INDEPENDENCE FX

Ultimate Mastering & Postproduction Effect Rack

YELLOWTOOLS

YELLOW TOOLS

INDEPENDENCE FX

Operating Manual

for

Independence FX 2.0.0

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Welcome

Thank you very much for purchasing Independence FX 2.0 - your ultimate mastering and post production effect rack!

Independence FX enters a totally new dimension for the entire mastering and post production of your songs, scores and sound recordings in mono, stereo and surround up to 8.1.
The extremely intuitive and easy-to-use rack functionality gives you immediate access to over 40 premium filters and effects, including yellow tools' sophisticated Impulse Response processor "Origami" with many IR files from the company „INSPIRED ACOUSTICS" and an audio import option. Independence FX offers three independent snapshot slots. You can add an unlimited number of insert effects to each slot and easily change their order per drag'n'drop. For a most intuitive workflow, the order of your insert effects in the rack corresponds exactly to the progression of your audio input signal.

Independence FX supports full "No Loss Patch Compatibility": Regardless of your preferred platform or host application - Independence FX enables you to save all your effect setups and snapshots as "No Loss" presets and to transfer them to other host applications or platforms.

Independence FX comes with an outstanding and innovative host and MIDI automation including the additional parameters „invert", „bypass", „host learn" and „MIDI learn". All speed-related filters and effects of Independence FX can be synchronized comfortably to the speed of your sequencer software (host).
Based on yellow tools' innovative Advanced Effect Technology (A.E.T.) Independence FX offers the most powerful effects with lowest CPU usage.

Worldwide unique in Independence FX is the flexibility of switching between different surround formats: You can change the input and output format completely independent from the original input format of your audio file! Generally Independence FX recognizes the surround format of your host-channel automatically and assigns the input and output format accordingly. Nevertheless you can assign other surround formats afterwards at any time - here an example:
Your host-channel has the surround format „5.0 DTS". You only want to edit the three front channels and finally create a new surround format after your editing. Simply select the input format „3.0 Cinema" in Independence FX, assign any insert filters and effects you want, and finally select the output format „5.0 Dolby Digital".
You can see that with Independence FX it is possible to extract separate channels of a surround file (any combination is possible), to edit them afterwards and finally to create a totally new surround format of these channels using the sophisticated Surround Panner.
If you are looking for a powerful virtual effect rack, specially designed for working with professional surround environments, Independence FX is all you'll ever need!

Despite the simple and intuitive operation of Independence FX we recommend you to read this manual carefully - it will elementarily simplify your work and handling of filters and effects.

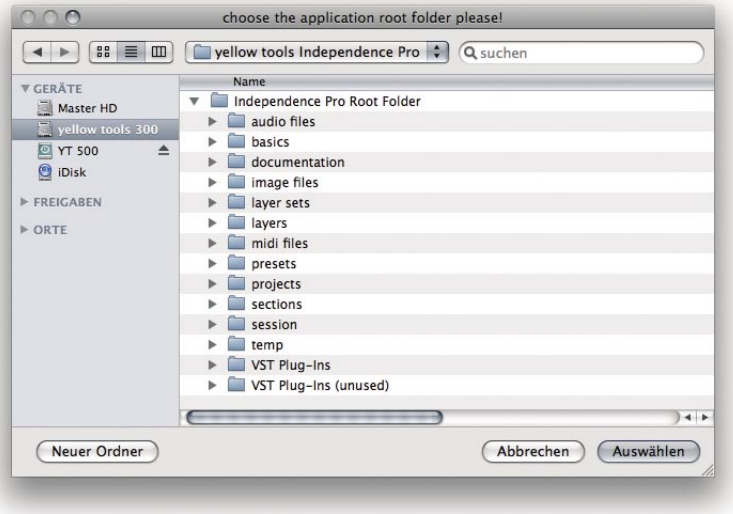
And now have fun with Independence FX.

User Interface & Basics

First start of Independence FX

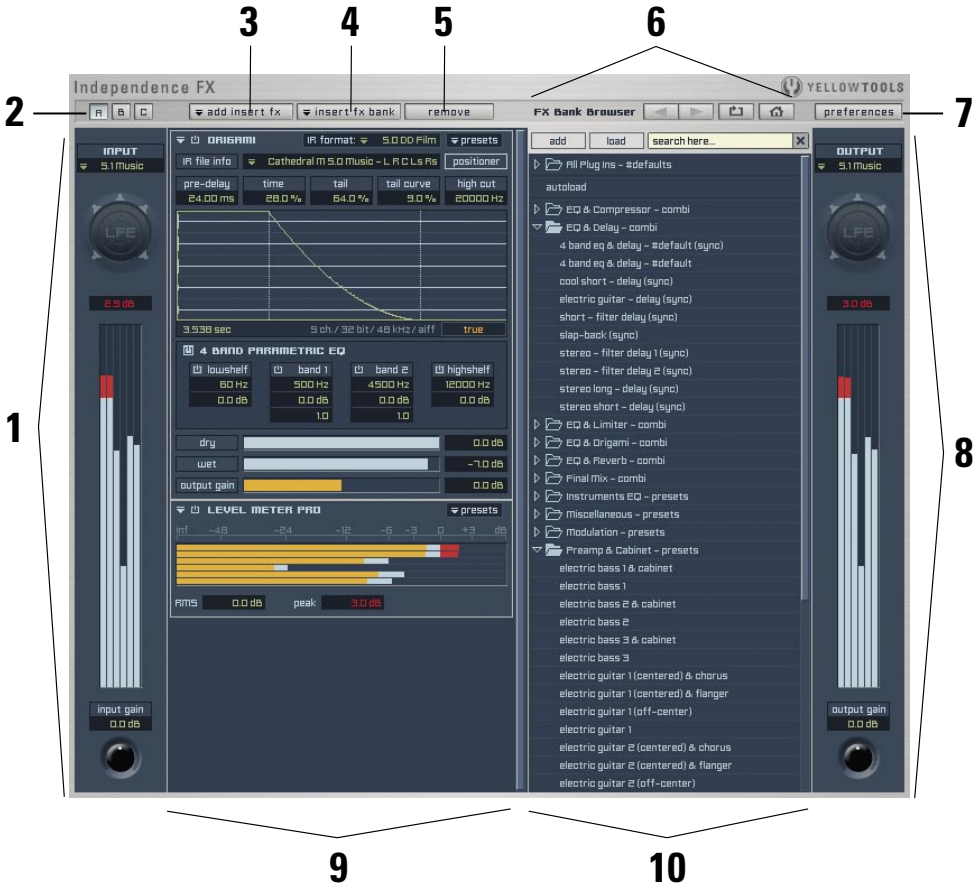
During the first start of Independence FX you get prompted to select the Independence Pro Root Folder:

This folder contains all files that are required for Independence FX and the PDF documentation. You can change the location of your Independence Pro Root Folder at any time afterwards and you can also change the Root Folder you want to use with Independence FX - if you have multiple Independence Pro Root Folders installed. Please browser through your hard disk(s) and select your Independence Pro Root Folder.



User interface of Independence FX

The user interface of Independence FX is clearly designed and intuitively to use.



1.) Input Channel

With the „Input“ pull-down menu you can select the format of the incoming audio signal. The selected format gets displayed graphically in the room matrix below the pull-down menu. The level meter including the indicator displays the current volume level of the incoming audio signal. With „input gain“ you can raise or lower the volume of this signal even before the modulation of Independence FX begins.


