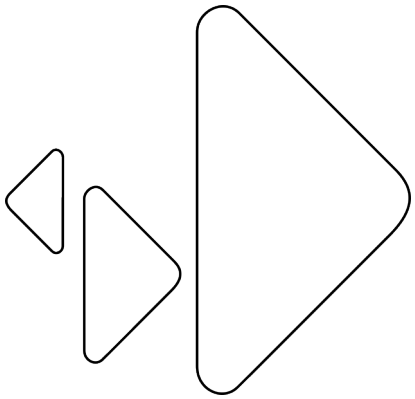
ITVL USER MANUAL

V.1.43



www.klysoft.net
July 2016

Content

What's new in v.1.4?

New features:

1. Copy/Paste pattern, see page 9 for detail.
2. Generate new pattern based on the pattern copied, page 9.
3. Easier DAW midi learn integration by using send CC#, page 17 (automation 1).

Fixed bugs:

1. Fixed cc automation bug.
2. Fixed Mac version midi menu bug, page 5.
3. Fixed GUI bugs.

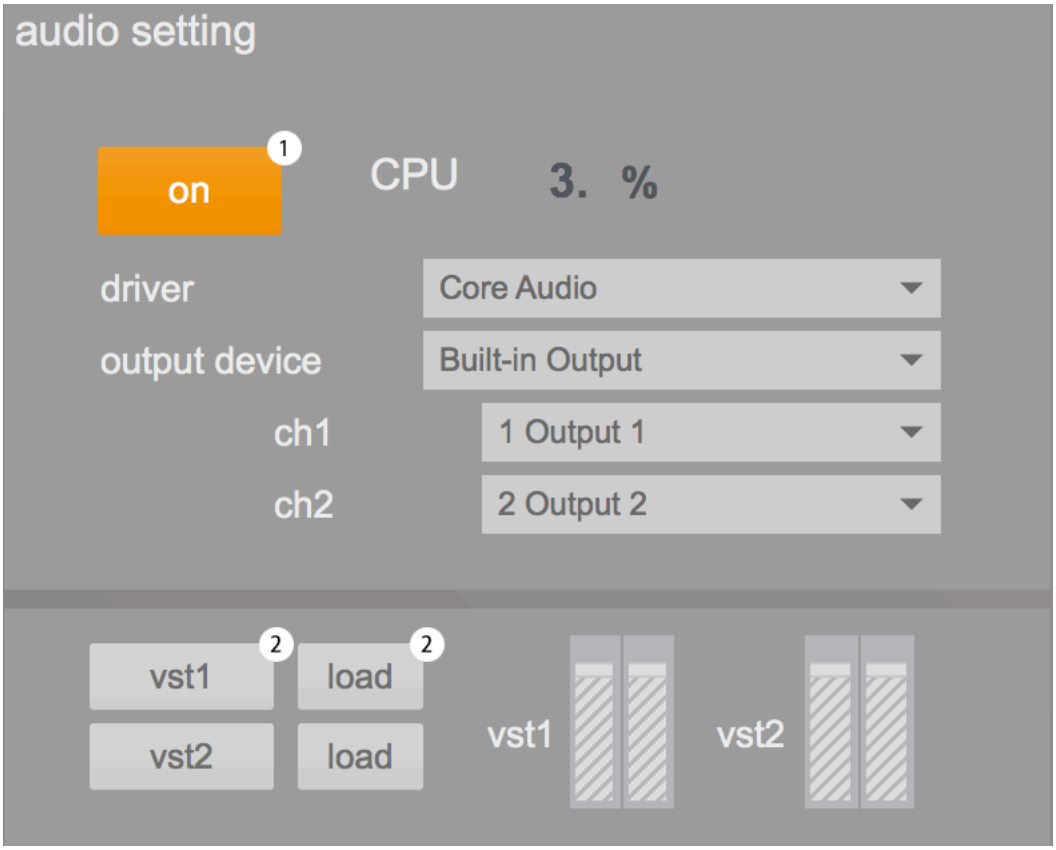
Others:

1. Improved swing function.
2. Added option to turn off note indicator.
3. Overall optimization.
4. Changed Windows version preset GUI.

Quick start guide

Use ITVL as standalone sequencer for VST plug-ins

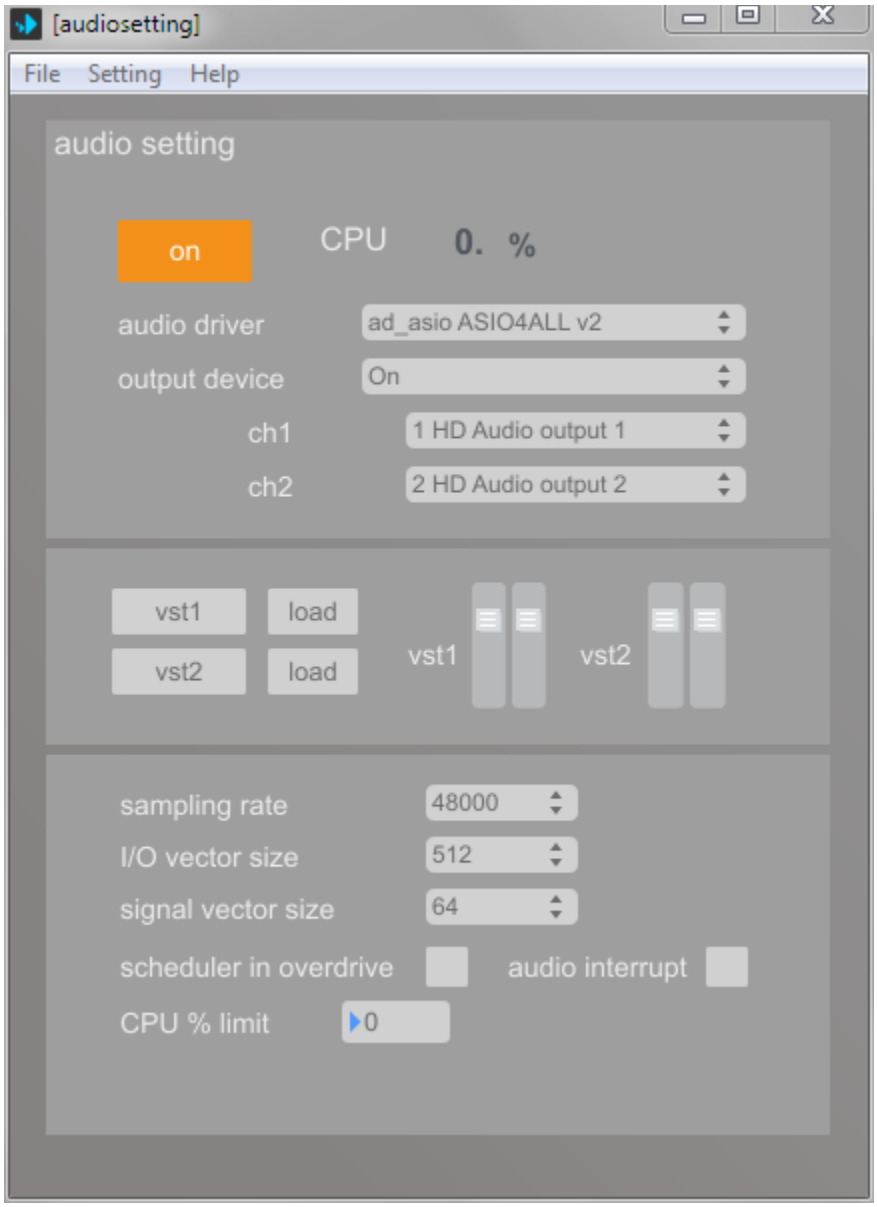
To use ITVL standalone with VSTplug-ins, you need to turn on the internal DSP in the **audio setting menu** and load the plug-ins.



