NEXO NeFu
Firmware Update Software

User Guide v1.6 for macOS and Windows
Thanks for downloading NEXO NeFu. This manual presents the app’s functionalities and how to use it step by step.

**PRESENTATION**

NEXO NeFu is the NEXO firmware update software for NEXO devices. It allows you to simultaneously update a set of amplifiers (NXAMPmk2 and NEXO NXAMP Powered TD-controllers).

Its main functionalities include:
- Automatically detecting devices through the network.
- Viewing and verifying all necessary information about the device updating.
- Loading a firmware file and viewing all versions of targeted systems.
- Performing an intelligent update of all device’s parts.
- Simultaneous update.
- Automatically notifying for new application and firmware version.
- Better error handling.
- Exporting a log of the update process.

Requires NXRM104, NXDT104 or NXAE104 remote control cards in the NXAMP for a full network update. NXAMP can also be updated through its serial port.

**Compatibility**

NEXO NeFu v1.6 is available starting from:
- macOS 10.12 Sierra,
- Windows 7.0.

**What’s New v1.6**

- Fixed display of “Download Failed” message on NXAMP after updating an extension card without needing to update NXAMP.
- Updating process now supports Dante firmware versions greater than or equal to v4.34.
NEXO NeFu supports both NXAMP and NXAMPmk2, the second generation of NEXO NXAMP Powered TD-controller.

Compatible NEXO Devices

**NXAMP**

NXAMP must be equipped with NXDT104 or NXAE104 extension card to proceed to a network update. It must be linked, directly or through other networking devices (switches, etc.), to a local network. The device(s) at the top of chain should be connected to the network via the Primary or Remote port of the extension card. The extension card will be updated along with the NXAMP.

In case of no extension card connected to the slot, the NXAMP can also be updated via the serial port. Simply connect a RS232 cable to the serial port of the NXAMP and link it to your computer.

**NXAMPmk2**

NXAMPmk2 is directly updated through the network thanks to its default extension card (NXRM104). NXAMPmk2 can also be equipped with NXDT104mk2 or NXAE104 extension card. In that case, the extension card will be updated along with the NXAMPmk2. Similar to NXAMP with card, NXAMPmk2 must be linked directly or through other networking devices to a local network.

The table below shows the different configurations that are supported by NEXO NeFu:

<table>
<thead>
<tr>
<th>Extension Card</th>
<th>NXAMP</th>
<th>NXAMPmk2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXDT104</td>
<td>✔</td>
<td>✔ 1</td>
</tr>
<tr>
<td>NXDT104mk2</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>NXAE104</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>NXRM104</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Serial Port</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>NXES104 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table summarizing the NEXO NeFu’s compatibility according to the NEXO device and the input interface.*

Network Configuration

A **Star network configuration** is recommended to update your devices in the best conditions.
Warning
Please note that the Daisy Chain configuration is not recommended for NXAE104 extension card update, as it might fail other ongoing updates. Therefore, make sure to use a Star network configuration or update it independently.

First Update of NXAMPmk2

NXAMPmk2 is supplied with the factory firmware (v1.01). For the first application, it is recommended to upgrade your device with the latest firmware.

Note about the factory firmware
For the first update of your NXAMPmk2, it is recommended not to use a switch on your network and to update your NXAMPmk2 with the default remote card (NXRM104).

Footnotes

1. Only the extension card will be updated if a NXDT104 first generation is connected to a NXAMPmk2. To update NXAMPmk2, it is recommended to use NXRM104, NXDT104mk2 or NXAE104. 

2. NXES104 cards are not supported by NEXO NeFu. To update them, it is recommended to use the previous update software called NXWin4. It can be downloaded here: https://nexo-sa.com/shares/upload/NxWin4_Setup_v4.2.1.8.zip
NEXO NeFu runs on both PC and Mac computers.

When starting up, NEXO NeFu will notify if a new version is available (this feature requires an internet connection).

Windows Version

Please download the installer from NEXO’s website.

Double click on the installation file `NEXO_NeFu_Setup_x86_1.6.0.exe`, and follow the instructions to install NEXO NeFu on a computer running on Windows.

NEXO NeFu requires the “Apple Print Service” component. Before NEXO NeFu’s installation, the “Apple Print Service” setup will start if it is not already installed on your computer.

For more information about “Apple Print Service” please follow this link: [https://support.apple.com/kb/DL999](https://support.apple.com/kb/DL999).

Once the installation is complete without any error message, NEXO NeFu is ready to use.

Mac Version

Please download the installer from NEXO’s website.

Double click on the installation file `NEXO_NeFu_1.6.0.pkg`, and follow the instructions to install NEXO NeFu on a computer running on macOS.

Once the installation is complete without any error message, NEXO NeFu is ready to use.
**CONNECTING NEFU TO NEXO SYSTEMS**

**Recommendations**

Before any device upgrade, we recommend to verify the following points to proceed the update operation in the best conditions:

- Please ensure that the network interface of the computer is set to the correct DHCP mode and IP address range as your devices in the network.

- On Windows, NEXO NeFu automatically installs the firewall exception rules needed by the application. Please verify that no other extra firewall tools are blocking the communication.

- On macOS, if a network adapter is used, please ensure that the connector is securely connected.

- Verify whether there is no running AVS-Service on the network, as it might cause update issues.

- Update via serial port: if a USB to serial port adapter is used, please ensure that it is compatible with your hardware and the drivers are correctly installed. Some adapters may not detect your device.

**Configure and Launch NEXO NeFu**

Please follow the steps below to connect.

1. Power ON the unit(s).

2. Connect an Ethernet cable with the card of NXAMP/NXAMPmk2 to one of the computer free network port. If you have a NXAMP first generation and it does not have a card, connect a RS232 cable to the serial port of the NXAMP.

