MIDNIGHT™ Plug-in Suite

User Guide
Introduction

The Midnight plug-in suite from Focurite brings the sound of their iconic equaliser and compressor – the renowned ISA 110 and 130 – into your digital studio in VST, AU and RTAS formats. Now you can take a massive step up and incorporate the pure, warm, delicious sound and the straightforward usability of these classic analogue processors in your own tracks. The on-screen front panels are as exquisitely detailed as the powerful, smooth DSP modelling behind them and they deliver a classic Focusrite sound that’ll blow your socks off.
Specifications

Plug-in Formats

Mac OS 10.5, 10.6 (Universal Binary):
- VST2.4 PowerPC, Intel 32-bit
- AU PowerPC, Intel 32-bit, Intel 64-bit
- RTAS 32-bit (Intel Mac only)

Windows XP, Vista, 7 (x86 and x64):
- VST2.4 32-bit, 64-bit
- RTAS 32-bit

System Requirements

Mac OS
- PowerPC G4/G5 or Intel Mac
- Mac OS 10.5 or higher
- 512 MB RAM
- XVGA (High Colour 1024x768)

Windows
- Windows XP, Vista, 7 (x86 and x64)
- Pentium III 600 MHz CPU or faster
- 512 MB RAM
- XVGA (High Colour 1024x768)

Installation

1. Double click on the Midnight installer

2. Follow on screen instruction to complete installation.

Software Activation

The Midnight plug-in suite requires you to activate the software before you are able to use it. Activation requires internet access, however this is not specifically required on the computer on which the plug-ins are installed.

Here are the steps required to activate your plug-ins:

1. Open your DAW of choice.

2. Open any one of the plug-ins in the suite in the same manner as you would open any other VST, AU or RTAS plug-in in your DAW. If you are unsure how to do this, please consult the user guide for your DAW, or contact your DAW’s manufacturer.

On opening the plug-in an activation window will appear (see next page).
Music computer connected to the Internet:

Step 1: Submit Activation Request.

Click the 'www' button and your computer will automatically open a web browser and navigate to the activation page. Enter your details and your Midnight Activation Code. The Activation Code can be found on a sticker on the back of the installer CD wallet (if purchased as a boxed copy). If you purchased the Midnight plug-in suite on our E-Store, then the Activation Code will be emailed to you and also displayed in your browser at the time of purchase.

Once you have entered your details press Submit and a licence file will be downloaded to your computer. A backup licence file will also be sent to your email address (please remember to disable junk mail filters or to check your junk mail folder).
Step 2 Install License File:

Now return to the plug-in window in your DAW and click on this icon.

Locate and select the downloaded license file to authorise your software. The file will be named: midnight_plugin_suite_Licence-XXXX-XX-XX.fnlf (where XXXX-XX-XX is the date of activation).

Once you have selected the license file both Compressor and EQ plug-ins will be authorised and ready to use.

Music computer NOT connected to the Internet:

Step 1: Offline Activation

Click the 'Offline Activation' button and choose a location on your computer to save the Activation Request File. The file will be named: FFMidnightPluginSuite-Licence-Request

Now copy this file on to some transferable media (e.g. a USB memory stick) and then copy the file onto an Internet connected computer.

Whilst on the Internet connected computer, double-click the Activation Request File. Your web browser will open and automatically navigate to the software activation page (see previous page).

Once you have entered your details press Submit and a licence file will be sent to your email address. (Please remember to disable junk mail filters or to check your junk mail folder.)

The file will be named: midnight_plugin_suite_Licence-XXXX-XX-XX.fnlf (where XXXX-XX-XX is the date of activation).

Step 2 Install License File:

Now return to the plug-in window in your DAW and click on this icon.

Locate the Licence file (which has been downloaded to the computer, or transferred from another computer).

Once you have selected the licence file both Compressor and EQ plug-ins will be authorised and ready to use.
**Compressor**

A compressor essentially acts like an automatic volume control, turning down the volume of a signal if it gets too loud. This reduces variation between loud and quiet passages, as it automatically reduces the gain when the signal exceeds a given volume, defined as the threshold. The overall level can then be turned up to make the signal as loud as possible. Using the Compressor helps to even out a performance, preventing a signal from clipping and/or disappearing in the mix, and can also give it a whole new sonic character.

The Midnight Compressor is modelled on the legendary Focusrite ISA 130 hardware compressor. The Midnight Compressor (as with the original ISA 130 compressor) has a warm, musical sound, and will provide sensitive compression to a wide range of musical sources without compromising the integrity of the original recording.

The controls are as follows:

**In Gain**

The dial in the bottom-left of the plug-in window allows the user to control the level of gain at the input of the module. The accessible gain range is –18dB to +18dB, with 0dB selected when the dial points vertically upwards (in the centre).

**Meters**

There are two level meters on the Midnight Compressor, labelled Threshold In/Out (on the left) and Gain Reduction (on the right).

The Threshold In/Out meter has two possible meter sources, selected by toggling the Input/Output switch to the right of the meter. When set to Input, the meter shows the signal level immediately after the In Gain control, and the blue LED section of the meter lights up to show the static value selected by the position of the Threshold control. This simultaneous display of both input level and threshold allows the user to quickly see whether the threshold is being exceeded by the input signal, and therefore whether compression is being applied.

**Note:** The Midnight Compressor is a ‘soft knee’ compressor. As the input signal approaches the threshold point, gentle compression is applied. The result is a smoother, more transparent compression. This also means that if the signal level on the meters is below but close to the threshold LED there will be a small amount of gain reduction.