1. Select the **audio driver** you want to use and then click **on** to turn on internal DSP. The **output device** and channels should be taken care of if you selected the driver, if they are still blank then you should manually select the device and channel, **ch1** is the left channel, **ch2** is the right channel.

2. Click **load** to load plug-ins, the **vst1** and **vst2** buttons are for opening the plug-in's interface. The faders on the right are for adjusting the volume of VST plug-ins.

3. Example of Audio setting menu under windows.



Use ITVL as standalone sequencer for hardware

In order to sequence external hardware, you need to have a midi interface and select midi out port in the **midi setting menu**.

1. Click **update** to update the midi device connected. The **out1 to out4** represent the **midi1 to midi4** output options that you can select using the **output** dropdown menu at each track's setting section.

2. If you want to sync ITVL with external hardware and use ITVL as master, then click the **master** in the sync section and select the **master** midi port that will output midi clock. Similarly, click **slave** and select **slave** midi port to use ITVL as slave.

Use ITVL with DAW

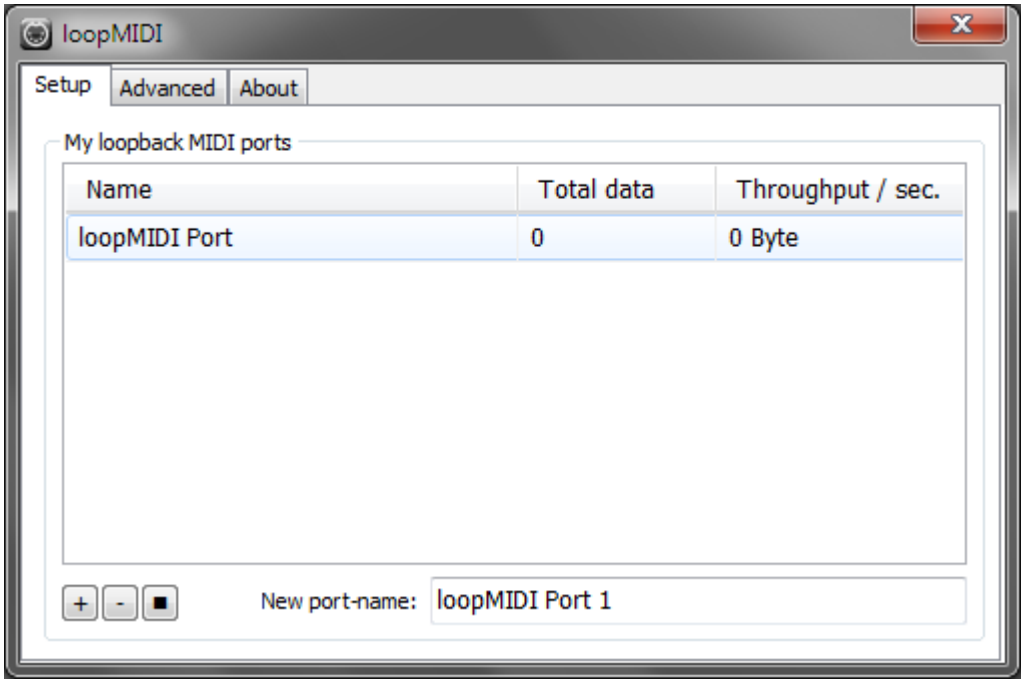
Use ITVL on Mac

Starting from v.1.4, ITVL should work with DAW directly when opened since the default midi out and in port have been set to **from itvl 1** and **to itvl 1**.

If somehow it didn't work or you are using older version, please select the midi port **from itvl 1**, **from itvl 2**, **to itvl 1**, **to itvl 2** in the midi setting menu and select the same port in your DAW (track).

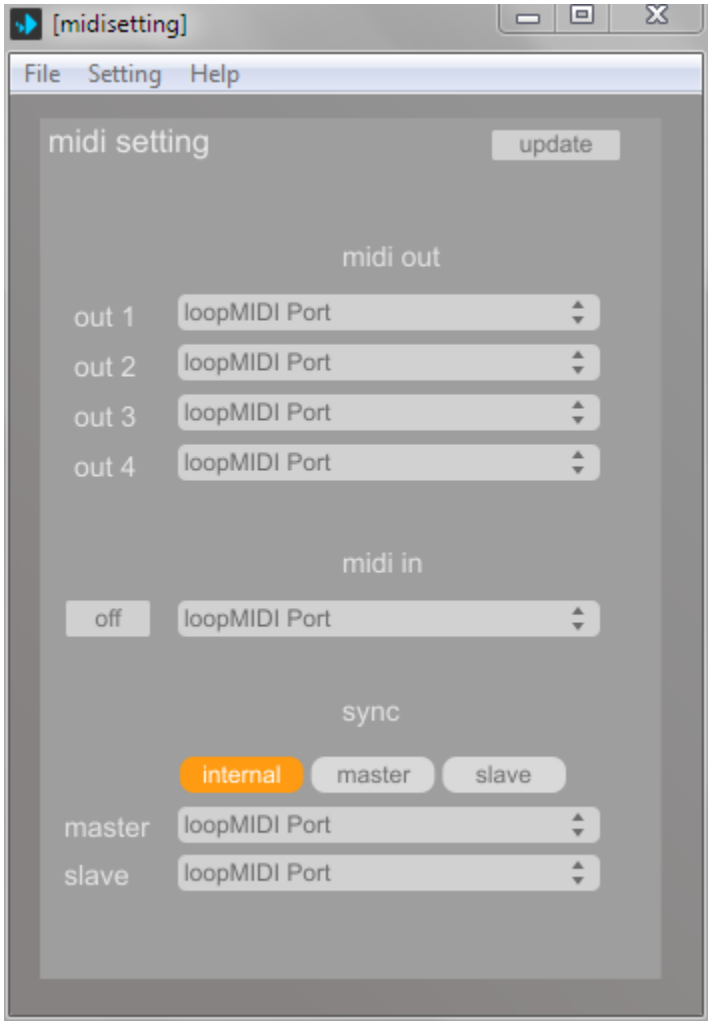
Use ITVL on Windows PC

Since windows doesn't automatically create virtual midi ports, you have to use programs like loopmidi in order to use ITVL with DAW directly on windows.



