

NUX NEK-100 Firmware Update Guide

Important Information

Please read the following information carefully before updating your NEK-100.

Firmware Package Contents

Firmware update packages may vary depending on the release. A package may contain anywhere from **one to five** `.bin` files.

You only need to update the `.bin` files included in your specific firmware package. **If a particular firmware file is not included in the package, simply skip that step.**

Update Tools

Firmware packages may include two different update tools:

Update Tool	Used For
<code>MIDI_DFU_Updater</code>	MCU Firmware
<code>RPC-DFU</code>	DSP Firmware, SoundBank, Demo Songs, and Rhythm Styles

Firmware File Naming

Firmware files use the following naming convention:

```
[Product Model]_[Firmware Type]_[Version].bin
```

For example:

- `NEK100_MCU_...bin` — MCU Firmware
- `NEK100_DSP_...bin` — DSP Firmware
- `NEK100_SBANK_...bin` — SoundBank
- `NEK100_DEMO_...bin` — Demo Songs
- `NEK100_STYLE_...bin` — Rhythm Styles

Recommended Update Order

If your firmware package contains multiple firmware files, update them in the following order:

1. **MCU Firmware** — `NEK100_MCU_...`
2. **DSP Firmware** — `NEK100_DSP_...`
3. **SoundBank** — `NEK100_SBANK_...`
4. **Demo Songs** — `NEK100_DEMO_...`
5. **Rhythm Styles** — `NEK100_STYLE_...`

 Skip any steps that do not apply to the files included in your firmware package.

Preparation

1. Download the Firmware Package

1. Visit the official [NUX NEK-100 product page](#).
2. Scroll down to the **Support** section.
3. Download the latest firmware update package `.zip` file for your operating system (**Windows or macOS**).
4. Extract the `.zip` file to a convenient location on your computer.

2. Check the Firmware Package

Open the extracted folder and check which `.bin` files and update tools are included.

Use the appropriate update tool based on the firmware files provided:

- If the package contains an **MCU firmware file**, use `MIDI_DFU_Updater`.
- For **DSP Firmware, SoundBank, Demo Songs, or Rhythm Styles**, use `RPC-DFU`.

Before you begin, identify all the firmware files included in the package and make sure you understand the update order described above.

Updating the MCU Firmware

Update Tool: `MIDI_DFU_Updater`

 Skip this section if your firmware package does not contain an MCU firmware file.

Step 1 — Connect the NEK-100

1. Connect the NEK-100 to your computer using a USB cable.
2. Connect the **DC 12V power adapter** to the NEK-100 to ensure a stable power supply during the update.

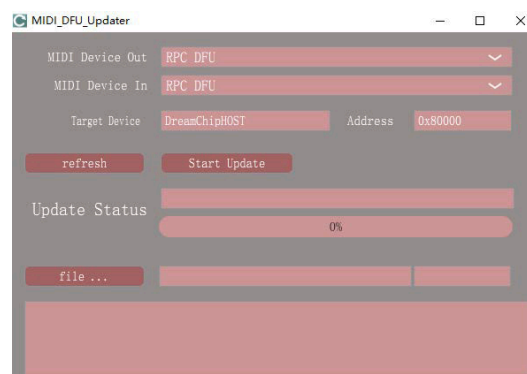
Step 2 — Enter Firmware Update Mode

1. Press and hold the `VOL+` and `VOL-` buttons simultaneously.
2. While holding both buttons, turn on the NEK-100.
3. Continue holding the buttons until the display shows:

`NEK-100 Firmware Update`

Step 3 — Launch the Update Tool

Launch `MIDI_DFU_Updater` on your computer.

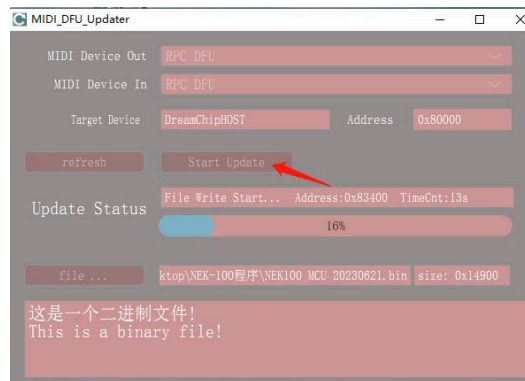


Step 4 — Select the MCU Firmware File

Click **File...** and select the MCU firmware **.bin** file.

You can also drag and drop the **.bin** file directly into the updater window.

Example: `NEK100_MCU_20230621.bin`



Step 5 — Start the Update

Click **Start Update** to begin the firmware update.

Wait until the progress bar reaches **100%** and the update is successfully completed.

⚠ Do not disconnect the USB cable or power supply while the update is in progress.

Updating the DSP, SoundBank, Demo Songs, and Rhythm Styles

Update Tool: **RPC-DFU**

Step 1 — Connect the NEK-100

1. Connect the NEK-100 to your computer using a USB cable.
2. Connect the **DC 12V power adapter** to ensure a stable power supply during the update.

