

2 CHANNEL
4 BAND EQUALIZER

MODEL **SR24**

User Manual

INTRODUCTION

Thank you for choosing this API Select SR24 Equalizer. The SR24 is a two channel four band equalizer in a two rack-space chassis. With a dedicated knob and/or switch for each control function, the SR24 is both easy to use and easy to re-set. By using continuously-variable controls for both frequency and boost/cut, the SR24 can be very precise in applying equalization to the selected audio material.

HISTORY

The design of the SR24 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 SR24 is a faithfully updated re-engineered version of the original APSI 562.

LAYOUT

The API SR24 contains two identical equalizer channels in one chassis, sharing only a common ON/OFF switch.

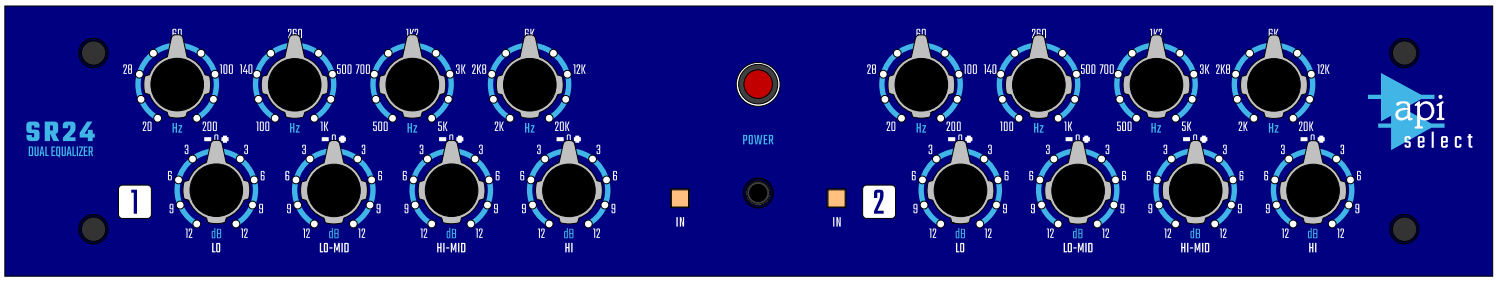
The equalizer covers the range from 20Hz to 20kHz in four EQ bands of overlapping frequencies - 20Hz to 200Hz, 100Hz to 1000Hz, 500Hz to 5000Hz, and 2000Hz to 20kHz.

Each band has a boost/cut control with a range of +/- 12dB.

There is a separate IN/OUT switch for each equalizer channel.

Rear panel connections include both balanced XLR connectors as well as balanced 1/4" jacks.

FRONT PANEL CONTROLS



POWER SWITCH

The front panel power switch turns power to the SR24 on and off.

The indicator immediately above the switch will glow RED when the SR24 is powered on.

IN/OUT SWITCH

When in the active (illuminated) state, the IN switch for each EQ channel will place the SR24 into the active audio path via a silent relay.

In the deactivated position, there is no active circuitry between the IN and OUT rear panel connectors.

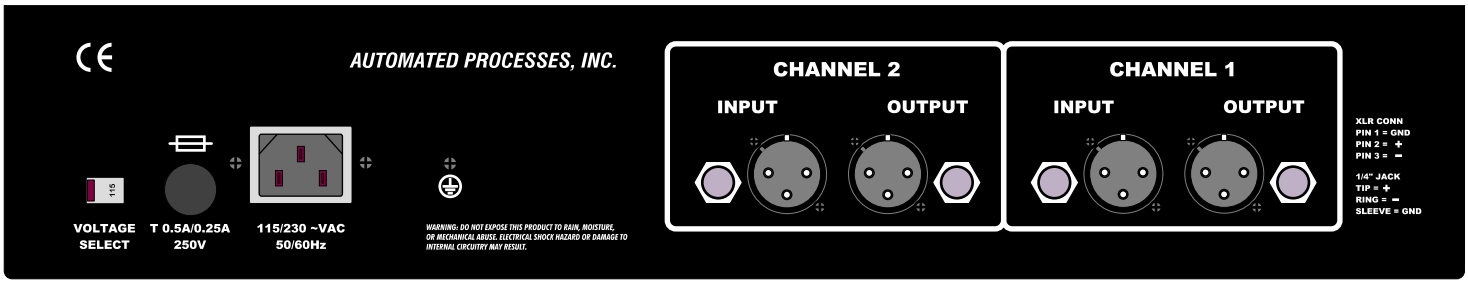
CENTER FREQUENCY POT

This pot selects the center frequency of the chosen EQ band. The pot is continuously variable. allowing very precise selection of the desired frequency.

BOOST/CUT POT

The larger 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.

REAR PANEL



INPUT CONNECTORS

The inputs to the SR24 can be either the 3 pin XLR-type balanced connector or the 1/4" balanced (tip, ring, sleeve) jack. Note that if you were to connect to both connectors, the signal from the 1/4" jack takes priority. The input XLR connector is wired pin 2 hot (or +).

