



# RUBBER BANDS 500

## USER'S MANUAL

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Please read all of the following instructions and save them or later reference before attempting to connect this unit to the Power DC Supply.

**COVERS**

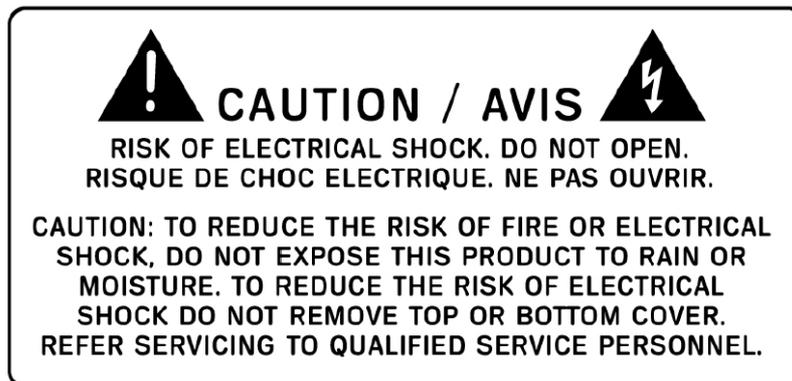
**DO NOT** remove the covers or try to repair the module on your own. Refer servicing to qualified personnel only.

**MOISTURE**

**DO NOT** expose the unit to rain or moisture. If the unit should become so exposed **TURN OFF** the device immediately.

**HEAT**

**ALWAYS** site the unit away from sources of heat including direct sunlight and ensure adequate ventilation around the unit.



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**Thank you for buying this IGS Audio product.**

Please read the information provided below very carefully before using your IGS unit.

### **Unpacking**

Your RUBBER BANDS 500 has been carefully and meticulously tested and inspected before dispatch. Please check for any signs of transit damage. If any signs of mishandling are found please notify the carrier and your dealer immediately.

Your RUBBER BANDS 500 packing should contain an RUBBER BANDS 500 with IGS Audio tag (packed in ESD bag) and this manual with the Warranty and RoHS/CE/WEEE Declaration attached.

### **Compatibility and Power**

The RUBBER BANDS 500 module is designed to be installed into an API™ 500 Series compatible rack and cannot function stand alone, requiring the power source supplied by the rack system.

The current consumption of the RUBBER BANDS 500 is rated at 55 milliamperes. Please check with the rack manufacturer that the design can meet this rating.

### **Mounting**

**WARNING!** Never plug or unplug any 500 series module with the power supply switched on. You may destroy your unit permanently!

The dimensions of all IGS Audio 500 series modules are compatible with API standard. When plugging your new unit to the 500-series rack, no unnecessary force is needed. However, please be careful and do not rush while pushing the unit into the rack sockets, to avoid damaging of the connectors and/or the PCBs of either the unit or the rack.

After the unit is placed in the rack, use the screws provided with your 500-series rack unit to make sure that the unit is safely placed.

When removing the unit from the rack, unscrew the front panel from the rack, and use your fingers to pull it out gently. Do not use any sharp objects (i.e. knives or screwdrivers) to prize it.

## IGS AUDIO RUBBER BANDS 500 – mono passive equalizer

Rubber Bands 500 is a passive equalizer absurdly reduced in size. This tiny module is equipped with transformer balancing on inputs and outputs (Carnhill) as well as a discrete driver circuit.

Of course the entire filtering section is passive and mirrors analogue equalizers from the 60s.

