

Read This First! Ethno Instrument 2.0.3 Installation Guide and Update Notes

OVERVIEW

This document provides information about new features in Ethno Instrument version 2.0.3, new system requirements, installation instructions, and late-breaking information about Ethno Instrument not covered in the Ethno Instrument *User Guide*.

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ATTENTION UPGRADING VERSION 1 USERS

☛ Your upgrade package includes a license card with your unique Ethno Instrument version 2 iLok license code printed on it. Since you already have an iLok you can proceed directly to “Redeeming your iLok license code to authorize your MOTU software”.

ATTENTION NEW USERS: AN ILOK IS REQUIRED

If you are a new Ethno user: this product requires an iLok Smart Key, a small USB device (sold separately) that holds the license for your MOTU software. Before you install and use your MOTU software, you must obtain an iLok, if you don't already have one.

☛ You will not be able to use your Ethno Instrument software without an iLok.



Figure 1: Ethno Instrument is compatible with iLok 1 and iLok 2 USB Smart Keys.

Do you already own an iLok?

You may already own an iLok if you upgraded from a previous version or own any other product that uses iLok. If so, you can skip to “Downloading your license to your iLok” on page 1.

Purchasing an iLok

If you do not already own an iLok, you can purchase one from your local music retail shop, an on-line music technology reseller, or iLok.com.

iLok compatibility

MOTU instrument products are compatible with iLok 1 or 2 (Figure 1).

REDEEMING YOUR ILOK LICENSE CODE TO AUTHORIZE YOUR MOTU SOFTWARE

Your Ethno Instrument package includes a card with your unique iLok license code printed on it. Follow the instructions below to redeem the code at iLok.com and download the resulting Ethno version 2 software license to your iLok.

☛ Your MOTU software will not run without the downloaded license in your iLok, so be sure to follow these important instructions before proceeding to install and use your MOTU software.

Installing iLok drivers and web browser components

To be able to use iLok.com and your iLok USB device, you must first install iLok drivers and iLok client (web browser) components, as follows:

- 1 Visit the *Download* tab at iLok.com.
- 2 Download and install the iLok *Client Installer*. This allows your web browser to communicate with iLok.com.
- 3 Download and install the iLok *Driver Installer*. This allows your iLok to work properly with your computer.
- 4 Restart the computer.

Downloading your license to your iLok

After installing the iLok drivers, you can redeem your MOTU software license code as follows:

- 1 Connect your iLok to any available USB port on your computer.
- 2 Go to iLok.com.

- 3 Create an account, if you don't already have one.
- 4 Find and click the *Redeem License Code* link.
- 5 Enter your unique, 30-digit license code number printed on the card included with your MOTU software package, and follow the on-screen instructions to deposit the license in your iLok account.
- 6 Click the *Download Licenses* link and follow the on-screen instructions to download the software license to your iLok.

Your MOTU software license is now in your iLok. Be sure the iLok is connected when you run your MOTU software.

Managing iLok licenses

Visit iLok.com to move product licenses from one iLok to another, consolidate multiple product licenses onto one iLok, protect your licenses from loss or damage, or otherwise manage your product license assets.

If you have further questions about your iLok, visit www.iLok.com, or contact MOTU Customer Service at +1 (617) 576-2760.

NEW SYSTEM REQUIREMENTS

Ethno Instrument 2.0.3 has the following new minimum and recommended system requirements:

- Mac or PC with Intel Core Duo CPU 1.83 GHz or faster; multiple processors or a multi-core processor is required. Intel Core 2 Duo CPU 2.0 GHz or faster recommended. Macs with PowerPC CPUs are not supported.
- 2 GB of RAM is required; 4 GB or more is highly recommended.
- CD/DVD disc drive for installation.
- Mac OS X version 10.5 or 10.6 (v10.5.8 or later is required), or Windows 7 or Vista (32- or 64-bit; Vista SP2 or later is required).
- A large hard drive (preferably at least 100 GB) with enough free space to hold the 21 GB soundbank files. The drive on which the sounds are stored must be a fast hard drive. See below for Mac- and Windows-specific hard drive requirements.
- A CD/DVD disc drive for installation.
- An available USB port for the iLok USB key. If you have multiple products that use iLoks for authorization, you can consolidate multiple authorizations onto a single iLok using www.ilok.com.

- A digital audio workstation program or other program that hosts AU, VST, or RTAS instrument plug-ins. Alternatively, Ethno Instrument can be used as a standalone application.