Independence FX
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insert fx bank
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FX Bank Browser
preferences
INPUT
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ORIGAMI
IR format: 5.0 DD Film
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100.0 %
50.0 %
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20000 Hz
add
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search here...
All Plug Ins – #defaults
autoload
EQ & Compressor – combi
OUTPUT
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RMS
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0.0 dB
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0.0 dB
Center Only
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2.1 Stereo – L R + LFE
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4.0 Dolby Surround / Pro Logic – L C R S
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✓ 5.1 Music – L R C LFE Ls Rs
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7.1 SDDS Music – L C R Ls Rs L2 R2 LFE
7.0 Film – L R C Ls Rs Lc Rc
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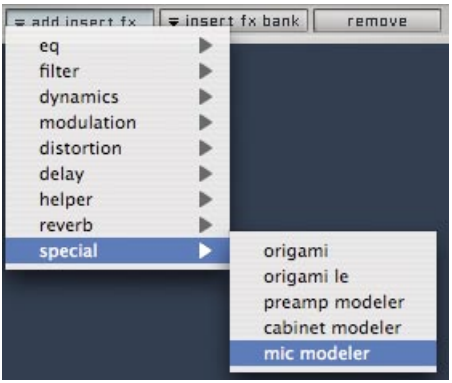
7.0 Music – L R C Ls Rs L2 R2
7.1 Music – L R C LFE Ls Rs L2 R2
8.0 Film – L R C Ls Rs Lc Rc Cs
8.1 Film – L R C LFE Ls Rs Lc Rc Cs
8.0 Music – L R C Ls Rs Cs L2 R2
8.1 Music – L R C LFE Ls Rs Cs L2 R2

2.) Slot Selection

Independence FX contains three different Snapshot Slots (A, B and C). So you can create and save three independent effect setups for each loaded Independence FX plug-in.
Of course you can switch between these three Snapshot slots during your session to compare different effect setups with each other.

3.) Insert FX Menu



Use this menu to add any number of insert filters and effects to your virtual rack.

4.) Insert FX Bank Menu

Use this menu to add a group of insert filters and effects to your virtual rack. You can also save your currently loaded inserts as an Insert Bank.
If you save your currently loaded inserts as „autoload.ytp“ file in your „Insert FX Bank“ folder, these inserts get loaded with every start of Independence FX automatically.

5.) Remove

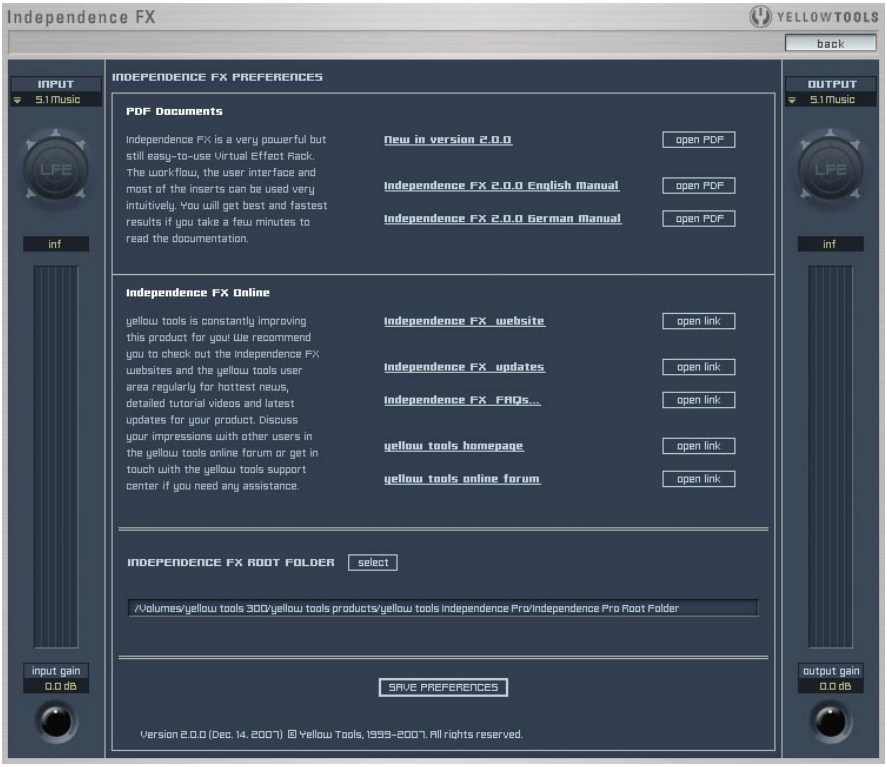
With this button you can remove one or more selected insert filters and effects from your virtual rack.

6.) FX Bank Browser Navigation

Here you have all navigation parameters to browser through your FX Bank presets.
Using the arrow icons you can browse through your navigation forwards and backwards.
A click on the “refresh” button refreshes your entire FX bank preset folder and with the “home” button you switch back to the first level of your presets.
Using the “load” button (or double-click) you can load the selected preset in the rack - “add” (or “ctrl” key (Mac) / “strg” key (Win) and double-click) adds the preset to already existing inserts in the rack.
As soon as you enter a keyword in the search field, the search will start automatically. With a click on the “X” icon you switch back to the first level.

7.) Preferences

With a click on this button you can open the preferences menu.



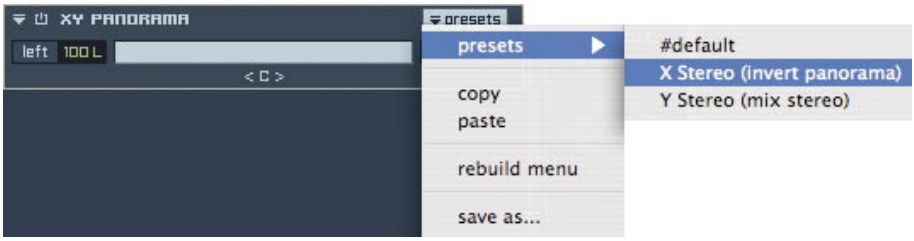
On the „Preferences“ page you have several links to PDF documents (manuals, version history) and to some online links for the newest updates, tutorials and much more.
The online links require an internet connection and to read the PDF documents on your computer you need the free Adobe Acrobat Reader or any other application that can open PDF documents.
With the „select“ button you can select your Independence FX Root Folder. If you change your Independence FX Root Folder you have to click on the „Save Preferences“ button afterwards and the restart Independence FX.

8.) Output Channel

With the „Output“ pull-down menu you can select the format of the outgoing audio signal. The selected format gets displayed graphically in the room matrix below the pull-down menu. The level meter including the indicator displays the current volume level of the outgoing audio signal. With „output gain“ you can raise or lower the volume of this signal after the modulation in Independence FX.

9.) Insert Rack

In this area all your added insert filters and effects get listed one below the other. The order of your insert effects in the rack corresponds exactly to the progression of your audio input signal. You can change the order of the insert filters and effects simply per drag‘n‘drop. All Independence FX inserts can get shut and opened with the small triangle symbol on the left side of the insert name.
You can synchronize some of the insert filters and effects with your sequencer software (host) with a click on the „sync“ button of the insert.
Additionally each insert effect contains its own „bypass“ button and „preset“ menu. With this menu you can save all settings of each insert filter and effect and reload it afterwards at any time. Use copy/paste to transfer the current settings of an effect to another slot without having to save them before.



10.) FX Bank Browser Content

In this area all your FX bank presets of the available insert filters and effects get listed one below the other.

Autoload feature

If you save the settings of your currently loaded insert as „autoload.ytp“ file in the respective folder, this insert get loaded with these settings automatically each time you add it to the rack.

General operation

The operation of Independence FX‘s filters and effects is extremely intuitive and user friendly.
You can make any adjustments with controllers and/or input fields. There are two different ways to use the input fields:

1.) With the keyboard:
Double-click on an input field, enter a new value and press the return key to activate the new value.