Once you have installed loopmidi, restart computer and open it, create a new port by click the **+** at the left bottom corner.

And then start your DAW first, please note this is **important** if you use ASIO driver (including ASIO4ALL) for your DAW, because ASIO driver allows only one device to use it, so you need to start your DAW and select ASIO in order to let your DAW use it. Otherwise, ITVL will take up ASIO and there will be no sound coming from your DAW.

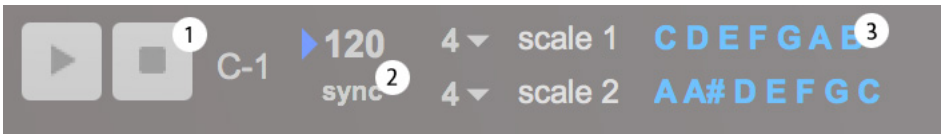


When you started ITVL, you need to select the virtual midi port in the midi setting menu, "loopMIDI Port" in the above example, and make sure **midi in** is off, this is to prevent the midi note sent by ITVL will go back and control ITVL. Alternatively, you can select a different **midi in** port if available (you can create another loopMIDI port).

We recommend you **NOT** to select **Microsoft GS wavetable synth** for any midi port when you work with DAW if you need to use ASIO driver, because it will take up ASIO driver automatically and will cause driver problems.

Global control

Global control bar



Global control bar sets the BPM, time signature and scales for all 4 tracks.

1. Press the **stop** button once, all sequencers will pause, if you press the **stop** again, all sequencers will return to the beginning.

2. **Sync** can be set in the midi menu.

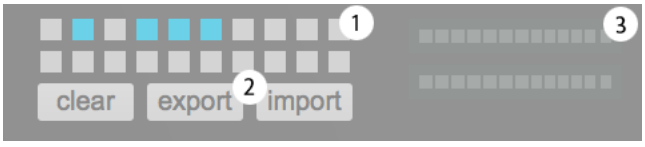
3. When typing the scale, you can only use **C**, **C#**, **D**, **D#**, **E**, **F**, **F#**, **G**, **G#**, **A**, **A#**, and **B** (Upper case), and only 7 notes will be accepted, with a space in between.

Track control

1. The **play** button turns track on and off.

2. Click the button **1**, **2**, **3**, and **4** to switch between each track.

Preset and volume (Mac)



1. **Shift + Click** to store a preset.

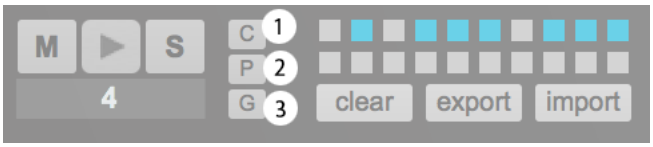
2. Click **export** to export all the presets to an external file, **import** for loading preset from external file.

3. Volume only works when using internal DSP (load VST plug-ins in the audio menu).

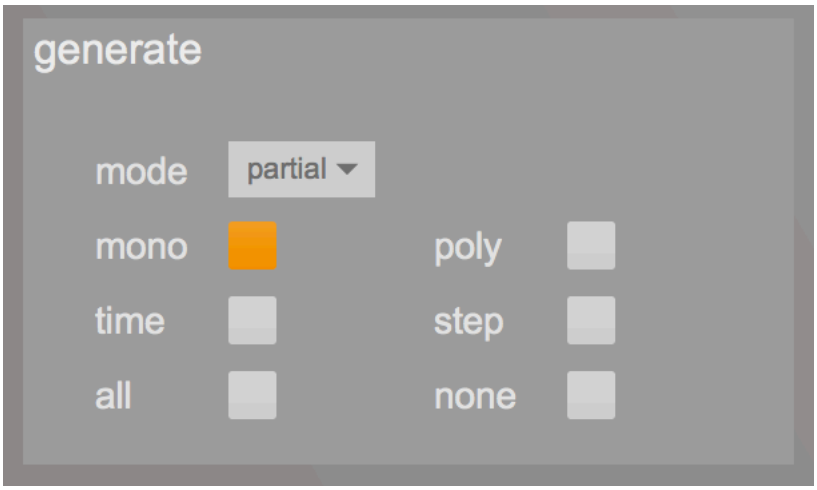
Preset and volume (Windows)

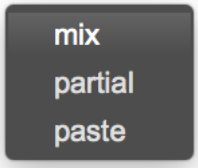
The **S** and **L** means "save" and "load", they are for using on tablets, you can enter the number and hit enter or just use the pen or finger to select the preset you want to save and load. PLEASE NOTE: if you use your finger or pen to scroll the number, the corresponding presets will all be replaced, so using scrolling to save presets is not recommend.

Copy, paste and generate



1. Click **C** (copy) button to copy the whole pattern excluding cc automation.
2. Click **P** (paste) button to paste the copied pattern to selected track.
3. There are three modes for **G** (generate) button, you can select in the misc setting menu.





1) Mix mode
   Clicking the **G** button, it will generate the selected portion based on the pattern copied and paste the rest of the pattern to the current track.

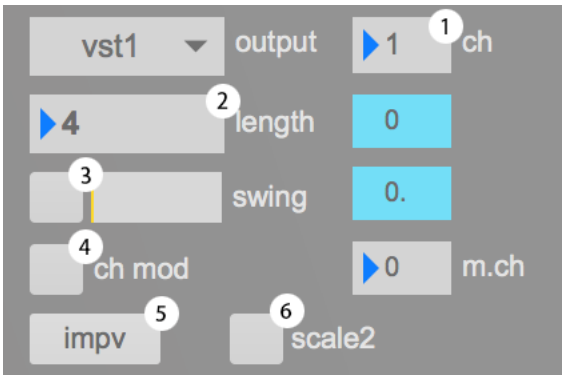
2) Partial mode
   It will only generate the selected portion without pasting the rest of the pattern.

