

# AVEDIS E27 & PURPLE BIZ MIC PREAMP

This 'combo rack' featuring two manufacturers offers 500 reasons to be cheerful.

**Text:** Robin Gist



► As Greg Walker mentioned in his Pacifica preamp review in Issue 52, Neve, API and EMI preamps have all been lovingly reissued in recent times. API currently has two versions of their legendary EQ, the 550A and the newer 550B available. Other manufacturers have made forays into the area of '500' series modular designs and it's this path that the Avedis E27 three-band parametric equaliser and the Purple BIZ microphone preamp have chosen. The Avedis E27 is similar to a 550A but not a copy or a reissue, and as such, has some interesting improvements and significant differences to the API, while the BIZ mic pre has no direct vintage comparison and offers a wide variety of interesting and useful tonal options in a compact format.

## ALL AMPLIFIERS OPERATIONAL

Way back in 1969, API began incorporating its discrete products into what was later to become an industry standard, 5 1/4-inch modular steel casing. Based around the Saul Walker-designed 2520 operational amplifier, the API 550A EQ distinguished itself as sweet-sounding and musical. This highly revered EQ employs a 'proportional Q' design that, as the name suggests, gradually increases the Q (quality or narrowness) of the filter as you apply more boost or cut to your signal. This approach is also used in the E27, which is clearly illustrated by Fig. 1. At the heart of the E27 is the Avedis-designed 1122 op amp that can also be used to replace 2520s in API products. Very significantly, the E27 has Jensen transformer-balanced inputs and outputs unlike the APIs, which have an unbalanced input that can sometimes cause interconnectivity problems.

## LOOKS LIKE, SMELLS LIKE

Internally and externally the E27 looks similar to a 550A, both in the layout and the positioning of its controls and componentry, however, the Avedis sports a black faceplate with red and silver knobs. On the subject of the knobs, the E27s look great, but the inner red cut/boost control is a victim of form over function. In an effort to replicate the curved triangular Avedis logo, the knob has ended up with quite a sharp indicator point that is less than pleasing to the touch. This might seem a bit trifling, but after continued use I found it very irritating and made the unit less inviting to use. Unlike the outer silver frequency control, the inner knob is neither stepped nor rough enough to grip, and unfortunately will rotate with the outer knob if not held. This again might seem insignificant, but lack of stepping makes recall very difficult as well as requiring a two-handed operation if you wish to hear your boost or cut amount at different frequencies. I hope Avedis will consider providing stepped cut/boost controls as well as fixing their knob design because these are the only things that I don't like about E27 EQ.

## SAME SIZE, DIFFERENT SOUND

What I *do* like about the E27 is its sounds. It's more open and extended in frequency response than a 550A and offers greater levels of control both in boost/cut and frequency selection: nine frequencies per band and an 'off' position compared to five on the 550A, and +16dB of boost and cut compared to +12dB. There are also push-button shelving options for high and low frequencies and a global bypass switch.

I tried the E27 on percussion, electric, acoustic and bass guitars, vocals and program material. In every case, the addition of E27 EQ improved the sound, either by allowing me to precisely tune into a problem area or to enhance some specific frequencies without boosting other unwanted ones around the area of interest. Phil Punch also tried the E27s on acoustic guitar and trumpets – read his comments in the 'second opinion' section. The inclusion of a 28kHz frequency position makes the unit a contender for mastering applications, but I think many mastering engineers would balk at the lack of stepped boost/cut controls. The E27 has all the great sonic features of a 550A but with more control, a more open sound and an improved input design.

## TWO'S COMPANY

The two E27 units I received for review last month each came housed horizontally in Avedis Audio's R52 rack-mountable power supply unit. The R52 allows for the horizontal mounting and powering of two '500-style' modules in a well made, machine milled steel 1RU chassis. It also provides phantom power for mic pres, power supply status LEDs and a linking function that feeds the output of module one into the input of module two. This is a very useful feature and depending on what type of modules you have installed, gives you options of combined and split signal outputs.

Linking two E27s together, for instance, gives you six bands of EQ with the output from module one feeding the input of module two. I tested this setup as soon as I became aware of its potential, which gave me a very powerful configuration of six bands of nine selectable frequencies in one big super EQ! The link switch disables the external input to module two while maintaining the output from module one; so if you had a mic pre in slot one and an EQ or compressor in slot two, you could record the 'chained signal' and the mic pre 'direct' signal to two different tracks simultaneously – perfect for those of us that like to have 'options' or just plain can't decide! I tested the mic pre/EQ combination using the Purple BIZ mic pre feeding into the E27 EQ and found the joy of adding some 'colour' to my signal.

## SECOND OPINION – PHIL PUNCH: Electric Ave Studios

Recently, Robin offered me the opportunity to have a quick trial of the new Avedis E27 EQ in my studio. In the past I've successfully used Avedis's 1122 opamp as a replacement in some of my API 550B EQs, so I was certainly curious to check it out.

Avedis Kifedjian is also a good guy to deal with and he knows a lot about opamps, circuit topologies etc. It was some three or four years ago now that he first mentioned he was working on his own EQ design and here it is!

