

MIX

Professional Audio and Music Production

Lexicon PCM96 Effects Processor

by [Barry Rudolph](#)

FIELD TEST

[▶ Back To The Home Page](#)


September 2008
Issue

This "mirrored" page is published through the kind permission of MIX Magazine and [Penton Media Incorporated](#).

Visit MIX Magazine's WEB Site at: www.mixonline.com

▶ [E-Mail A Link To This Page.](#)



You Are Here: www.barryrudolph.com > [mix](#) > [pcm96.html](#)



[Buy It At Musician's Friend!](#)



[Download](#) A Printer-Ready Copy Of This Review. You'll Need A [Free Acrobat PDF Viewer Plug-In](#) For Your Browser.



Lexicon has been making high quality audio effects processors for 35 years. Its latest release, the PCM96 effects processor, delivers great performance from more than 1,200 presets including 28 new and legendary Lexicon reverbs, delays and modulation effects.

Although not a convolution-based reverb, all room presets use early-reflection impulses from well-known rooms as starting points for creating reverb. This hybrid approach retains the inherent realism of a convolution reverb but allows the precise control and manipulation possible only with reverb synthesizers. The PCM96 uses 32-bit floating-point processing, works at sample rates up to 96 kHz, and is HiQnet™-compatible.

Intuitive Interface

The single-rackspace PCM96's front panel looks friendly enough, with a stereo input LED meter, large Select knob for scrolling through presets and menus, Tap/Tempo button, and a Compact Flash card slot for storing, loading and comparing edited presets with space for 768 user presets in the internal Flash memory.

The A, B and C endless-rotary controllers adjust parameters in three corresponding rows within the highly visible OLED (organic LED) display. The Machine button is for configuring the four independent machines--each containing it's own algorithm. Finally, the Back button "digs" you out--one menu level at a time.

In addition to the 100-240VAC IEC power connector, the rear panel features I/O via stereo analog XLRs (+4 dBu or -10 dBV switchable), digital AES/EBU audio XLRs, word clock input, a trio of MIDI jacks, two FireWire 400 spigots, and two Ethernet RJ-45 connectors.



A VST or Audio Units plug-in that runs as it would in any DAW computer comes with the unit. You can also control the unit and stream audio over FireWire. In this mode, the same plug-in now causes the unit to pass audio to and from your DAW like any of the other FireWire-based DSP units.

Reverb in the House

I connected the PCM96's audio I/O to my Pro Tools system using the FireWire, analog I/O and digital I/O paths. I could not hear any sonic difference. After installing the software that includes FXpansion's VST-to-RTAS adapter, a new Preference pane comes up in the Mac's System Preferences window, where you set: Communications Interface, either FireWire or Ethernet; buffer setting (three levels); whether FireWire will simply control or both control and stream audio; audio I/O, analog or digital; clock rate and source; and finally Locate, which when clicked, flashes the unit's front panel display to identify which PCM96 in the rack you're controlling.

With this out of the way, I started using the unit on every mix possible. I streamed over FireWire because I wanted

Multi-Access and Control

There are many ways to control and interconnect the PCM96 to your studio or DAW. Connect and control it like any other outboard reverb by sending and returning to it from your console or DAW using Manual mode.

System view is for recalling presets, setting clock sync and rate, and viewing machine configurations--a pictogram demonstrates how up to four machines are interconnected in six different possible combinations. However, the rear panel stereo I/O limits all machine configurations to a maximum of two inputs and two outputs. In plug-in mode, three more combinations are possible, and up to four inputs and outputs are available over FireWire.

Machine view shows the currently loaded preset in any of the (selectable) four machines. Once a machine has a loaded preset, the parameters become available for adjustment.

Remote control of the PCM96 is by either FireWire or the Ethernet connection using the unit's IP address. In fact, multiple PCM96s can be networked together and controlled from the same computer. This works well when the unit (s) are in a machine room and not in immediate reach of the engineer.

to configure two mono reverbs and a single stereo reverb at the same time.

The plug-in GUI is small but unfolds in two levels. The first level shows eight parameter faders with names like Pattern for selecting the room impulse. The second level below that offers programmability that is deeper than I can cover here (it gets as deep as you can dive)-- but know that this reverb will become an essential tool for sound designers. I would have liked the ability to use the plug-in GUI to perform and store setups in the unit when using it as a stand-alone processor. As it is now, when used as a FireWire processor, the front panel goes blank.

I called up a mono reverb called Small Playroom and changed the early reflection type to Bandpass at 375 Hz and saved it. This unusual reverb tone was perfect for an Urban Contemporary mix. I copied it to another aux, panned the two mono reverbs' returns left and right and sent to them both using a stereo send. By "Linking Pan To Fader" in Pro Tools, wherever a track is panned in the mix, the PCM96 effect will always follow it.

I next wanted an expensive-sounding stereo reverb for strings. I called up that blast from the past, the Concert Hall preset. All presets have subsets under the Load button. This one had 20 different variants and I went with Large Perc Concert. I shortened the Reverb Tail to 1.97 seconds and adjusted the tail width to 115 degrees. The tail width control passes all synthesized reverb audio through a 2 X 2 matrix that encodes the reverb to give it a feel ranging from narrower (mono) to anywhere out to super-wide stereo. This effect/feature is dramatic and caused the string section to sit in a super-wide, panoramically wonderful space.

A Reverb for All Reasons

I've just started to scratch the surface exploring all the capabilities of the PCM96. Its versatility goes way beyond any plug-in reverb and most hardware units costing many times as much. Like the 480L and 960L before it, the PCM96 is a huge winner and future studio stalwart, and carries on the Lexicon legacy with its wonderful sound, simple operation yet deep programmability, malleable interfacing, and flexible control.

WEB: www.lexiconpro.com

Barry Rudolph is an L.A.-based recording engineer. Visit his Web site at: WWW.BARRYRUDOLPH.COM



[Buy The Lexicon PCM96 Stereo Reverb/Effects Processor](#)

[Click Here To Return To The Mix Directory](#)

This Review Is Copyright © 1995 Through 2008 By [Penton Media Inc.](#) All Rights Reserved.



[Back To Home Page](#)

[Back Up To The Top](#) 

All Web Page Design Is Copyright © 1995 through 2008 By Barry Rudolph