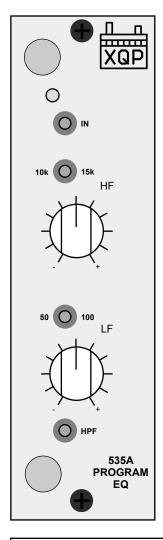


# XQP 535A Program EQ USER GUIDE

535A-0402



	PINOUT
1	Chassis
2	+ Output
4	- Output
5 6	Audio Common
7	
8 9	- Input
10	+ Input
11 12	+ 16VDC
13	Power ground
14	- 16VDC
15	

## A Few Specifications

 $\begin{array}{ll} \text{Frequency response} & -3 \text{dB} \ @ \ 10 \text{Hz} \ \& \ 98 \text{kHz} \\ \text{Input impedance} & 54 \text{k}\Omega \end{array}$ 

Output impedance  $50\Omega$ 

High Frequency 10kHz +11dB / -12dB 15kHz +9dB / -10dB

Low Frequency 50Hz +14 / -13dB 100Hz +15dB / -15dB

High pass filter 90Hz -3dB

#### INTRODUCTION

Thank you for purchasing the XQP 535A Program EQ. It is the second generation XQP equalizer based on the Baxandall circuit, originally conceived by Peter Baxandall in, or prior to, 1950. A beloved design to be sure. In the A version of the 535, we have simplified the circuitry so there are fewer amplifier stages (relative to the original XQP 535). There is also now a passive high pass filter that can be switched into or out of the signal path.

Like the 535, the HF band of the 535A is based on filter corner frequencies beyond 20kHz. This causes the slope of the HF band to be continuously rising or falling as it reaches what is normally considered the upper range of hearing. The available frequency selections, labeled 10k and 15k are suggestive of what might sound familiar to your ears (or maybe not). The actual corner frequencies are around 40kHz and 60kHz.

The 535A is a 500-series module, designed to fit into API's VPR-related products as well as those made by other companies. This device is currently pending approval by the VPR Alliance.

#### **OPERATION**

Two thumbscrews on the front panel are provided for convenient insertion/extraction from a 500-series enclosure. They align with the circuit board and thus with the edge connector at the back of the parent device. Two 4-40 screws are provided to secure the module with a #1 Phillips screwdriver.

The IN switch at the top will engage the EQ circuit by releasing the two bypass relays. The yellow LED will be lit when the circuit is engaged.

The HF band can boost or cut up to about 11dB (the maximum amount is frequency-dependent). As stated above, the 10k and 15k frequency selections are denoted based on what might sound right. The whole point of a Baxandall EQ is to cover a wide range, so you won't be choosing a frequency corresponding to a particular musical note on this type of EQ. Just wiggle the switch a bit and select the position you like the sound of.

The LF band, similarly, has two frequencies from which to choose, 50 and 100Hz. The knob will allow for boost and cut...we expect that you know this already.

The HPF (high pass filter) is a simple, single-pole passive design in keeping with the gentle slopes of the EQ. It can be used in conjunction with LF boost to expand your options a bit.

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