

Apogee FX Plugins User's Guide For Symphony Desktop

User's Guide - October, 2020



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Overview

Introduction

Obsessively crafted by the same team that designs all Apogee hardware and software products, Apogee FX plugins offer superior sound quality, and full bandwidth performance at every sample rate. From visually modern interfaces that allow you to precisely shape and contour your sound to meticulously modeled vintage hardware that is so accurate it has been endorsed by the hardware manufacturer, Apogee plugins will quickly find their way into your daily recording tool kit.

Thanks to Apogee FX plugins' unique ability to run both on hardware DSP and natively on your computer's CPU, Symphony Desktop offers more innovative workflow options than any interface available today.

With Symphony Desktop and Apogee FX, there's no need to adapt your creative workflow to the restrictions of your audio interface and plugins - YOU choose the way you want to work.

Register your product

- Access Apogee's expert Technical Support for free
- Receive important product update information by email
- Take the Customer Satisfaction Survey for a chance to win Apogee gear!

Register Now: www.apoqeedigital.com/support/register

Setup

System Requirements

To run Apogee FX as a native plugin on your Mac or Windows computer

- macOS 10.13.6 or later
- Windows 10 Anniversary update or later
- 4 GB RAM minimum, 8GB of RAM recommended
- Pace iLok account, free from <u>www.ilok.com</u> iLok License Manager software installed no physical iLok required.

To run Apogee FX on Apogee hardware DSP

- Apogee Symphony Desktop audio interface
- Apogee Symphony Desktop Control software application

Installation

Apogee FX plugins are installed on your computer as part of the Symphony Desktop software installation.

Plugin Activation

To authorize Apogee FX plugins, you'll need a Pace iLok account and the Pace Activation Code that comes with the purchase of the plugin(s). The Activation Code deposits an iLok license into your account and activates it to a physical iLok 2 (or greater) or your computer's hard drive.

Depending on the DAW, the Pace activation process is launched by simply opening the DAW program or opening an Apogee FX plugin in an open session.

 At the "Activation is required" page, click Activate if you have an Activation Code. If you don't have a code, click Try to activate with a 15-day Trial license.



2. If you clicked Activate, enter the Activation Code on this page:



 Sign into (or create) your iLok account on this page. If you create an account from this page, you will be prompted to download the required iLok License Manager application.



- Choose a valid license location on this page.
 If you want to activate to your iLok 2 (or greater), connect it now:
- It's also possible to activate your license from the iLok License Manager app - open the app and choose Licenses > Redeem Activation Code.



Plugin Interface Tour

Opening Apogee FX Plugins

Apogee FX plugins support a wide range of innovative workflows, thanks to the plugins' ability to run on Apogee hardware DSP and natively in your DAW, using your computer's CPU power.

How and where you open an Apogee FX plugin is determined by your workflow preferences.

Open any individual Apogee FX plugin in your DAW as you would any other plugin - go to your DAW channel's plugin dropdown menu, select the Apogee FX plugin, and start processing. The plugin uses your computer's native CPU power, and thus doesn't require the Symphony Desktop to be connected.

You can also open the Apogee Channel FX plugin in your DAW. Open the Channel FX plugin, then load up to 6 FX plugins making it convenient to save and recall your own custom processing chains - vocals, drums, guitars and more.

When you open Apogee FX in the Monitor FX tab, the plugins run on your computer's native CPU power and processing is applied non-destructively (i.e. processing is not permanent). If you disconnect Symphony Desktop, the plugin continues to operate as configured.

In the Channel FX plugin, two additional tabs labelled Preamp and Print FX are displayed, from which you can load and control FX plugins running on Symphony Desktop hardware DSP.

When plugins are opened in the Print FX tab, the processing is applied destructively (i.e permanently) at the hardware input *before* routing to your DAW. With Print FX, you commit your processing, which can be an efficient way to work.



Apogee FX Plugins <u>User's Guide</u>

If you need the latency advantage of direct monitoring and you want to use plugins while recording, Dualpath monitoring offers all the advantages of this workflow without the need to manage multiple windows and apps.

To set up Dualpath Monitoring, open FX plugins in the Monitor tab, then set Channel Link as described below.

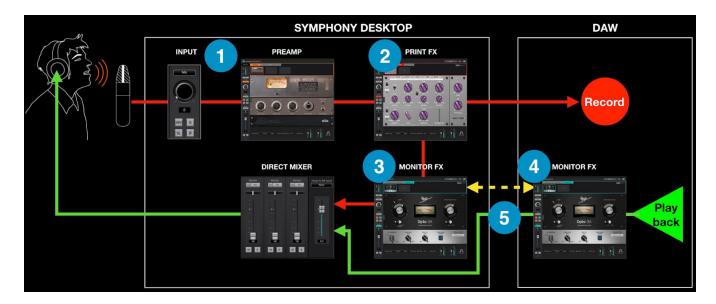
The Channel FX plugin may also be opened in the Symphony Desktop Control application, when using Symphony Desktop in a standalone workflow. In the Control Direct Mixer Channel, click the Preamp, Print or Monitor buttons to access the Channel FX.



