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By Gibson Prichard

PreSonus is a relatively new company in Baton Rouge, Louisiana, who has spent the past few years carving a niche making high-quality audio equipment at prices home studio owners can afford. Such is the case with their ACP22, a two-channel Compressor/Limiter/Gate. Retailing for around \$399.95, it gives a lot of bang for the buck.

I/O and Control: The ACP22 is a two-channel dynamics processor designed for use in many applications, including radio broadcast, which is where my demo unit was put through it's paces. The inputs, outputs and side-chain insertion points are all balanced audio, appearing on XLR's and TRS 1/4" jacks, with the TRS jacks also able to accept unbalanced signals if necessary. Recognizing the need to interface with prosumer equipment, PreSonus provides a level switch on the ACP22's outputs, allowing it to operate at +4dBu or -10dBV. PreSonus also adds an Automatic Compression button to the ACP22, bringing a touch of their BlueMax automatic compressor to this unit. Otherwise, the controls are pretty much the same as other compressors, with Threshold, Attack, Release, Ratio and Output Level knobs to control the compressor. Another unusual addition to the ACP22's Gating section is the Low Pass Filter control, which modifies the audio so that the gate is less sensitive to high frequency instruments like cymbals, a will only open for low frequency instruments like drums or bass guitar.

In Use: I installed the ACP22 as a pre-processor to a radio station's digital Studio-to-Transmitter-Link (STL), primarily to ride gain on any hard peaks and protect the A/D converters from being overdriven. Setup was very straightforward and only took a few minutes. Almost right off the bat, I noticed how clean the ACP22 was and how transparent it was to the audio. As I adjusted the Gating controls, I also found the Range button, which reduces the signal by 60dB (yes, 60dB!) when the input signal crosses the gate's lower threshold, but that 60dB cliff could come in handy to effectively turn off unneeded microphones in a live mix environment. Once I set the controls, it performed flawlessly and sounded as transparent as the Aphex Compellor 300 I had been using for the same task. In the radio production v on n e s not a lightweight. It was able to ride gain effectively as a protection limiter before

recording to DAT or hard drive. The announcers liked the flexibility of the ACP22, particularly in its ability to "squash" their mics for a great, exaggerated, punchy sound when voicing commercials. I could not discern any noise induced in the signal by the ACP22, a fact borne out by the impressive stated dynamic range of >115dB with an SNR of >95dB and crosstalk of >82dB @ 10dHz. The Automatic Compressor section worked surprisingly well and I found it to be a good compromise for a varied source material, such as that in a radio production environment. I found the Auto Compressor tended to pick the side of less compression with moderate release times for most material, rather than the more aggressive approach I might have preferred.

Under test: At the Audio Media offices, we put the ACP22 on the test bench where it largely lived up to or exceeded its printed technical specifications. Based on typical practices of some other manufacturers, we expected that the frequency response (stated simply as "10Hz to 50 kHz") might easily be down a dB or more at the extremes. At unity gain, with a +4 dBu input, the response was down only -.06 dB at 10Hz, -.1 dB at 25kHz and -.41dB at 50kHz. The static noise floor in the 22 to 22kHz range measured -87.9 dBu.