2.) With the mouse:
Click and hold the mouse button on an input field. Keep the mouse button pressed and move upwards to increase the value or move downwards to decrease the value. Release the mouse button when you reached the desired value. The faster you move the mouse the faster the parameter value of the input field will change.
If you use the mouse for adjusting your values, you can additionally use the following keyboard short cuts:

- For a better finetuning, press and hold the „shift“ key before you move up or down.
- To reset the input field to its „default“ value, press and hold the „command“ key (Mac OS X) or the „ctrl“ key (Windows XP) and click on the respective input field.

As soon as you start editing the value of an input field (whether with the keyboard or with the mouse), the area of this input field and the value itself get displayed inversely:

You can open the MIDI and/or host automation menu for parameters simply with the held „ctrl.“ key and a mouseclick on the parameter you want to automate.
The automation gets explained with all details in the following chapter.

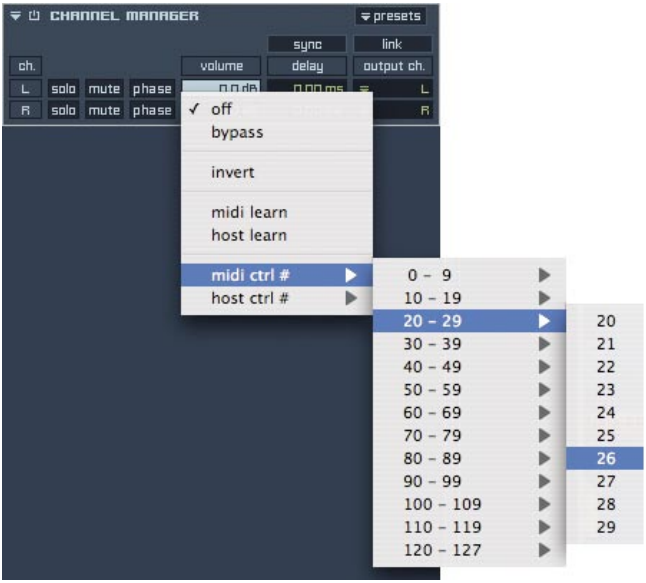
Automation

Independence FX offers MIDI automation with 128 MIDI CCs (Continuous Controller) and host automation with 128 host channels per entity.
On the following pages we will explain the MIDI and host automation assignment of parameters in Independence FX. Please read the user manual of your host application about the required settings and assignments for automation in your sequencer software.

IMPORTANT: *Because of the flexibility of Independence FX's virtual rack functionality no parameter names get used for the automation but only numbers. This enables you to use the same insert filter or effect several times in your rack with different automations assigned to the same parameter.*

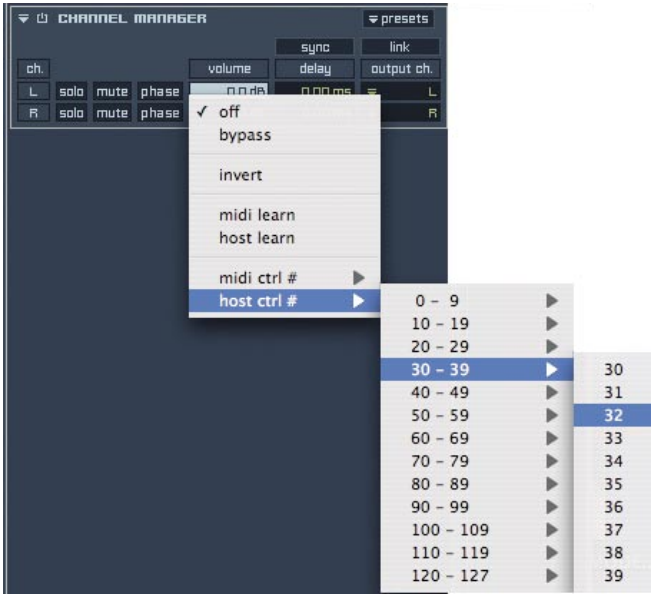
Setup of an automation

To automate a parameter please click with the held „ctrl" key on the desired parameter to open the automation pull-down menu (example MIDI automation of the „Channel Manager" parameter „Volume"):



Select the MIDI controller number „26" and move your controller 26 of your MIDI keyboard (or any other MIDI controller) afterwards. You will recognize that the „Volume" value will change accordingly.

To make the assignment of MIDI controllers even easier we integrated next to the manual assignment also a „midi learn“ function. Just click on this option in the pull-down menu and move any controller of your MIDI keyboard you want to use for „Volume“ afterwards. Independence FX recognizes the CC number and its position automatically and assigns this number to „Volume“ accordingly. You can view this number in the „midi ctrl #“ menu at any time and of course also change it manually.
The host automation works exactly the same way - you can assign host controller channels both manually and with „host learn“.



Snapshot automation

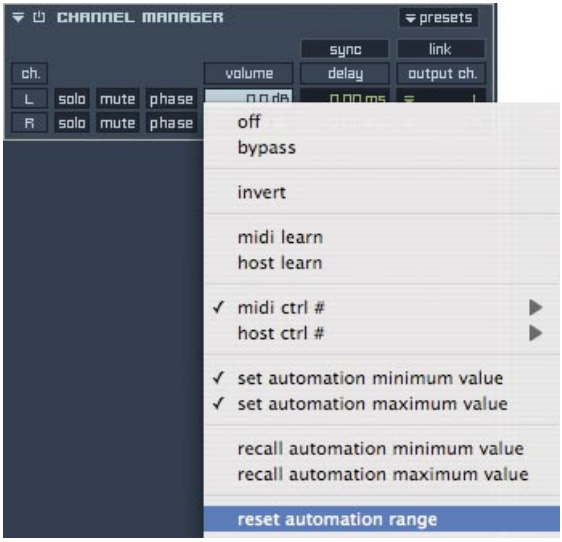
Beside the automation of the insert filters and effects parameters, Independence FX also supports the entire MIDI and Host automation for the three “Snapshot Slots”:

The assigment of the automation works exactly like you do with the inserts.

Additional automation features

The automation pull-down menu contains beside the „learn“ and manual assignment of automation controllers also additional and very useful parameters:

- „off“: With this option you can delete the automation of the assigned parameter.
- „bypass“: With this option you will not delete the automation but only mute it temporarily. The assigned controller number maintains.
- „invert“: If you activate this option, Independence FX will process the incoming messages from your controller inverted.
- „set automation minimum value“ & „set automation maximum value“:
  Beside the general automation of parameters you can additionally set a minimum and maximum automation value for each parameter. This means that you can use the full range (0% to 100%) of the selected controler only for a specified value range of the assigned (automated) parameter.
  Set the parameter to your desired minimum/maximum value and select the minimum/maximum option in the pull-down menu afterwards.
- „recall automation minimum value“ & „recall automation maximum value“:
  Select this option and the parameter value will switch to the currently assigned minimum/maximum value immediately.
- „reset automation range“: Select this option to reset both the current minimum and the current maximum values for the automated parameter.



Visual presentation of automated parameters

As soon as a parameter of Independence FX is automated, the color of the parameter value will change. In Independence FX parameters can be indicated in four different ways (example: „Frequency“):

1.) Standard view: Parameter without automation (color “yellow”).

2.) „midi learn“/„host learn“ view: A „learn“ option for the parameter „Frequency“ was activated (color “orange”).

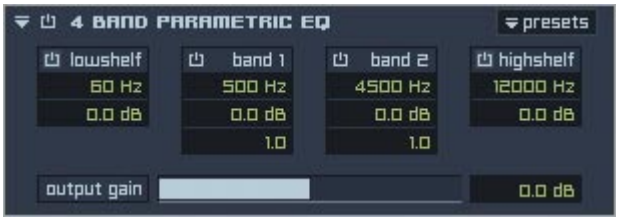
3.) Automated view: The parameter „Frequency“ is automated (color “green”).

4.) „bypass“ view: he parameter „Frequency“ is automated but currently muted (color “grey”).

