## JDK AUDIO



## SINGLE CHANNEL VPR SERIES <br> 4 BAND EQUALIZER

MODEL V14

## INTRODUCTION

Thank you for choosing this JDK Audio V14 Equalizer. The V14 is a single channel four band equalizer in the popular 500 VPR format. Equipped with continuously-variable dual concentric knobs, the V14 can be very precise in applying equalization to the selected audio material.

## HISTORY

The design of the V14 circuitry is not entirely new. For a brief period in the late 1970's and early 1980's an audio company called APSI manufactured consoles and equalizers. The APSI 562 was a 4-band Parametric equalizer which was made by APSI, but sold through API. A variety of APSI modules were included in the sales brochures and literature produced by API. The 562 has over the years remained on the 'favorites' list of a number of studio engineers. The original APSI 562's, however, have become more difficult to find and nearly impossible to find in good working condition. The V14 is a faithfully updated re-engineered version of the original APSI 562.

## LAYOUT

The JDK Audio V14 contains four dual concentric knobs, the lower or larger of which selects the level of boost or cut applied to the audio signal, and the upper or smaller knob adjusts the center frequency to be adjusted.

The equalizer covers the range from 20 Hz to 20 kHz in four EQ bands of overlapping frequencies -20 Hz to $200 \mathrm{~Hz}, 100 \mathrm{~Hz}$ to $1000 \mathrm{~Hz}, 500 \mathrm{~Hz}$ to 5000 Hz , and 2200 Hz to 20 kHz .

Each band has a boost/cut control with a range of +/- 12 dB .
There is a lighted IN/OUT switch for the equalizer at the lower left.
The rear panel connection is via an edge connector that mates to a corresponding connector in either an API 500VPR 10-space rack or a 6 position API Lunchbox® ${ }^{\circledR}$

## FRONT PANEL CONTROLS



## CENTER FREQUENCY KNOB

This knob (the smaller, upper knob) selects the center frequency of the chosen EQ band. The pot is continuously variable allowing very precise selection of the desired frequency.

## BOOST/CUT KNOB

The larger, lower knob controls Boost or Cut within the chosen frequency range. With the pot in the straight up (12 o'clock) position, no change in the tonal balance of the selected range will be applied.

## IN/OUT SWITCH

The IN/OUT switch will place the V14 into the active audio path.
In the OUT position, there is no active circuitry between the IN and OUT rear panel connectors

All 4 equalizer bands have peaking (also called "bell" in the UK) response characteristics. While the central frequency of that boost (or cut) is the one engraved on the panel, there is of course amplitude variation that occurs to a lesser extent on nearby frequencies. This is termed the 'Q' where higher Q's have less effect on adjacent frequencies.

## CONNECTIONS

The V14 is designed to only be used with an appropriate card-frame enclosure that provides inputs, outputs and power supply voltages to the module. This includes the API 500VPR 10-space frame, the 6 position API Lunchbox®, or an API 1608 console.

PLEASE NOTE: NO OTHER ENCLOSURES ARE APPROVED FOR USE AND USE OF ANOTHER ENCLOSURE WILL IMMEDIATELY VOID YOUR WARRANTY!

## TECHNICAL SPECIFICATIONS - V14

I/O: Balanced Input and Output through VPR Rack (All measurements with 600 Ohm output load)

Bandwidth: +/- $0.5 \mathrm{db}, 20 \mathrm{~Hz}-50 \mathrm{kHz}$

THD+N @ 1Khz, +4dbu: 0.01\%
Maximum Level: +24dbu
Signal-to-Noise Ratio: -102db
EQ Bands: 4 bands, all +/-12db Peak/Dip type
Lo: $20 \mathrm{~Hz}-200 \mathrm{~Hz}$
Lo-Mid: $100 \mathrm{~Hz}-1 \mathrm{kHz}$
Hi-Mid: $500 \mathrm{~Hz}-5 \mathrm{kHz}$
Hi: $2.2 \mathrm{kHz}-20 \mathrm{kHz}$
Current: 30mA, 3.4VoltAmps
Dimensions: 1 VPR Alliance Slot
Height: 5.25 Inches
Width: 1.5 Inches
Depth: 7 Inches
Weight: 1.5 lbs
Input Impedance: 12K Ohms
Output Impedance: 300 Ohms Transformer Balanced

## JDK Audio Product Warranty

a. Warranty Information: This product carries a one year parts and labor warranty from date of purchase. JDK Audio does not cover claims for damage due to alteration and/or abuse. This warranty is limited to failures during normal use, which are due to defects in material or workmanship. If any defects are found in the materials or workmanship, or if the product fails to function properly during the applicable warranty period, JDK Audio, at its option, will repair or replace the product.
b. JDK Audio reserves the right to inspect any products that may be the subject of any warranty claims before repair or replacement is carried out. Final determination of warranty coverage lies solely withJDK Audio.
c. This warranty is extended to the original purchaser and to anyone who may subsequently purchase this product within the applicable warranty period. Proof of purchase may be required.
d. To obtain service:
a. Call JDK Audio c/o API at 301-776-7879, 8:30 AM to 5 PM Monday through Friday (Eastern Time) to get a Return Authorization (RA). Products returned without an RA number may not be accepted.
b. Pack the defective part by wrapping in plastic and cushioning material. Seal securely in an approved shipping container. If you do not have a sufficient shipping container, askJDK Audio for advice when calling for the RA number.
c. Include a note explaining the problem and conditions of the service request. Include your complete return address (no P.O. Boxes, please)
d. Ship the product freight prepaid to:

> JDK Audio c/o API
> 8301 Patuxent Range Road
> Jessup, MD 20794

## IMPORTANT: Be sure the RA number is plainly written on the shipping carton

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