3) Paste mode
   It will only paste the selected portion of the pattern to the current track.

Please note that only mono notes, poly notes, time pattern and steps can be generated.

Sequencer

Track setting



1. **Ch** is the midi channel.

2. **Length** means the length of the pattern or simply put, after how many bars, the pattern will be played again. The blue indicator on the right shows the current bar.

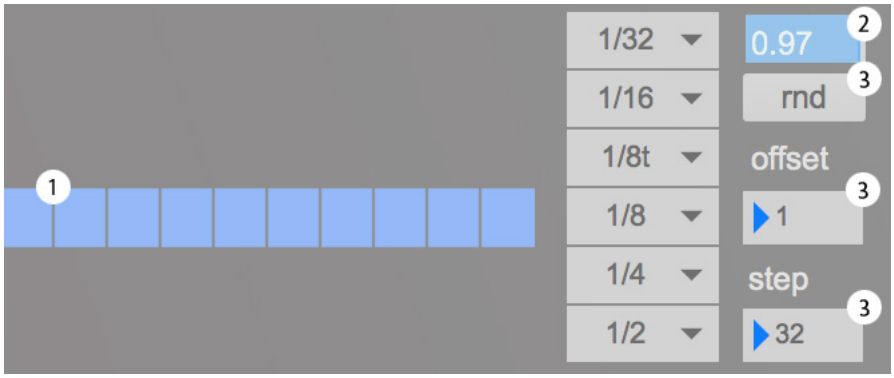
3. Click the button to activate **swing**, adjust the swing amount using the **slider**. The blue **indicator** shows the swing amount.

4. When **ch mod** is activated, it means the midi channel will be modulated, there are two algorithms that decide when the channel will be changed, they can be selected in the **misc menu**, algorithm 1 changes slower, and algorithm 2 changes faster. The **m.ch** is the maximum channel.

5. When **impv** is activated, the track will enter improvisation mode and will automatically add variation to the sequence whenever the red indicator is on. There are two algorithms can be selected in the **misc** menu. What behind the impv is that when the function is taking effect (the red light is on), the sequencer will play the note of the other step instead of the current step. Thus, you can adjust the note of the inactive step to control the impv to some extent.

6. Activate **scale 2** will switch the selected track to scale 2.

Time interval section



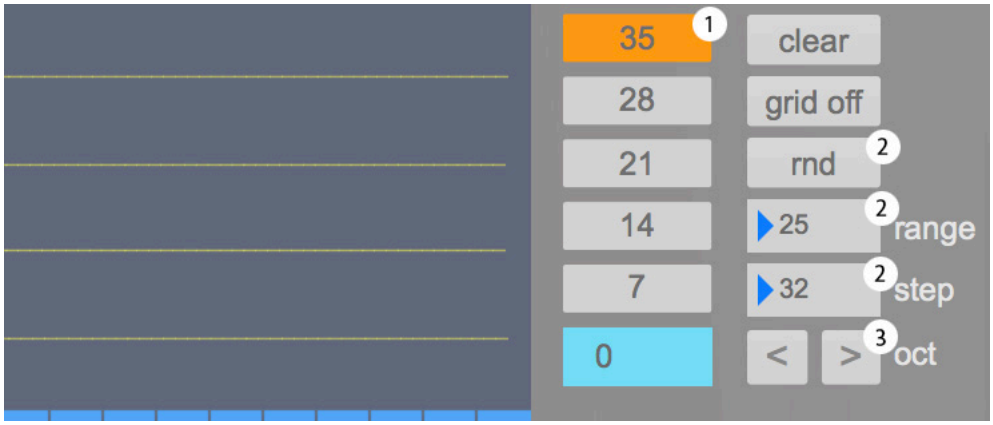
The Dynamic time interval system is what sets ITVL apart from the traditional step sequencers and lets you create organic melody with ease.

1. The value selected for the step N means the time interval between the step N and the next step (N+1).

2. The **length indicator** at the upper right corner is the ratio of the total of the time interval selected against the track length (bars). If the ratio is greater than 1, the indicator will turn red and the track will be turned off automatically in the track control section.

3. Random **offset** controls the range of the rows that the random function will skip, for example, if the offset is 1, then press the **rnd** button, new values will be generated from top row (1/32 in this case) to second to last row (1/4). The random **step** controls the range of the steps that random function will be performed.

Pitch interval section (monophonic mode)



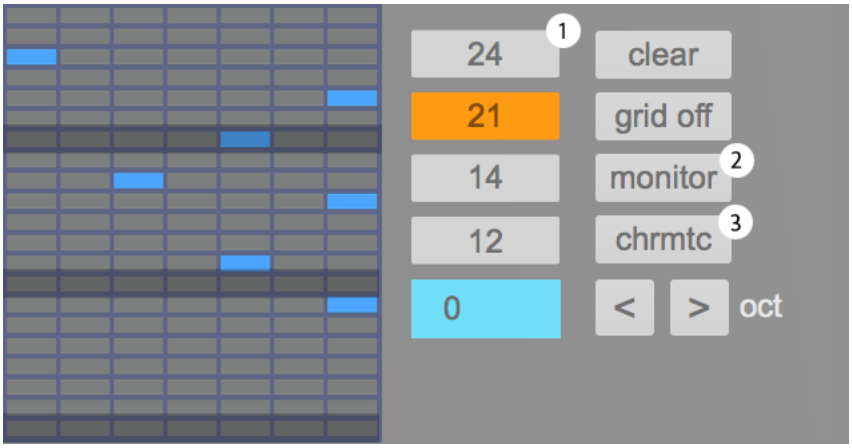
1. The display option button selects the how many octaves are shown in the track. Since ITVL uses restricted scale, the octave means the 7 notes typed in the scale of the global control bar.

2. Similar to the time interval random, the random **range** and **step** sets the range of the random function.

3. The octave up **>** and down **<** sets the octave base, by default, it starts from C0. The blue indicator shows the current octave.

Pitch interval section (polyphonic mode)

Each track has a **mono** and **poly** mode, can be switched using the tab at the lower left corner, it can be controlled via midi.

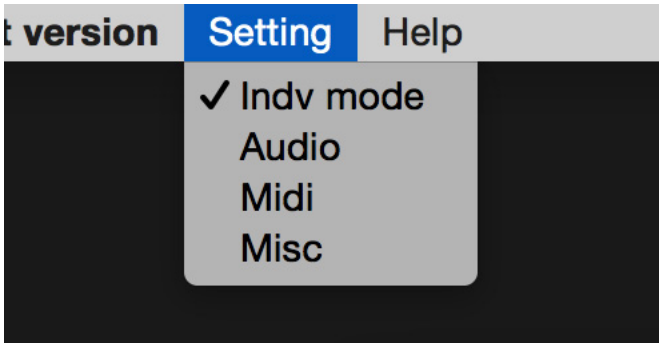


1. Similar to the display option in mono mode, the buttons on the left lets you select the display option, however, unlike the mono mode; switch between each option may cut the notes that are out of range.

