



31772 80701

W 495 STB Equalizer (Stereo)

W 495 B Equalizer (Mono)

The W 495 STB Equalizer is a two channel unit and is contained in a standard cassette of size A1 (40 × 190 mm).

Each channel consists of a low and a high frequency filter, a boost-cut filter with switchable bandwidth, and an amplifier, all combined into a single active unit. For high and low frequency equalization there are each three cutoff frequencies available, and for boost-cut equalization 11 center frequencies may be selected.

The controls are coupled to adjust both channels simultaneously. However it is possible to switch each channel independently with a push button to a flat frequency response. This enables the user to affect only one of the two channels. The equalizer (device) is also available in a single channel version with the designation W 495 B.

Technical Data: 0.775V ± 0dB

Filter Section:

Frequency response in flat position

40Hz to 15kHz, ± 0.3dB

Low frequency filter switchable 40, 60, 100Hz

amplitude in steps ± 2-4-6-9-15dB, ± 10%

High frequency filter switchable 7, 10, 14kHz

amplitude in steps ± 2-4-6-9-15dB, ± 10%

Boost-Cut filter switchable 175, 250, 350, 500, 700Hz

1.0, 1.4, 2.0, 2.8, 4.0, 5.6kHz

amplitude in steps ± 2-4-6-8-10dB, ± 10%

Bandwidth of boost-cut filters switchable

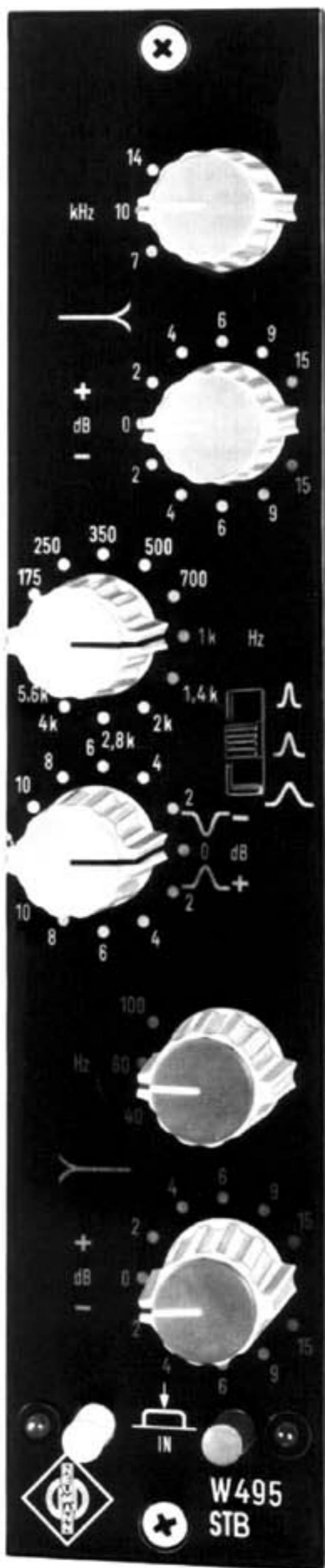
in three ranges broad, middle, narrow

Bandwidth in broad range

and 10dB position approx. 1 octave

Ratio of bandwidth

broad : middle : narrow 1:0.5:0.25



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Input Data:

Input	balanced, floating
The input transformer is statically shielded.	
Input impedance (40Hz-15kHz)	$\geq 2 \text{ kohms}$
Maximum source impedance	50 ohms

Output Data:

Maximum output load	$\geq 300 \text{ ohms}$
Nominal output level into 300 ohms	+ 6dB
Maximum output level into 300 ohms, at operating voltage = 24V	+ 22dB
at operating voltage = 21V	+ 21dB
Output impedance	$\leq 40 \text{ ohms}$
Output	balanced
For floating operation the W 495 STB stereo unit must be connected to a separate transformer, such as Neumann 09463002. The W 495 B mono equalizer is already equipped with a transformer.	

