



The Great Equalizer

New tools, old favorites

By Chris Kathman

A funny thing happened to me last year. A marketing consultant for a corporation that makes equalizers asked me if I had used their latest model in any of my travels.

My honest answer was that I wasn't really sure. My focus is on the band I'm mixing, and I genuinely don't notice what brand of EQ is there if the system du jour sounds O.K.

It is a fact that I'm not the first person to mention in these pages that systems have been getting better with each passing year, with DSP becoming more and more helpful. I was sound-checking Cake at an outdoor festival in Arizona recently and the systems guy pointed to the EQ and I shook my head – I didn't need it, the rig sounded great right out of the box.

Of course, there are horror stories down through the ages. One that I witnessed myself happened on the Cake tour I did last year. One of the opening acts was the Hackensaw Boys, a bluegrass group from Virginia.

We soundchecked in a city and venue that shall remain nameless, as will the local provider. I was downstairs in the production office when the "Hacks" went on, and was startled when one of my crew raced in saying, "C.K., you've gotta get upstairs right now!"

I followed him to the stage and heard insanely huge sheets of dying elephant feedback raging around the Hacks. I went over to the monitor board, and just then the feedback stopped. A guy I hadn't seen all day was manning the console, and the tech that I had met previously, and thought was going to be doing moni-

tors, was just straightening up from the rack of digital EQs.

I asked him what happened, because the Hacks were always sensitive to being discriminated against because they're not a rock band like the others on the show, and they were visibly upset. The tech said to me that the guy on monitors had mistakenly bypassed all the EQs.

Later that evening, I had the stage manager put me on his cell phone to one of the main guys at the system provider, and I read him the riot act in the process of describing what had happened. Of course, I was being somewhat of a hypocrite – I've mixed monitors for more than one show without even powering up the EQs!

KIND OF HOLLOW

Sometimes when I would walk into a venue, and see a knowledgeable colleague's curves from the night before, I would just go with them – and forget to switch the rack on. As I would proceed through sound-check, I'd absentmindedly think, "Man, the wedges sound kind of hollow today," and compensate on the channel, only to discover the truth at the end of the night.

I recently asked the LAB (Live Audio Board) community about EQ nightmares and Alan Wheeler responded. "Most embarrassing, hmm, that would be me making miniscule incremental changes to various frequencies all night. Absolutely positive I could hear differences when a slider was altered, only to find the bypass had been on all night. (With) this EQ, the bypass worked the opposite direction to all my other EQs."



Owen Orzack told a story about an EQ that “died mid-show on a very loud DSC star mix – squeeeeeee! Turns out upon further analysis that the plastic casing holding the fuse in the chassis was cracked and picked that exact moment in time to decide to shoot the spring loaded fuse out of the unit. Mr. Murphy drops by the gig once again!”

Frank Aponte was in my town recently, far from his home in Puerto Rico, mixing a Mexican artist named Julieta Venegas. When I went to meet Frapo at the Conga Room, I discovered that LAB regular and former Cracker FOH mixer Woody Nuss is now the house guy there. He said that when he replaced the monitor EQs, he picked up almost 50 percent more level in the wedges, with much better tone. The new EQs are dbx 1231’s, which are very reasonably priced and thus present in a large number of venues nationwide.

Ian Barfoot replied to my asking for favorite EQs by saying: “Ahhh, a BSS 926/920 system with wireless remote. Pure class at FOH.” He added that he “would not swap my rack of Varicurves for those things with sliders on, you know, the things monitor engineers have by the rack load.”

BSS has discontinued the Varicurve, which is kind of like Sennheiser deciding to not make the legendary 409 mic anymore. Last year, when I wrote a Real World Gear intro about consoles, people made fun of me when I said I had emotional feelings for a Soundcraft 500B at a venue I worked in many years ago.

DOWN A LITTLE

That particular FOH position also included good old Klark Teknik DN360 EQs. I got used to how they would react when I pulled down some 2.5K, or grabbed 630 and 800 (Hz) and brought them both down a little. I felt a sense of comfort and security whenever I would walk into another venue somewhere, and see those familiar white-faced units in a rack.

Speaking of White, many the time I have patiently watched and listened to a crusty old guy pat his White 4001s, with knobs on them, and proudly proclaim them to be “the best sounding EQs ever made!” You can’t buy those anymore, either.

Mike Kivett tells a very funny story with an unlikely solution. “Most interesting thing I ever saw was several years ago at a club show featuring an

’80s one-hit wonder band. There was no rider to muddy the situation, so monitor EQs were comprised of (bargain basement brand, manufacturer name deleted).

“As you might imagine there were issues, but the show went on. At one point, all the sliders on one of the units fell to the bottom of the throw! Apparently the glue that held the slider panel against the faceplate decided to come undone at that point, and the friction was lost, making it impossible for the faders to hold position.

“Some quick experimentation showed that pressure at a certain point would keep the faders from slipping, but duct tape alone wouldn’t work. So, the tech got a cigarette butt off the floor, taped it to the front of the unit, and the faders once again held for the duration of the show.

