `NUX_RPC-DFU_MacOS_V1.0.0.zip`



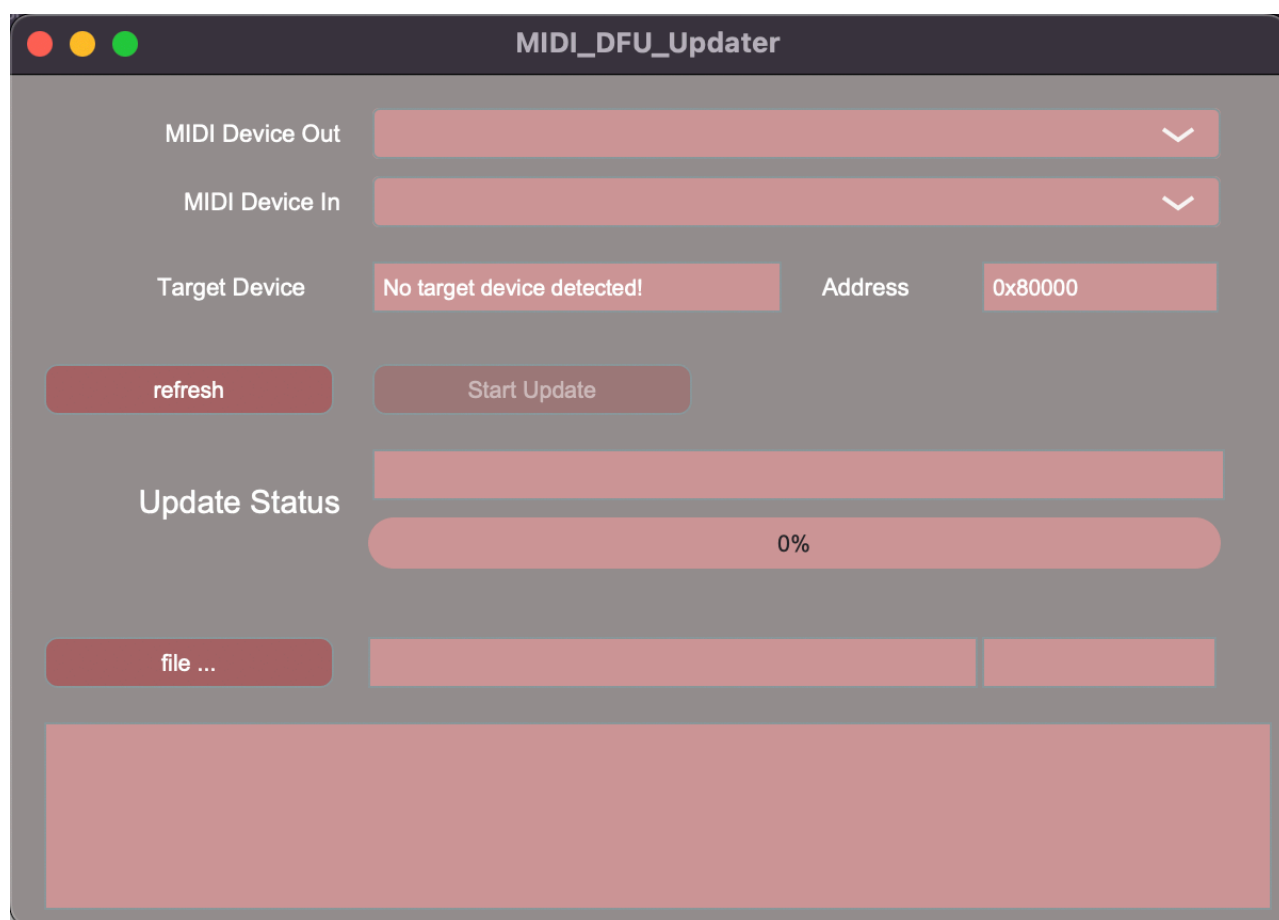
5. Unzip both ZIP files, open the resulting **.dmg** disk images (or **.exe** for Windows), and install the applications on your computer.

Connect NUX NES-1 to your computer & Activate the Device Firmware Update (DFU) mode.

1. Connect the NUX NES-1 to your computer using either a **USB-C to USB-A** or **USB-C to USB-C** data/sync cable (not included), depending on the USB port available on your computer.