3. To enable NXAMP updating, you must switch the NXAMP into “Download mode”. Simply restart NXAMP while holding the Mute 1 button down, and wait for the “Download waiting…” message. Now your NXAMP is ready for update. This step is not needed for NXAMPmk2.

4. On macOS:
   - Locate NEXO NeFu in the Applications folder or in the Dock and double click on its icon to launch it.
   - If the alert message “NEXO NeFu can’t be opened because it is from an unidentified developer” appears, you can open it by right-clicking on the NEXO NeFu’s icon and choose [Open]. Press [Open] on the next alert dialog to launch the application.

   It is also possible but not recommended to completely disable this behaviour on your computer: Go to [System Preferences > System & Privacy] and click the [General] tab, followed by clicking the lock icon in the bottom-right corner to enable changes. Then look for “Allow applications downloaded from:” and choose [Anywhere]. After accepted the security warning, you can now launch any application.

4. On Windows:
   - Launch NEXO NeFu through the shortcut in the start menu or through the search
bar.
Device Discovery

NEXO NeFu automatically detects device(s) thought the network or serial port as long as there are enabled (go to the Settings Menu to enable or disable interfaces).

Caution: AVS-Service and NeMo

If AVS-Service is running on your local machine, NEXO NeFu will ask user to stop it at startup. Please ensure that no AVS-Service is running on your network since it might cause detection issues.

If a NEXO NeMo is running on the network, it will be automatically switched into offline mode to avoid any update troubles.

Loading the Firmware File

To update your devices, you must download and open the desired firmware file (called LOAD).

Note

It is highly recommended to use the latest firmware file available at: https://nexo-sa.com/software

NEXO NeFu supports all “.dld” file from LOAD2_48 to the latest.

Note that NXAMPmk2 can be updated since LOAD4_20.

Automatic loading

If an internet connection is available on the local machine, NeFu will notify that a new
official version of the firmware is available. This firmware can easily be downloaded and loaded from NeFu, as shown below.

The firmware file is stored in the application’s dedicated folder and is opened by NeFu every time at startup. You can export or reset this downloaded firmware by pressing on the [Save to file] or [Reset Firmware] button from the Settings menu.

**Load a firmware manually**

By clicking on the “Select firmware file” section or by pressing CTRL+I (CMD+I on macOS), you can browse the firmware file. Then, press [Open] to load the file. On macOS, the firmware can also be loaded by dragging and dropping the file into the application’s window (not possible on Windows due to the administrator privileges requirements).

In the header section, all the packages that are contained in the “.dld” file will be
displayed with the different versions.

**Update Processing**

All discovered NEXO devices are listed in the main view. The ones that are ready for update can be selected.

Click on the [Start update button] to launch the firmware update of the selected devices. NEXO NeFu will perform an intelligent update through the different parts of the amplifier and/or the extension card.

If a password was set on NXAMPmk2(s), a popup message invites you to enter the current password before continuing. The password can be set from NeMo or directly on the NXAMPmk2 in *Options > Lock and Sleep settings*.

At the end of an update, NEXO NeFu displays a checkmark (update was successful) or
a warning icon (update failed). If an extension card has been successfully updated, you will need to restart the unit to apply updates.

Note
At the end of an extension card update, it is possible that NeFu may take some time to rediscover the card due to initialization (about 30 seconds).
Settings Menu

On the main view of NEXO NeFu, you can access to the Settings Menu by pressing the icon on the right upper part of the screen, as shown below.

- In the “Network interface” page, you can enable/disable your current interfaces (e.g. if you have several network interfaces and want to choose only a few of them).

Please note that Wi-Fi interfaces are not allowed for update.

- On the “Sort devices” page, it is possible to choose how your devices are sorted in the list. You can sort by Dante ID, by name or by firmware version. By choosing “Custom”, it is possible to sort your devices as your wish by dragging and dropping them in the list.

- [Automatically look for software updates] enables you to be notified as a new NEXO NeFu’s version is released (as long as an internet connection is available).

- [Automatically look for new firmware] enables you to be notified as a new firmware version is released (as long as an internet connection is available).

- [Reset NeFu settings] allows you to restore all saved application parameters to their default values (last firmware file location, selected options, window size…).

- The [Dark appearance] option allows you to set the Dark or the Light style to provide a good contrast no matter the light environment.

- Application logs can be exported to file or sent to NEXO for debug by pressing [Send logs to NEXO] or [Export Logs]. Pressing [Reset logs] will clear all current application logs.

- The “Downloaded Firmware” area is available when a firmware has been downloaded from NeFu. It is possible to export this firmware to a local file or to clear it.
NXAMP update issue

If your NXAMP has restarted in normal mode during the firmware update and NeFu is still in progress (no error or update status displayed), you need to cancel and retry the update on this NXAMP. This is a very rare case that can occur on a troubled network or with a bad network USB adapter.

First update of NXAMPmk2 and macOS X El Capitan

Detection issues may occur on OS X 10.11 (El Capitan – known multicast issue). To avoid this issue, it is highly recommended to upgrade your operating system or to set the IP address of your Ethernet port to static.

First update of NXDT104

On NXAMP:

In case of NXDT104 with factory firmware plugged in a NXAMP with recent firmware, the amplifier could display the message “I2C error”. Simply update the extension card to the latest version.

On NXAMPmk2:

With the factory firmware of NXDT104, NEXO NeFu may not detect the NXAMPmk2 device. Simply update the extension card first and then update the NXAMPmk2.

Serial port discovery error

If a USB to Serial Port adapter is used, please ensure that the correct drivers are installed and updated on the computer.
We will be happy to have your feedback about this release, so feel free to send an email to technical@nexo.fr with the mail subject starting by [NeFu]. Thanks for your cooperation!

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