



# RUBBER BANDS

## USER'S MANUAL

IGS Audio Igor Sobczyk  
3 Maja 76d, 41-400 Mysłowice, Poland  
e-mail: [igs@o2.pl](mailto:igs@o2.pl) ph: +48 601 597 592

[www.igsaudio.com](http://www.igsaudio.com)

Please read all of the following instructions and save them for later reference before attempting to connect the unit to the mains.

#### EARTH

This unit is connected via its power cord to the mains safety earth.  
**NEVER OPERATE THE UNIT WITH THIS EARTH CONNECTION REMOVED.**

#### COVERS

**DO NOT** remove the covers. Refer servicing to qualified personnel only.

#### VOLTAGE

Unit is set to operate only at the voltage indicated on the PSU unit  
**CHECK** that the correct voltage is selected before connecting the AC mains supply.

#### FUSES

**CHECK** that the fuse fitted is the correct type for the local mains voltage.  
**ALWAYS** replace fuse with the correct type.

#### MOISTURE

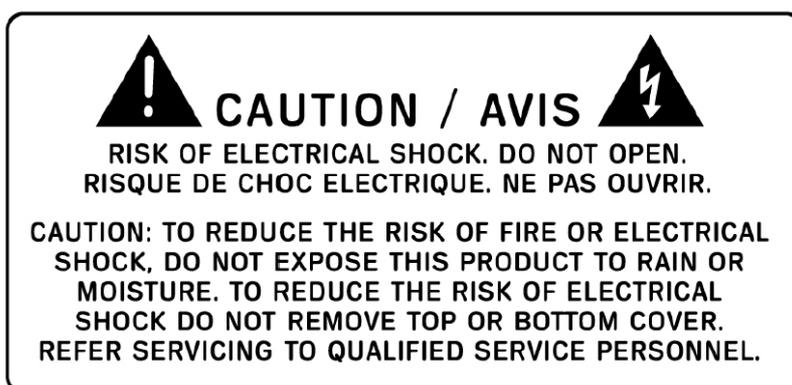
**DO NOT** expose the unit to rain or moisture. If the unit should become so exposed **REMOVE** the mains power immediately.

#### CABLES

**PROTECT** the mains power cord from damage through impact or abrasion.

#### HEAT

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



Copyright 2014. All rights reserved.

The information in this document is subject to change without notice.

IGS Audio makes no warranty of any kind with respect to the material in this document and shall not be liable for errors contained herein or for incidental or consequential damages related to the use of the material.

Manual revision: 1.0 (December 2014)



**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 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 packing should contain an RUBBER BANDS with IGS Audio tag, an RUBBER BANDS POWER SUPPLY unit and this manual with the Warranty and RoHS/CE/WEEE Declaration attached.

**Compatibility and Power**

The RUBBER BANDS uses dedicated external POWER SUPPLY unit and can't operate without it.

Never attempt to replace the external PSU with the third party one or one made by yourself.

There is a fuse socket near the power cable connector on the PSU. Ensure that the correct fuse is being used before plugging the TUBECORE to the power outlet.

- For US area (115V) use 2A Slow Blow (Type T).
- For Europe and rest of the world area (230V) use 1A Slow Blow (Type T).

**Always check the voltage selector on the PSU** to ensure that it is set to the proper voltage available in your country.

Connecting the PSU to the RUBBER BANDS is fairly easy, thanks to industrial standard 7-pin metal connector and long, heavy duty cable.

**Always power up the PSU first** and then use power switch at the front of the RUBBER BANDS. Follow the reverse order when switching off.

## IGS AUDIO RUBBER BANDS – stereo tube equalizer

The Rubber Bands EQ consists of two blocks: The first block is a classic passive filter well known from the EQP-1 Pultec equalizer. The second block is a specially designed two-stage tube amplifier called Organic Amp. The new design includes a bypass relay, which allows you to instantly compare the results of your work. The equalizer has been divided into 4 sections: 2 for bass and 2 for treble. Frequencies are being selected with stepped switches. Boosting and cutting are controlled continuously. Manipulators featured are Bass Boost, Bass Cut, High Boost (with the choice of Q) and High Cut. Interactions of filters that allow simultaneous boosting and cutting certain frequencies can produce amazing sound effects. Many sound engineers believe that the passive equalizer is a cure for all digital evils. A distinctive characteristic of the IGS Audio Rubber Bands Equalizer is its stereophonic structure, where the manual selecting of components with an accuracy of 0.2% allows for perfectly synchronous manipulation of both channels. The inputs and outputs are transformer balanced.