2. Launch the **MIDI_DFU_Updater** application. You should see the following window:

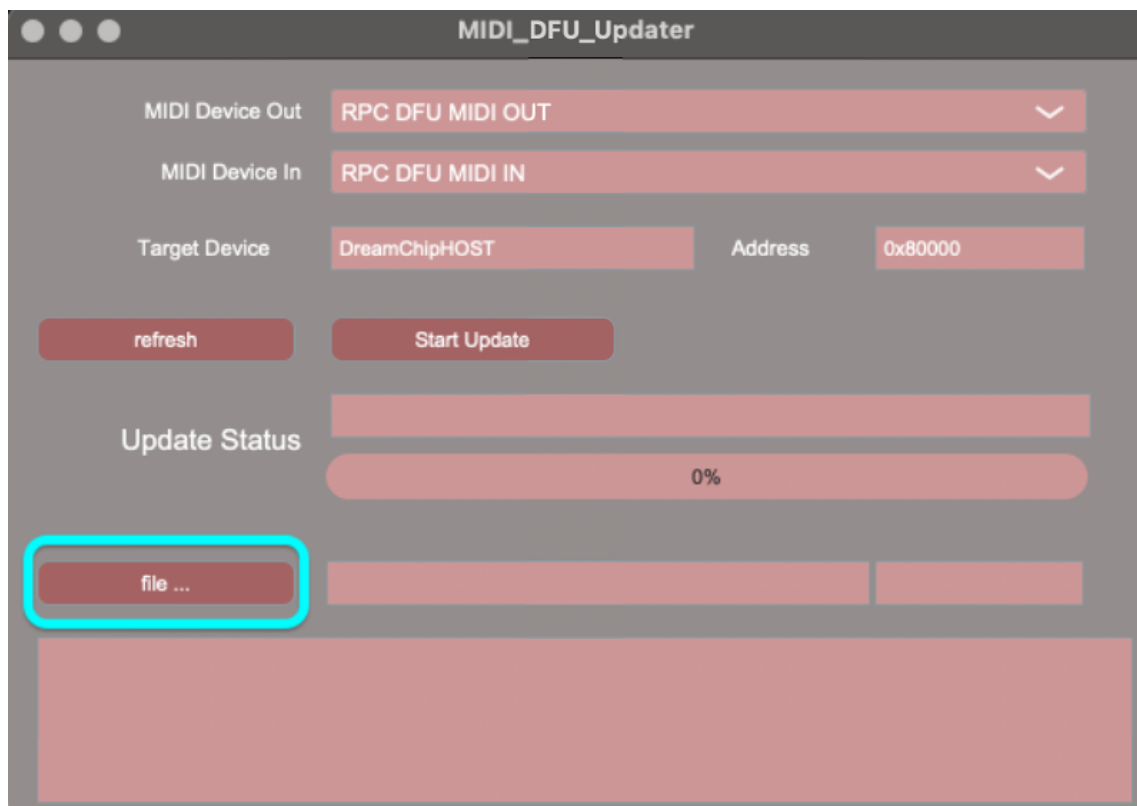


3. Press and hold the **"SELECT"** button while switching the **ON/OFF** button to the **ON** position to enter DFU mode. Continue holding **SELECT** until **"NES-1 Firmware Update"** appears on the screen, then release the button.