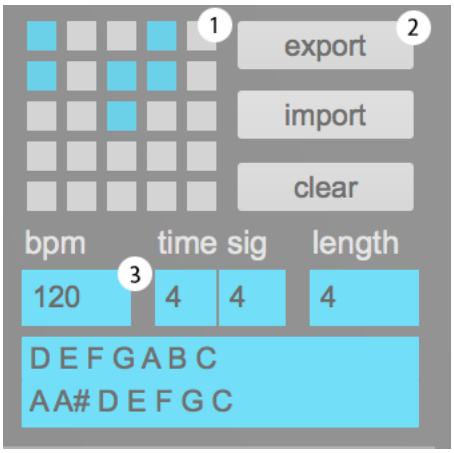
2. **Monitor** lets you hear all the notes on the selected step instantly when you click a cell no matter the track is on or off, it is convenient for choosing chords, but remember to turn it off when the sequencer is playing, otherwise it will play all the notes even if the step is off.

3. By activating **chrmtc**, the track will enter chromatic mode, the scale in the global control will no longer take effect. The display option **24** and **12** are specifically for chromatic mode, which shows 2 and 1 chromatic octave respectively.

Individual mode



In individual mode, every track has its own preset, and can be chained up to 8 patterns. Enter individual mode by checking the **Indv mode** under setting menu. After activating **Indv mode**, the global preset will be automatically disabled.



1. Similar to the global preset, **shift + click** to store pattern.

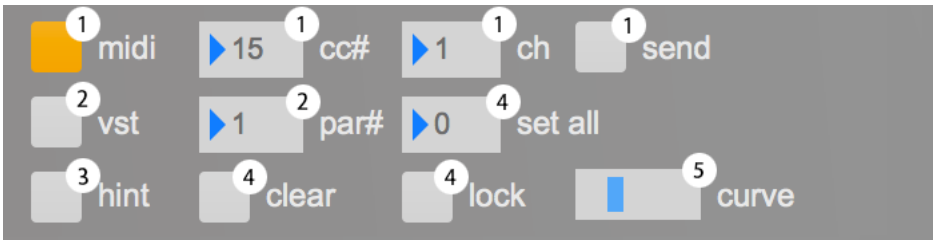
2. **Import/Export** will load/save the individual preset to an external file.

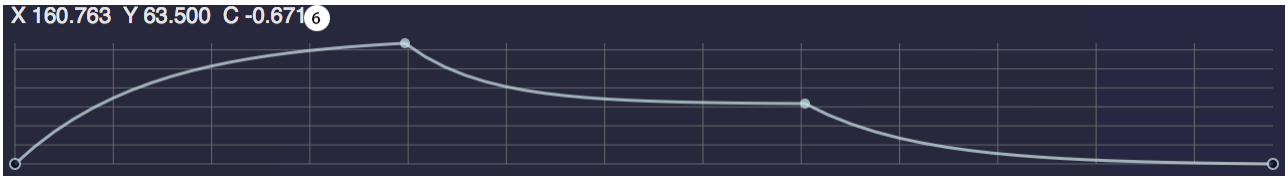
3. The **BPM**, **time sig**, pattern **length** and **scale 1 and 2** shown here are the global information when the pattern was stored, with this being said, when you load a pattern in the individual mode, the global control will not be changed to the same setting the pattern was stored.

1. Up to 8 patterns can be chained internally. Turn on the **chain** button, when the total pattern number is set to 1, the **chain** button will become blue, and patterns can be chained via midi (send corresponding value to ITVL at the end of the pattern, see midi cc and control chart for the detail).

2. When patterns are chained internally, patterns will be chained from left to right.

Automation





Each track has one automation function for modulating the external plug-ins or midi device parameters and it also display the current position in the track length.

1. Activating **midi** cc function will route the automation to selected midi out port. When using with DAW midi learn, select the desired CC#, channel, activate **midi** mode, and then click the **send** button to send the info to DAW.

2. Activating **VST** parameter function will route the automation internally to modulate the hosted VST plug-ins' parameters (VST plug-ins can be hosted in the audio menu). Par# is the parameter# to be modulated.

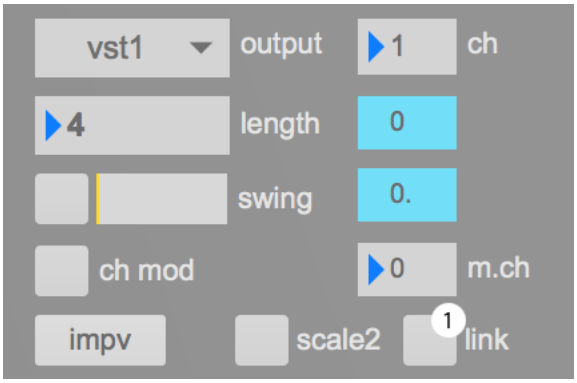
3. By activating the **hint** function, the automation area will display the current position under the track length (bars, length in the track setting) instead of the time interval system. And that is also the position of the automation (automation doesn't follow the time interval system).

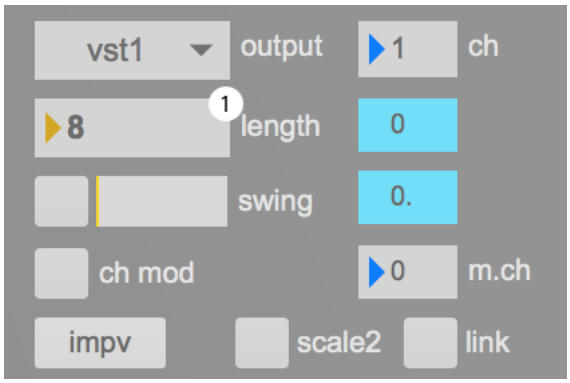
4. **Set all** will set the automation to a fixed value. **Clear** will clear all the automation value. **Lock** will lock the automation area to prevent changes.

5. The automation curve can be adjusted using the **curve** slider, to do this you need to select a joint point first.

6. Clicking the joint point in the automation area means the point is selected; make sure the point info is shown at the upper left corner when you move the mouse cursor to the point. **Shift + click** to delete the selected point.