I first tried the E27 on an acoustic guitar miked with an AEA R92 ribbon to do some fairly radical EQing. I think these mics sound great in this application; sweet open-sounding tops with no graininess. However, you often need to roll out some bass to get a balanced sound, depending a bit on the guitar and player, of course. In this case I felt I also needed to pull a little out around 600-700Hz... also boosted a couple of dB around 10k.

I was subsequently using all three bands on the E27 with very good results. The E27 sounds smooth – no harshness as the top end was lifted, and importantly, no noise. Later in the session, I used two E27s to add a little 'air' to trumpets miked with a pair of RCA 77s (ribbons again). I used the high band in shelving mode (+2dB at 10k). Once again, a nice sound that compensated for the natural roll-off of these vintage ribbons.

A look inside these units reveals high quality components and a layout similar to my 550Bs.

I'm impressed by these EQs. API-like in some ways, although they have more frequencies, they're perhaps a little less coloured, but there's certainly plenty of headroom. I hate the boost/cut knobs – they feel horrible and when you switch frequencies they often change position... painful!

However, apart from 'the knob issue' I think anybody who likes or is lusting after API-style EQ would certainly like the Avedis E27. (A pair of these with switched boost/cut would be nice for mastering or two-mix EQ... here's hoping Avedis.)

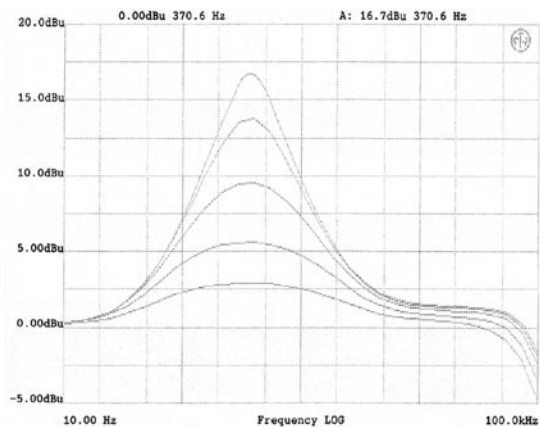


Figure 1

## THE COLOUR PURPLE

The '500 series' Purple BIZ mic pre is a transformer-coupled, three-amplifier design with a user controlled ability to switch one of the amps off. This, along with different gain and fader settings offers a huge variety of tonal variations effectively at the same gain level. What's more, the BIZ can output up to +76dBu of gain, making it a viable option for ribbon mics, and there's an instrument DI input as well. Compulsory +48V phantom power and polarity invert switches with LED status along with tri-state LED level indicators for the gain and level controls grace the front panel.

The BIZ is well made using quality components, but, somewhat strangely, the unit itself lacks an internal metal cover, which would be beneficial for both shielding and ease of installation purposes. I suppose you could argue that the exposed design makes for easier servicing, but I don't mind undoing a few screws! Be that as it may, I really liked the sound of the BIZ pre and, at certain settings, the lack of 'character' it imposed upon the signal. Conversely, by overdriving the gain stage, I also managed to create an edgy (read: 'slightly distorted') sound while recording a percussion overdub. For the same project I later needed to capture the clean and pure tones of a female vocalist – the Purple duly did the 'biz' there too.

This preamp is certainly versatile, making it a good choice for anyone who needs to buy a pre that can cover a spectrum of duties and provide a variety of sonic options. Bear in mind, though, that you need to add the purchase price of a suitable '500 series' case to the cost of the BIZ.

## HOME & HOUSED

The Purple BIZ pre, the Avedis E27 EQ and R52 case make a great combination. Casing options like the API lunch box and other variants can be hard to integrate into studio racks and end up living on top of console meterbridges or on a table somewhere. The two-unit R52 obviates this problem. The fact that you can mix and match or maybe start with just one EQ and the case (or whatever you like), gives you great flexibility, both in purchase and usage choices. Anyone who has used API EQ I'm sure will enjoy using the E27. If the cut/boost knob problems get sorted out, I can see no reason why it wouldn't become bit of a 'legend' itself some day, like the API that inspired it. And for all you lunch box or '500'-format gear owners out there, the Purple BIZ pre is a great alternative that offers a bit more gain compared to the API512c mic pre, giving you some further tasty sonic alternatives. Now if I could just get Avedis to fix those knobs, get enough money for four E27 EQs and two R52 cases, I could live happily ever after with my two super EQs... ■



## NEED TO KNOW

### Price

E27 EQ: \$1650  
R52 Case: \$850  
Purple BIZ mic pre: \$1250

### Contact

Legacy Audio  
(07) 5570 4171  
sales@legacyaudio.com.au  
www.legacyaudio.com.au

### Pros (E27)

Great sound.  
Balanced I/O.  
Extended frequency response.  
Proportional Q design.  
Jensen transformers.

### Cons (E27)

User-unfriendly cut/boost knob design.  
No stepping on cut/boost control.

### Pros (BIZ)

Large gain range.  
Tonally versatile.  
Lundahl input transformer.

### Cons (BIZ)

No internal case/shield.

### Summary E27

A great sounding EQ with proportional Q design.

### Summary BIZ

A versatile preamp with lots of gain and headroom.