Step 2 — Enter Firmware Update Mode

1. Press and hold the **VOL+** and **VOL-** buttons simultaneously.
2. While holding both buttons, turn on the NEK-100.
3. Continue holding the buttons until the display shows:

NEK-100 Firmware Update

Step 3 — Launch RPC-DFU

Launch **RPC-DFU** on your computer.

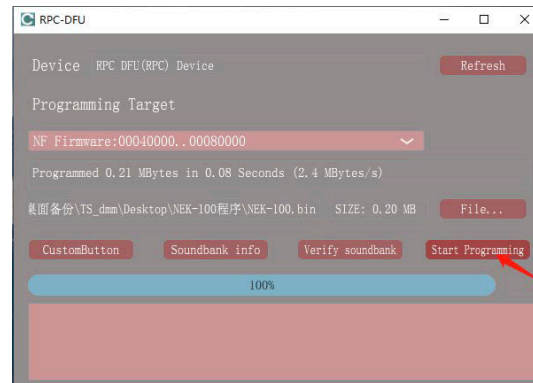
Step 4 — Select Target, Load File, and Program Each Component

Note: If your package contains multiple firmware files, **you must click **Start Programming** after selecting each file** before moving on to the next one. Skip any file types that are not included in your update package.

Follow the recommended sequence below to flash each available component:

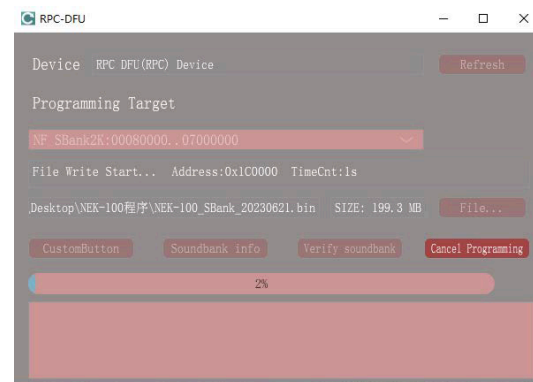
1. DSP Firmware (NEK100_DSP_...bin)

1. Set **Programming Target** to: NF Firmware: 00040000..00080000
2. Click **File...** and select the corresponding NEK100_DSP_...bin file.
3. Click **Start Programming** and wait until the progress bar reaches **100%** with a success message.



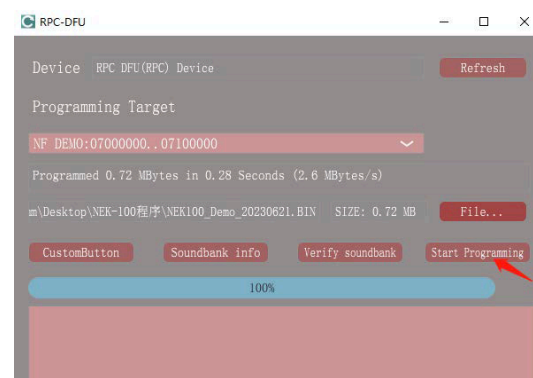
2. SoundBank (NEK100_SBANK_...bin)

1. Set **Programming Target** to: NF SBank4K: 00080000..0F000000
2. Click **File...** and select the corresponding NEK100_SBANK_...bin file.
3. Click **Start Programming** and wait until the progress bar reaches **100%** with a success message.



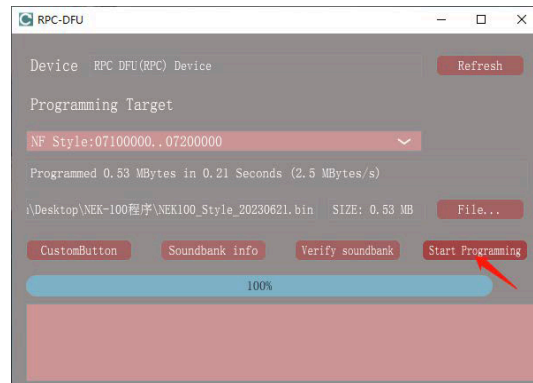
3. Demo Songs (NEK100_DEMO_...bin)

1. Set **Programming Target** to: NF DEMO: 0F000000..0F100000
2. Click **File...** and select the corresponding NEK100_DEMO_...bin file.
3. Click **Start Programming** and wait until the progress bar reaches **100%** with a success message.



4. Rhythm Styles (NEK100_STYLE_...bin)

1. Set **Programming Target** to: `NF Style: 0F100000..0F200000`
2. Click **File...** and select the corresponding `NEK100_STYLE_...bin` file.
3. Click **Start Programming** and wait until the progress bar reaches **100%** with a success message.



⚠ Important: Do Not Interrupt the Update

Never disconnect the USB cable or DC 12V power supply while a firmware update or programming operation is in progress.

Interrupting the update may cause the NEK-100 to malfunction and could require service to restore the instrument.

- If you have any problems, please feel free to contact us by email: info@cherubtechnology.com
- *Last edited on Sep 10th, 2026*