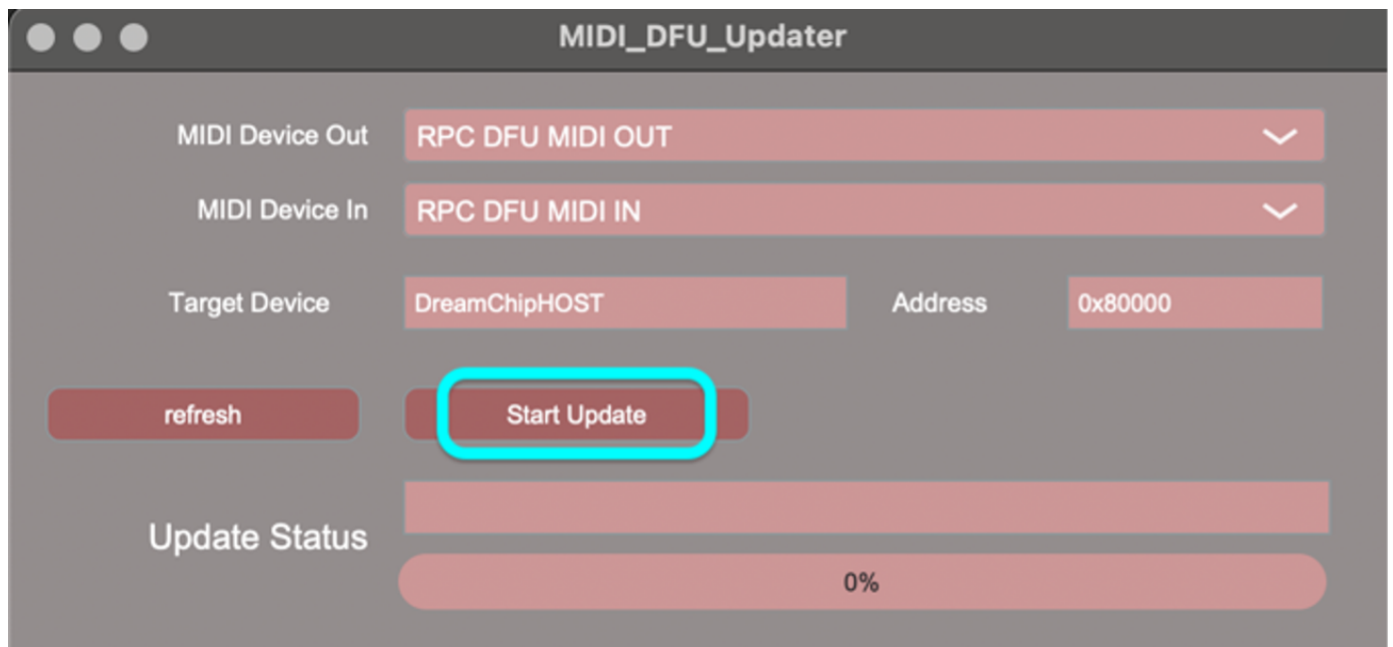


Update the MCU Firmware

1. Click **"File..."** and select the firmware file: `NES-1_MCUFirmware-V3.0.1.bin`.



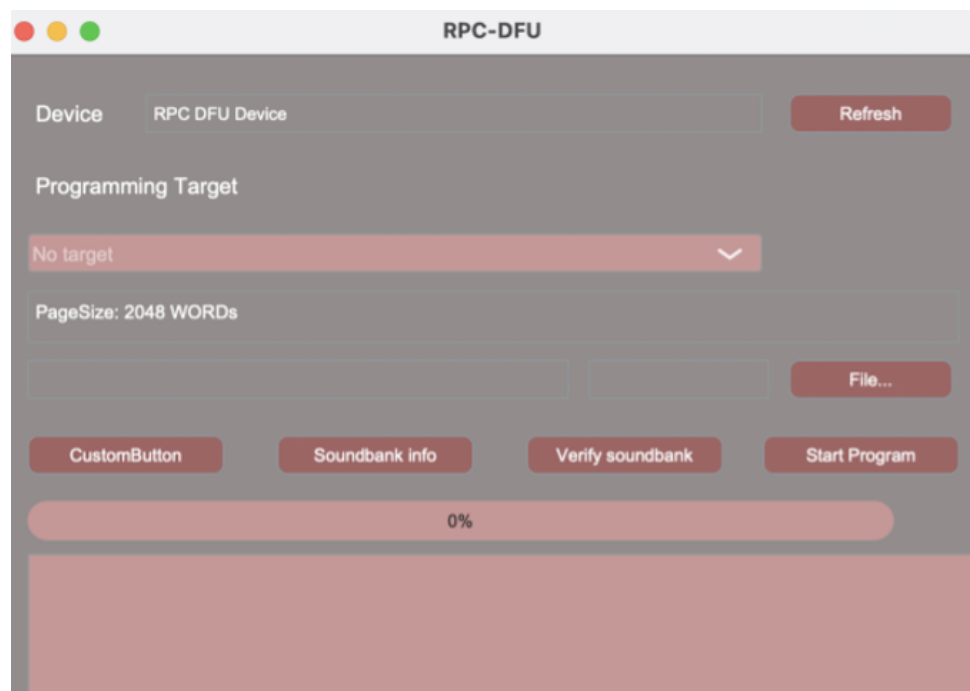
2. Click **"Start Update"** and wait until the status bar reaches 100%. **DO NOT** unplug the USB cable during the update process.