Apogee Channel FX Plugin

The Apogee Channel FX plugin provides access to all Symphony Desktop DSP processing, and includes two unique capabilities to unlock a wide range of processing workflows:

- The Channel FX can be opened both in the Desktop Control app (where plugins run on Apogee hardware DSP) and natively in your DAW (where the plugins run on your computer's CPU). This means that DSP processing may be applied at several points in the typical overdubbing signal path:
 - 1. Apogee Alloy Mic Preamp Emulation (including Analog IN settings), processed in Hardware DSP.
 - 2. Print FX Up to 6 Apogee FX plugins, processed in Hardware DSP.
 - 3. Direct Mixer Monitor FX Up to 6 Apogee FX plugins, processed in Hardware DSP.
 - 4. DAW Monitor FX Up to 6 Apogee FX plugins, processed in Native (computer) CPU.



When the DAW Channel FX is linked (see 5 above) to a hardware input, then the entire range of hardware DSP and native processing may be controlled from the Channel FX plugin running in your DAW. Regardless of where Apogee processing is applied in the signal chain - at the hardware analog inputs, the direct monitor mixer or in your DAW running natively - settings may be controlled from the Channel FX plugin in your DAW. There's no need to open the Channel FX in Desktop Control in the vast majority of circumstances. To get started with the Channel FX plugin in your DAW, launch the DAW, then choose the Channel FX in your DAW's plugin dropdown menu.



- 1. Channel Link Set Channel Link to match the Input setting on your DAW channel. For example, if you've connected a mic to Symphony Desktop Analog 1 input, set your DAW channel Input to Analog 1 and Channel Link to Analog 1 to match.
- 2. Once Channel Link is set, hardware controls are displayed in the Channel FX, to control Input gain, Direct Mixer level and pan and other settings. Essentially, this is one channel from the Desktop Control Direct Mixer
- 3. Click the Preamp, Print FX or Monitor FX tabs to access DSP processing. See below for more details.
- 4. DSP Load displays the current percentage of hardware DSP in use over all channels.
- 5. Rack IN Trim & Level Trim the signal level before Print FX, as displayed by the IN meter.
- 6. Rack OUT Trim & Level Trim the signal level after Monitor FX, as displayed by the OUT meter.

Channel FX Tabs

In the Preamp tab, Apogee Alloy mic preamp emulation is selected and set. DSP processing is applied destructively (i.e. permanently) in the analog input circuitry and immediately after A/D conversion. All signal path stages downstream, such as the Direct Mixer channel and the recorded DAW audio

1. Toggle between the 3 mic preamps - Symphony (no emulation), AV66, AV57.



In the Print FX tab, open up to 6 Apogee FX plugins to process hardware inputs before routing to your DAW for recording.

- 2. Print FX Tab Enable Enable/bypass all Print FX plugins.
- 3. Open Print FX Click + to open up to 6 Apogee FX plugins. When multiple FX are opened, drag the FX icons to re-order them.
- 4. Print FX Presets Open, save and toggle through Factory or User Channel FX presets
- 5. Print FX A >B Toggle all open Print FX between two states, A and B. Useful for comparing alternate settings guickly.
- 6. Copy to Monitor FX Copy the current configuration of open Print FX plugins and their settings to the Monitor FX tab.



In the Monitor FX tab, open up to 6 FX plugins to process DAW playback. If you've set Channel Link, a Channel FX plugin is automatically and transparently opened on the hardware channel for DualPath monitoring, described in the Symphony Desktop User's Guide.

- 7. Monitor FX Tab Enable Enable/bypass all Monitor FX plugins.
- 8. Monitor FX Presets Open, save and toggle through Factory or User Channel FX presets
- 9. Monitor FX A >B Toggle all open Print FX between two states, A and B. Useful for comparing alternate settings quickly.
- 10. Open Monitor FX Click + to open up to 6 Apogee FX plugins. When multiple FX are opened, drag the FX icons to re-order them.
- 11. Open Monitor FX Click + to open up to 6 Apogee FX plugins. When multiple FX are opened, drag the FX icons to re-order them.
- 12. Copy to Print FX Copy the current configuration of open Monitor FX plugins and their settings to the Print FX tab.