High Cut: 6, 10, 20 kHz;

High Boost: 5, 6, 10, 12, 16 kHz;

Bass Boost/Cut: 20, 40, 60, 100, 180, 240 Hz;

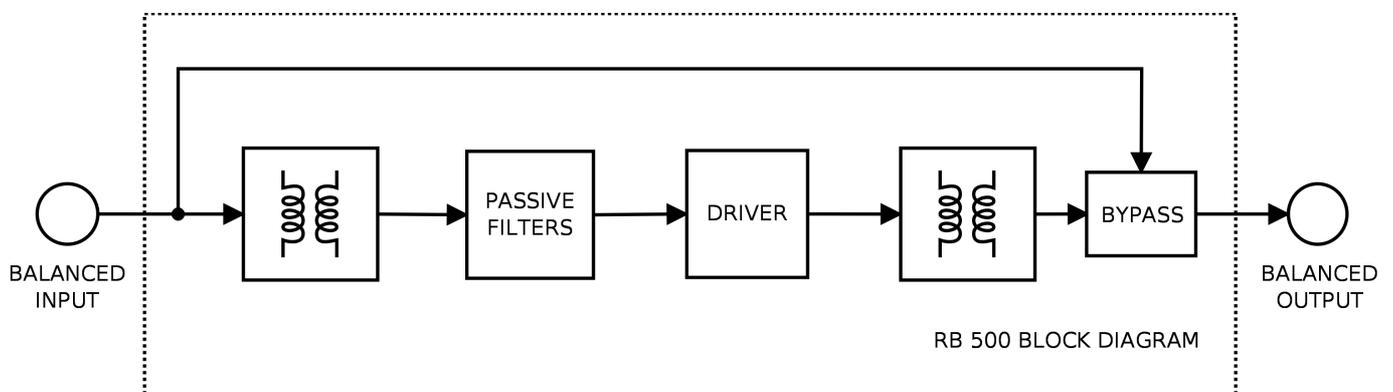
Boost/Cut Range: +/- 15dB;

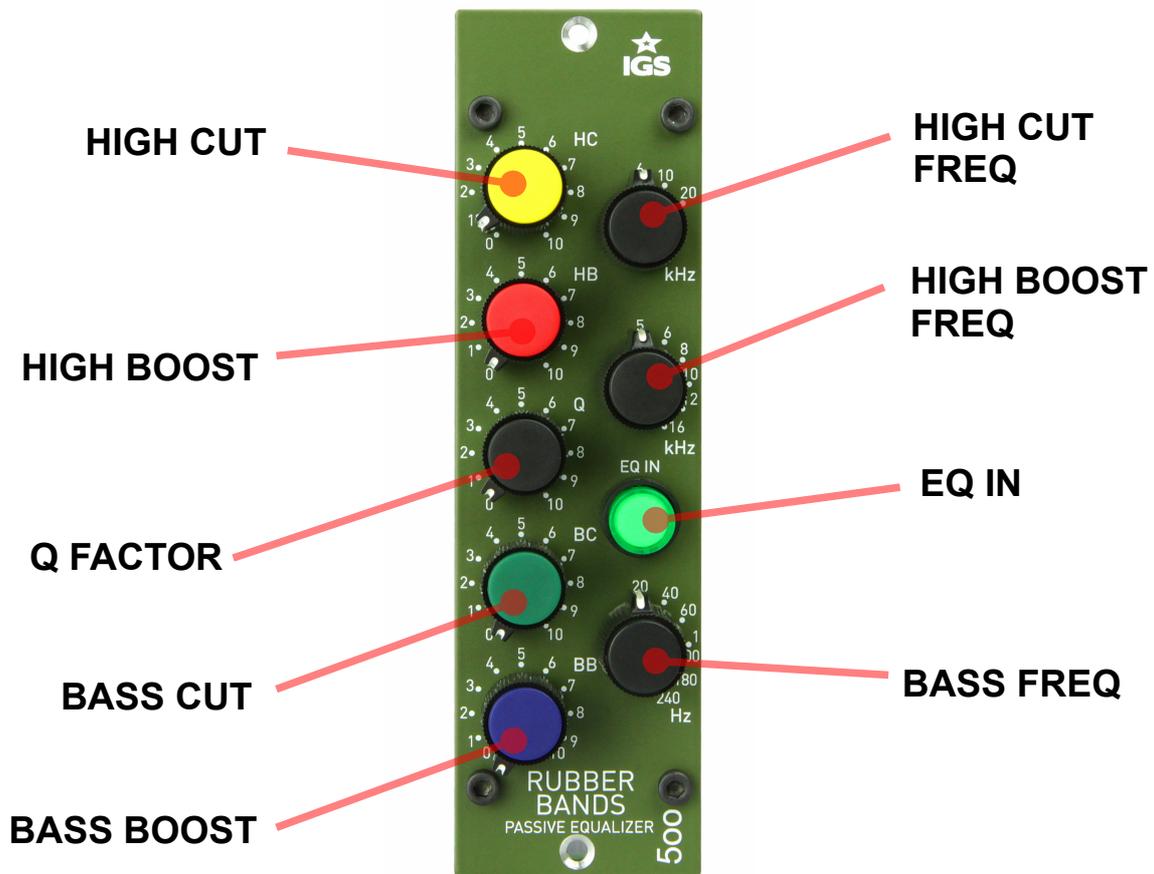
Q: 0.5 to 4.