Linking tracks





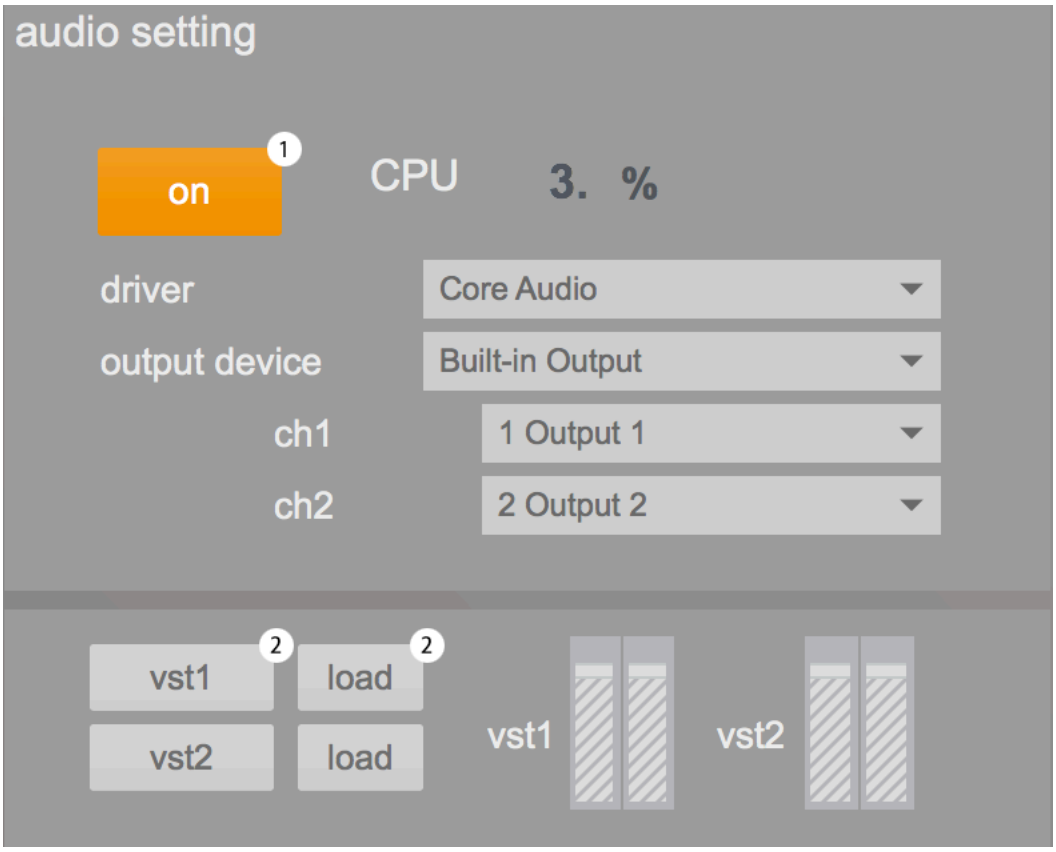
On track#2, 3 and 4, you will find a **link** button in the track setting area; it allows the current track to be linked with the previous track. You can link all 4 tracks together, or link any two or three adjacent.

1. When the function is activated, the first track in the chain will be responsible for triggering the second track, and the second one will trigger the third one, thus, remember to set enough length for the first track because it is the only one that will be re-triggered automatically. For example, if you link track1 and track2 together, both are 4 bars, please make sure the **length** of track1 is set to “8” bars instead of “4” to cover the track2, otherwise the track1 will be trigger every 4 bars, there is not enough time for track2.

2. The first track in the chain will be responsible for all the automation; the automation on the other tracks will no longer work. Turn on the **hint** function on the first track to see the current position in the chain.

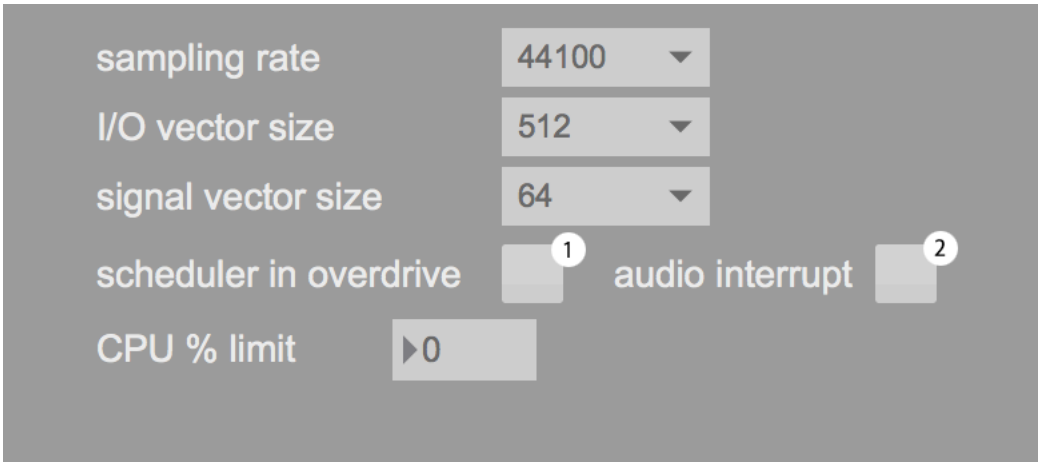
Menu

Audio menu



1. Audio menu is for using ITVL to host external VST plug-ins. By default, the DSP status will be off; click the **on** button to turn on DSP (When the “on” button become orange, the DSP is active).

2. Load plug-ins by clicking the **load** button, open plug-in panel/GUI by clicking the **vst1** or **vst2** button. The faders on the right are for controlling the plug-in volume.



1. When **scheduler in overdrive** is enabled, ITVL gives priority to timing and MIDI processing over screen drawing and user interface tasks such as responding to mouse clicks.

2. Enabling Scheduler in **Audio Interrupt** can improve the timing of audio events that are triggered from control processes or external MIDI input.

