

api audio products, inc.

# 550b

## 550b Four Band Switchable Equalizer

### Features

- ▶ 4 bands of our famous sounding equalization
- ▶ Each band offers 7 API selected frequency centers
- ▶ Reciprocal and repeatable filtering
- ▶ 12dB of boost/cut per band
- ▶ EQ Band 1 and 4 offer shelf/peak switching
- ▶ "Proportional Q" narrows filter Q at extremes
- ▶ Traditional API fully discrete circuit design
- ▶ High headroom +30dB clip level
- ▶ Re-issue of 1967 API 550 EQ with an extra band

The API 550 EQ played a major part in the history of music recording in the USA during the 60's and 70's. Originally conceived for use in API's consoles, this latest 550 "B" version is a continuation of the original 1967 550 through the 550A with one additional filter band and several new frequencies. Incorporating API's exclusive circuitry and proprietary components (such as the legendary API 2520 Op Amp), the 550b artfully blends the past with the present. So many hit records still depend on the unique 550 sound, that the 550b will be an invaluable tool you will turn to again and again. The API 550b--unlike any other you will ever use.



Many EQ's today offer a huge assortment of complex features, but the API 550b provides exactly the right number of controls to the professional engineer. Deceptively simple at first glance, the 550b's four EQ bands are overlapped significantly to aid in dual roles as problem solver and sweetening device. Each band offers 7 switchable filter frequencies spanning 4 to 5 octaves, selected through experience by a "who's who" list of the industries most proficient engineers.

Making use of "API Proportional-Q", a design introduced by API in the 60's, the 550b intuitively widens the filter bandwidth at minimal settings and narrows it at higher settings--without the need for additional bandwidth controls. This feature minimises the "phase-shift" sound found in many equalizers. The reciprocal nature of the 550b enables the user to "undo" what has been done previously.

The benefits of the API 550b are most obvious to those who work with EQ on a continuous basis. The 550b's ability to affect or reverse tonal modifications is perhaps the most important feature. If major tonal restructuring is required, the extraordinary headroom made possible with API's 2520 OpAmp offers predictable and gentle "analog" performance under duress. With a surprisingly wide range of tonal variations, you can do no better than the API 550b.

# 550b Features

## Front Panel

Center Frequency Selector, 7 selections on each band.

+/- 12dB Boost/Cut Stepped Filter Control on each band

High and Low Frequency Peak/Shelf positive action Military Grade toggle switches

This Graph shows the "Proportional Q" characteristics of the 550B Filter, from 0 to +12 dB of Boost.

API Custom Solid Aluminum Knobs

Fits API 2 slot, 4 slot, and 10 slot racks

Silent IN/OUT Switch

## Connector Pinout

### Rear View

1	<b>CHASSIS</b>
2	512c 525 550b 560b OUTPUT + (+4)
3	512c 550b 560b OUTPUT + (-2)
4	512c 525 550b 560b OUTPUT LOW
5	<b>AUD GND</b>
6	525 STEREO LINK N/C 512c 550b 560b
7	INPUT LOW (-2) 560b INPUT LOW (+4) 512c 525 N/C 550b
8	INPUT LOW (+4) 512b 525 560b INPUT LOW (GND) 550b
9	INPUT HI (-2) 550b 560b INPUT HI (+4) 512c 525
10	INPUT HI (+4) 512c 525 550b 560b
11	GAIN ADJ 550b 560b N/C 512c 525
12	<b>+16 VDC</b>
13	<b>PWR GND</b>
14	<b>-16 VDC</b>
15	+48 V PHANTOM 512C

## 550b Specifications

- Number of Bands:** Four
- Filter Type:** "Low" and "High" bands are Peak/Shelf switchable. Low-Mid and Mid-High are peaking type
- Filter Frequency Centers:**
  - Low: 30, 40, 50, 100, 200, 300, 400Hz
  - Low-Mid: 75, 150, 180, 240, 500, 700, 1KHz
  - Mid-High: 800, 1.5K, 3K, 5K, 8K, 10K, 12.5K
  - High: 2.5K, 5K, 7K, 10K, 12.5K, 15K, 20K
- Filter Boost/Cut:** +/- 12dB
- Filter Slope:** 12dB per Octave
- Input Impedance:** 18.5K +4 in, 7.5K -2 in
- Output Impedance:** Less than 75 Ohms
- Nominal Levels:** -15 to +15dBu
- Clipping Level:** +30dBu @ +/- 16V
- Frequency Response:** +0, -.3, 30 to 20kHz
- Noise:** Actual, unweighted noise, <-98 dBu, 20-20kHz
- Distortion:** .07% max, @ +18dBu Output
- Connectors:** 15 position .156 sp edge connector
- Size:** 1.50" X 5.25" X 6" Deep
- Shipping/Actual Weight:** 3lbs./2.5lbs.
- Power Consumption:** ±12/18 Volts/DC, @40 ma.
- Rack Frame and Power Supply Options:** Fits 500HPR (2 slot, internal power supply), 500b4 "Lunchbox" (4 slot with internal power supply), 500VPR (10 slot and requires API 200PS Power Supply, API Legacy Consoles and vintage API

## Mounting Frame and Power Supply Options

- 500H**  
2 Slot  
frame with  
internal power supply
- 500b4**  
4 slot  
"Lunchbox"  
Frame with internal  
Power Supply
- 500V**  
10 Slot  
Frame
- L200PS**  
Power Supply

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