

helios parametric equaliser

RE 24

391



the slim one for crowded racks - only 1 $\frac{3}{4}$ " panel height

At Helios we have a time honoured saying that "the art of console design lies in what you leave out", and the same philosophy has been applied to the concept of the RE24 Equaliser. Like all our products, except those built to satisfy the more unusual minds in the industry, we have aimed for a device immediately comprehensible, "driveable", and most economical in rack-space.

It offers a full four frequency regions, the upper and lower mid ranges overlapping almost completely, but the complication of variable Q knobs (one more setting to remember and reproduce) and high and low shelving options have been deliberately avoided. Apart from the unfortunate results all too often produced by shelving lifts (rumble and hiss from the incoming material), the choice of Q in the RE24 allows two sections to simulate very effectively the kind of shelf commonly encountered. The ear is often a more reliable judge than the spectrum analyser of exactly what is needed. In the H version, the sharpness of the upper mid range curves is considerably increased, so that over a wide range there is effectively a choice of bandwidth. Each section has an input gain control to balance up overall loudness.

The basic version is powered from available supplies, +36 volts stabilised and 0 volts = audio earth. Input and output are unbalanced, and the full performance is thus available at minimum cost. + 24 or 30 volt supplies will give perfectly satisfactory performance limited only in headroom.

Option A designates an L.E.D. overload indicator on each output, responding to peak signal, whose operating level may be set by an internal preset. It also indicates the overloading of the input by incoming level when the controls are set for heavy troughs.

Option B provides balanced floating input and output via high quality transformers. The input is 10k ohms bridging and the output of low impedance giving an effectively voltage output into a 600 ohm load. However termination of the output is entirely unnecessary.

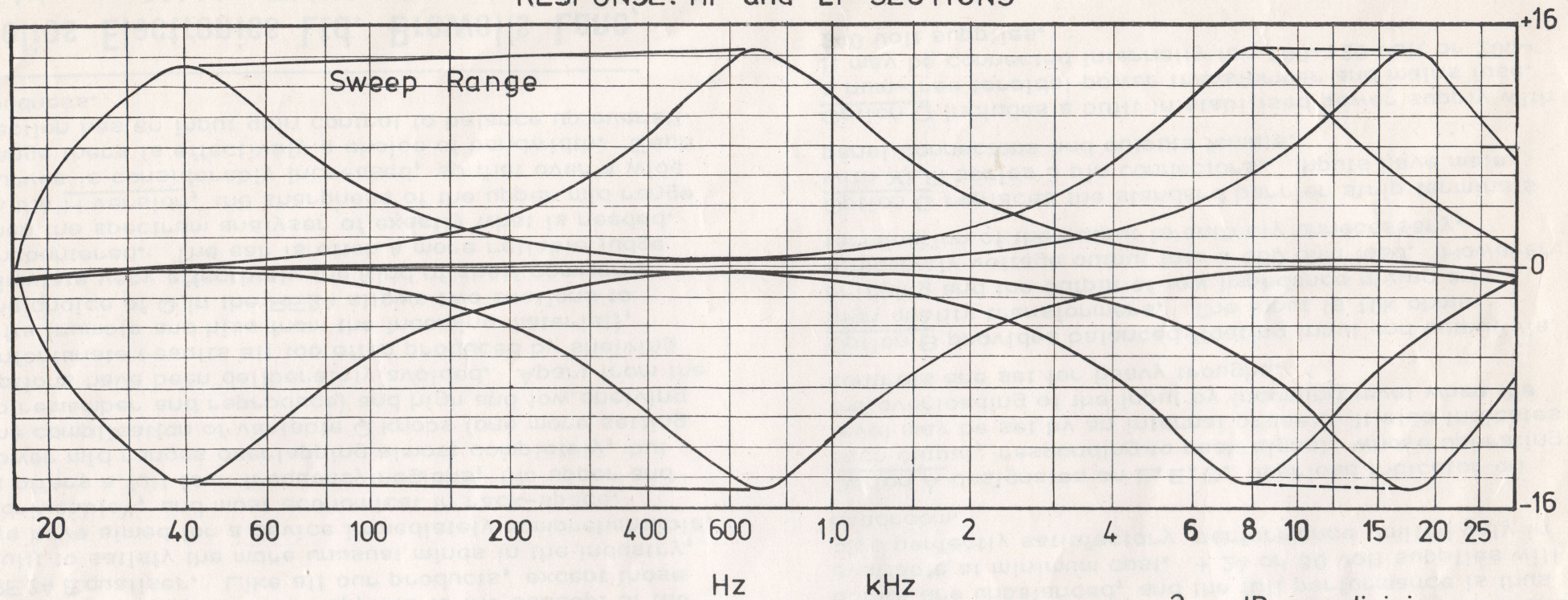
Option C replaces the standard barrier strip terminals with XLR series 3 pin connectors. Inputs have male panel connectors and outputs female.