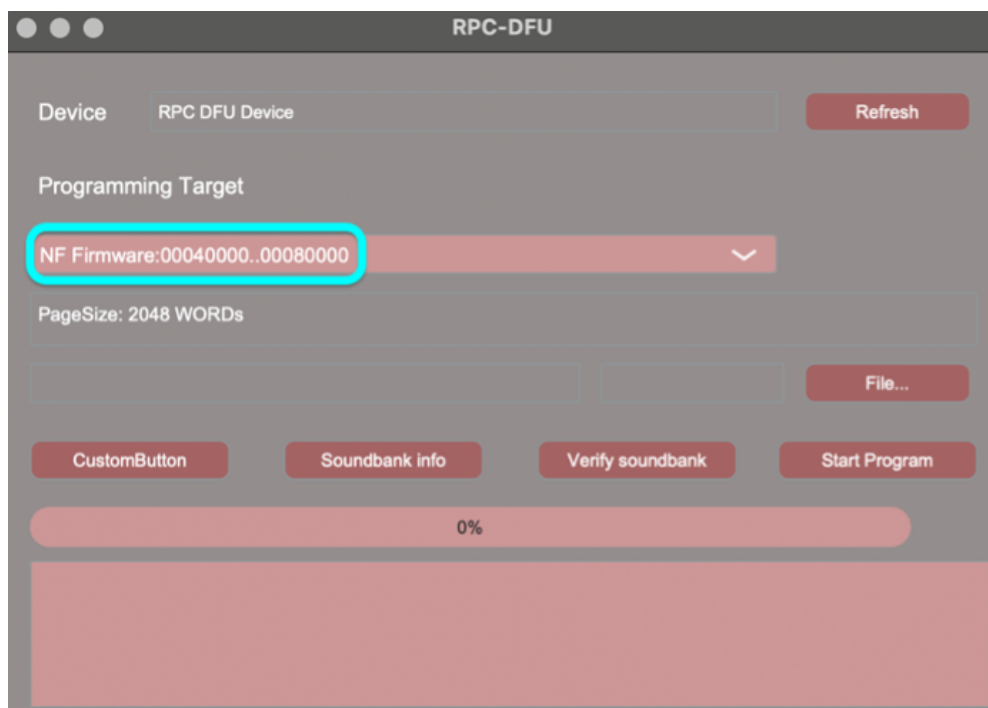
3. Close the **MIDI_DFU_Updater** once the MCU firmware update is complete.

Update the DSP Firmware

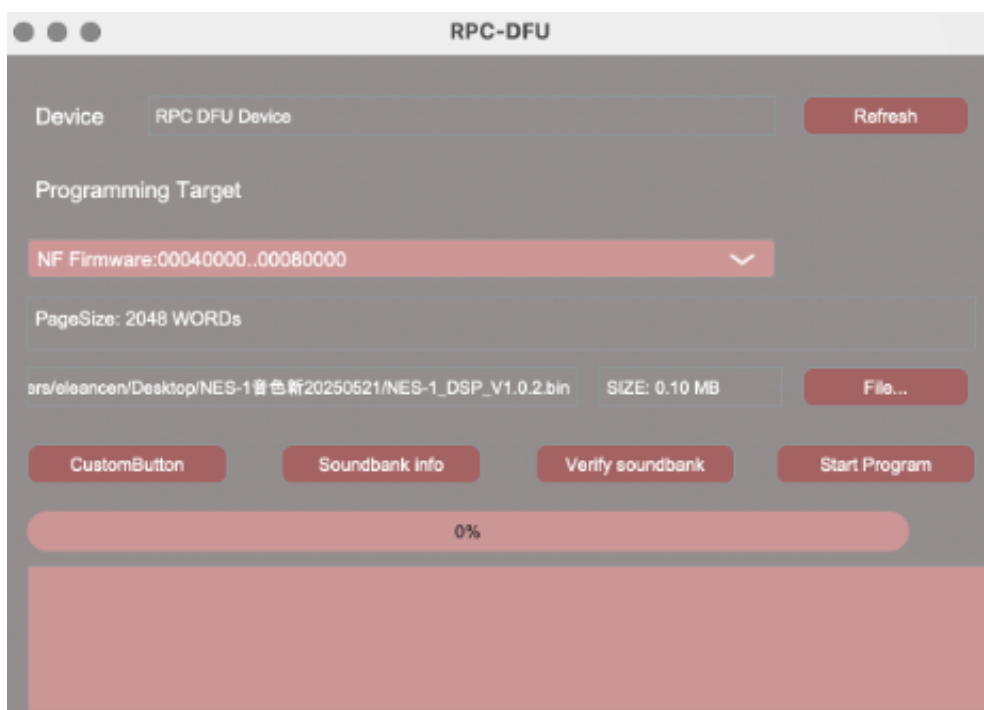
1. Launch the **RPC_DFU** application. You should see the following window:
 - The **Device** section will display **"RPC DFU Device"**, indicating that the NES-1 has been successfully connected.