Equalizers

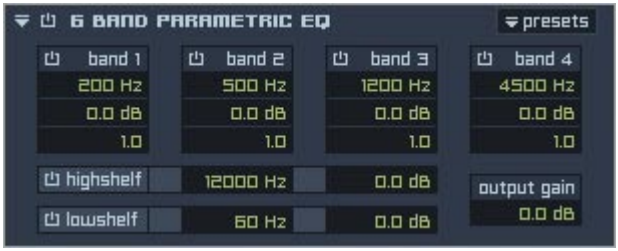
Equalizer provide controls to boost or cut specified frequencies of the audio signal.

4 band parametric EQ



Lowshelf: Below the adjusted frequency the audio signal is boosted (positive dB values) or cut (negative dB values).
Band 1: Depending on the selected slope of the curve (value 3) the adjusted frequency is boosted (positive dB values) or cut (negative dB values).
Band 2: Depending on the selected slope of the curve (value 3) the adjusted frequency is boosted (positive dB values) or cut (negative dB values).
Highshelf: Above the adjusted frequency the audio signal is boosted (positive dB values) or cut (negative dB values).
Output Gain: The output volume of the audio signal.

6 band parametric EQ



Same as „4 Band parametric EQ“ but with four identical filters.

Vintage 3 band EQ

As the name implies: A precise reproduction of a Vintage EQ. The slope of the curve is already determined for each filter.

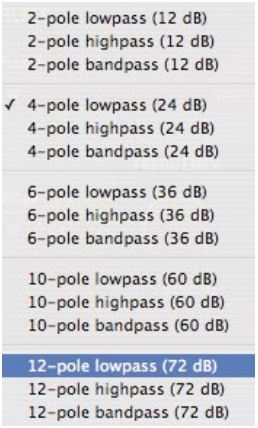
Band 1: The adjusted frequency can get boosted (positive dB values) or cut (negative dB values).

Frequency: Specifies the frequency, above/below which the audio signal gets boosted/cut.

Output Gain: The output volume of the audio signal.

Filters

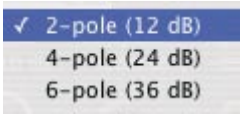
2D Filter



With the 2D Filter you can boost or cut the range of frequencies - depending on the selection of your filter type and slope. Use the spot in the 2D matrix to edit both parameters „Frequency“ and „Resonance“ simultaneously.

Slope: Pull-down menu to select the filter type and slope.
Frequency: Specifies the frequency, above/below which the audio signal gets boosted/cut.
Resonance: Emphasis of the selected frequency from 0% (no emphasis) to 100% (maximum emphasis).

X-Filter



With X-Filter you can assign an infinitely variable fade between the three filter types „Low Pass“, „Band Pass“ and „High Pass“.

Frequency: Specifies the frequency, above/below which the audio signal gets boosted/cut.
Resonance: Emphasis of the selected frequency from 0% (no emphasis) to 100% (maximum emphasis).
Slope: Pull-down menu to select the slope.
Filter Mode: Fade between „Low Pass“, „Band Pass“ and „High Pass“ from 0% to 100%.

Filter Follower

Same as X-Filter. Additionally the Filter Follower changes the settings for „Frequency“ and „Resonance“ of the selected „Slope“ and „Filter Mode“ in a dynamic ratio to the volume of the audio signal.

Frequency: Specifies the frequency, above/below which the audio signal gets boosted/cut.
Resonance: Emphasis of the selected frequency from 0% (no emphasis) to 100% (maximum emphasis).
Slope: Pull-down menu to select the slope.
Filter Mode: Fade between „Low Pass“, „Band Pass“ and „High Pass“ from 0% to 100%.
Intensity: Intensity of the filter.
Attack: The moment the filter will apply after the audio signal started.
Release: The moment as of the filter will not apply any longer after the audio signal softens.
Output Gain: The output volume of the audio signal.

Low Cut Filter

With the Low Cut Filter you can cut low frequencies depending on the selected slope.

Slope: Pull-down menu to select the filter type and slope.
Frequency: Specifies the frequency, below which the audio signal gets cut.

High Cut Filter

With the High Cut Filter you can cut high frequencies depending on the selected slope.

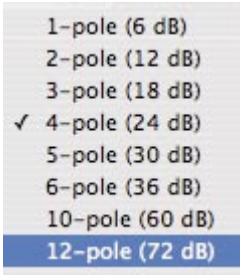
Slope: Pull-down menu to select the filter type and slope.
Frequency: Specifies the frequency, above which the audio signal gets cut.

Multi Mode Filter

The „Multimode Filter“ allows the usage of the three filter types „Low Pass“, „Band Pass“ and „High Pass“ simultaneously.

Slope: Pull-down menu to select the slope.
Frequency: Specifies the frequency, above/below which the audio signal gets boosted/cut.
Resonance: Emphasis of the selected frequency from 0% (no emphasis) to 100% (maximum emphasis).
Low Pass: Volume of the Low Pass part.
Band Pass: Volume of the Band Pass part.
High Pass: Volume of the High Pass part.

LFE Filter

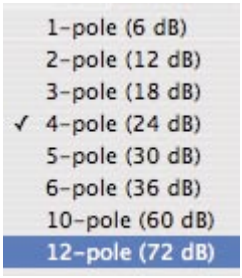


If you are working in a surround format that contains a LFE, you can use this filter to cut high frequencies depending on the selected slope.

LFE creator: Creates a new additional LFE channel out of all available channels.
Slope: Pull-down menu to select the filter slope.
Frequency: Specifies the frequency, above which the LFE signal gets cut.
Output Gain: The output volume of the audio signal.

IMPORTANT: To use the "LFE creator" option you have to select a surround format that allows an LFE channel (5.1, for example) in the input and output pull-down menus.

Satellites HP Filter



If you are working in a surround format you can use this filter to cut low frequencies depending on the selected slope.

Slope: Pull-down menu to select the filter slope.
Frequency: Specifies the frequency, below which the audio signal gets cut.
Output Gain: The output volume of the audio signal.

Dynamics

Compressor

With the „Compressor“ you can reduce the dynamic of your audio signal and thus the differences between soft and loud signals. Thereby you can turn up the overall signal higher without exceeding the available headroom and causing unwanted distortions. The result is more presence and punch of your audio signal.

Input Gain:	Here you can turn up or down the volume of your input signal before the compression applies.
Treshold:	Sets the level above which the compressor starts reducing peaks.
Ratio:	Determines the amount of compression.
Attack:	Sets how long it takes for compression to kick in after the input signal exceeds the treshold level.
Release:	Determines how long it takes for the compression action to stop after the input signal falls below the treshold level.
Knee:	The curve character of the starting compression after exceeding the treshold level. 0% is a hard start of the compression, 100% an extremely soft start.
Lookahead:	This value balances small fluctuations of the audio signal within the entered time in milliseconds.
Output Gain:	The output volume of the audio signal.

Limiter

A Limiter regulates the output level of the audio signal gently down, before an over-regulation can take place. Finally the Limiter is also like an „extreme type“ of the compressor, since it works according to the same principle as the compressor, however the level of the compression is substantially higher.

Treshold: Determines the value in dB about how much you want to raise the volume of your audio signal.
Release: Determines how long it takes for the limiter action to stop after the input signal falls below the treshold level.
Output Gain: The output volume of the audio signal.

Gater

A Gater only lets an audio signal pass through if a determined volume level of the audio signal is exceeded. With the Gater you can avoid noises of the audio signal and also control its dynamic.

Treshold: Sets the volume level above which the gater lets the audio signal pass through.
Attack: The rise time of the audio signal after it exceeds the treshold level.
Hold: This value balances small fluctuations of the audio signal within the entered time in milliseconds.
Release: Determines how long it takes for the gater action to stop after the input signal falls below the treshold level.