Option D includes a built in stabilised power supply with a hum-free toroidal power transformer and mains fuse. It may be connected internally for 100-120 volt or 200-240 volt supplies.

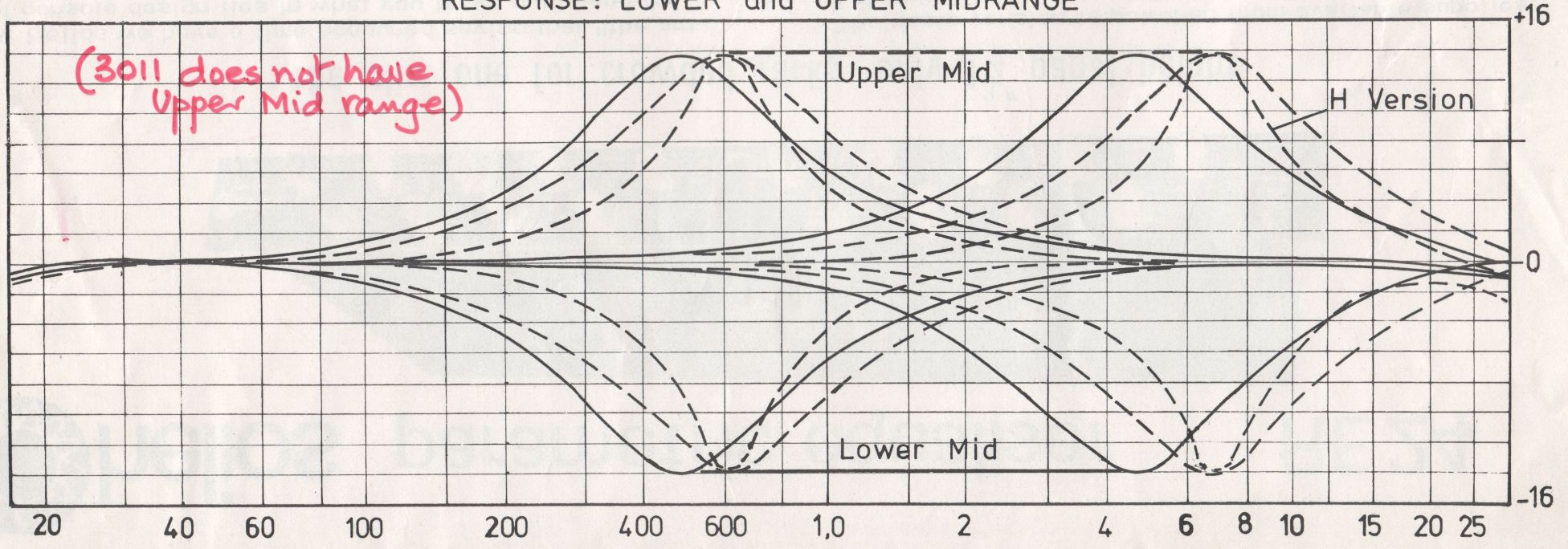
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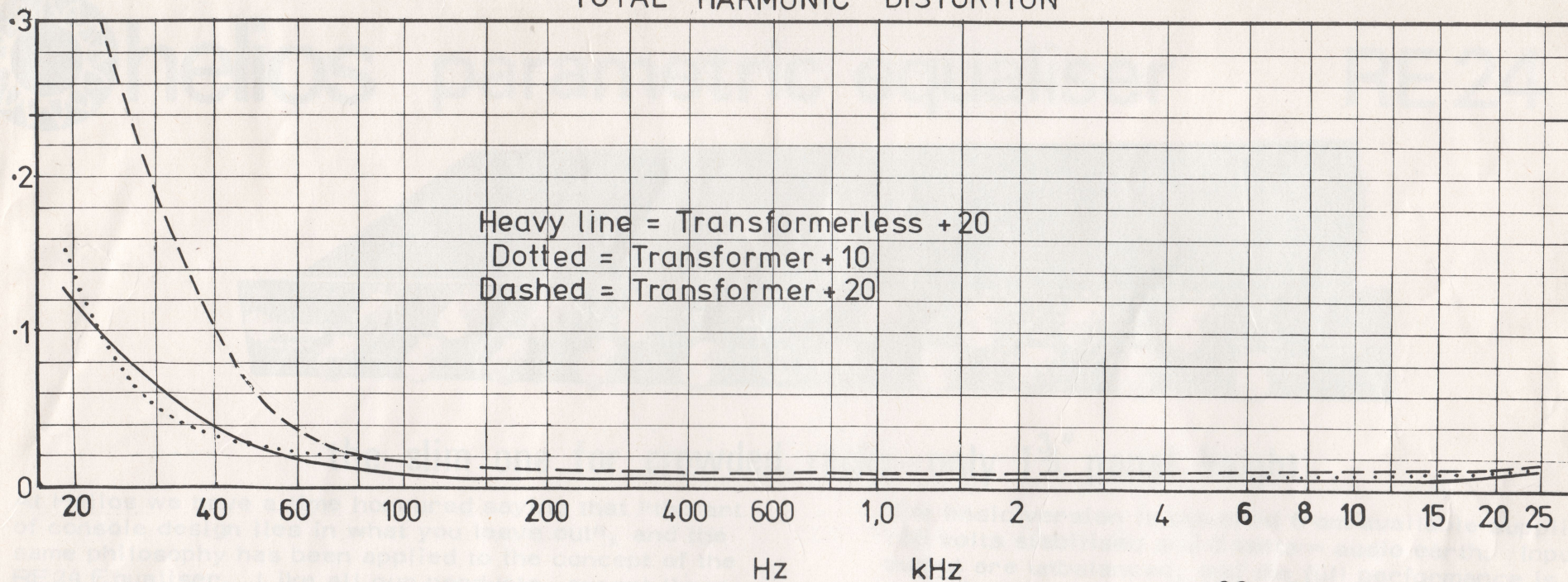
RESPONSE: HF and LF SECTIONS