Output Data with Transformer:

Output	balanced, floating
The output transformer is statically shielded.	
Output impedance	$\leq 40 \text{ ohms}$
Output CMR @ 15kHz	$\geq 60 \text{ dB}$
Gain	0dB, $\pm 0.5 \text{ dB}$
Gain trim, internally adjustable	$\Delta P = 1 \text{ dB}$
Total harmonic distortion: output level + 22dB into 300 ohms	
operating voltage = 24V	$\leq 0.3\%$
Channel separation @ 15kHz	$\geq 90 \text{ dB}$

Noise levels:

Source impedance = 50 ohms	
Load impedance = 300 ohms	
measured at output in flat position	
weighted peak	$\leq -92 \text{ dB}$ (DIN 45405)
weighted peak	$\leq -88 \text{ dB}$ (CCIR 468)
unweighted rms	$\leq -99 \text{ dB}$ (DIN 45405)

Power Supply:

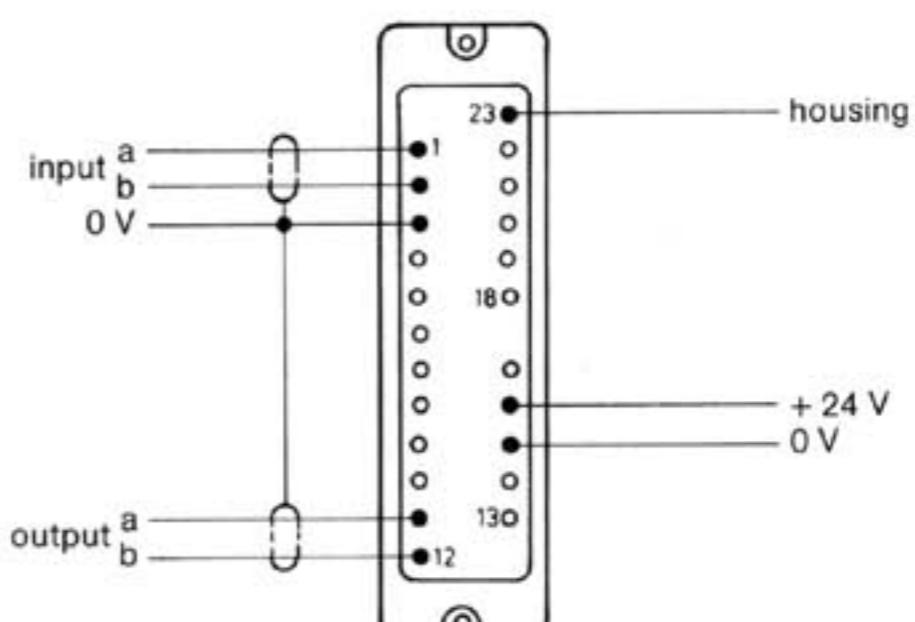
Nominal operating voltage	+ 24V dc
Permissible operating voltage range	+ 21 to + 28V

Current consumption at 24V:**Stereo unit W 495 STB**

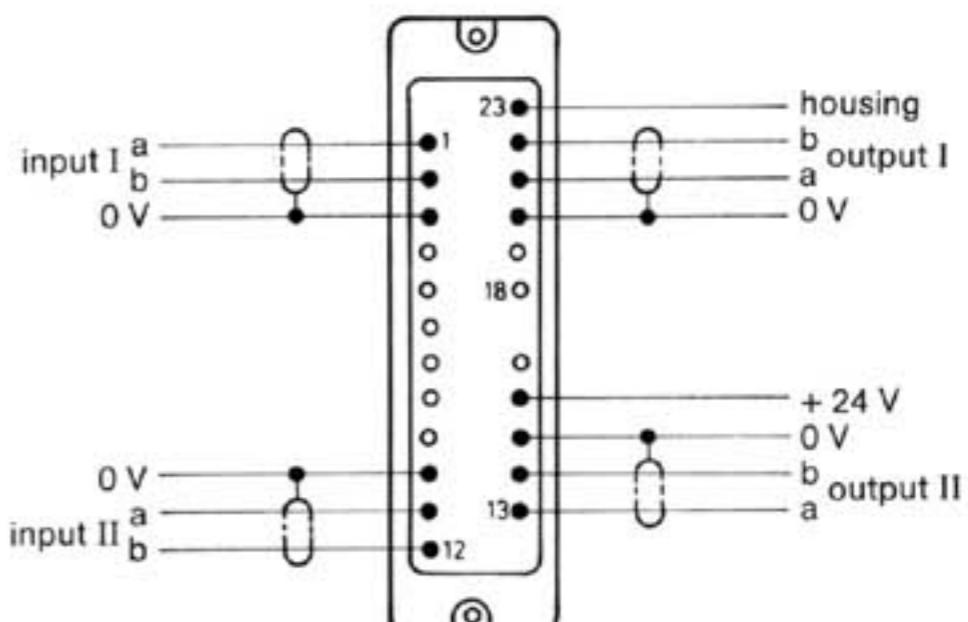
without signal	approx. 60mA
with output signal, +22dB, 300 ohms	approx. 140mA
Mono unit W 495 B	
without signal	approx. 30mA
with output signal, +22dB, 300 ohms	approx. 70mA

