

U73b Compressor

Version 2

User Manual

<http://shop.audified.com/products/u73b-compressor>

<http://services.audified.com/download/u73b>

<http://services.audified.com/support>

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Introduction

Dear musician,

Thank you for purchasing Audified U73b Compressor effect. This plugin effect is an emulation of a unique old German broadcast compressor/limiter U73b which was often used for mastering between 1960 and 1980. It is an all tube vary-mu compressor/limiter with adjustable release time option. We kept the circuit exactly as it was originally designed and only added an input and output gain before and right after the compressor circuit to help with proper adjusting of the compression. The plugin effect is also equipped with a VU meter and selectable side-chaining.

New in version 2

1. True side chaining, allowing to control the compression with an independent signal
2. Improved processing, especially by adding adjustable oversampling
3. Automatic gain control option
4. Default calibration setting
5. Selectable German or English interface
6. More realistic interface
7. Retina support
8. Selectable display color

Installation

This plugin is protected by the iLok dongle. Please make sure you have activated a valid license in your iLok.

Please refer to www.ilok.com where you can find all documentation regarding iLok.

1. Windows: Unzip and run the installer and follow the on-screen instructions. You can select the destination path and the installed plug-in format during the process.
2. Mac: Unzip and mount the provided disk image and run the installer. You can select the installed plug-in format by clicking the Customize button.

Requirements and formats

U73b plug-in runs as AAX, VST3 and VST2 plug-in on Mac and PC and AudioUnit on Mac.

Supported operating systems:

1. Mac: OS X 10.9 - 10.12
2. Windows: 7, 8, 10

Uninstallation

1. Windows: Navigate to the U73b Compressor program folder in the Start menu and run the uninstaller.
2. Mac: Open the provided disk image and run the uninstaller.

Effect controls

The interface has the following parts:

1. Power and calibration module
2. Compressor module
3. Level control module
4. Display area



Power and calibration module

E i n / A u s (O n / O f f) s w i t c h - toggles between the processing state and the bypassed state

C a l i b r a t i o n - The software model works with real voltages, the same as in the circuit of the original device, related to the dBu scale but the digital signal processing in the DAWs works with the digital full scale known as dBFS. Therefore we added a calibration parameter to relate the digital scale (dBFS) with the analog scale (dBu) and you are supposed to set the calibration to work in proper operational range of the compressor effect. Be careful when working with this parameter. We suggest to set this parameter to headroom you use in your DAW recordings or headroom of your audio interface. The default setting is -9 dB and it is loaded every time you load the plugin. However the calibration value is overwritten by the value from DAW project (when the calibration is changed explicitly and saved with the project). The default value can be changed in the settings menu (please refer to the section "Services menu" of this manual for more details).

Compressor module

Circuit emulation of the U73b compressor

C o m p r e s s o r / L i m i t e r s w i t c h - The upper U73b knob switches between the Compressor mode (Kompr), Bypass (Durchschalt) and Limiter mode (Begr). The compressor mode has lower threshold setting and very gentle increasing ratio, in opposite, the limiter mode provides higher threshold setting with higher ratio but still with a smooth knee.

R ü c k l a u f = Release time - the first three positions offer fixed release time, the other three positions marked with red labels provide adjustable, program content dependent release time.

Level control module

Input and output gains, metering

E i n g . = In - Adjusts the input gain before the compressor/limiter circuit.

A u s g . = Out - Adjusts the output gain after the compressor/limiter circuit. This parameter can be adjusted automatically when the "A u t o o u t p u t" switch is on. In this case, the output gain is adjusted automatically

to keep approximately the same loudness when the input gain parameter is changed.

M e t e r s s w i t c h - Switches the meter to show the input or output signal level or the amount of the gain reduction.

Display

H P F - There is a high-pass filter connected in the circuit in the compressor mode with around 100 Hz cutoff frequency and 6dB/octave slope. Although this filter helps to create the unique sound of the U73b compressor, the bass roll-off might not be suitable for all instruments when mixing or for all genres when U73b is used for mastering. We have added an extra control to switch this filter off. In the limiter mode, this filter is permanently turned off regardless on the parameter setting.

S i d e c h a i n - Selects the signal source used for controlling the gain reduction.