Midi menu

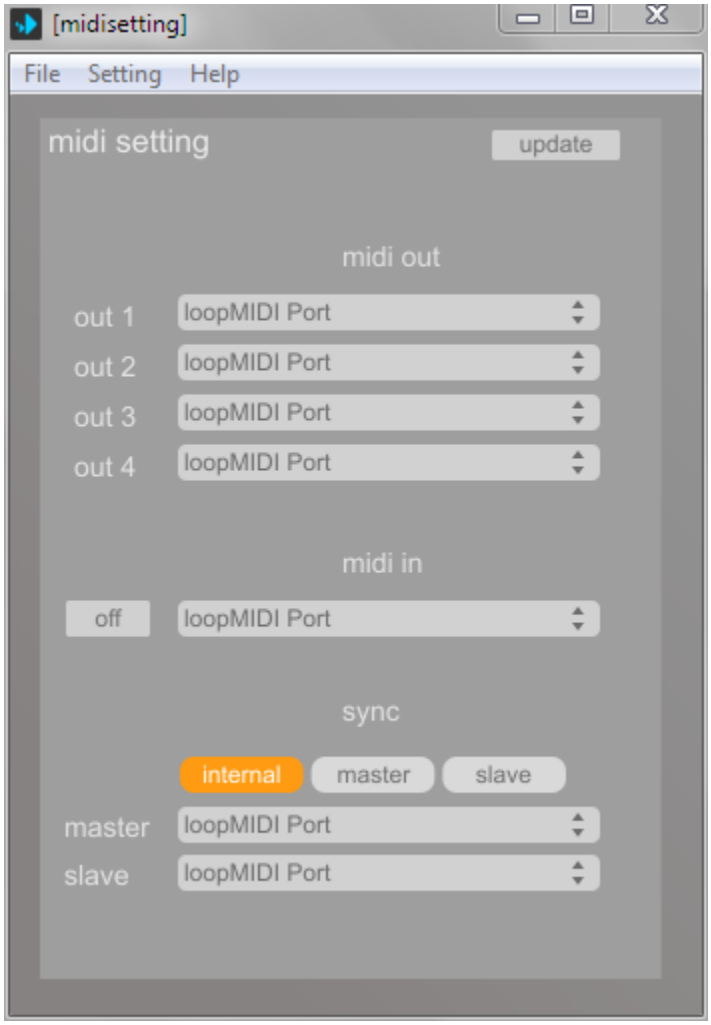
Midi setting menu is for sequencing external device or the plug-ins in your DAW, select the appropriate midi port in the midi out menu. **From itvl 1** and **from itvl 2** are the two internal midi ports for using with DAW (**Mac only**). There are 4 midi out options that can be selected in the track setting output drop down menu, you can choose anyone in any track.

1. If the midi device name doesn't show up in the midi out drop down menu, then click **update** button to refresh midi device information.

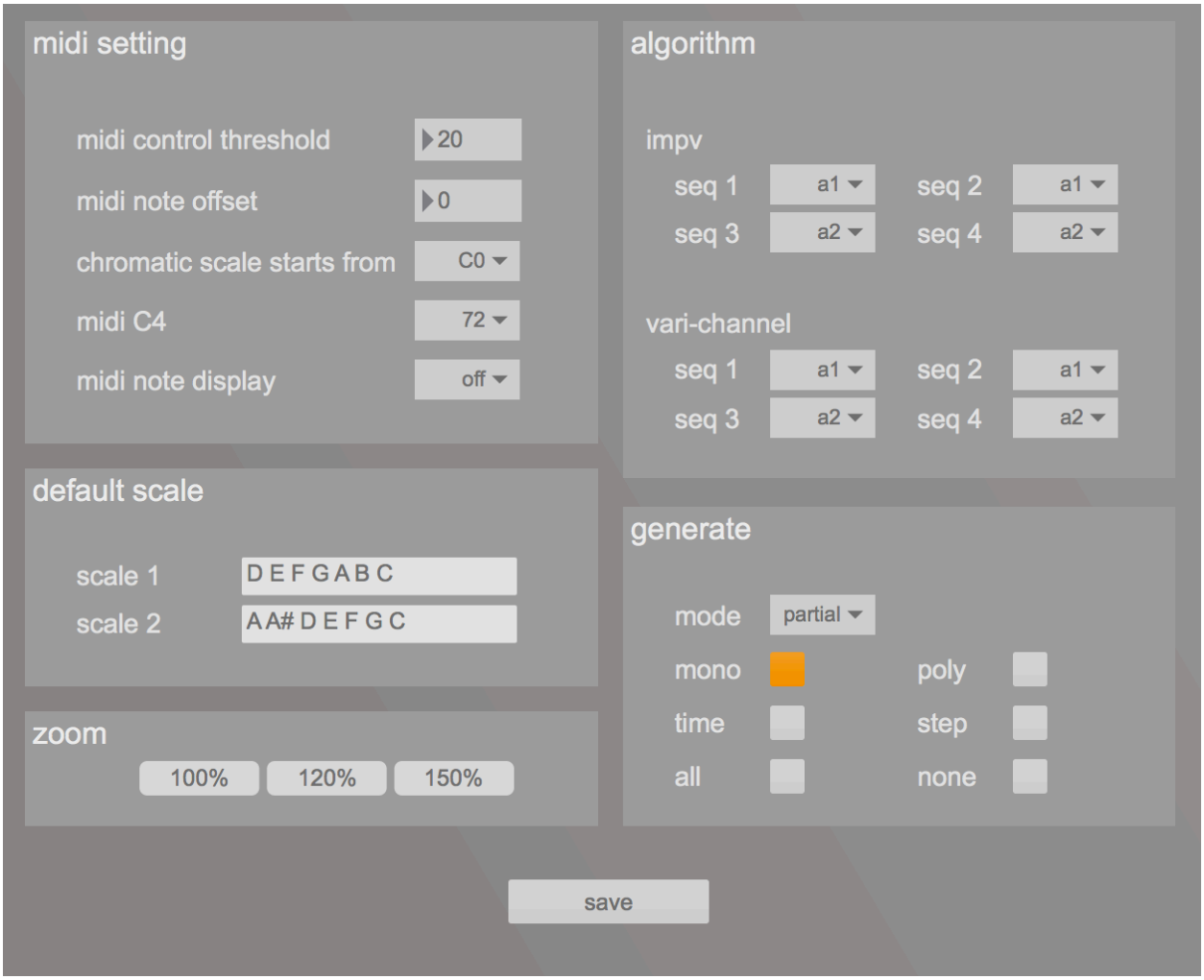
2. **Midi in** drop down menu is for midi controllers, **master** and **slave** menu is for syncing ITVL to other devices. Sync option "master" means ITVL will be the master.

3. If you want to use ITVL with DAW directly in Windows, you need to use programs like LoopMIDI to setup virtual midi ports. The instruction is described in the **Quick Start Guide** section at the beginning of this manual

4. The **off/on button** at the midi in section (**Windows only**) is for turning the midi control off, this is to prevent the midi notes and cc values sent from ITVL going back to control ITVL. You can also setup two midi ports and select a different midi port for midi in to prevent this problem.