Ambient operating temperature	0°C to 50°C
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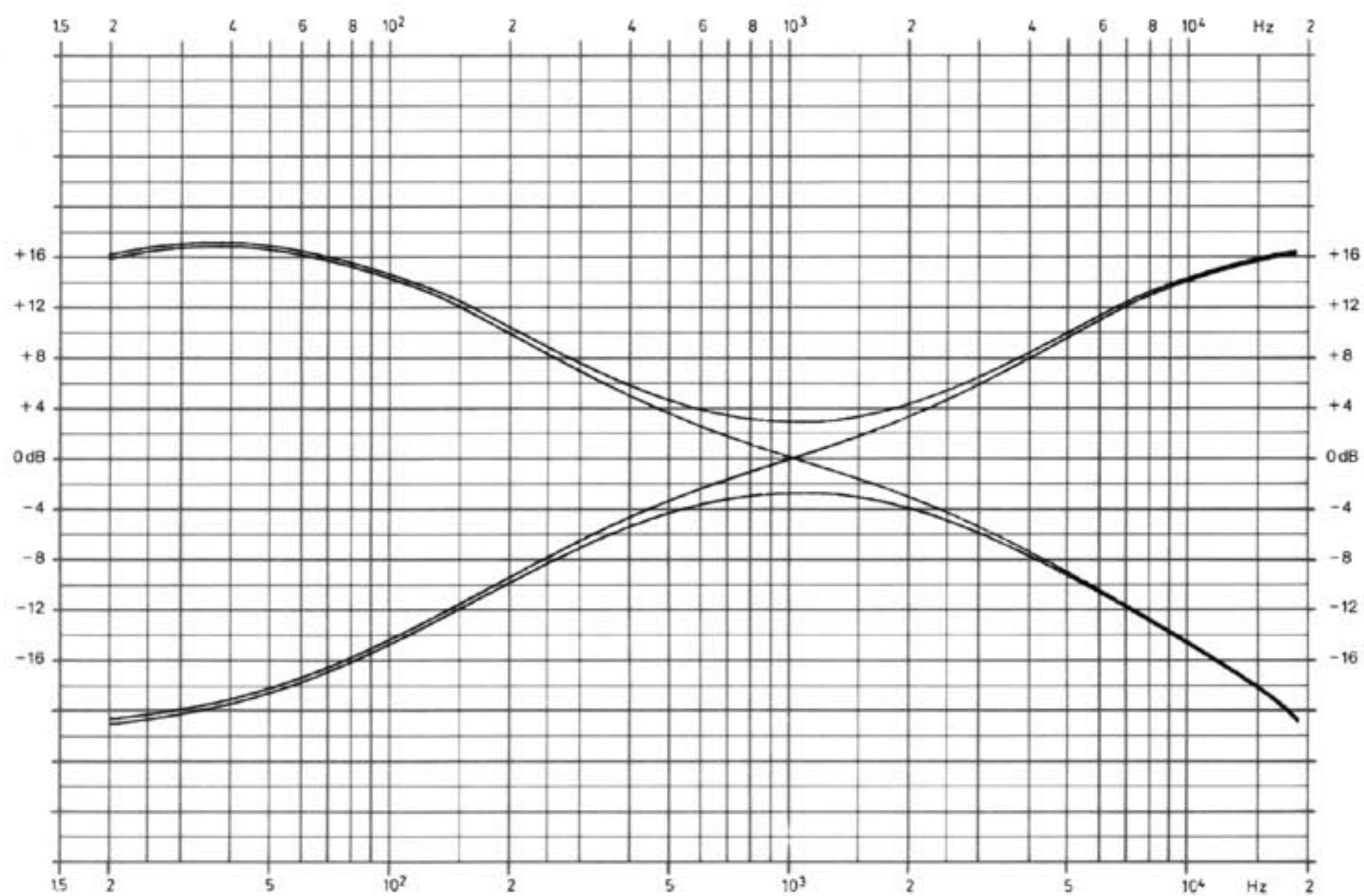
Housing	A1 cassette
Dimension of cassette	40mm (1.6") wide 190mm (7.5") high 109.5mm (4.3") deep
Weight W 495 STB	1.1kg (2.43 lbs)
W 495 B	0.95kg (2.09 lbs)
Connector	T 2700
Mating connector required	T 2701