Symphony ECS Channel Strip

The Symphony ECS Channel Strip offers 3-band EQ and high pass filter, easy-to-use compression plus a Drive control for extra saturation and distortion. The ECS Channel Strip offers a complete range of processing with a minimum of fuss!



- 1. EQ Section In/Out Toggle the EQ section on or off
- 2. High Pass to EQ or Side Chain toggle the high pass filter between two possible signal paths.
 - HP > EQ The high pass filter is inserted into the EQ signal chain, processing audio throughput.
 - HP > SC The high pass filter is inserted into the compressor side chain, making the compressor less sensitive to low frequencies.
- 3. High Pass Frequency Set the frequency of high pass filter. The slope is fixed at 18 dB per octave.
- 4. Lo Shelf Gain Set the gain of the Lo Shelf band in in the range of -15 dB to +15 dB.
- 5. Lo Shelf Frequency Set the frequency of the Lo Shelf band.
- 6. Mid Peak Q Switch the Q (or bandwidth) of the Mid Peak band to Wide (up) or Narrow (down).
- 7. Mid Peak Gain Set the gain of the Mid Peak band in the range of -15 dB to +15 dB.
- 8. Mid Peak Frequency Set the frequency of the Mid Peak band.
- 9. High Shelf Gain Set the gain of the High Shelf band in the range of -15 dB to +15 dB.
- 10. High Shelf Frequency Set the frequency of the High Shelf band.
- 11. Compressor Section In/Out Toggle the Compressor section On or Off
- 12. Compressor Threshold Set the Threshold (the level at which gain reduction commences)

- 13. Compressor Ratio Set the ratio of gain reduction once the signal is above the threshold. For example, with a 3:1 ratio, the compressor output increases 1 dB for every 3 dB the compressor input increases.
- 14. Compressor Dry/Wet Mix Set the percentage of Wet (compressed) signal at the compressor output. Set to 100% (fully clockwise) to output the compressed signal only. Try a Mix value of 50% for parallel compression on drums and other sources with large transient peaks.
- 15. Gain Reduction Meter Displays the amount of gain reduction.
- 16. Drive Increase the level of Drive from subtle saturation to distortion. The Drive circuit comes after EQ and Compression and before the Output Level.
- 17. Output Level Adjust the output level of the plugin.
- 18. Preset Save/Recall Load, save and toggle through Factory or User presets.

To reset controls to their Default setting, Option-click (Mac) the control.

To enter a numerical value, double-click the control. To enter frequencies 1kHz and above, type the frequency in the format "1200" or "1.2k".

Pultec EQP-1A Program Equalizer

Apogee's Pultec EQP-1A Program Equalizer captures the richness, warmth and ease-of-use of the original tube hardware, as manufactured to this day by Pulse Techniques. Reach for the Pultec EQP-1A when you need to add weighty bottom end and silky top end with just a few twists of the dial.



- 1. Low Boost Boost at the frequency selected by the Low Frequency selector.
- 2. Low Atten Attenuate at the frequency selected by the Low Frequency selector. Try boosting and attenuating simultaneously for an interesting effect!
- 3. Low Frequency Select the frequency of the Low Boost and Atten controls.
- 4. High Boost Boost at the frequency selected by the High Frequency selector.
- 5. Bandwidth Set the bandwidth, from sharp to broad, of the high frequency boost.
- 6. High Frequency Select the frequency of the Hi Boost control.
- 7. High Atten Attenuate at the frequency selected by the Atten Sel selector.
- 8. Atten Sel Select the frequency of the High Atten control

- 9. IN Switch In the equalization controls. When EQ is not switched in, gain circuit emulation is still active.
- 10. Off On Toggles the plugin between Engage and Bypass.
- 11. Preset Load, save and toggle through Factory or User presets.

Pultec MEQ-5 Midrange Equalizer

The Apogee Pultec MEQ-5 Midrange Equalizer plugin precisely recreates the original hardware to sculpt critical midrange frequencies with precision and warmth.



- 1. Low Peak Frequency Select the frequency of the Low Boost control.
- 2. Low Peak Boost Boost at the frequency selected by the Low Peak Frequency selector.
- 3. Dip Frequency Select the frequency of the Hi Boost control.
- 4. Dip Atten Attenuate at the frequency selected by the Low Frequency selector.
- 5. Low Peak Frequency Select the frequency of the Low Boost control.
- 6. Low Peak Boost Boost at the frequency selected by the Low Peak Frequency selector.
- 7. IN Switch In the equalization controls. When EQ is not switched in, gain circuit emulation is still active.
- 8. Off On Toggles the plufin between Engage and Bypass.
- 9. Preset Load, save and toggle through Factory or User presets.