64-bit operation

For native 64-bit operation, Ethno Instrument has the following additional requirements:

- Mac OS X v10.6, or a 64-bit version of Windows 7 or Vista
- 64-bit CPU
- 64-bit plug-in host application, if using the 64-bit plug-in

Platform	Ethno Instrument formats that support 64-bit operation
Mac OS X	AU, VST, Stand-alone
Windows	VST, Stand-alone

Hard disk format

Due to the large size of Ethno Instrument's factory soundbank UFS files, the disk containing the soundbank files must be able to support individual files larger than 4 GB. This is determined by the disk's file system format.

The default file system format for disk drives on Mac OS X and Windows are compatible with Ethno Instrument's soundbank files:

- Mac OS X: HFS+ (Mac OS Extended, journaled or unjournaled)
- Windows: NTFS

The FAT32 format is not compatible with Ethno Instrument's soundbank files, as it does not allow file sizes greater than 4 GB.

If you experience trouble copying the UFS files to your hard disk, refer to the troubleshooting chapter in the Ethno Instrument User Guide.

UVI ENGINE XT

Ethno Instrument 2.0.3 has been significantly updated, due to the incorporation of the latest UVI Engine XT first introduced in the recent release of MachFive 3. Ethno Instrument 2.0.3 is now based on this same core code base, which offers:

- Compatibility with the latest Mac and Windows operating systems, including Mac OS X 10.7 (Lion) and Windows 7
- 64-bit operation
- CPU performance optimizations
- Dozens of "under-the-hood" improvements

INSTALLATION

Important! Install the iLok drivers first

Before installing Ethno Instrument or connecting your iLok USB SmartKey, install the iLok drivers, as follows:

Mac OS X:

1 Insert the *Ethno Instrument Installer* CD and open the *InterLok Extensions Installer* folder; or, if you have downloaded the latest iLok drivers, locate the folder containing the download.

2 Double-click the InterLok extensions installer.

3 Follow the directions the installer gives you.

4 Restart your computer, then connect the iLok USB SmartKey to an available USB port.

☛ Windows users: Follow any on-screen prompts regarding iLok driver installation.

Windows users: Uninstall previous versions

Before running this Ethno Instrument installer, Windows users should uninstall previous versions of Ethno Instrument by opening the Windows Control Panel, choosing *Programs and Features* (Vista or 7) or *Add or Remove Programs* (XP), and uninstalling Ethno Instrument.

☛ If you are using the DXi version of Ethno Instrument version 1, see “DXi transition” on page 4 before uninstalling.

Next, run the Ethno Instrument installer

Run the Ethno Instrument installer first before you copy the UFS soundbank files from the soundbank DVDs, as follows:

1 Insert the *Ethno Instrument Installer* CD; or, if you have downloaded the Ethno Instrument installer, locate the folder containing the download.

2 Double-click *Ethno Installer* (Mac), *Setup32.exe* (Windows 32-bit), or *Setup64.exe* (Windows 64-bit).

3 Follow the directions the installer gives you.

☛ Windows VST users: The Ethno Instrument VST plug-in is installed in:

startup disk:\Program Files\MOTU\Vstplugins

Point your host application to this folder, or copy the *EthnoVST.dll* file to the Vstplugins folder of your choice.

Then copy the UFS soundbank files to your hard drive

Ethno Instrument includes three 8 GB (dual layer) *soundbank* DVDs that contain a total of 21 GB of multi-sampled instruments. To install the UFS soundbank files, copy them from the DVDs to the following location:

Mac OS X

startup disk/Library/Application Support/MOTU/Ethno/

Windows

startup disk:\Program Files\MOTU\Ethno\

The term *startup disk* in the path names above is the name of your system hard drive (usually *Macintosh HD* or *C*).

Place the UFS files directly in this location. Alternatively, you can place the UFS files in another location (possibly on an external or second hard drive), create aliases (Mac OS X) or shortcuts (Windows) to them, and then place the aliases or shortcuts in this location.

☛ If you create aliases or shortcuts, the names must be the same as their corresponding UFS files. If the alias or shortcut name includes the words *alias* or *shortcut to*, it will not work.

PLEASE REGISTER YOUR SOFTWARE

MOTU can only provide customer service and technical support to registered users. Therefore, it is important for you to register your software immediately after purchase.

