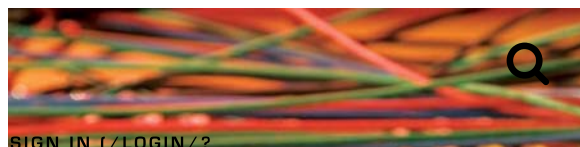




Tape Op

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[DYNAMICS (/REVIEWS/CATEGORY/DYNAMICS), SIGNAL PROCESSORS (/REVIEWS/CATEGORY/SIGNAL-PROCESSORS)]

ISSUE #66

Retro Instruments (<http://www.retroinstruments.com>): Retro 176 Limiting Amplifier

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ISSUE

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REVIEWED BY CRAIG SCHUMACHER (/REVIEWS/BY/CRAIG-SCHUMACHER)



One of the hardest parts of writing these reviews is coming up with a good opening sentence. It's easy to get caught up in excess hyperbole when geeking out over pro audio gear, especially when you discover a truly amazing item that on one hand is fresh and exciting, and on the other hand is nothing new to recording. I already knew that Phil Moore understands how to recreate a classic when I reviewed the Sta-Level (Tape Op #55), but now with the edition of the 176 Limiting Amplifier, Phil has done it again and even more so. Like the Sta-Level, the Retro 176 is laid out very much like the original, with all the controls as expected. Its physical size and configuration are also like the original, including the exposed tubes and transformer in the back. It has the classic, hinged face, but Phil wisely added a cover to the top. It is a 2RU-height unit that is painted in an industrial grey and looks very much like the Sta-Level in choice of knobs and screening. Like the original 176 and 175B, it has controls for input level, compression ratio, meter selection, attack, sidechain HPF frequency, output, and release. Unique to Phil's version are switches labeled Interstage and Assymetry. As a recreation, the Retro 176 is a variable-mu compressor/limiter that can be heard as an audio time machine. It will take you back to the original sound of the classic UA 176 and 175B. The modern difference is it allows you to bypass the interstage transformer (modeled after the original UTC A-19) and reduce the amount of "tube" character and achieve a tighter and more transparent compression. With the interstage compressor engaged, you have a rich and full tube-sounding compressor that is ideal for bass and guitars and renders a sound that is equal to the original (see Sylvia's comments below), and in some cases, may be better due to the reduced noise floor derived from the use of modern components. This makes the 176 a very versatile studio tool. You can look at it as an 1176-style compressor with tubes, but that is oversimplifying its capabilities. In many ways, it's more like a Distressor with tubes, as it can handle any type of compression duties needed. The reason the Distressor is great is that it can mimic the behavior of classic FET or opto compression but then has the ability to create its own sounds when pushed into distortion. The Retro 176 also can faithfully recreate multiple types of compression algorithms through its input, ratio, attack, and release controls, but it also allows the user to really drive it to create really cool tones of its own. Through the use of the interstage selection, assymetry position, and sidechain filter, you can fine-tune how the 176 reacts to all manners of program material. We discovered how powerful these switches were on bass tracks. The Retro 176 allows you to completely reshape the bass envelope from subtle tightening and minimal dynamic impact to full-blown tube squash that propels the bass forward and brings out all the rock tone. And that's just playing with the knobs. Once we dialed in a bass tone we liked, we played with the interstage switch, then checked out which side of the wave we wanted to mess with via

assymetry selection, and then tailored that signal even further with the sidechain filter. All this interactive control really lets you get a signal that maintains its presence and place in the mix even when it's surrounded by multi-layered guitars, horns, and strings. For vocals, I still love the Sta-Level when the vocalist has given us a great performance that just needs the love. But for singers with bad mic technique or poor dynamics, the Retro 176 is a real problem solver. Again, all the options presented by the controls allow you to go after bumps or sibilance and to fine-tune which characteristic of the vocal you choose to enhance. It's also great on all manners of guitars and really shines on acoustic guitars as you can decrease the low-end sound-hole muck without losing the bottom end of the instrument completely. What we have come to understand is that the Retro 176 is one of the most versatile and musical pieces of equipment we have had the pleasure to use. The more we use it, the more we are learning how powerful this unit is. Here's what Sylvia Massey, who owns a ton of vintage gear, thinks: "We've been using the Retro 176 for a while and have put it up against our original UA 175Bs on several different applications, including snare, bass guitar, drum room, and vocals. It's really a great unit. I especially like how it works on vocals and find it has the same sweet quality as the original 175B. It reacts very similar to the original; however, the Retro 176 is much more versatile. And much more stable. The engineers at RadioStar all had an opportunity to work with the Retro 176, and we all found it to be the most desirable single-channel limiter in the facility-which says a lot, because we have some great tube limiters and compressors here, including RCAs, original Gates Sta-Levels, Collins, ITA, CBS, Western Electric, Altec, UREI, Neve, etc. The only other compressor as highly sought after in the studio is our Retro Sta-Level!" At its \$2995 street price, the Retro 176 is not going to be within many people's budgets, but considering that an original 176 of questionable performance could easily cost you this much, the Retro 176 is a great deal as you get all the tone and features of the original plus the modern power-user's extra controls that take the original sound to new levels. If you are serious about your tracking and mixing, this one is for you. We need three more now at WaveLab so we can have two to use on tracks and two to couple together for the stereo mix. Now that would be something! The Retro 176 is available through Vintage King (www.vintageking.com). (\$3695 MSRP; www.retroinstruments.com)



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LA-610 Classic Tube Channel (/Reviews/Gear/47/La-610-Classic-Tube-Channel/)

BY CRAIG SCHUMACHER [/REVIEWS/BY/CRAIG-SCHUMACHER]

Universal Audio is well known for recreating the classic studio preamps and compressors that were built by the company's original founder, Bill Putnam Sr. The reissues of the 1176 and the LA-2A from...

