Read This First! Ethno Instrument 2.0.1
Installation Guide and Update Notes

OVERVIEW

Attention upgrading Ethno Instrument version 1 users! ..................1
System requirements .......................................................1
Installation .................................................................2
Authorization ...............................................................4
DXi transition ...............................................................4
Enhancements in version 2.0.1 ............................................5
New features in version 2 ..................................................5

ATTENTION UPGRADING ETHNO INSTRUMENT VERSION 1 USERS!
☛ Your upgrade package includes a license card that holds your Ethno Instrument version 2 iLok authorization. Follow the instructions in the “Authorization” section on page 2 to install your version 2 authorization.

SYSTEM REQUIREMENTS
Ethno Instrument version 2 has the following system requirements:

■ A minimum of 1 GB (gigabyte) of RAM is required. However, since Ethno Instrument loads samples (or a portion of the samples) into the computer’s RAM, add as much RAM as possible to your computer; at least 2 GB is highly recommended.

■ 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.

Mac
■ Mac OS X version 10.4, 10.5, or 10.6; version 10.4.11 or later is required.

■ PowerPC G4 1 GHz or faster CPU (including PowerPC G5 CPUs and all Intel processor Macs). Multi-processor or multi-core PowerMac G5s or Intel processor Macs are highly recommended.

■ The hard drive containing the Ethno 2 soundbank files must be formatted as Mac OS Extended (also known as HFS+). Journaling can be on or off.

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

Windows
■ Windows 7, Vista, or XP; for native 64-bit operation, a 64-bit version of Windows 7 or Windows Vista is required.

■ Pentium 4 1 GHz or faster CPU (or AMD equivalent); for native 64-bit operation, a 64-bit CPU is required. Multi-processor or multi-core PCs are highly recommended.

■ The hard drive containing the Ethno 2 soundbank files must be formatted as NTFS.

■ A digital audio workstation program or other program that hosts VST or RTAS instrument plug-ins. For native 64-bit plug-in operation, a 64-bit VST host application is required. Alternatively, Ethno Instrument can be run as a stand-alone application.

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” below 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.

**AUTHORIZATION**

☛ Attention new Ethno Instrument users: if you are a new Ethno Instrument user, you do not need to follow the instructions in this section and you can instead proceed to “New features in version 2” on page 5.

The Ethno Instrument version 2 license card
The license card included with your Ethno Instrument 2 upgrade holds your version 2 iLok authorization.

Figure 1: The Ethno Instrument version 2 license card holds your version 2 iLok authorization.

This version 2 authorization must be transferred to an iLok. You then connect the iLok holding the version 2 authorization to any USB port on your computer in the same manner as you did for Ethno Instrument version 1.

You can transfer your Ethno Instrument 2 authorization into your Ethno Instrument version 1 iLok or any other iLok you may have. It does not matter which iLok holds the version 2 authorization. The only requirement for running version 2 is that there must be an iLok holding a version 2 authorization connected to the computer.

Your version 1 authorization
You may keep your Ethno Instrument version 1 authorization, either on the same iLok as your version 2 authorization or one a different iLok. The version 1 and 2 authorizations are completely independent of one another and do not need to be stored on the same iLok.

Moving the version 2 authorization from the license chip to an iLok
This procedure must be done on a computer on which Ethno Instrument version 2 is already installed (see “Installation” on page 1), and it requires an iLok USB SmartKey.

To move the version 2 authorization from the license chip to an iLok:

1 Locate an available USB port and insert the iLok to which you wish to transfer your Ethno Instrument 2 authorization.
2 If Ethno Instrument is currently running on your computer, either stand-alone or in a host application, quit Ethno Instrument or the host application (so that Ethno Instrument is no longer running).

