

## GRACE M502, BAC-500 AND RETRO DOUBLEWIDE

Three Compact Compressors, Three Different Approaches



**W**hat makes you different from the next DAW jockey with a trackball? Flavor. And if you want to add more color to your recordings and mixes, analog hardware is a great way to do it. The three 500 Series compressors reviewed here not only deliver for those trying to maximize space, but each offers its own take on gain reduction style and character.

The Grace m502 goes the optical route using Grace's signature pure, hands-off signal path; the BAC-500 is designed by Brad Avenson and uses two discrete op amps and a custom wound output transformer; and the Retro Doublewide incorporates four NOS 6BJ6 pentodes and two Cinemag transformers into two 500 Series spaces and borrows some tricks from the Sta-Level. All units were reviewed in a Radial Workhorse at the back end of a Dangerous 2-Bus summing system from tracks mixed in Nuendo Version 5.5.

### GRACE M502

Grace Design got into the 500 Series game last summer with the m501 mic preamp (reviewed in *Mix's* July 2011 issue). Later, at AES in New York City, they announced the m102 and m502 optical compressors—mirror units on the inside, but the m102 is a half-rackspace desktop unit and m502 is a 500 Series version. Features include what you'd expect: threshold, attack, release, ratio and makeup gain. Additionally, you have three choices for input level (-10dB, 0 and +10dB),

### PRODUCT SUMMARY

**COMPANY:** Grace Design

**PRODUCT NAME:** m502

**WEBSITE:** [gracedesign.com](http://gracedesign.com)

**PRICE:** \$695

**PROS:** Sonically stellar, versatile, easy to strap together in stereo

**CONS:** Slick knob design but tough to recall with accuracy



a link switch for stereo operation using two modules, and a 10-position LED gain reduction meter, plus a peak-level LED, which goes green at -10dBu and red at +20dBu (6dB before clipping). Grace was “gracious” enough to send me two units for review, allowing me to test the pair in stereo.

Out of the box it was easy to mount the units in my Radial Workhorse, but not before I attached the included jumper that al-

lows the m502s to be strapped together. I could also use the Workhorse “link” switch on the back of the unit because Grace implements the Workhorse’s Pin 11 unbalanced audio out connection for linking, plus Pin 7 & 9 connections for the Workhorse and Purple Sweet Ten rack’s auxiliary connectors (sidechain).

I used the m502s on a number of tracks both percussive and not, and it excelled in every case. The attack/release controls were great for letting the attack of a kick drum through while grabbing the back-end boom, providing a tight transient. I hit it hard in this application, lighting up the peak LED, but heard no evidence of the signal getting harsh or breaking up. Next, when I used the m502 on an acoustic guitar I went with a medium

**“THE BAC-500 SOUNDS GREAT ON GUITAR TRACKS. I WAS ABLE TO GET FANTASTICALLY CRUSHED, IN-YOUR-FACE EFFECTS USING THE VERSATILE RATIOS PROVIDED BY THE UNIT.”**

attack and lazy release. In this case I used Nuendo’s Region Gain feature to tone down some nasty peaks and squeaks, and then let the m502 add general smoothness at the end of the chain.

The 10-segment LED gain reduction meter was quick and gave me accurate feedback on how hard I was hitting the unit. On stereo drum overheads, the m502s sounded great. I was able to tame runaway cymbals while leaving the quality of the rest of the kit untouched. When jumping from mono to stereo use between mixes, it was easy to flip the unit into Link mode from the front panel.

The m502 is a stellar optical compressor that is super-clean, letting you dial in light to heavy crush via the intuitive control set. For instance, on tracks recorded at low level, I just upped the input gain switch and I was ready to adjust the amount of compression with the other controls. Or, I could knock the gain down if I had tracks that were hot, keeping the other controls where you’d expect without having to go radical.

It’s hard not to like the m502. It has that rare combination of quality, features and price—highly recommended.

### BAC-500

The BAC-500 compressor is designed by Brad Avenson and is carried exclusively by Pete’s Place Audio. It is a feedback-style FET compressor built around two discrete op amps and a custom-wound output transformer. Controls include rotary pots for input, attack, release, ratio and output. Additionally there is a three-position sidechain contour switch, eight-segment LED gain reduction meter and push-buttons for adding distortion and a hard relay bypass.

I’m a big fan of sidechain control on any compressor, as it gives you options for making the output more musical, and the BAC-500 works great. On a boomy acoustic guitar, I used the highpass sidechain option to reduce low end to the compressor so it wasn’t reacting to frequencies I took out later to make the

track fit in the mix. This keeps you from having to use an additional EQ before the compressor and lets you sculpt the bottom end at the end of the chain after the compressor.

The attack and release worked as expected and I had no problems getting the effect I wanted. I liked how fast the attack could be; sometimes you want that unnaturally fast attack to clamp down on something as an effect. For instance, I used the BAC-500 on a track that had a pointed attack that I wanted to de-

### PRODUCT SUMMARY

**COMPANY:** Pete’s Place Audio

**PRODUCT:** BAC-500

**WEBSITE:** petesplaceaudio.com

**PRICE:** \$995

**PROS:** Sidechain EQ, surgical precision FET compressor, sounds great

**CONS:** Counterintuitive bypass, disappointing distortion feature