Connections to

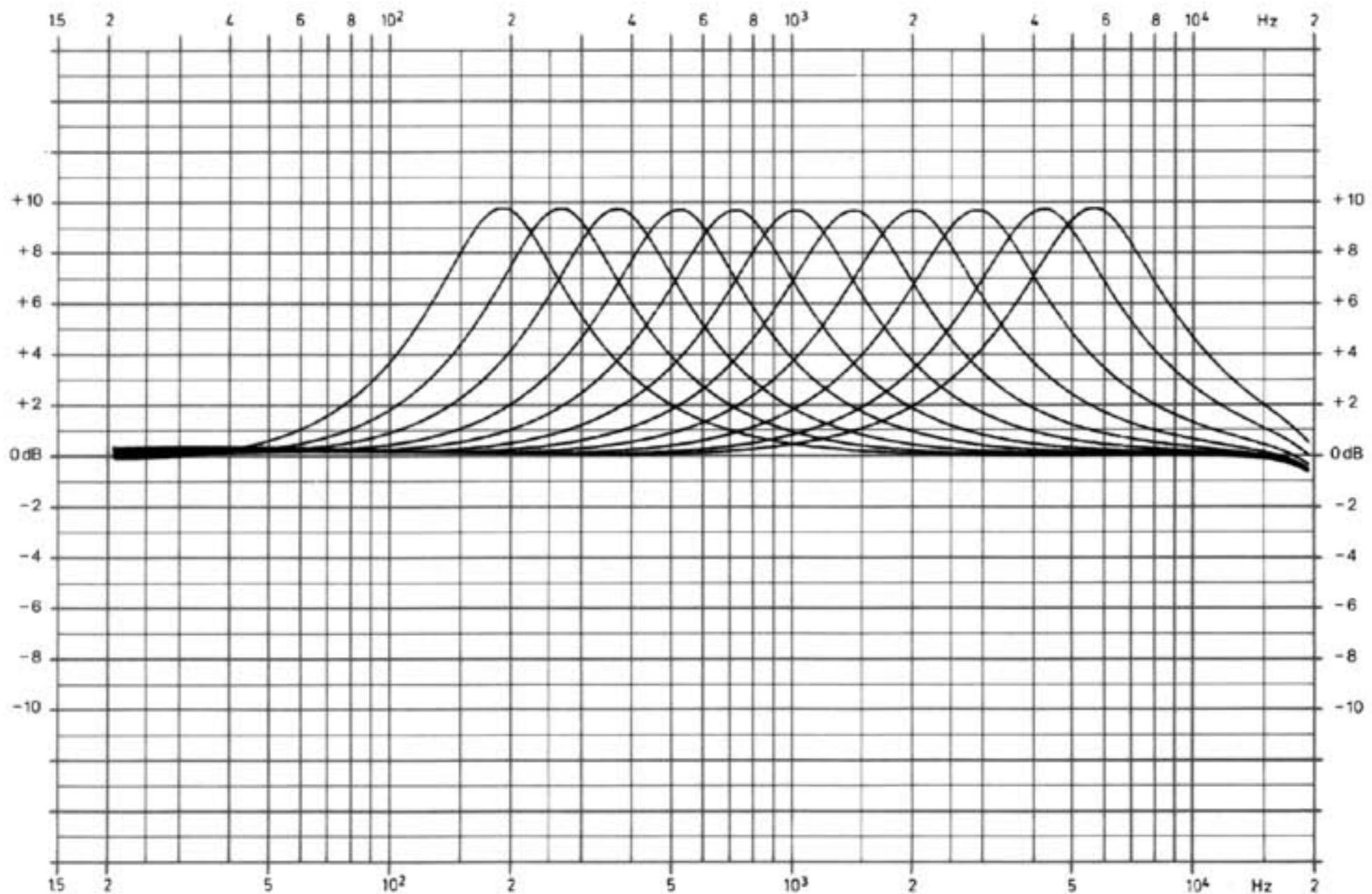
W 495 B

Connections to