Modulation

Chorus

Chorus doubles the audio signal and detunes the copy compared to the original signal. Thereby the audio signal sounds softer and is more present.

Depth: Determines the level of the modulation in %.
Speed: Determines the speed of the modulation in hertz.
HF Damp: All frequencies of the audio file above the set value get cut.
Spread: Limitation of the panorama ratio from both sides simultaneously. 100% corresponds to the full stereo panorama, 0% corresponds to mono.
Dry/Wet: Volume relation between the unprocessed (dry) and the processed (wet) audio signal.
Sync: Enables the synchronization of the „Speed“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).

Flanger

Flanger doubles the audio signal and delays the copy compared to the original signal.

Depth: Determines the level of the modulation in %.
Speed: Determines the speed of the modulation in hertz.
HF Damp: All frequencies of the audio file above the set value get cut.
Feedback: Routes the delayed signal back to the module‘s input. Higher values create a more intense effect.
Spread: Limitation of the panorama ratio from both sides simultaneously. 100% corresponds to the full stereo panorama, 0% corresponds to mono.
Dry/Wet: Volume relation between the unprocessed (dry) and the processed (wet) audio signal.
Sync: Enables the synchronization of the „Speed“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).

Phaser

Like „Flanger“ also the „Phaser“ effect splits the input signal, manipulates the frequencies of one split and then sums the two splits back together.
The result sounds similar to a flanger, but softer and subtler.

Speed: Determines the speed of the modulation in hertz.

Start Freq: Sets the start frequency of the Phaser effect.

Range: Determines the range around the start frequency in which the phaser modulation takes place. 0% corresponds to no modulation, 100% corresponds to maximum modulation.

Feedback: Routes the delayed signal back to the module‘s input. Higher values create a more intense effect..

Spread: Limitation of the panorama ratio from both sides simultaneously. 100% corresponds to the full stereo panorama, 0% corresponds to mono.

Dry/Wet: Volume relation between the unprocessed (dry) and the processed (wet) audio signal.

Sync: Enables the synchronization of the „Speed“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).

Vinylizer

The Vinylizer includes three different vinyl types (33, 45, 78 tempo) to simulate the sound of old recordings. Beside the different tempos you can additionally choose between three categories:
1 = new recording
2 = old recording
3 = very old recording

Model: Selection of the vinyl type.
Model Vol: Volume of the selected vinyl type.
Clicks: Simulation of the „Crackle“ noises of old recordings. 0% corresponds to no noises, 100% corresponds to many noises.
An authentic value is between 3% and 7%.
Clicks Vol: Volume of the „Crackle“ noises in dB.
Noise: Simulation of noise of old recordings dB.
Lowpass: All frequencies above the set value get cut.
Highpass: All frequencies below the set value get cut.
Output Gain: The output volume of the audio signal.

the vinylizer categories menu

Distortion

Time clipper

Time Clipper „hacks“ the audio signal and produces an analog rhythmic distortion. This distortion is however not static, but dynamic - in dependence to the „Depth“ and „Speed“ parameters.

Treshold: Sets the value for Time Clipper to start after the input signal exceeds the treshold level.
Gain: Determines the level of the modulation in dB.
Depth: Determines the level of the modulation in %.
Speed: Determines the speed of the modulation in hertz.
Volume: The output volume of the audio signal.
Sync: Enables the synchronization of the „Speed“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).

Bit reduction

Bit reduction reduces the resolution of the audio signal. Thus you can reduce the sound quality and you can simulate the sounds of older equipment.

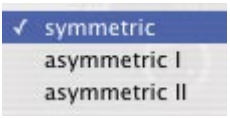
Bit Reduct: Here you can assign the new resolution to your audio signal.
24 bit correspond to the current standard of recording studios, 16 bit to an audio-cd, 8 bit to older samplers and drum machines, 4 bit to very cheap sound generators (toys, for example).
Sample Red.: Reduces the number of frames and thus creates interesting effects.
Aliased: If sample reduction is used, you can activate this option to avoid unwanted clicks.
Drive: Creates a digital distortion.

Dual band distortion

Dual Band Distortion splits the audio signal and produces an analog distortion. Each split gets modulated separately.

Frequency: Sets the frequency value where the audio signal gets split.
Drive A: This is the range below the set frequency. The set dB value determines the volume of the modulation.
Drive B: This is the range above the set frequency. The set dB value determines the volume of the modulation.
Color: With „color“ you can make the modulated audio signal brighter or closer. Negative values produce a closer sound, positive values produce a brighter sound.
Volume: The output volume of the audio signal.

Tube distortion



Tube Distortion produces an analog symmetric or asymmetric distortion of the audio signal.

Drive: The assigned dB value determines the volume level of the modulation.
Low Cut: Specifies the frequency, below which the audio signal gets cut.
HF Damp: All frequencies of the audio file above the set value get cut.
Shape: Here you can choose between symmetric and asymmetric processing.
Volume: The output volume of the audio signal.

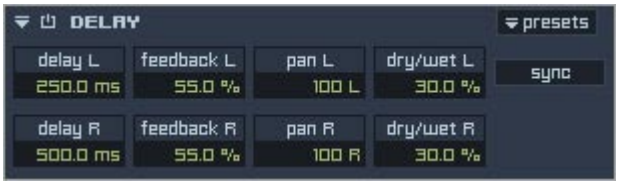
Delays

Sample delay

With „Sample Delay“ you can assign a time related movement of the audio signal.

Time L: The delay of the left channel in milliseconds.
Time R: The delay of the right channel in milliseconds.
Link Button: If activated, the entered value gets also assigned to the other channel automatically. If you edit the value of one channel with your mouse, the value of the other channel gets scaled accordingly.
Sync Button: Enables the synchronization of the delay to the tempo of your sequencer software (host).

Delay



Delay can produce one or more delayed copies of the input signal and thus creates an echo-like sound.

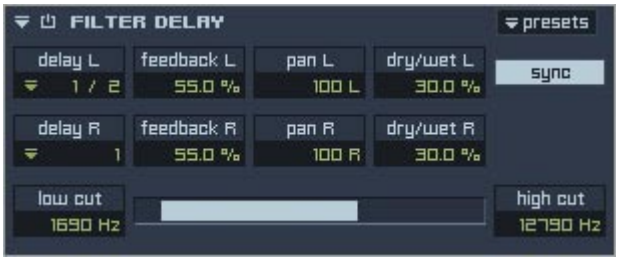
Delay L: The interval for the left channel between hearing the straight signal and the first delay of the delayed signal.
Feedback L: Sends a portion of the output of the left channels back into the input of the delay line, which create repeating echoes. 0% corresponds to no delay, 100% corresponds to many delays.
Pan L: Panorama settings of the delay of the left channel from 100L (left) to 100R (right).
Dry/Wet L: Volume relation between the unprocessed (dry) and the processed (wet) left channel of the audio signal.
Delay R: The interval for the right channel between hearing the straight signal and the first delay of the delayed signal.
Feedback R: Sends a portion of the output of the right channels back into the input of the delay line, which create repeating echoes. 0% corresponds to no delay, 100% corresponds to many delays.

Pan R: Panorama settings of the delay of the right channel from 100L (left) to 100R (right).

Dry/Wet R: Volume relation between the unprocessed (dry) and the processed (wet) right channel of the audio signal.

Sync: Enables the synchronization of the „Delay L“ and „Delay R“ parameters (they change into a select pull-down menu) to the tempo of your sequencer software (host).

Filter Delay



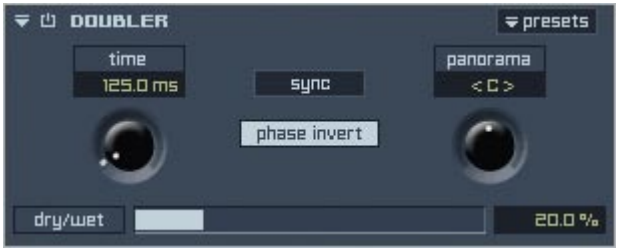
Same as „Delay“.
Additionally you have two more parameters:

Low Cut: Specifies the frequency, below which the audio signal gets cut.