Overheard later was the tech’s assertion that it was the first show he’d ever seen that was saved by a cigarette butt.”

Now, that’s what I call the Real World! ■

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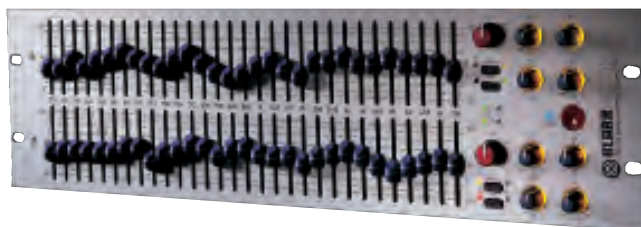
Klark Teknik DN370

www.klarkteknik.com

Manufacturer Take: Proportional-Q filters, range switch selects ± 6 dB or ± 12 dB operation. Sweepable high-pass filter with 20 Hz to 500 Hz range, sweepable low-pass filter with 2 kHz to 20 kHz. Two sweepable notch filters per channel, with overlapping frequency ranges of 20 Hz to 2 kHz and 200 Hz to 20 kHz. Multi-point clip monitoring, with clip warning LEDs when the level exceeds +20 dBu (2 dB below the onset of clipping).

Chris Kathman Take: This new model is the successor to the dearly beloved DN360, which is still available. It adds two parametric notch filters, which are certainly nice to have. Also, the adjustable high-pass filter is unquestionably superior to the 360’s fixed one.

U.S. List Price: \$ 2,331.67





REAL WORLD



BSS FCS-960

www.bss.co.uk

Manufacturer Take: Switching between normal and fine filter width settings on each channel. 3U rack space. Constant Q-filters, also has a sweepable hi-pass filter, gain control and electronic balanced inputs and outputs.



C.K. Take: I've seen a million of these all over the place. Well, maybe not a million, but a pretty fair number of them. Very reliable, to the best of my knowledge, and quiet. I hate to use the word "musical," but these really work well.

U.S. List Price: \$???

dbx 2231

www.dbxpro.com

Manufacturer Take: Instant encode/decode Type III noise reduction in-circuit at the push of a button. Increases S/N ratio by up to 20 dB. Patent-pending PeakPlus Limiter, threshold range of 0 to +20 dBu, four stage LED bargraph for gain Reduction and output Level. Status LEDs offer visual feedback for all settings on the front panel.

C.K. Take: Given dbx's long history as an industry leader in the manufacturing of limiters, the one included here probably works well. The noise reduction – that remains to be seen. I have yet to use one of these.

U.S. List Price: \$ 749.95



Ashly Protea System II 4.24G

www.ashly.com

Manufacturer Take: The 4.24G can control four channels of EQ in a 2U package. Includes 28 bands of 1/3-octave EQ, with programmable compressor/limiter. Programmable delay of up to 1.364 seconds. Individual, programmable 24 dB/octave high- and low-pass filters. 240 by 64 fluorescent backlit display. Also available with Protea 4.24RD remote.

C.K. Take: I was working a corporate talking head gig one day on a system delivered by some guys from an AV company, one of whom said their regular mixer used this unit on the podium mic, with good results. I was kind of uneasy, having never used one before, but decided to experiment. Much to my surprise, without any instruction, I could operate it just fine. Excellent design.



U.S. List Price: \$ 2,249

Shure DFR11EQ5 Parametric

www.shure.com

Manufacturer Take: Up to 10 selected bands of adjustment. Runs on Windows. Filters can be adjusted with a mouse or by entering numerical values on the keyboard. The width of the cut or boost can be selected by the mouse or from a pull-down menu. Adjustable output gain.

C.K. Take: I thought of this as an install device until I saw Paul Tucci using it with Hall and Oates a few years ago. It has to be controlled by a laptop, but in turn gives you very precise control over narrow frequency slices. (The model DFR22 is stereo, can deploy 16 filters, and retails for \$999.)

U.S. List Price: \$780





Meyer Sound CP-10 Parametric

www.meyersound.com

Manufacturer Take: Complementary phase, symmetrical boost and cut. Two channels, each with five bands of parametric equalization plus high and low-cut shelving filters. Often used with the SIM system. 110 dB dynamic range. LEDs indicate signal clipping. When power is interrupted, input signals are bypassed directly to the corresponding outputs.

C.K. Take: This device is legendary. The only negative thing I can say about it is that sound companies, many years ago, would sometimes carry spare graphics already in the signal chain in their racks, because the CP-10 would occasionally go out. This problem was rectified. Jon Martin says that the CP-10 is "very accurate" and he prefers to "use this for system EQ, and leave the 31-band for grabbing during show-time."



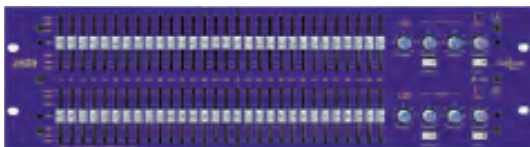
U.S. List Price: \$ 3,770

XTA GQ600

www.xta.co.uk

Manufacturer Take: Offers 10dB of boost or cut at 30 frequencies. Shelving HF trim section, with adjustable gain and frequency. Sweepable high-pass filter and a fixed frequency low-pass filter. Audio I/O on LXR's and Klippon connectors. Relay fail-safe bypass and peak level indicators.