High Cut: 6, 10, 20 kHz;

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

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

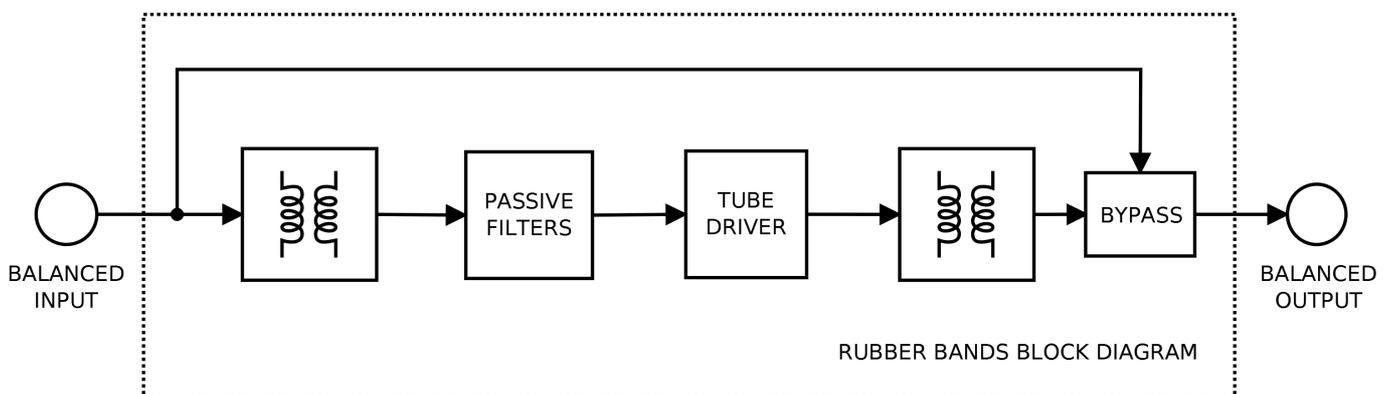
Boost/Cut Range: +/- 15dB;

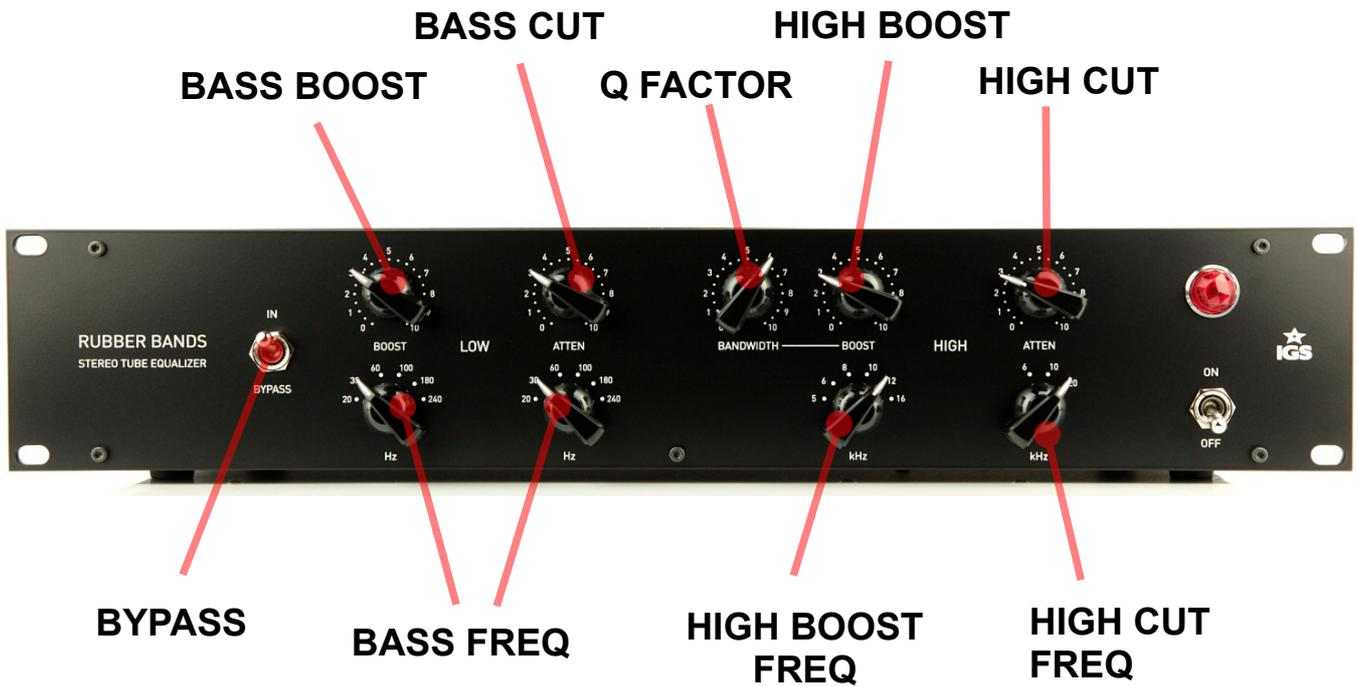
Q: 0.5 to 4.