To do so, visit www.motu.com/registration to register online. Or, fill out and mail in the registration card found at the beginning of the *User Guide* (leave the rest of the cardboard page in the manual for your future reference).

☛ If you purchased an upgrade from an earlier version at www.motu.com, you are already registered and no further action is necessary.

VISIT MOTU.COM FOR UPDATES

Software updates are periodically posted on our website, so check our website for the latest updates at www.motu.com.

TECHNICAL SUPPORT

If you have questions, please review the *User Guide* carefully first. You can reach MOTU tech support as follows:

- 24-hour online tech support database with search engine: www.motu.com
- Online: www.motu.com/support
- Phone: +1 (617) 576-3066
(9 a.m. – 6 p.m. Eastern)
- Downloads: www.motu.com

DXI TRANSITION

Ethno Instrument version 2.0 and later does not have a DXi version. Windows users should instead use the VST or RTAS plug-in or the standalone Ethno Instrument application.

If you have projects that use the DXi version of Ethno Instrument, before uninstalling Ethno Instrument version 1 or installing Ethno Instrument version 2, follow these steps to transition from the DXi version to another format (VST, in this example):

- 1 Open any project files that use DXi instances of Ethno Instrument.
- 2 Open the DXi instance of Ethno Instrument and save a multi.
- 3 Create a new VST instance of Ethno Instrument.
- 4 Load the multi file from the DXi instance into the VST instance.

ENHANCEMENTS IN VERSION 2.0.3

Version 2.0.3 provides the following enhancements:

- Improved operation when using the same keyswitch for multiple parts
- Enhancements to drag and drop export of audio
- Other minor enhancements

ENHANCEMENTS IN VERSION 2.0.2

Version 2.0.2 provides the following enhancements:

- Compatibility with the latest Mac OS X and Windows operating systems, including Mac OS X 10.7 (Lion) and Windows 7
- 64-bit operation, as summarized earlier in “64-bit operation” on page 2
- CPU performance optimizations
- Enhanced audio time-stretching (tempo adjustment)

ENHANCEMENTS IN VERSION 2.0.1

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Key Range display

When an instrument preset is loaded, the Loop settings area now displays the preset’s key range. In the example below, the Harmonium mute preset is loaded.



Figure 2: Key Range display for instruments

Other changes

Improvements, optimizations, and refinements can be found in the following areas:

- **Tuning:** user tuning and mapping presets.
- **Performance:** compatibility improvements on Snow Leopard; improvements to streaming.

NEW FEATURES IN VERSION 2

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Native 64-bit Windows support

The standalone application and VST plug-in now support native 64-bit operation when using the 64-bit version of Windows 7 or Windows Vista.

- ☛ As a 64-bit version of Pro Tools is not yet available, a 64-bit RTAS plug-in is not available at this time. RTAS users should continue to use the 32-bit version of Ethno and a 32-bit version of Windows.

Expanded instrument and loop content

The Ethno 2 sound library has been greatly expanded and now includes 21 GB of instruments, loops, and phrases. For full details on all sounds, please see chapter 8, “Instruments” (page 73) and chapter 9, “Loops and Phrases” (page 113) in the *Ethno Instrument User Guide*.

Here are highlights of some of the new and exciting instruments, loops and phrases added in Version 2:

New Version 2 loops and phrases

- Japanese taiko drums
- Balkanish voices
- Arabic voices
- Persian voices
- India percussion loops
- India percussion phrases

New version 2 instruments

Africa

- African large drums
- African flutes
- Ngoni Donso

Asia

- Gongs
- Koto
- Liu Qin
- Pipa
- Shakuhachi
- Shamisen
- Taiko
- Thai drums

Australia

- Oceanian drums

Celtic

- Bag pipes

Eastern Europe

- Balalaika
- Balkanish voices
- Cymbalum

India

- Dilruba
- Harmonium
- Indian flute

- Indian percussion
- Jaladarangam
- Khombu
- Magudi
- Nadhaswaram
- Santoor
- Sarod
- Shank
- Shenai
- Sitar v2

Middle Eastern/Mediterranean

- Arabic voices
- Baglamas
- Bouzouki
- Mandolin
- Mediterranean Lira
- Middle East Santur
- Persian Voices

Occidental

- Concertina

South America

- Equatorian drum
- Latin panpipe

Xtra World Voices

Unlimited parts

You can now have an unlimited number of parts in a single instance of Ethno Instrument.



Figure 3: Parts List controls.