High Cut: Specifies the frequency, above which the audio signal gets cut.

IMPORTANT: The parameters „Low Cut“ and „High Cut“ only correspond to the processed (wet) signal.

Doubler

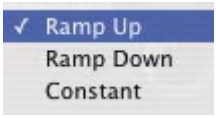


Doubler produces a simple duplication of the audio signal.

Time: Here you can assign the time distance between the original audio signal and the duplicated signal.

Panorama: Panorama settings of the duplicated audio signal from 100L (left) to 100R (right).
Sync: Enables the synchronization of the „Time“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).
Phase Invert: If activated, the phase of the newly generated signal gets inverted.
Dry/Wet: Volume relation between the unprocessed (dry) and the processed (wet) audio signal.

Echo



With Echo you can simulate the typical echo effects of Vintage machines.

Variation: Here you can select the volume progression of the echo effect: „Ramp Down“ starts the first echo with its original volume level and the following echoes get turned down. „Ramp Up“ starts quiet and becomes louder. With „Constant“ all echoes have the original volume level of the audio signal.
Delay: The interval between hearing the straight signal and the first echo of the delayed signal.
Echoes: Number of echoes.
De-Pan: Automatic movement of the echoes between the left and right channel. 100% corresponds to a movement between the full stereo panorama, 0% corresponds to no movement.
HF Damp: All frequencies of the audio file above the set value get cut.
Dry/Wet: Volume relation between the unprocessed (dry) and the processed (wet) audio signal.
Sync: Enables the synchronization of the „Delay“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).

Helper

Volume

Here you can assign volume changes to the entire audio signal.

Panorama

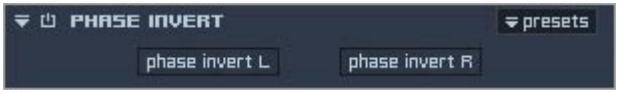
Here you can assign the panorama relation of your entire audio signal.

Panorama: Panorama settings from 100L (left) to 100R (right).
Spread: Limitation of the panorama ratio from both sides simultaneously. 100% corresponds to the full stereo panorama, 0% corresponds to mono.
Auto Pan: Automatic movement of the echoes between the left and right channel. 100% corresponds to a movement between the full stereo panorama, 0% corresponds to no movement.
A.P. Speed: The speed of the „Auto Pan“ movement in hertz. One complete movement in one second corresponds to 1.00 hertz.
Sync Button: Enables the synchronization of the „Speed“ parameter (changes into a select pull-down menu) to the tempo of your sequencer software (host).

XY panorama

Here you can limit the panorama relation of the audio signal. You can assign different values to each channel.

Phase invert



Here you can invert the phase of the left and/or right channel.

Level meter

The „Level Meter“ displays the current output volume level of the audio signal.

Level meter Pro

The „Levelmeter Pro“ shows RMS and peak values simultaneously:

Calibration

To calibrate the speakers for a surround environment you can use this helper.

Metronome

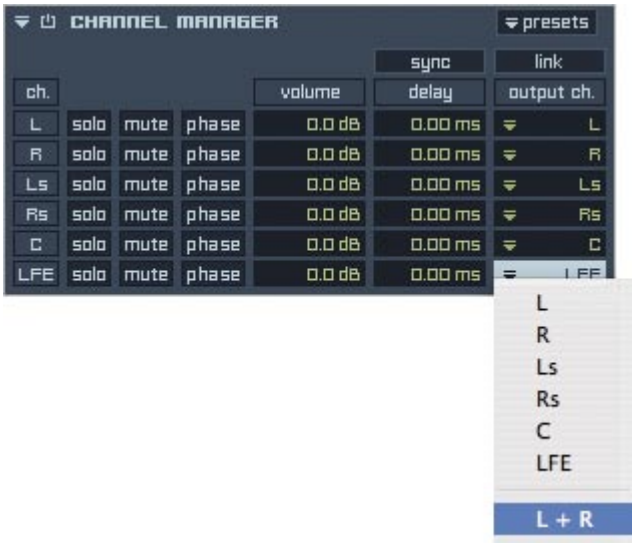
You can use the Metronome with custom tempo or synced to the tempo of your host.

Reference Tone

Use this helper to tune your guitars, basses and other instruments.

Channel Manager

A very powerful surround helper that also works in stereo format. Additionally you can route any channel of your surround format to „L“ (left) and „R“ (right) and thus create a mix down of your surround format to stereo.



Surround Panner

The surround panner enables you to use stereo, mono and surround audio files in any Independence FX environment. Corresponding to the position of the stereo (L & R), mono (M) or surround (S) icons new volume settings get calculated for all existing channels of your currently selected surround format.

Radius: Here you can assign the radius of the surround panner. The inner orange circle displays the “center” dB value and the outer red circle displays the “rear minimum” dB value of the newly created audio signal.

Mode: Here you can select the mono (for mono audio files), stereo (for stereo audio files) or surround (for surround audio files) surround panner.

Center: Volume level of the center channel.
LFE: Volume level of the LFE channel.
Output gain: Output volume of all audio channels.
Angle: Determines the angle of the left audio signal from 0° to 360°.
Distance: Determines the distance of the left audio signal to the center position of the surround format.

Type: In this pull-down menu you can select how to move the audio signal(s).
- free: each audio signal gets moved individually
- x mirror: The audio signals gets mirrored against the x-axis.
- y mirror: The audio signals gets mirrored against the y-axis.
- xy mirror: The audio signals gets mirrored against the x-axis and the y-axis.
- sync: Parallel movement of the audio signals to the x-axis and the y-axis.

Angle: The angle of the right audio signal from 0° to 360°.
Distance: The distance of the right audio signal to the center position of the surround format.
Front max.: The maximum volume level for the front position of the audio signal.
Front min.: The minimum volume level for the front position of the audio signal.
Center: The volume level for the center position of the audio signal.
Rear max.: The maximum volume level for the rear position of the audio signal.
Rear min.: The minimum volume level for the rear position of the audio signal.

TIP 1: The distance parameter also allows negative values up to -100%. This way you can move the audio signal(s) from the front left position to the rear right position with a single move, for example.

TIP 2: Use the surround panner in surround mode to balance your surround audio files. Keep in mind that any changes of the positions of a surround audio file may cause phases. Use the "Channel Manager" Helper insert to avoid this problem.

Reverbs

Reverb

Reverb produces - unlike echo - continuous sonic reflections of the audio signal.
Thus allows an extremely real simulation of reverbs of different rooms

Model:	Select between already prepared reverb simulations.
Level:	Here you can raise or lower the volume of the signal even before the modulation begins.
Time:	Determines how long the reverberation lasts in milliseconds. Lower values equate to smaller rooms, higher values equate to larger rooms.
Spread:	Limitation of the panorama ratio from both sides simultaneously. 100% corresponds to the full stereo panorama, 0% corresponds to mono.
HF Cut:	All frequencies above the assigned value get cut.
Predelay:	Introduces a short pre-delay before the reverb takes effect.
Dry/Wet:	Volume relation between the unprocessed (dry) and the processed (wet) audio signal.

Reverb TWO

Same as „Reverb“.
Additionally you have some further parameter for an even more realistic reverb simulation. A real reverb always consists of three parts: The original audio signal, the first early reflection, and finally the ambience produced by the impulse.

Early Refl.: Selection of the room for the first early reflection.