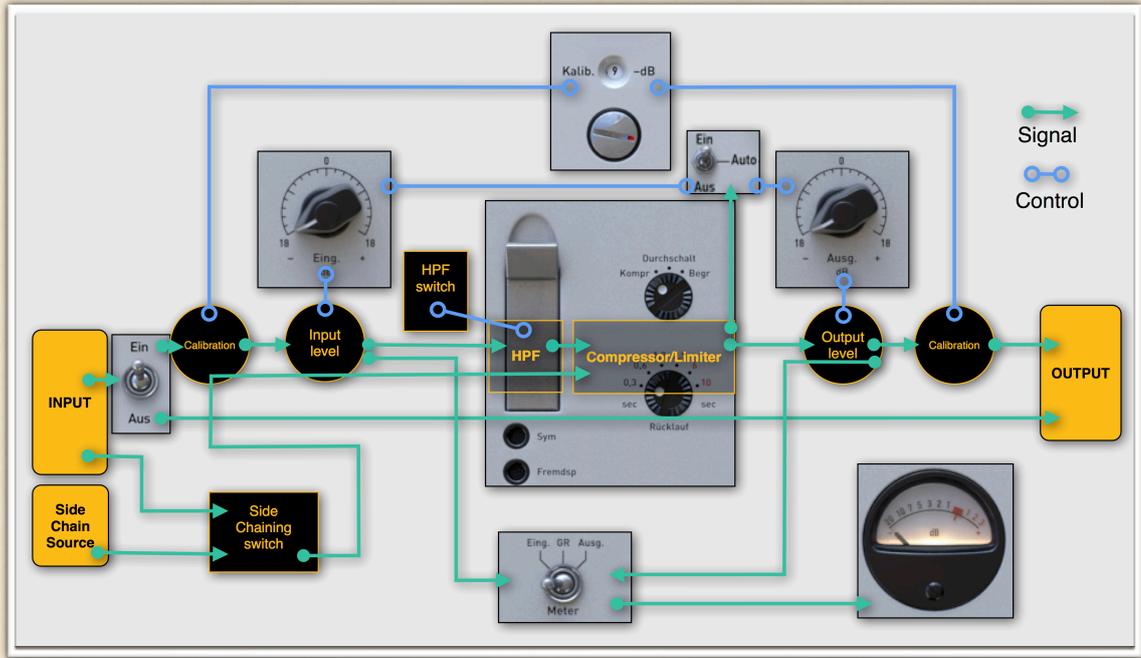
Click to the display item "Side chaining" to set the following modes:

1. Individual - each of stereo channels is controlled by itself.
2. Left - both stereo channels are controlled by the left channel input.
3. Right - both stereo channels are controlled by the right channel input.
4. Left+Right - both stereo channels are controlled by the sum of left and right channel inputs.
5. External - select this option to control the compression of an audio signal in the given track with an audio signal from another track. This can be used for example to create a "ducking" effect or to control the compression of a bass guitar with a kick drum recorded in another track. The external track can be both mono and stereo (stereo not supported by the AAX format). In case of the stereo external side chain, the left external side chain channel controls the compression of the left compressor channel and similarly the right external side chain channel controls the compression of the right compressor channel. To enable this feature, the DAW must be set for side chaining and must support the side chaining, otherwise this option is disabled. When the DAW side chaining is disabled during



plugin life, the external side chain is switched to the standard plugin input. This feature is not supported by the VST2 format at all. Please refer the user manual of your DAW to setup the side chaining in your DAW.

Signal Flow



Signal flow and control of the U73b Compressor pluginArtist factory presets

Presets

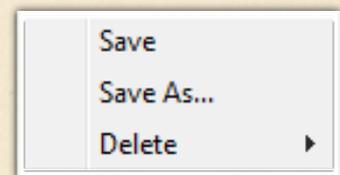
Presets management is located in the right part of the display.

Artist presets

The U73b Compressor effect was developed in cooperation with musicians and producers Boris Carloff and Bjorn Thorsrud. Their artist preset are marked BC or BT.

User presets

Parameters of the plug-in can be saved into user presets. To save your preset, click the STORE button and choose Save (for updating existing preset) or Save As to create a preset with a new name. After entering the name, the preset will be stored



after clicking the "OK" button.

To delete a preset, click the appropriate item in the Delete submenu.

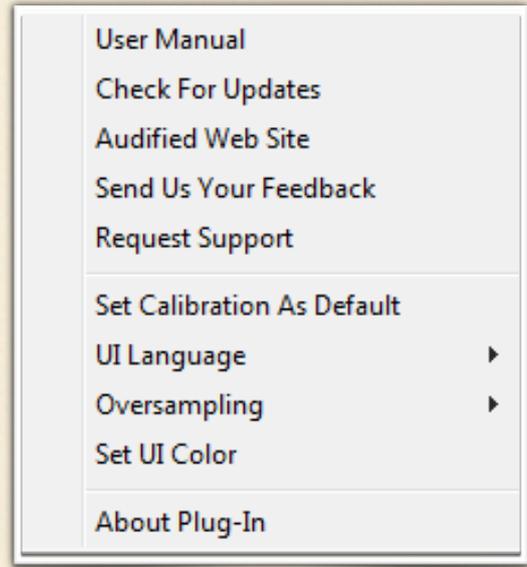
Services menu

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To access product updates, product version info and Audified [web](#) site, use the Services menu (the key symbol on the right of the display).

Some of the services are standard, so let us explain only some of them:

1. Set Calibration As Default - The calibration value set in the opened instance of U73b may be used in all instances opened in any host or any project. Click this menu item and the current calibration value will be saved as default and will be used when opening other U73b's.
2. UI Language - The original language on the U73b panel is German. We have added the English translation, so select your preferred language here.
3. Oversampling - when this setting is turned on, the internal plug-in processing runs at higher sample rate than set in the DAW. This helps to reduce the aliasing distortion which is always produced by the nonlinear effect processing and improves the processing of high frequencies. However, the price for more accurate signal processing is a higher CPU utilization. Tip: turn on this option for the final render of your project and turn off when mixing the project.
4. Set UI Color - The U73b display may help you to distinguish the context - select different colors for U73b used in different tracks of your project. AUDIFIED and some 3rd party host applications set the color automatically.



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S u p p o r t

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We believe that you can work with the U73b Compressor plug-in now. However, if there would be something unclear or if you would need an assistance, feel free to contact us at <http://services.audified.com/support> or use the items in the Services menu.

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