RESPONSE: LOWER and UPPER MIDRANGE 2 dB per division



TOTAL HARMONIC DISTORTION



Frequency Bands Low frequency 40Hz to 700Hz ± 14 dB boost or cut
 Lower middle 0.5kHz to 5kHz ± 14 dB boost or cut
 Upper middle 0.7kHz to 7kHz ± 14 dB boost or cut
 High frequency 7kHz to 17kHz ± 14 dB boost or cut

For further details see response curves.

Output : Maximum output (clipping) is +23dBm into a bridging input of greater than 10k ohms or +21dBm into a 600 ohm load.

Crosstalk : Measured at output of one channel with the other channel fed with 15kHz sine wave at +20dBm, both channels eq. in, max boost at 15kHz and measured channel input terminated with 600 ohm - crosstalk better than 100dB.

Noise : Bandwidth 20Hz to 20kHz.

Equalisation out better than -83dBm.
 Equalisation in, no boost or cut better than -83dBm.
 Equalisation in, max boost on all bands better than -81dBm.

Distortion : See appropriate curves.

Power Supplies Option D, built in mains power supply, requirement is 110-125vAC or 220-250vAC 45-60Hz.

When powered externally (Standard unit) requirements are: 36vDC stabilised at 220mA max plus 12vDC stabilised at 80mA max (Overload indicator Option A only).

Dimensions Front panel height $1\frac{3}{4}$ " (44.5mm)
 Front panel width 19" (483mm)
 Depth front to back $8\frac{1}{2}$ " (216mm)

Note When XLR connectors used (Option C) allow additional 3" (75mm) behind the unit.

Front Panel Finish

Stove enamelled black or brown or clear anodise. Legends screen printed. Other colours and engraved legends to order.