- To add a part, click the *ADD* button (Figure 3).
- To delete a part, select it and click the *DEL* button (Figure 3).
- To clear a part of the current loop or instrument, right-click and choose *Clear Part*.

MIDI Mute

Each part has a MIDI Mute button (Figure 4); when enabled, it temporarily disables MIDI input to the part. This operates independently from the audio mute button.

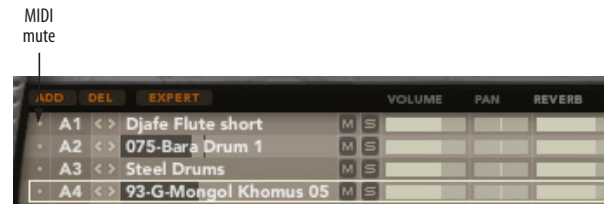


Figure 4: MIDI Mute.

Persistent browser

When the browser is open, the Parts List now remains available. Sounds from the browser will be loaded into the currently selected part in the Parts List. This enables you to quickly load sounds into multiple parts without having to close or reopen the browser after each one.



Figure 5: Parts List and the browser.

Additionally, double-clicking any part in the Parts List which currently has a sound loaded will reveal that sound in the browser.

Preset searching

In addition to browsing sounds by type and geographic location, you can now search in the browser to quickly find presets.

In the browser, click *Search Instruments* or *Search Loops* to access the browser's search engine (Figure 6). Type in the desired text, and the browser immediately lists all instrument or loop presets with that text in their names.

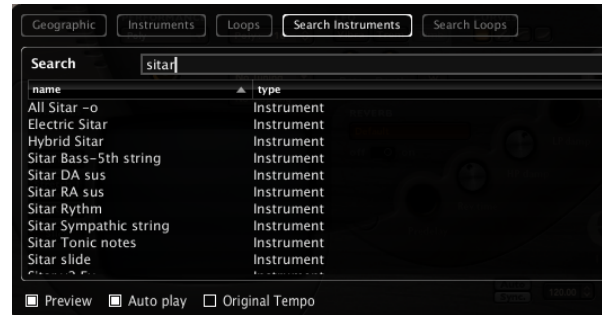


Figure 6: Searching in the browser.

You can further sort the list by name or preset type by clicking the column headings. Clicking the heading toggles between ascending and descending order.

Keyswitch (KS) presets

Presets with the letters KS at the end of their name (Figure 7) offer keyswitch layers, just like Expert Mode keyswitching. However, these keyswitches are “built in” to the preset and do not require Expert mode programming on your part.

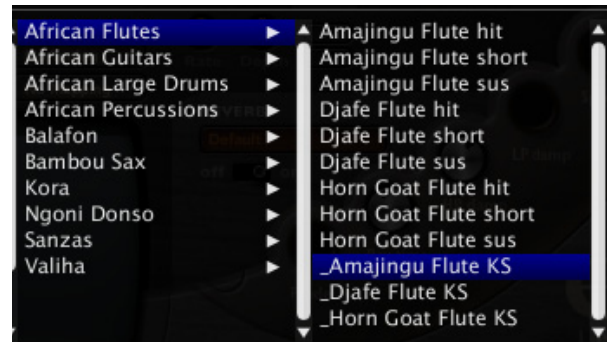


Figure 7: Keyswitch (KS) presets. In this example, the KS preset (selected) provides three layers made up of the Amajingu Flute presets above (hit, short and sustain).

When you load a KS preset into a part, the keyswitches for the preset are displayed in the Loop settings area (Figure 8):



Figure 8: Key switch settings for a KS preset.

Many Ethno instrument presets, both from version 1 and version 2, are programmed with KS presets.

Microtunal tuning and scales

Ethno version 2 opens the door to the world of authentic microtonal tuning.

The *Tuning* menus (Figure 9) provide a comprehensive selection of authentic, non-Western scales with microtonal tuning.

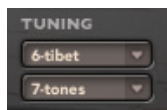


Figure 9: Microtonal tuning.

Choose the desired scale from the *Tuning* menu (Figure 10), which provides sub-menus organized by geographical region.



Figure 10: The Tuning sub-menu.

Choose the desired mode from the *Scale Mapping* menu (Figure 11), which provides scales ranging from five tones up to twenty-four tones.

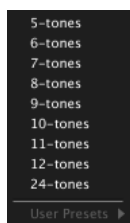


Figure 11: Scale mapping menu.