Level: Volume of the first reflection.
Spread: Limitation of the panorama ratio from both sides simultaneously. 100% corresponds to the full stereo panorama, 0% corresponds to mono.
Predelay: Introduces a short pre-delay before the reverb takes effect.
Frequency: Determines the tempo of the modulation of the processed signal in hertz.
Depth: Determines the level of the modulation of the processed signal in %.
Dry/Wet: Volume relation between the unprocessed (dry) and the processed (wet) audio signal.

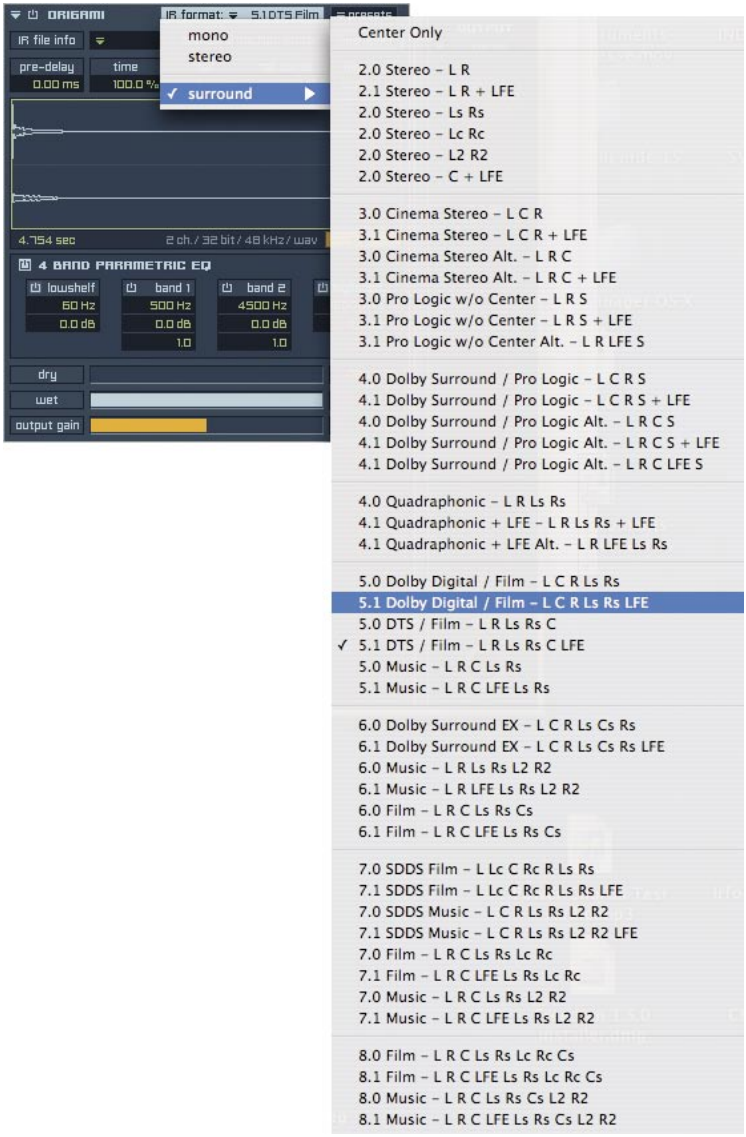
Special

Origami & Origami LE

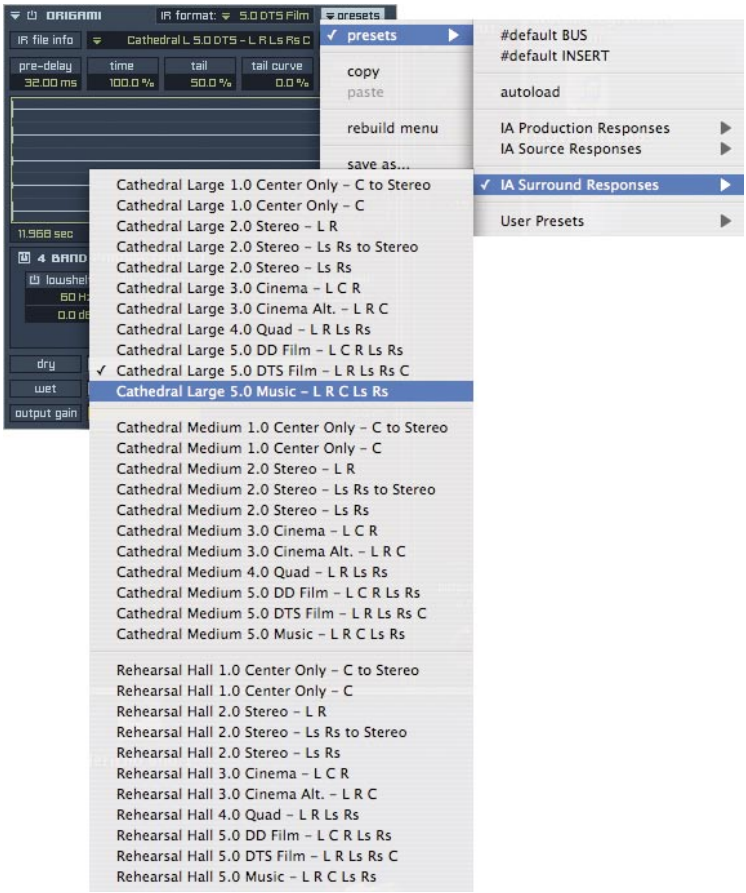
Origami is a high-end real-time engine to use and edit Impulse Response files, developed by yellow tools' software developers and audio engineers.
In Independence FX Origami and Origami LE are already integrated. Featured with IR files of the fantastic „INSP:IR Impulse Library" from Inspired Acoustics, Origami gives you an amazing listening experience - as if you would be in the room yourself!
To enable you to move your instruments inside the loaded room individually we expanded Origami by the Positioner feature. After the Positioner is activated you can move your audio source - and thus your instrument - completely free within the loaded room... as usual for Independence FX in real-time, of course!!!

Contrary to a synthetically produced „Reverb" the Impulse Response processing of Origami uses real rooms to for the creation of the reverb. As it were A „fingerprint" of the acoustic characteristics of a real room is used. With this fingerprint one can now provide arbitrary acoustic signals. This form of the reverb creation is also called „convolution reverb", since during the signal generation the mathematical operation of convolution is used. This technology is not only limited to simulating rooms, rather each acoustic system can be simulated.
IR technology gets used most frequently in the field of scoring and film synchronisation.

IR format: Multi-channel audio files (interleaved) have to get specified before you can use them in Origami. An IR file with 5 channels can be 5.0 DD, DTS or Music, for example. In this pull-down menu you can select the format for the processing of your Impulse Response files - independent from your selected input/output format! This way you can use a 5.0 IR file, for example, also in an 5.1 or any other format up to 8.1... without any prior conversion of the file!



Presets: Use this pull-down menu to load the Impulse Response files that are included in Independence FX or your own presets.



IMPORTANT: The processing Impulse Response files takes a lot more CPU power than any other Independence FX insert filter or effect.

IR file info: The “IR file info” button in the upper left corner of Origami lets you switch to the info page of the currently loaded Impulse Response file. Here you can enter your own notes and you will see - if available - the location details and additional author details. After the first click the „IR file info“ button will switch to the status „back“. To return to the main page just click the button again.

Import: Use this pull-down menu to import your own impulse response files. You can also import IR files via drag'n'drop of the files onto the waveform display.

Positioner: Click this button to open the „Positioner" feature. The „Positioner" gets explained on the next page.

Pre-delay: The moment the IR processor will start after the incoming audio signal. You can assign positive and negative values. Positive values create a delayed start, with negative values the beginning of the IR file gets skipped.

Time: Here you can assign if the IR file gets used completely or only by percentage of the entire length.

Tail: Here you can assign the decay time of the IR file - depending on the „time" value. 100% correspond to the entire length of the IR file less the „time" portion.