C.K. Take: Mike Smith said on the LAB that his "favorite EQ that always works: XTA GQ600. Smooth, unobtrusive, ever-green. Movie star good looks. The last analog EQ I will own." I have seen this in the FOH rack at some major arena shows, and at some really high-end sound companies. It's probably as well made as the company's popular crossovers.



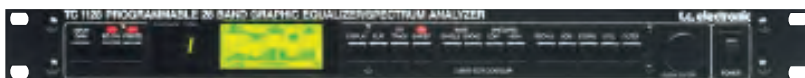
U.S. List Price: ???

tc electronic TC1128 and 6032 Remote

www.tcelectronic.com

Manufacturer Take: Digitally controlled analog mono 28-band high-performance equalizer with + 12 dB range, analyzer options, store/recall of settings. 6032 Remote is capable of instant control of up to 32 tc 1128/tc1128X equalizers. Includes 29 high-speed motorized faders. Select any EQ and the fader will move to the correct setting, ready for modification. Replaced by the new EQ Station and Motofader-64 remote.

C.K. Take: When I was asked to work some gigs a few years ago as the Clair Brothers system tech at the Greek Theatre in L.A., I was quite nervous at the thought of operating the 6032. Fletch and Pete Kudas very kindly helped me learn it, and now I wish I had one at every gig. Powerful, and beautiful sounding.



U.S. List Price: \$???

Rane DEQ 60L

www.rane.com

Manufacturer Take: The first true graphic equalizer whose output response precisely matches its front panel settings. Perfect-Q offers virtually no band interaction and extremely low ripple between adjacent bands. Selectable between Perfect-Q or proportional-Q response. Low-cut and high-cut filters. Switchable boost/cut or cut-only modes.



C.K. Take: Rane has worked quite diligently over the past several years to develop gear for higher-end applications, and with efforts like this unit, it appears they are well on their way to attaining their goals.

U.S. List Price: \$



Presonus DEQ624

www.presonus.com

Manufacturer Take: Digital processing unit, under digital control but with a familiar analog feel; no menus or sub-menus. Hi-pass and lo-pass filters plus narrow Q select. Switchable range control. Channel-A Master button copies Channel-A settings to Channel-B. Storage for four curves. Proprietary 60-cycle hum cancellation algorithm. Compressor/limiter/expander for each channel.

C.K. Take: What, it doesn't mix a cocktail for you? Sounds like this feature set could really be useful in a lot of situations. The hum cancellation part sounds cool, not that it substitutes for a properly grounded system.



U.S. List Price: \$799.95

Inter-M GEQ-2231D

www.inter-m.net

Manufacturer Take: Traditional analog feel with digital signal processing. Constant-Q 1/3-octave low-noise digital filter bank. High-cut and low-cut filters. Peak limiter, output clip indicator. 24-bit AD/DA converters, 64 kHz sampling frequency, 40-bit internal signal path.

C.K. Take: A confidential informant of mine deep inside the industry tells me that this unit, although little known, actually works much better than many others that are more "known" – and that the others will admit it, privately. It will be interesting to see if it takes off.

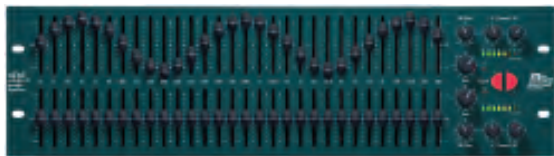
U.S. List Price: \$868



BSS Opal FCS-966

www.bss.co.uk

Manufacturer Take: Separate LF and HF contour filters which can change an overall sound balance without disturbing a detailed room or loudspeaker response, can be used to add (or remove) room effects that change with temperature, audience numbers or humidity. Constant Q topology, filter width is constant whatever the fader gain setting. Sweepable high-pass filter, eight-segment LED meter shows output level and signal clipping.



C.K. Take: These are starting to pop up in different venues, and they seem to be a good-sounding value for the price. I have had no complaints when I have used them. Woody Nuss has replaced the FOH EQ's at the Conga Room with these units.

U.S. List Price: ???

Klark Teknik DN3600

www.klarktechnik.com

Manufacturer Take: This discontinued unit offers tuneable notches and sweepable low- and high-pass filters, as well as 30 tactile switches for instant access to virtual faders, DN360 and DN27 emulations with K-T's proprietary combining filter characteristics. 66 memories for EQ settings, plus ability to address up to 64 slave units.

C.K. Take: Tremendously simple and comprehensible front panel layout. I first encountered one in Marseille in 1997, with a monitor rig, and within minutes I was zooming around on it, totally comfortable. Now replaced in the K-T line by the DN9340 Helix, which has many more features and retails for \$3,932.

Estimated Used Price: \$2,000

