

Some say a copy can never be as good as the original, but SIMON TILLBROOK finds that Cartec's clone of the Pultec EQP-1A might just challenge this assumption.

There are numerous software emulations, as well as hardware reissues and clones of some of the more desirable hardware processor devices such as compressors and equalisers manufactured by the likes of Fairchild, Urei, and Pultec to name but a few. Manufacturers such as Tube-Tech, Manley, and Summit have produced some well received and widely used examples in hardware form, but despite having all this available to us, and often very competitively priced, many with the means still feel that the original units cannot be bettered or even accurately emulated.

One specific device made by Pulse Technologies, later Pultec of New Jersey, in the 1950s is the EQP-1A programmable equaliser. These hand-built units are amongst the most revered of their type, and now Cartec Audio has entered the scene with what is claimed to be the best clone of this prized processor in the form of the Cartec EQP-1A Program Equalizer.

My overall and immediate impression is that the Cartec Audio EQP-1A is closer to that Pultec design and sound than I have heard to date.

One of the techniques used by many, including many engineers I was lucky enough to learn from, was utilising both the boost and attenuation controls simultaneously in the low frequency section. This was something that Pultec insisted on you avoiding in the original literature but that is, of course, a red rag to a bull, and engineers immediately ignored this and did the opposite creating a push/pull compression type of effect that tended to add both clarity and warmth to the low end, and this is faithfully reproduced by the Cartec EQP-1A.

The mid/high frequency section can change its character with use of the bandwidth control going from a smooth and very sweet sound and feel, when opened up in the broad setting, to an edgy sound with some bite when set to the narrow end of the scale. Employing

CARTEC EQP-1A

Program Equaliser

Description

Cartec Audio has stuck to the original as close as possible, resisting the temptation to modify or enhance.

The 3U enclosure of the Cartec EQP-1A is a neat 150mm deep, with a single IEC power connector and transformer balanced XLR input and output sockets.



The front panel has a dark metallic green finish with yellow in-filled engraved legends for each of the controls resembling the layout faithfully, albeit with a different colour scheme.

Internally, next to the large mains transformer mounted to the chassis base, we find a single board design with all the components mounted on turrets and wired point to point, thus keeping the signal path as short as possible, helping with sonic integrity and keeping noise figure very low. The three valves are all JJ/NOS with an ECC82, ECC83, and a 6X4 rectifier. All very neatly put together with great attention to detail and respect to the original design.

The controls for the various stages of the Cartec EQP-1A appear on the front via Grayhill switches and PEC potentiometers in the original layout.

The low frequency section is a shelving characteristic with both boost and attenuation rotary controls, with the scale running from 0 to 10. Frequency selection is 20, 30, 60, and 100Hz. The mid/high frequency section is boost only with the rotary control once again scaled from 0 to 10 with variable bandwidth rotary with the scale range from a sharp 0 to a broad 10 setting. The selectable frequencies here are 3, 4, 5, 8, 10, 12 and 16kHz.

Finally, the high frequency shelving section is attenuation only with rotary variable between 0 and 10 and frequency selection between 5, 10, and 20kHz.

the high frequency attenuation can have the effect of bringing out more of the warmth in the lower part of the spectrum.


Making An Impact

Spending a few days with the Cartec EQP-1A reminded me of all that others and I love about those Pultec equalizers without the same inherent noise levels. Lacking these in no way impacts the wonderful sonic ranges that can be achieved by this program equaliser. Having the Cartec EQP-1A in the signal path, but bypassed, gives a smooth sheen to the signal that is very pleasant indeed.

Cartec Audio will be manufacturing matched pairs just like the original Pultecs, and that is a prospect that I am drawn to. I would love the opportunity to work with a pair of Cartec EQP-1As, but guess I will have to join the queue that is rapidly forming.

Conclusion

My initial impression of the Cartec Audio EQP-1A has not been altered, just simply reinforced with extended use. This is the best clone of the Pultec that I have used by some margin.

Silky smooth or with some sharp bite, but never really aggressive, the Cartec EQP-1A is a lovely processor that will be hard to part with. Now... about that matched pair... 

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INFORMATION

① GB£1,895.00 (exc.VAT)

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THE REVIEWER

SIMON TILLBROOK is the Principal Music Tutor at Islington Music Workshop in London. The rest of his time is spent as a freelance engineer, mainly in the USA.

Use

It would have been nice to have an original Pultec to compare with for you, but alas that was not to be and I will have to rely upon my experiences with the original to help.