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Alesis 3630 Modification Kit. (/Reviews/Gear/48/Alesis-3630-Modification-Kit/)

BY JOHN BACCIGALUPPI [/REVIEWS/BY/JOHN-BACCIGALUPPI]

Unlike the article we published in Tape Op #45, which outlined a very simple mod for the 3630 compressor, this kit is a complete overhaul. Considering the low initial cost of the compressor and the...

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Stretch 500-Series Dynamics Processor (/Reviews/Gear/113/Stretch-500-Series-Dynamics-Processor/)

BY ELI CREWS [/REVIEWS/BY/ELI-CREWS]

Standard Audio caught my attention around six years ago when I reviewed the amazing Level-Or [Tape Op #78]. With the Stretch, Standard again took the DNA of some hard-to- come-by vintage gear and...

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M502 Optical Compressor (/Reviews/Gear/91/M502-Optical-Compressor/)

BY SCOTT MCCHANE [/REVIEWS/BY/SCOTT-MCCHANE]

The Grace brothers (Michael and Eben) are well-known for their uncompromised designs. I've been a big fan of Grace since JB introduced me to the Model 101 preamp [Tape Op #27] five years ago, and I've...

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MLA-3 Multiband Compressor (/Reviews/Gear/92/Mla-3-Multiband-Compressor/)

BY ADAM KAGAN [/REVIEWS/BY/ADAM-KAGAN]

The worlds of project studio and commercial studio have collided in a big way over the last few years, and now we are seeing the same convergence with gear that was developed for the mastering lab...

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Portico 5042 ?True Tape? Emulation & Line Driver (/Reviews/Gear/51/Portico-5042-True-Tape- Emulation-Line-Driver/)

BY GARRETT HAINES (/REVIEWS/BY/GARRETT-HAINES)

The Rupert Neve Designs Portico 5042 is a two- channel tape emulator and line-driver. Like other units in the Portico line, the 5042 is a half-rack design. It is equally at home as a desktop unit or...

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Channel Compressor (500-Series) (/Reviews/Gear/101/Channel-Compressor-500- Series/)

BY CHRIS GARGES (/REVIEWS/BY/CHRIS-GARGES)

AwTAC (Awesome Transistor Amplifier Company) of New York is quickly proving itself as a manufacturer with high standards. Since the introduction of its Channel Amplifier [Tape Op #93] three years ago...

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Echo Dream 2, Robot, Apocalypse (/Reviews/Gear/99/Echo-Dream-2/)

BY CHRIS WOODHOUSE (/REVIEWS/BY/CHRIS-WOODHOUSE)

Never saw it coming. Another day at work at the Dock (our spanking-new studio spot in Sacramento), helping my bud John Dwyer (Thee Oh Sees, Coachwhips, Damaged Bug) spray fuzz guitar all over...

MICROPHONES (/REVIEWS/CATEGORY/MICROPHONES), SIGNAL PROCESSORS
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The Mod Squad Handles For SM57 & SM58 (/Reviews/Gear/113/The-Mod-Squad-Handles-For- Sm57-Sm58/)

BY DAVE CERMINARA (/REVIEWS/BY/DAVE-CERMINARA)

I was first introduced to Crimson Audio Transformers through their useful Mogaine ribbon mic pre-preamp [Tape Op #110]. I later tried one of their modded SM57 mics while I was working back at Treelady...

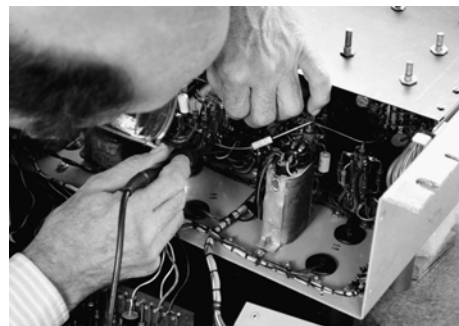
BEHIND THE GEAR

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Restoring The "Holy Grail Of Compressors": Behind The Scenes At The Vintage King Tech Shop (/Interviews/Bonus/Vintage-King-Restoration-Series-Part-1-Outboard/)

BY

Vintage King co-founder Michael Nehra shares some of his love, knowledge, and practical advice for diving into the world of vintage audio gear, and then takes us behind the scenes for a walk through...



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Jim Williams: Behind The Gear With Audio Upgrades (/Interviews/Btg/90/Jim-Williams/)

BY MIKE JASPER (/ARTICLES/BY/MIKE-JASPER)

Jim Williams has spent much of his 56 years working with some of the biggest names in the music business, including Frank Zappa, John McLaughlin and Stevie Wonder. He's the owner of Audio Upgrades,...

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From WWII Planes To Stax Consoles: Behind The Gear With Bill Cheney & The History Of Spectra Sonics (/Interviews/Btg/102/Bill-Cheney/)

BY JOHN BACCIGALUPPI (/ARTICLES/BY/JOHN-BACCIGALUPPI), LARRY CRANE (/ARTICLES/BY/LARRY-CRANE)

Bill Cheney and Jim Romney are the men responsible for keeping the amazing legacy of Spectra Sonics, a legendary, if criminally unheralded, pro-audio company alive.



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Rich Williams: Behind The Gear With Burl Audio (/Interviews/Btg/105/Rich-Williams/)

BY LARRY CRANE (/ARTICLES/BY/LARRY-CRANE)

Burl Audio, under the direction of owner/designer Rich Williams, has developed some of the best new recording equipment over the last eight years. Their mic preamps, summing amps, and control room...



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