When this meter is set to Output, it shows the signal level immediately after the Blend control in the signal chain. The LED portion of the meter will be unlit in this mode as the compression is applied to the input signal, and not the output signal.

The Gain Reduction meter shows the amount by which the compressor is attenuating the signal level, and due to its function, this meter will operate from right to left.
Threshold

The **Threshold** dial determines the level at which compression begins, with a range of –50dB to –10dB. The lower the threshold, the more the signal is compressed. Setting a higher threshold will leave quieter passages unaffected, as only passages that exceed the threshold will be compressed. When the **Threshold In/Out** meter is set to **Input**, this value will be displayed on the LED portion of the meter, as detailed above.

Ratio

The **Ratio** dial determines the rate at which compression is applied to a signal with increasing input, and is the ratio of change in input level compared to change in output level. The control gives a continuous range of 1.5:1 to ∞:1. The lower ratio settings will be softer, and provide gentler control over the signal levels. However as the ratio increases, the compression will become harder, and more noticeable. At very high ratios, the compressor will behave in much the same way as a limiter.

Attack

**Attack** determines how quickly compression is applied once the level of the source signal has risen above the threshold. The attack time is fastest when fully anti-clockwise, making the compressor react to the peak levels of the signal. This is sometimes desirable but can cause unwanted “pumping” of steadier low level components of the signal, due to short transients. Rotating the dial clockwise will increase the attack time, causing the compressor to ignore short transients and respond more to the average loudness of the signal.

Faster attack times will be useful on instruments such as a slapped bass guitar, where the compressor is being used to create a very ‘punchy’ sound. Slower attack times will be more suitable on vocals for example, or other instruments where the compressor is required to provide a more subtle control of signal level.

Release

**Release** determines how quickly compression is removed once the level of the source signal has fallen below the threshold. The release time begins at 0.1 seconds (fully anti-clockwise), which may be appropriate for rapidly varying signals to avoid compressing the beats that follow, but can result in excessive distortion on more sustained material. Clockwise rotation continuously increases the release time, giving a smoother effect, but which at the same time may result in transients causing audible “pumping”. The maximum release time is 4 seconds. The setting of the ‘Release’ control will have no effect on the signal when the ‘Auto Release’ button is engaged, as outlined below.

Auto Release

When the **Auto Release** button is pressed, the release curve response is determined by the musical material and the auto release calculation. The release rate varies to suit the dynamics of the signal. This is especially effective on complex programme material, and enables the use of fast attack times without incurring any “pumping” artefacts. When Auto Release is on, the release knob can still be rotated but the position and release value shown on the release knob does not affect the release time.

Make Up Gain

After the overall level has been reduced by compression, the **Make Up Gain** dial allows you to increase the output level. Up to 40dB of make up gain is available.

Blend

The **Blend** control allows the user to mix together the processed (compressed) and unprocessed signals, allowing more of the dynamics of the original source to be maintained. In the fully anti-clockwise (**Dry**) position, only the unprocessed signal will be audible, whereas when set fully clockwise (**Wet**) only the compressed signal will be heard. When the dial points directly upwards (50/50), equal amounts of processed and unprocessed signals are mixed together. This simulates the common practice of mixing compressed and uncompressed signals on two separate channels of a mixing console, known as ‘parallel compression’. It can be particularly useful when compressing drums, as a very heavily compressed signal can be blended with the uncompressed signal. The result is that the required reduction in the dynamic range of the signal is achieved without an overly ‘squashed’ sound being audible. The **Blend** control can also be used to great effect on signals where a very subtle compression is needed, such as on vocals.
Equalisation of sound is an essential part of the recording process, necessary to remove or boost various parts of the audible frequency spectrum. The Midnight EQ comprises of three sections: **Low Mid** and **High Mid** parametric EQ (in the centre of the plug-in window), **Low Shelf** and **High Shelf** (bottom-left and bottom-right), plus **Low Filter** and **High Filter** (top-left and top-right).

Details of the different sections of the plug-in are as follows:

**Low Mid and High Mid**

The centre section of the plug-in window features two separate bands of parametric EQ, **High Mid** and **Low Mid**, both with a boost/cut **Gain** dial from –16dB to +16dB, a **Frequency** sweep control, and fully variable **Q** (bandwidth). The **High Mid** band’s centre frequency covers the range 600Hz to 18kHz, and the **Low Mid** band’s centre frequency ranges from 40Hz to 1.2kHz.

**Low Shelf and High Shelf**

High and low frequency shelving sections are available in the bottom-right and bottom-left corners of the plug-in, each with a boost/cut **Gain** dial from –16dB to +16dB, and a **Frequency** select dial that rotates continuously. The **High Shelf** frequency selection ranges from 3.3kHz to 15kHz and the **Low Shelf** frequency selection ranges from 33Hz to 270Hz.

**Low Filter and High Filter**

Two dials provide full control of both **Low Filter** (top-left dial) and **High Filter** (top-right dial). Rotating the dials past the ‘**OFF**’ position will make the filter active, and allow a continuous sweep between the frequencies indicated (36Hz to 330Hz for the low filter, and 3.9kHz to 16kHz for the high filter). The **High Filter** will rolloff (attenuate) all of the frequencies above the selected frequency whereas the **Low Filter** will roll off frequencies below the selected frequency.

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