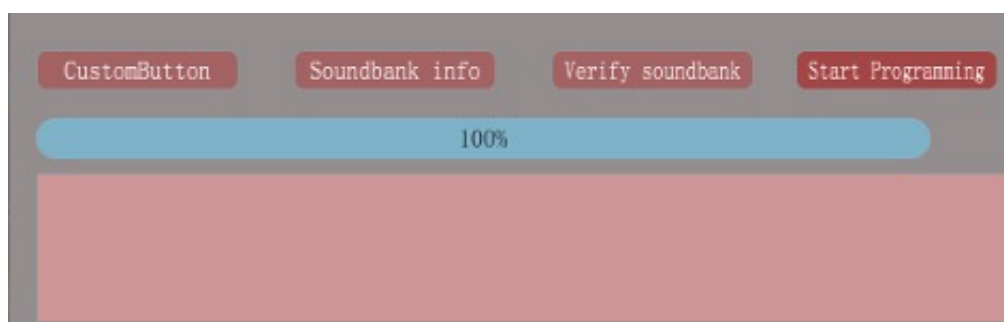
2. From the **"Programming Target"** dropdown menu, select **"NF Firmware"**.



3. Click **"File..."** and choose the firmware file: `NES-1_DSP_V1.0.2.bin`.



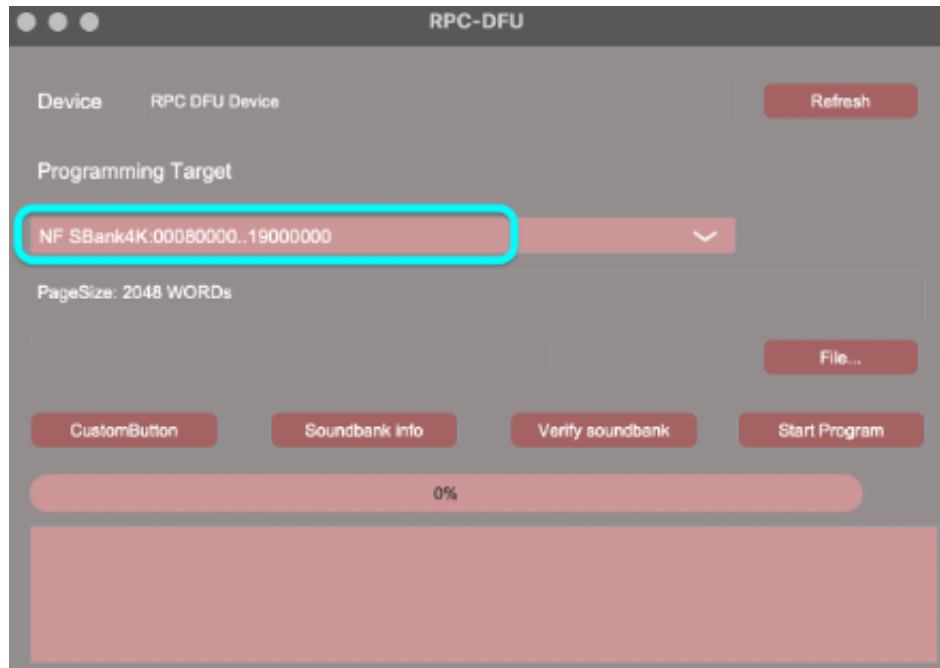
4. Click **"Start Programming"** and wait until the status bar reaches 100%. **DO NOT** unplug the USB cable during the process.