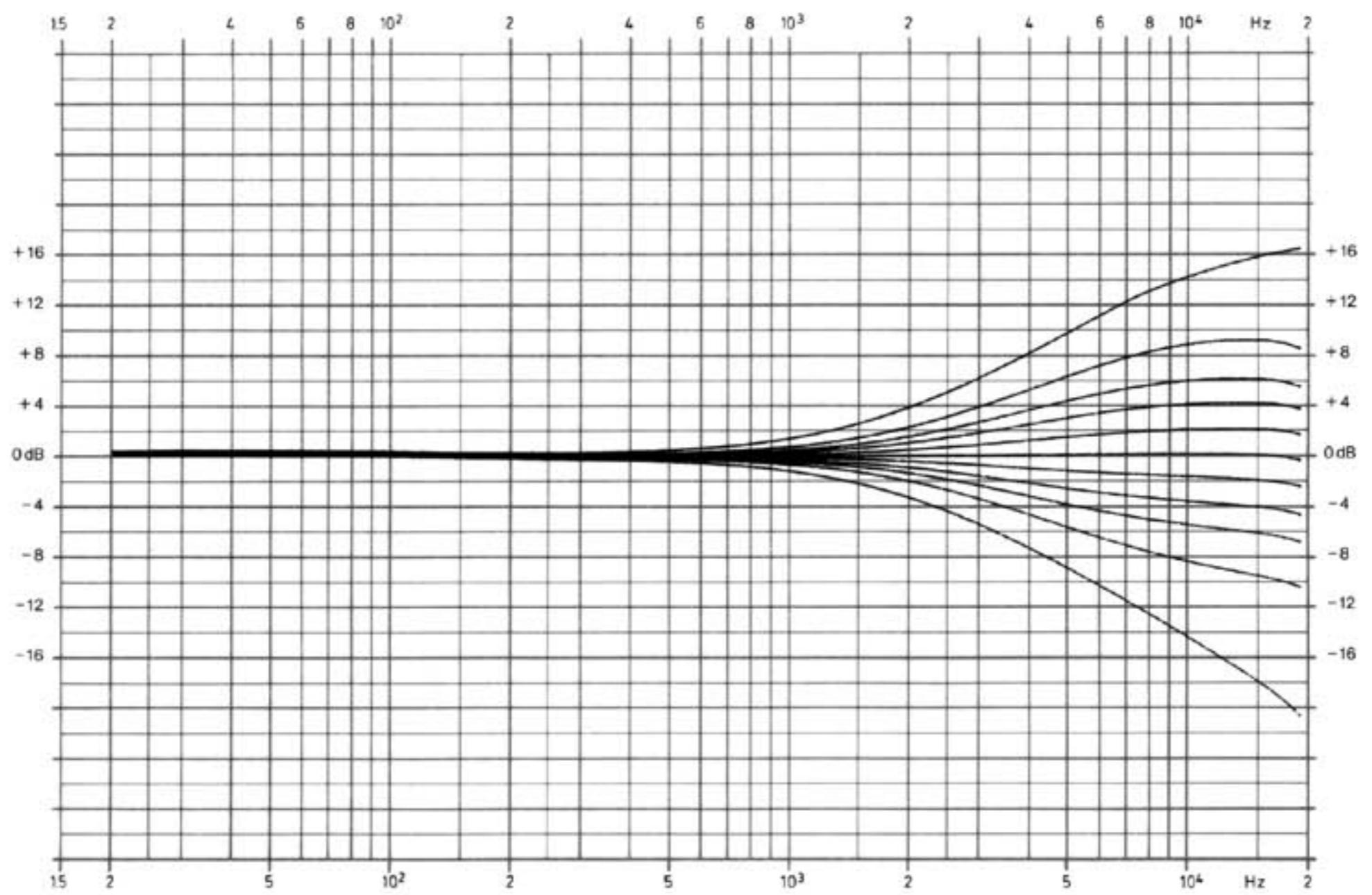
W 495 STB



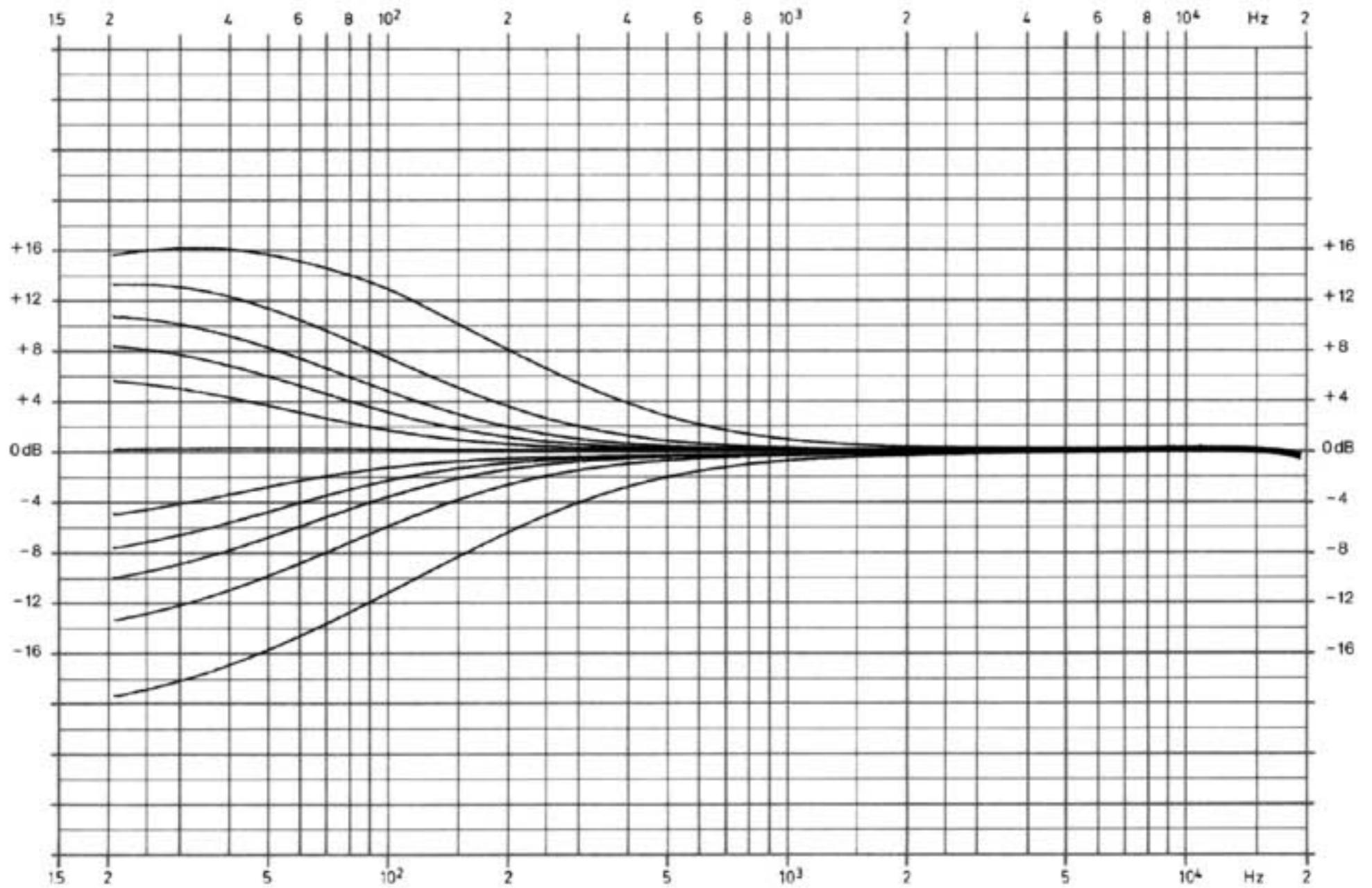
high-low equalizer
set to 100Hz and 10kHz
combined adjustments ± 15 dB