### Typical usage:

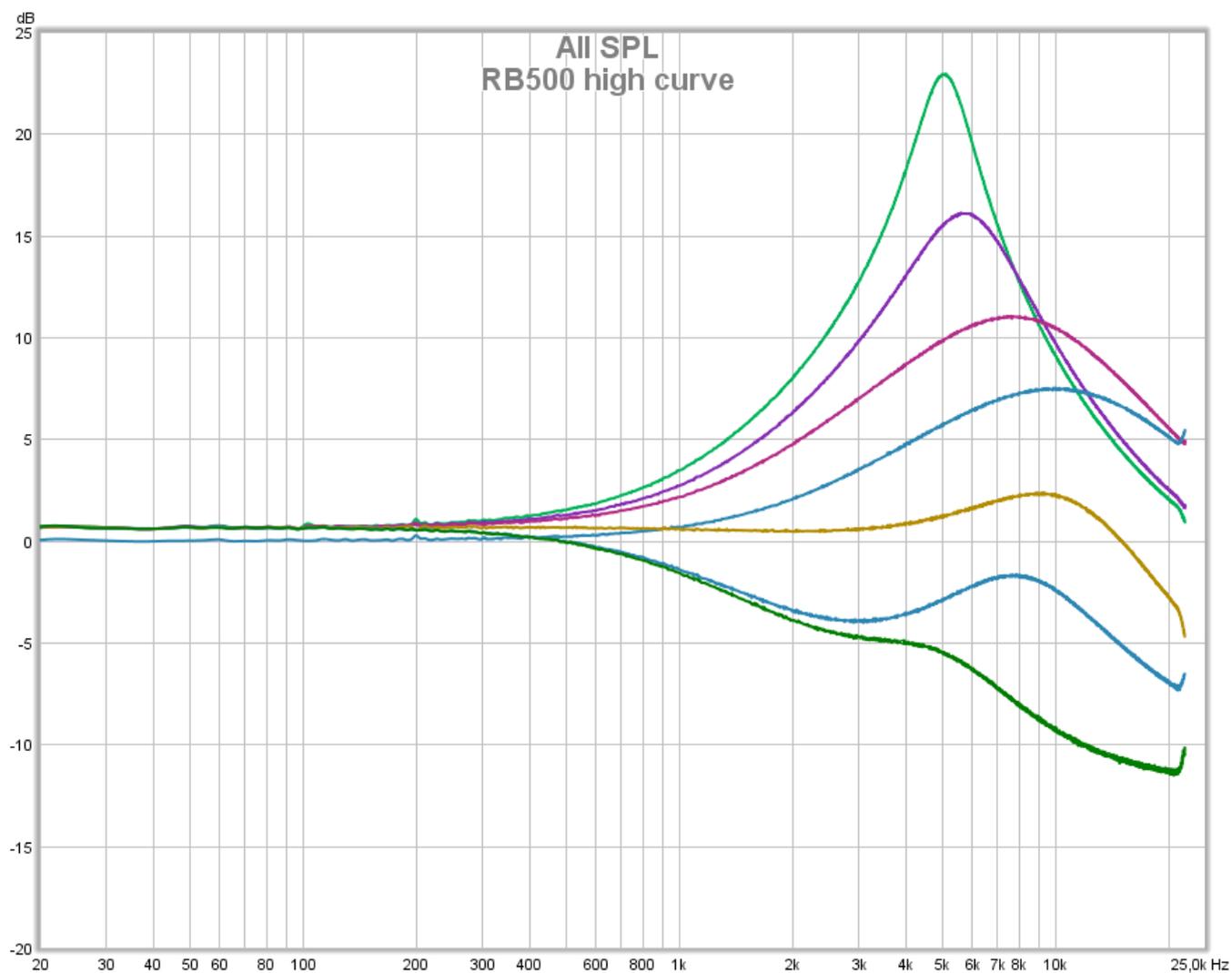