Tail Curve: The curve characteristic of the decay phase (Tail).

High Cut: All frequencies of the IR file above the adjusted value get cut.

True button: The sophisticated Independence FX Impulse Response Processor „Origami" even manages „true stereo" (one multi channel audio file with 4 separate channels) and „true surround" processing up to 8.1 (one interleaved audio file with up to 81 separate channels).
Even in „true stereo" and „true surround" mode you can still use the „positioner" feature and the new „Channel Manager" insert allows you any custom channel routing to fit your needs.

The following processing is supported:

mono to:	mono, stereo, surround
stereo to:	mono, stereo, true stereo, surround, true surround
surround to:	mono, stereo, true stereo, surround, true surround

EQ: See chapter „Equalizer“.
Dry: Volume of the unprocessed audio signal.
Wet: Volume of the processed audio signal.
Output Gain: The output volume of the audio signal.

Origami Positioner

When you click on the “positioner” button in the upper right corner, the display will switch to the positioner screen and the button changes into “back”. If the Positioner is not yet activated, simply click on the orange button inside the 3D panel to activate Origami’s positioner and to move your instruments inside the virtual room.

As soon as activated, a “speaker” icon comes up in the middle of the 3D matrix and the status of the button switches into “active”.

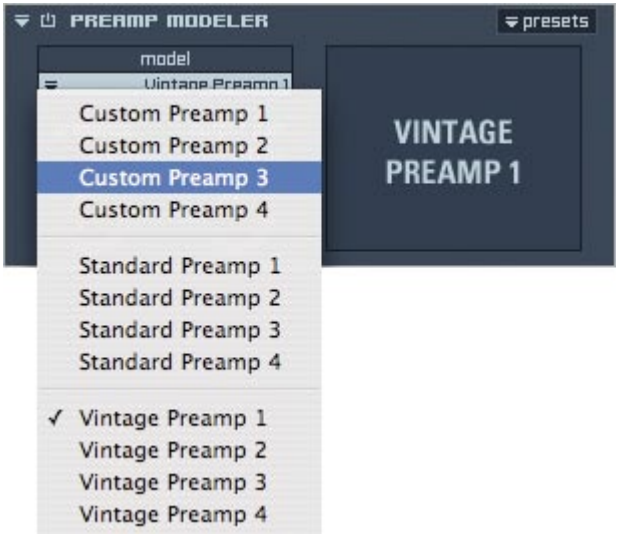
Now you can change the position of the audio signal in your virtual room. To return to the original position of the audio signal in the center, please press and hold the “Alt” key and click on the icon. Now the room position will be reset to its default values.

If you are pleased with your audio signal’s position, you can click the “back” button in the upper right corner to return to your basic screen. Whenever the positioner is activated and you return to your basic screen or Origami’s “IR file info”, the “positioner” button gets bordered lightly to show its activated status.

Preamp Modeler

Independence FX comes with a selection of 12 premium preamps.

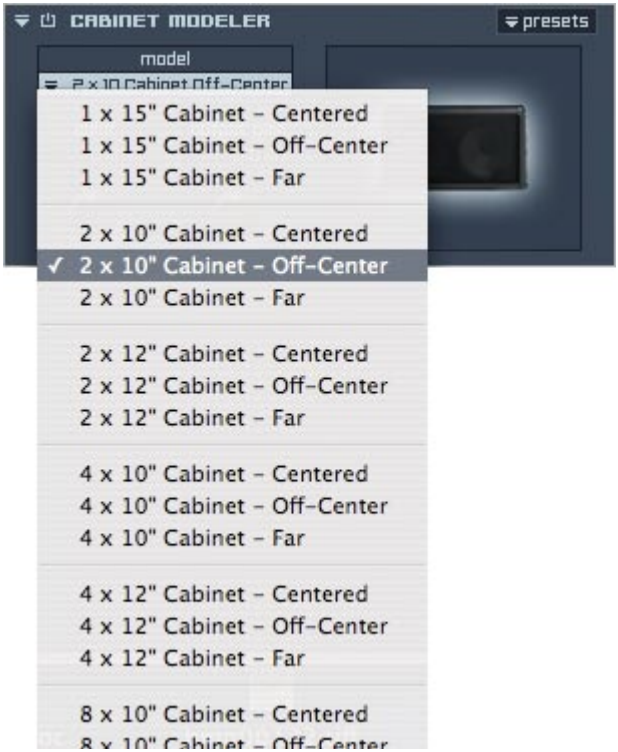
Model: Use this pull-down menu to select your preamp model.
Presence: This DSP parameter increases the higher middle frequencies of the audio signal. This way the sound becomes more presence.
Output Gain: The output volume of the audio signal.



Cabinet Modeler

The Cabinet Modeler offers the simulation of the typical cabinet sound for any of your instruments - but was specially designed for electric guitars and electric basses.
You can choose between 6 legendary cabinet models of different size and with different microphone position.

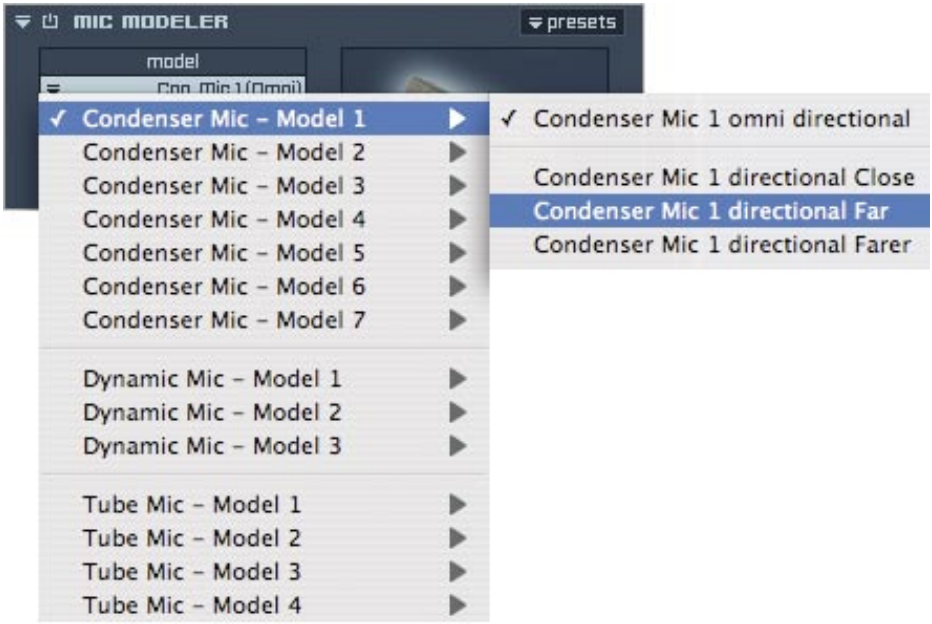
Model: Use this pull-down menu to select your cabinet model.
Color: This parameter allows you to edit the EQ color of the audio signal.
Output Gain: The output volume of the audio signal.



Mic Modeler

The Mic Modeler allows you the immediate assignment of different microphone characters to your instruments. Available are 14 different legendary microphone models of the categories „condenser“, „dynamic“ and „tube“.
Depending on the microphone model you can even select between the different positions and characters „omni directional“, „directional close“, „directional far“ and „directional farer“.

Model: Use this pull-down menu to select your mic model.
Output Gain: The output volume of the audio signal.



Credits

Idea and conception: Drazen Vlahovic
Productdesign and project management: Christian Hellinger
Senior software developer: Roman Glomb
Impulse Response Files: Inspired Acoustics „INSP:IR impulse library“; Entel Ltd., Hungary

User Interface: yt art division
Graphic Design, Art Direction, Packaging Designs: Hedgehog advertising agency, Germany
Packaging and production: Optime Service, Germany

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