For information about creating your own user presets in the Tuning and Scale mapping menus, plus more in-depth information about Ethno Instrument's microtuning feature, see *Ethno Instrument User Guide*, Appendix B, "Microtonal Tuning" page (123).

Poly and Mono performance modes

Ethno version 2 includes additional Poly and Mono performance modes.

The *Portamento* menu (Figure 12) controls whether you can play multiple notes at once and what happens between consecutive, overlapping notes when you play.



Figure 12: The Portamento menu.

Poly

Choose *Poly* mode (Figure 12) for normal, polyphonic instrument operation, where you would like to be able to play multiple notes at once. In Poly mode, there is no portamento "glide" (pitch bend) between consecutive notes that overlap. This is the default mode in Ethno version 1.

PolyPortamento

PolyPortamento mode (Figure 12) is similar to *MonoPortamento* mode (below), except that each note continues to sustain, without being cut off by the next note. This allows you to play chords that include portamento transitions (*glide*) between moving notes within the chord. The direction of the portamento bend into the next note being played (down or up) is determined by the last note played: if it is higher, then the portamento bends down into the next note. If it is lower, portamento bends up into the next note. The speed of the portamento bend is determined by the *Glide* setting (below).

☛ The *Polyphony* setting must be 2 or higher for *PolyPortamento* mode to fully work as intended.

MonoRetrigger

Choose *MonoRetrigger* (Figure 12) to make the currently selected part play like a monophonic synth, where only one note can play at a time. Each new note played replaces any currently sustaining notes, without any *Glide* between them. *MonoRetrigger* mode is ideal for solo instruments.

MonoPortamento

MonoPortamento mode (Figure 12) is similar to *MonoRetrigger* mode above, except that when consecutive notes overlap, you'll hear portamento (bending pitch) between the two notes. The speed of the portamento is controlled by the *Glide* setting. This is the same as *Mono* mode in Ethno version 1.

Enhanced time-stretching

Ethno version 2 employs newly licensed audio time-stretching technology from the IRCAM institute for audio research in Paris for exceptionally high-quality results when speeding up or slowing down phrases. This gives you a great deal of flexibility because you can use Ethno's extensive library of phrases at just about any tempo you wish.

To use the new time-stretching algorithm, click the *Stretch 2* button (Figure 13). Stretch 2 mode is similar to Stretch 1 mode, except that it employs the IRCAM time-stretching engine to process the audio when it is played at a slower or faster tempo than the loop or phrase's original tempo.

To further enhance the audio quality of the Stretch 2 time-stretching, the *Preset* menu (Figure 13) provides several settings for various types of audio material. For best results, choose the preset that most closely matches the nature of the loop or phrase being played. You can also freely experiment with the presets to find the one that sounds the best to your ears.

Stretch 2 mode is particularly useful for vocal phrases (using the *Voice* preset) or any material when it is stretched by extreme amounts (slower or faster).

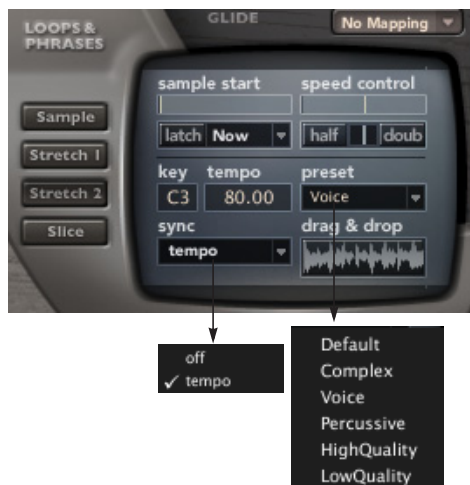


Figure 13: Stretch 2 mode.

Stretch 2 mode places higher, more intensive processing demands on your computer. Therefore, if you are experiencing performance issues, or if you hear unwanted artifacts in the audio being produced by Ethno Instrument, try reducing the number of parts using Stretch 2 mode. You can use Stretch 1 mode as a more efficient alternative. If the part is playing a loop, you could also use Slice mode as a more efficient alternative.

Enhanced effects processing

Ethno 2 includes new analog-modeled EQ, CPU-optimized convolution reverb, and eight new analog-modeled filters (rez, comb, analog, and more).

Appending multis

When loading a multi in version 2, the new sounds can either replace the existing parts, or they can be appended. To append a multi, select the *Append Multi* option in the lower left corner of the multi browser (Figure 14).



Figure 14: Appending a multi.