OUTPUT CONNECTORS

The outputs of the SR24 can be taken from either the 3 pin XLR-type connector, or via the 1/4" balanced TRS (tip, ring, sleeve) connector on the rear panel. Like the input, the output XLR connector is wired pin 2 hot (or +), and the 1/4" TRS connector is wired tip hot (or +). These two connectors are wired in parallel, so output audio will appear on both connectors.

AC MAINS CONNECTOR

The mains AC connector is the standard IEC-type 3 pin connector. The ground of this AC connector is permanently internally connected to the chassis of the SR24 for safety. ***Be sure the Voltage Select switch is in the correct position for your country and the appropriate value fuse is in the holder before applying AC voltage to the SR24.***

AC FUSE HOLDER

When set to the 115V position use a 500mA GMA fuse with Slo-Blo characteristics. At the 230V setting use a 250mA Slo-Blo fuse. ***It is important to change the fuse when changing the supply voltage.***

AC VOLTAGE SELECT SLIDING SWITCH

For line voltages from 100V to 120V, set the switch to 115V. The 230V position is good for all line voltages from 200-240 Volts.

TECHNICAL SPECIFICATIONS - SR24

Inputs: Balanced XLR and 1/4" parallel jacks

Outputs: Transformer Balanced XLR and 1/4" parallel jacks
(All measurements with 600 Ohm output load)

Bandwidth: +/- 0.5db, 20Hz - 20kHz

THD+N @ 1kHz, +4dbu: 0.01%

Maximum Level: +23dbu

Signal-to-Noise Ratio: -100db

EQ Bands: 4 bands, all +/-12db Peak/Dip type
- Lo: 20Hz - 200Hz
- Lo-Mid: 100Hz - 1kHz
- Hi-Mid: 500Hz - 5kHz
- Hi: 2kHz - 20kHz

Power Consumption: 10 Watts

Dimensions: 2U EIA 19" Rack
- Height: 3.5 Inches
- Width: 19 Inches
- Depth: 10 Inches

Weight: 13 lbs

Input Impedance: 12k Ohms

Output Impedance: 300 Ohms Transformer Balanced

(Specifications subject to change without notice)

API Limited Warranty and Service Information

a) **Warranty Information:** API products carry a one year factory service and five year parts warranty from date of purchase. API (Automated Processes, Incorporated) 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, API, at its option, will repair or replace the product.

b) **PLEASE NOTE:**The design or quality of any non-authorized third party service or vendor is beyond the control of API. Therefore, use of **NON-API VPR Alliance modules in any API product including consoles** may **VOID this warranty.** Also, service or modification of any API unit except by an authorized API representative may **VOID this warranty.**

c) API 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 with API.

d) 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.

e) **For questions regarding operation, interfacing or service of your API product, please contact your API dealer from whom you purchased the unit. Many times, your authorized API dealer is the fastest and most cost-effective way to maintain and service your product.**

f) The below steps are the best way to initiate the repair process or to submit a parts order request:

Repair procedure:

1. Fill out a Return Authorization(RA) form at service.apiaudio.com.
2. Wait to receive an e-mail from API Audio with an RA#.
3. Use the API original box to package the unit. Write the RA# large and legibly on the box (if the RA# is not clearly visible on the box, the unit may be rejected by our receiving department)
4. Include copy of the RA form with the unit.
5. Ship the product **freight prepaid** to:

API SERVICE DEPARTMENT
8301 Patuxent Range Road Ste A1
Jessup, MD 20794

Parts Order procedure:

1. Fill out online PO form (for parts and parts numbers not listed online please fill out PO form with your name, e-mail, contact phone and shipping address and describe the part you need).
2. Submit online PO form.
3. API will e-mail you back with part numbers and procedure how to order/pay.

g) This is your sole warranty. API does not authorize any third party, including any dealer or sales representative, to assume liability on behalf of API or to make any warranty for API.

h) THE WARRANTY GIVEN ON THIS PAGE IS THE SOLE WARRANTY GIVEN BY API AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE WARRANTY GIVEN ON THIS PAGE SHALL BE STRICTLY LIMITED IN DURATION TO FIVE (5) YEARS FROM THE DATE OF THE ORIGINAL PURCHASE FROM API OR AN AUTHORIZED API DEALER. UPON EXPIRATION OF THE APPLICABLE WARRANTY PERIOD API SHALL HAVE NO FURTHER WARRANTY OBLIGATION OF ANY KIND. API SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES THAT MAY RESULT FROM ANY DEFECT IN THE API PRODUCT OR ANY WARRANTY CLAIM.

i) This warranty provides specific legal rights and you may have other rights, which vary from state to state.



API, 8301 Patuxent Range Road, Jessup, MD 20794
Tel: 301-776-7879
www.apiaudio.com

In a constant effort to improve the subtle details of our products, some amount of change is inevitable.
API reserves the right to modify or change any of the features, specifications or performance of its products without notice or obligation.