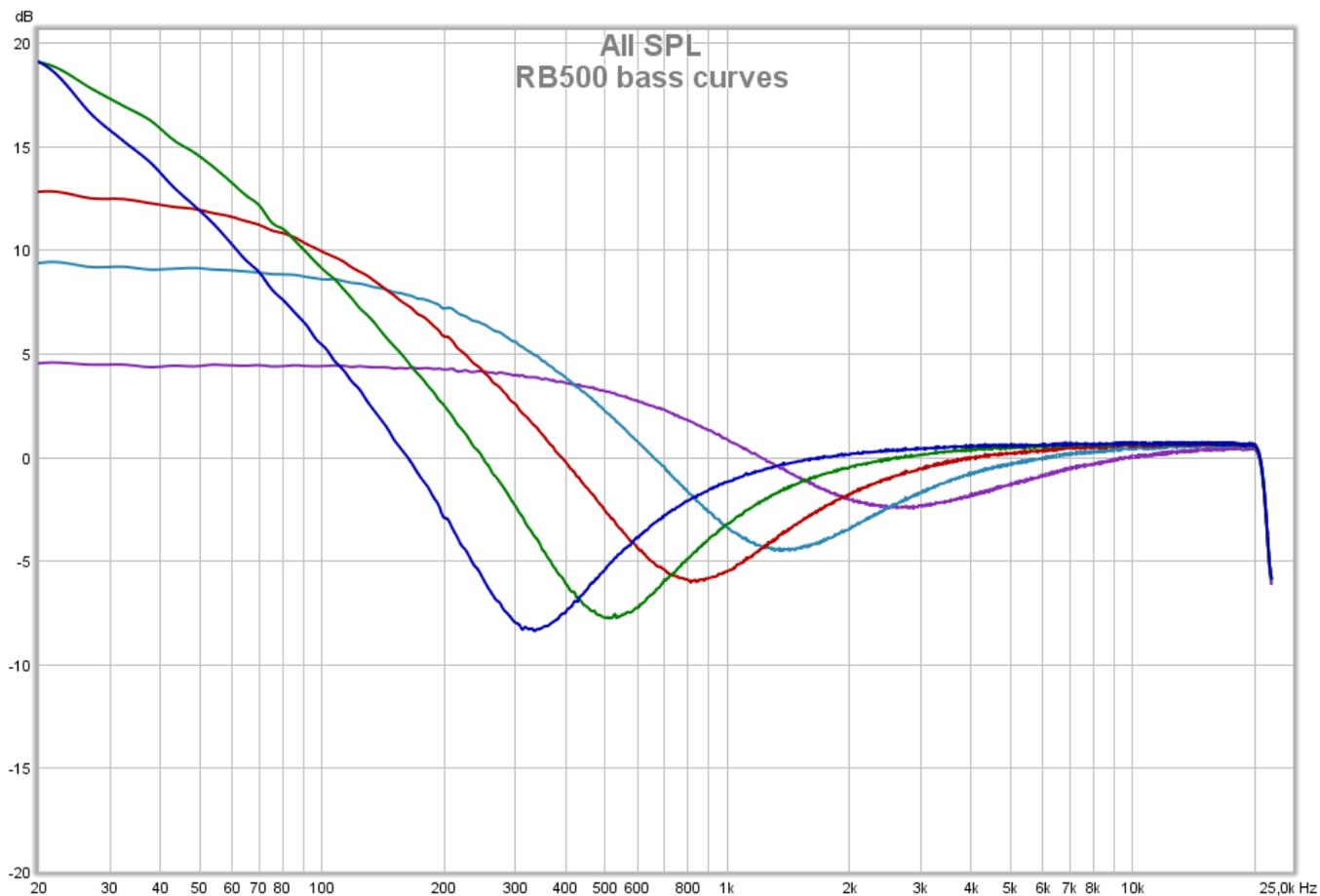
- Great all around equalizer