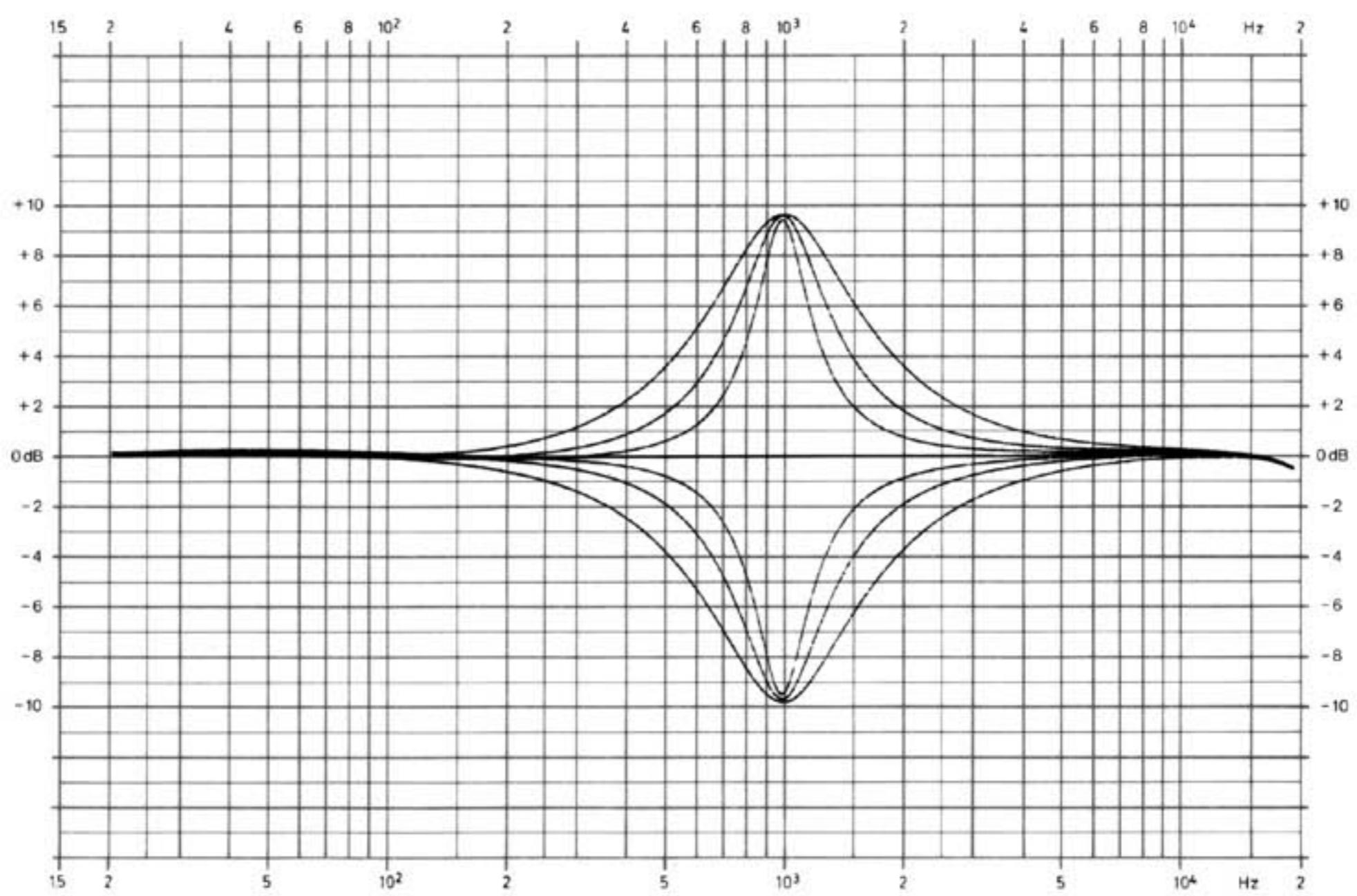
boost equalizer
set to 10dB
curves 175-250-350-500-700 Hz
1-1.4-2-2.8-4-5.6kHz