Opto-3A Optical Compressor

This Optical Compressor/Limiter reproduces the reactive compression characteristics of a renown hardware solid state compressor/limiter.



- 1. Gain Set the Output gain, i.e. after compression. The grease pencil mark indicates unity gain when no gain reduction is engaged.
- 2. GR/Output Meter Select the signal displayed on the front panel meter gain reduction level or output level.
- 3. Peak Reduction Set the amount of Peak Reduction as the control is turned clockwise, the threshold lowers and the ratio subtly increases.
- Comp/Limit Switch the gain reduction ratio between compression and limiting.
- 5. HF Contour Modify the high frequency response of the compressor side chain. When the side chain's high frequencies are boosted, the compressor's threshold becomes more sensitive to high frequency audio and thus compresses this part of the spectrum more than low frequencies. Setting

HF Contour to Cut has the opposite effect - high frequencies are compressed less than low frequencies.

- 6. Hi Pass Set the frequency of the compressor side chain hi pass filter.
- 7. Dry/FX Set the mix between the Dry (input) signal and the FX (compressed) signal. Set at 50/50 for parallel compression, then adjust to taste.
- 8. Side Chain Listen Listen to the side chain signal path, useful when adjusting HF Contour or Hi Pass. Turn off during normal compressor operation.
- 9. Preset Load, save and toggle through Factory or User presets.

ModEQ6 Parametric Equalizer



- 1. Scale Display -Toggle the EQ display between +-18 and 24 dB
- 2. Band Adjuster Click and drag the band adjuster to the desired gain and frequency.
- 3. Band Focus Click to focus the band and display controls in the plugin lower half.
- 4. Band On Toggle the band On/Off
- 5. Q Mode Set the Q behavior Proportional or Constant.
- 6. Band Solo Solo the band so that its effect on the total EQ may be heard. On Peak/Notch bands, a variable Q band pass filter is engaged
- 7. Band Type Depending on the band, toggles the band type between Peak and Notch or Peak and Shelf
- 8. Band Frequency Set the frequency of the focused band.
- 9. Band Gain Set the gain of the focused band.

- 10. Band Q Set the Q, or slope, of the focused band.
- 11. Preset Load, save and toggle through Factory or User presets.
- 12. Analyzer Set the frequency Analyzer display before (Pre) or after the equalization (Post), or turn off the analyzer display
- 13. Speed Set the display speed of the frequency analyzer
- 14. Light/Dark Click the Apogee logo to toggle the plugin graphics between Light and Dark Mode.

ModComp Visual Compressor



- 1. Ratio Display Output Level Displays output level after compression, before Makeup gain.
- 2. Ratio Display Input Level Displays input level before compression.
- 3. Gain Reduction Meter and Trace Displays gain reduction amount. Input/Output Trace and Display Speed Input is displayed as dark blue, output is displayed as light blue. Adjust display scrolling speed in the upper corner of the display.
- 4. Threshold Set the threshold level above which audio is compressed.
- 5. Ratio Set the ratio of compression once the audio input level exceeds the threshold.
- 6. Knee Set the compression knee, or sharpness of the transition from uncompressed to compressed audio.
- 7. Attack Set the compression attack, or speed at which gain reduction commences once the audio input level exceeds the threshold.
- 8. Release Set the compression release, or speed at which gain reduction stops once the audio input level goes below the threshold.

ModComp Visual Compressor (continued)

- 9. Makeup Set the amount of gain added after compression to make up for lost level from the compression process.
- 10. Auto Engage Auto Makeup gain to automatically add post-compression gain to maintain unity gain through the compresser. Dry/FX - Set the mix between the Dry (input) signal and the FX (compressed) signal. Set at 50/50 for parallel compression, then adjust to taste.
- 11. Preset Load, save and toggle through Factory or User presets.
- 12. Style the Style
 - Punch best for general compression and limiting.
 - Easy Auto attack/release with a linear release envelope similar to the renown 160 compressor. Great for easily configured compression with a vibe
 - Leveller Ultra-clean and transparent gain reduction, great for providing a transparent leveling of the audio signal. Even though the release setting is longer even at its minimum, the gain reduction action remains smooth and present.
- 13. Dry/FX Mix
- 14. Compressor Side Chain view Toggle the plugin window view between Compressor and Side Chain.
- 15. Light/Dark Click the Apogee logo to toggle the plugin graphics between Light and Dark Mode.

Additional Support

For more information

- Apogee KnowledgeBase and FAQs
- Informational Videos
- Apogee Product Registration
- How to contact Apogee Technical Support

Please visit:

www.apogeedigital.com/support

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