### Block diagram





- HIGH CUT** Amount of attenuation of high frequencies
- HIGH BOOST** Amount of boost of high frequencies
- BASS CUT** Amount of attenuation of low frequencies
- BASS BOOST** Amount of boost of low frequencies
- Q FACTOR** Slope of the high boost filter
- HIGH CUT FREQ** Frequency of high cut filter
- HIGH BOOST FREQ** Frequency of high boost filter
- BASS EQ FREQ** Frequency of bass eq section. It's applicable for both boost and cut sections.
- EQ IN** Eq On/Off switch



## RB500 main functions and technical specification:

- ✓ 500-series mono module
- ✓ All stepped manipulators
- ✓ Precise LED bar scale
- ✓ Carnhill input and output transformer
- ✓ 3 year warranty

Operating Level	+4dBu
Maximum Input	+20 dBu
Maximum Output	+22 dBu
Input impedance	1 kOhm
Output Impedance	600 Ohm
Frequency response	5Hz to 20kHz; +/- 0.1dB
Band amplification	+/-15 dB
Noise level dBA	-99dB
THD+N @0dBu	0.012%
Power consumption	3 Watts
Shipping weight	0.9kg
Dimensions	H 13,3cm x W 3,8 cm x D 15,8cm

## Troubleshooting

### The signal plays thru but there is no change in signal when i turn the knobs:

- Please check the Bypass switch – should be pushed in and lit.

### No signal plays thru the unit, regardless the settings at the front panel:

- Please check the cables connecting the rack.
- Check if the unit has been properly installed.

### The EQ IN button doesn't lit when pressed:

- Check if the unit has been properly installed.
- Please check if the rack power supply is on (check the LEDs at the front plate of the rack)

### The sound coming out of the unit is very distorted:

- Check the input signal level (if too high the unit might saturate the sound, especially when LF boost is high)

## **Warranty:**

**This device is declared to be free from defects in material and workmanship for a period of three years. Any device found defective within three years from the delivery date and returned to the factory, will be repaired, adjusted, or replaced and sent to the customer with no charge. The customer always pays the shipping cost to us. This warranty does not cover expendable items such as tubes or fuses. If the defect has been caused by a misuse or abnormal operation conditions, the repair will be billed at a nominal cost. The product should be returned in its original package, if this is possible, or packed in such a way that it is not damaged during the shipment. We are not to be held responsible for any damages during the shipment. All units shall always be packed in a box with support for the rack ears. All 500 series modules need to be secured in ESD bag and protected with foam. We will charge the customer €20 + VAT if the packing material needs to be replaced. If we find that the product works perfectly, the customer will be invoiced €50 + VAT to cover our costs of examination and handling plus the cost for returning the product to the customer.**