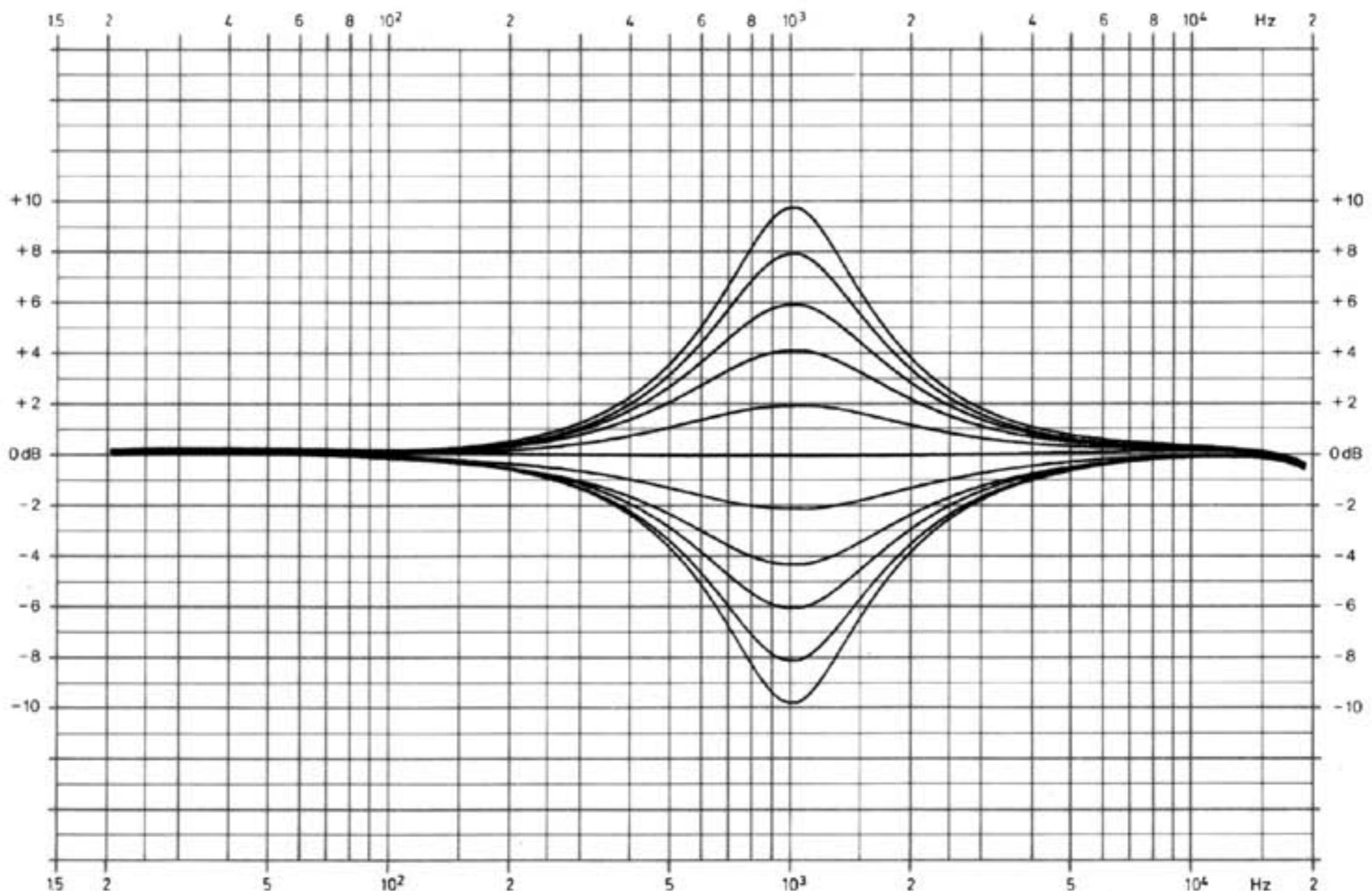
high frequency equalizer set to 10 kHz
 boost/cut 2-4-6-9-15dB
 curves for 7 kHz and 14 kHz are shifted along the frequency axis accordingly



low frequency equalizer 60 Hz
 boost/cut 2-4-6-9-15dB
 curves for 40Hz and 100Hz are shifted along the frequency axis accordingly



boost – cut equalizer set to 1kHz
set to 10dB
bandwidth shown broad – mid – narrow



boost – cut equalizer set to 1kHz
shown in steps of 0-2-4-6-8-10dB