3 Launch Ethno Instrument (or your Ethno Instrument host application).

4 During launch, you should see the window shown below in Figure 2:

![Ethno Instrument Window](image1)

**Figure 2:** You should now see this window on your screen.

5 Click Authorize.

6 When you see the dialog shown below in Figure 3, check the *Use my iLok smart key* option and click Next.

![Ethno Instrument Authorization Dialog](image2)

**Figure 3:** Leave the ‘Use my iLok smart key’ option checked.

7 When you see the dialog shown below in Figure 4, check the *Use license card* option and click Next.

![Ethno Instrument Authorization Dialog](image3)

**Figure 4:** Check the ‘Use license card’ option.

8 You’ll now see the window below:

![Ethno Instrument Authorization Dialog](image4)

9 Remove the license chip from the license card by gently snapping the three tabs, taking care not to bend the chip itself.

![License Chip](image5)

**Figure 5:** The license chip after it has been removed from the card.

10 The license chip is now ready to be inserted.

☛ Do not remove the iLok from the computer’s USB port during this step — be sure to leave it plugged in!

Leaving the iLok inserted in the computer’s USB port, gently insert the license chip (Figure 5) into the slot at the end of the iLok, with the circuit facing the top of the circuit board inside
the iLok itself, as shown below in Figure 6. Look inside the iLok and look for the side of the circuit board that has the LED, along with a few chips on it. That’s the top.

Figure 6: Gently insert the license chip into the iLok.

11 Be sure to push the license chip all the way in.

Figure 7: Be sure to gently push the license chip all the way in.

12 If the license chip is inserted correctly as described above in step 10 and step 11, you should now see confirmation that the authorization has been successfully transferred to the iLok, as shown below in Figure 8:

Figure 8: This window confirms that the Ethno Instrument authorization has been successfully transferred to the iLok.

13 Click OK.

14 You will now see a window that informs you about iLok.com, which is an online resource that allows you to register your iLok and helps you manage your iLok authorization resources. Registration is not required by Ethno Instrument, however, so the choices you make in this dialog are up to you.

Figure 9: Registering your iLok on ilok.com. This is optional.

15 Remove the license chip from the iLok.

That’s it. Your Ethno Instrument version 2 authorization has been transferred from the license chip to the iLok. You can now proceed to “New features in version 2”, below.

Transferring from one iLok to another
You can transfer your Ethno Instrument authorization from one iLok to another as many times as you wish. To do so, use the the authorization transfer features available at www.ilok.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 2.0.1
Key Range display ........................................... 5
Other changes .................................................. 5

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 10: 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
Native 64-bit Windows support ......................... 5
Expanded instrument and loop content ............. 5
Unlimited parts ............................................. 6
MIDI Mute .................................................. 6
Persistent browser ........................................ 6
Preset searching ......................................... 6
Keyswitch (KS) presets ................................. 7
Microtunal tuning and scales ....................... 7
Poly and Mono performance modes ............ 8
Enhanced time-stretching ......................... 8
Enhanced effects processing .................. 9
Appending multis ................................... 9

Expanded instrument and loop content
The Ethno 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

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.

 cabeça 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.
READ THIS FIRST! ETHNO INSTRUMENT 2.0.1 INSTALLATION GUIDE AND UPDATE NOTES

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.

Add/delete parts
- To add a part, click the ADD button (Figure 11).
- To delete a part, select it and click the DEL button (Figure 11).
- 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 12); when enabled, it temporarily disables MIDI input to the part. This operates independently from the audio mute button.

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.

Unlimited parts

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 14). Type in the desired text, and the browser immediately lists all instrument or loop presets with that text in their names.
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 15) 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.

When you load a KS preset into a part, the keyswitches for the preset are displayed in the Loop settings area (Figure 16):

**Microtunual tuning and scales**

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

The **Tuning** menus (Figure 17) provide a comprehensive selection of authentic, non-Western scales with microtonal tuning.

Choose the desired scale from the **Tuning** menu (Figure 18), which provides sub-menus organized by geographical region.

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).

Many Ethno instrument presets, both from version 1 and version 2, are programmed with KS presets.
Poly and Mono performance modes
Ethno version 2 includes additional Poly and Mono performance modes.

The Portamento menu (Figure 20) controls whether you can play multiple notes at once and what happens between consecutive, overlapping notes when you play.

Figure 20: The Portamento menu.

Poly
Choose Poly mode (Figure 20) 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 20) 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 20) 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 20) 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 21). 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 21) 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 21: 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 22).

Figure 22: Appending a multi.