Misc menu



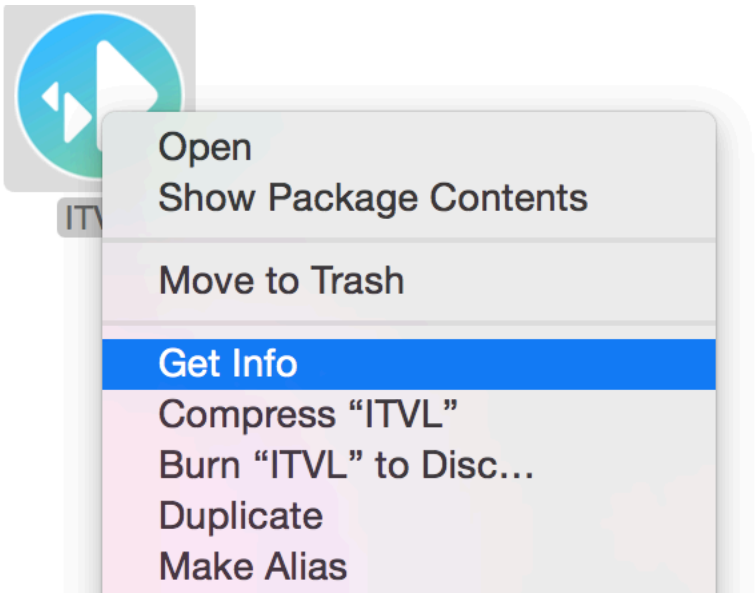
- **Midi control threshold**: set the lowest midi control value level that will activate the on/off toggle (for midi controllers).
- **Midi note offset**: +/- value to the note number sent by ITVL, for solving the conflicting midi note number issues, for example Yamaha and Roland.
- **Chromatic scale starts from**: set the lowest chromatic octave for poly mode.
- **Midi C4**: for solving the conflicting midi note number issues.
- **Midi note display**: select the track that will be monitored in the global control bar, can be turned off starting v.1.4.

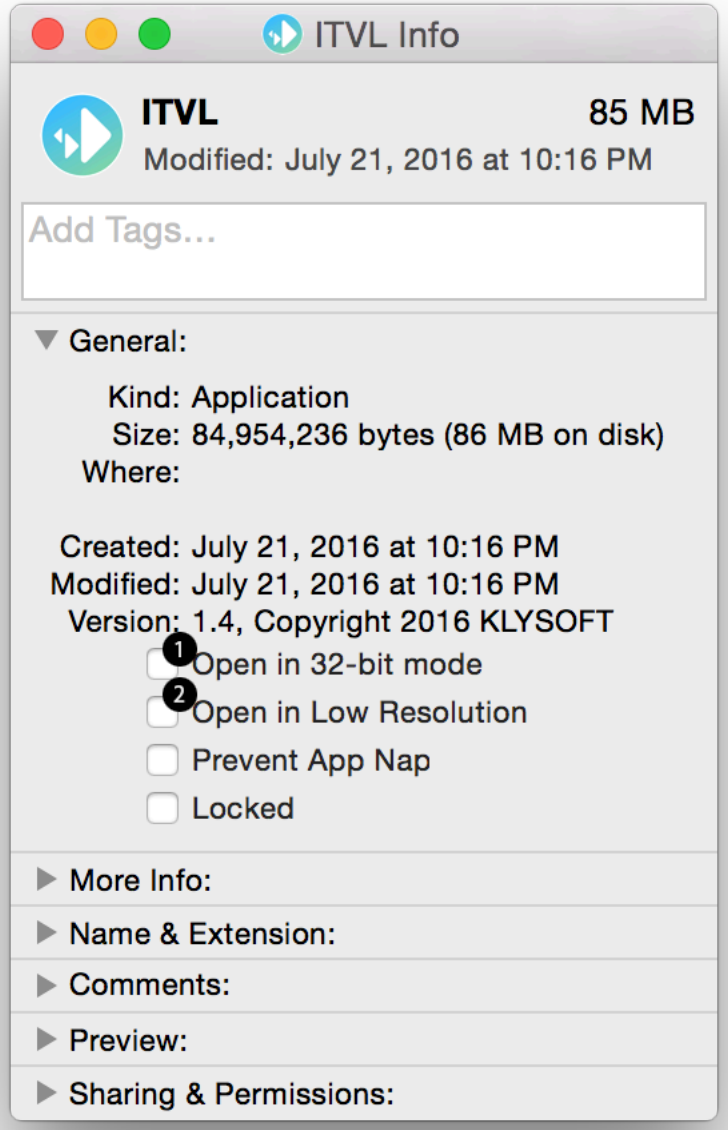
- **Default scale**: set the scale will be loaded at start up.
- **Impv algorithm**: select impv algorithm for each track.
- **Vari-channel algorithm**: select vari-channel algorithm for each track.
- **Zoom**: adjust the GUI size.
- **Generate**: select the function of the generate button.
- Don't forget to **save the setting**, so it will not return to default value next time.

Mac get info menu

You can select 32/64 bit, high/low resolution version in the get info menu. Please note that ITVL can only 32bit VST plugin if you run 32bit app, 64bit app can only host 64bit plugin.

Right-click the app icon and select **Get Info** to open menu.





1. Activate to run in 32-bit mode.

2. Activate to run in low-resolution mode.

Troubleshooting

1. Why my ITVL doesn't save presets anymore? The saved misc menu setting is not loaded when startup, and saved main presets disappear?

   This usually happen in windows environment, the reason is that you may have installed ITVL in the "program files" or "program files (x86)" or any other folders that needs admin privilege to write files. The solution is to run ITVL as an admin, you can do that by right-click the ITVL.exe and click the compatibility tab, check the "Run this program as an administrator" box. Or simply, move ITVL to another folder.

2. Why midi sync is not working properly?

   Check midi setting menu, click **update** button and select midi port again. If midi sync as a slave is not working properly, please check audio menu and see if internal DSP is turned on. You need to turn on internal DSP to use midi sync as slave.

3. Why there is no sound when hosting VST plug-ins?

   First, check the track control and see if the track is on and then check setting area; make sure the output option is **VST1** or **VST2**. If this doesn't help, check if VST plug-in is 64bit, ITVL doesn't support 32bit VST plug-ins. If you are running windows, make sure that no other program is using ASIO driver and midi port is not Microsoft gs wavetable synth, because it will take up ASIO as well.

4. Why my stored presets disappear while the misc menu setting seems to work fine?

   This may happen if you exported presets to an external file. When you exported presets after you make any changes to the preset, the changes will NOT be stored in the program.

5. Why it is running slow on Retina Mac?

   If you feel ITVL is running slow, you should check the setting in the get info menu (right-click on ITVL app), check "**open in low resolution**" and uncheck "**open in 32-bit mode**" will help.

6. Why my username and serial# doesn't work?

   When entering serial#, you should type the "-" as well. Sorry you can't copy and paste the serial# at the moment.