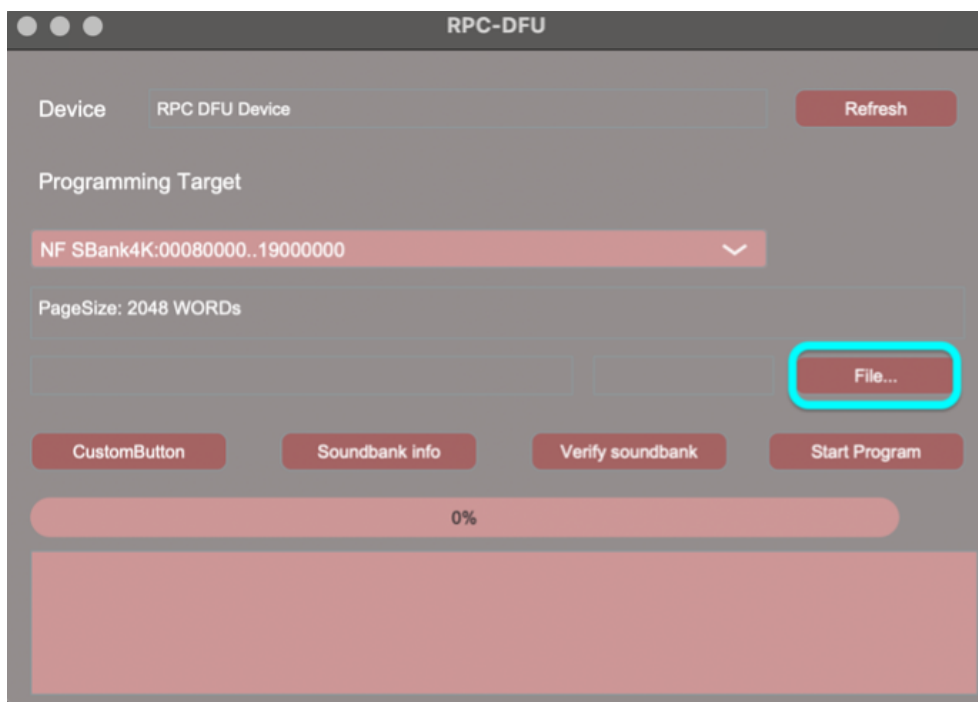
5. Leave the **RPC_DFU** application open, as it is also used to upgrade the soundbank—this is the final step of the firmware update.

Update the Soundbank

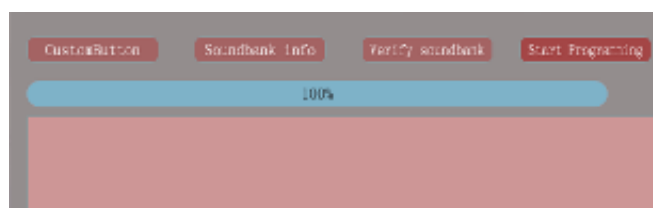
1. Under the **“Programming Target”** menu, select **“NF SBank4K”**.



2. Click **“File...”** and select the soundbank file: `NES-1_Soundbank_250515_4K_AES.bin`.



3. Click **“Start Programming”** and wait until the status bar reaches 100%. **DO NOT** unplug the USB cable during the process.



4. Now you can close the **RPC-DFU** application once the soundbank update is complete.

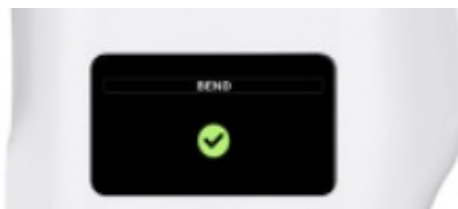
Finish Updating and Recalibrate the Pitch Roller

1. After updating to the latest firmware, you must calibrate the pitch bend to ensure accurate operation. Follow the steps below:
 - Power on the NES-1 as usual.
 - Press and hold the **Octave Up** button, then press the **BT** button to enter pitch bend calibration mode.



2. Calibration Steps:

1. Push the pitch bend all the way up and hold. Wait until the screen displays "✓".
2. Push the pitch bend all the way down and hold. Wait until the screen displays "✓".
3. The pitch bend will automatically return to the center. Wait for a third "✓" to appear.



4. When all three "✓" are displayed, calibration is complete. You may now power off the device.

3. Firmware Update Completion

You can turn off the device by switching the power button, Then, switch the power button to turn it on again. The firmware has now been updated successfully.

Last edited: Jul 23rd, 2025