### Typical usage:

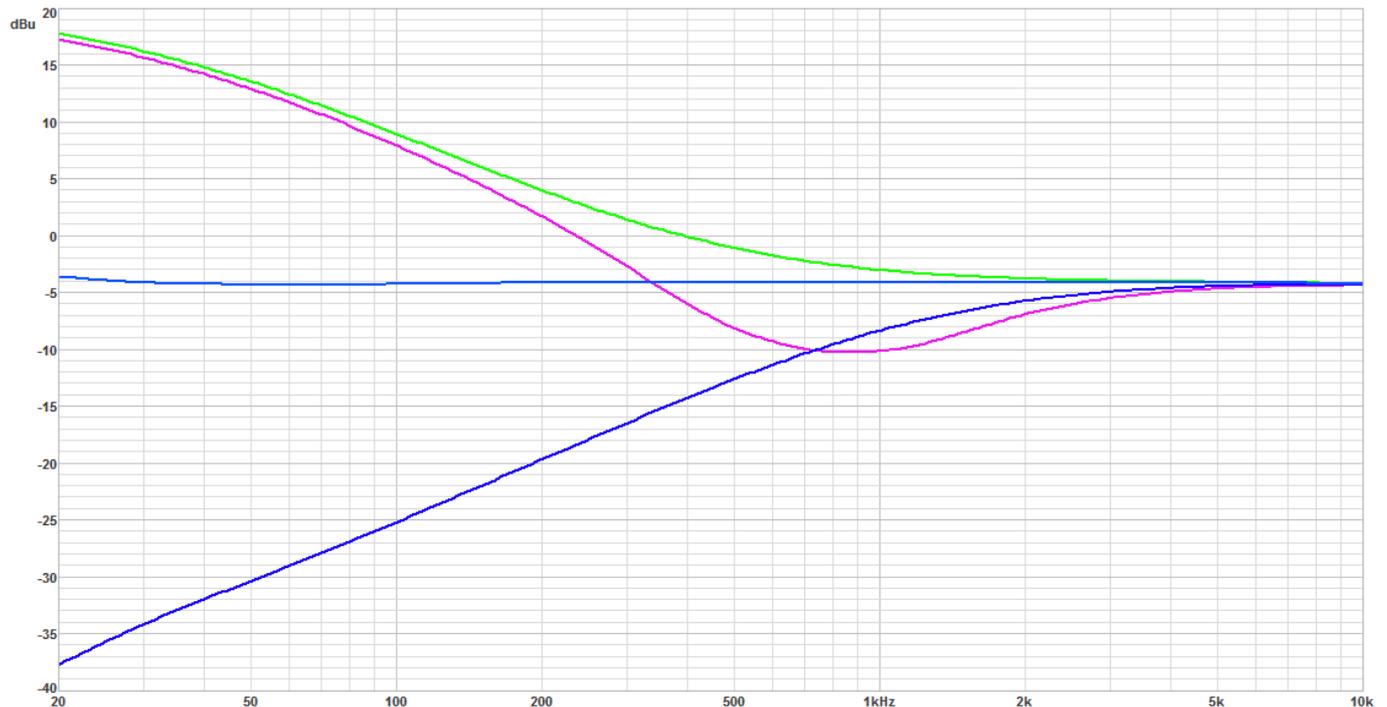
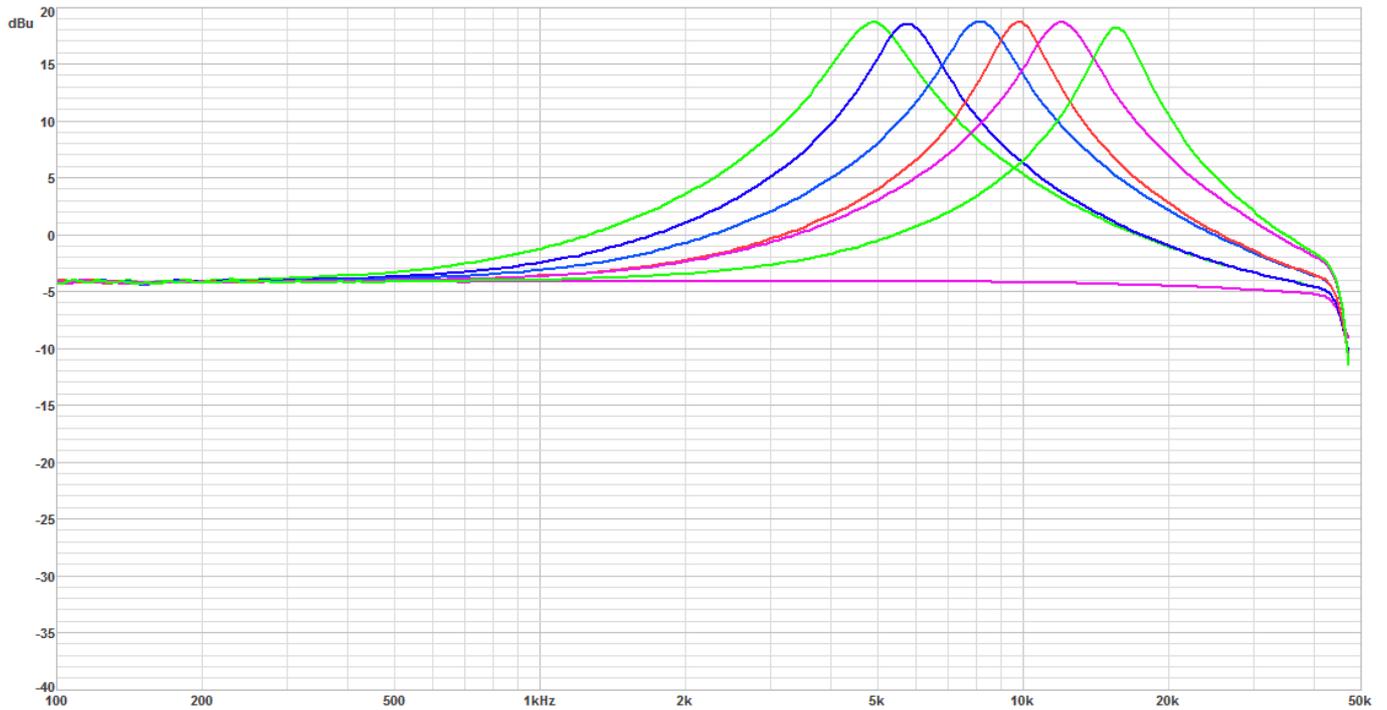
- Great mastering equalizer, due to its excellent channel convergence.
- Very good on vocals, guitars and strings – adds fat bottom and crispy high frequencies

### 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 FREQ** Frequency of bass eq section. It's applicable seperately for boost and cut sections.
- BYPASS** Eq IN/BYPASS switch



**RUBBER BANDS main functions and technical specification:**

- passive equalizer with tube Organic Amp
- XLR, transformer balanced inputs/outputs,
- Smooth control: Bass Boost; Bass Cut; High Boost Q; High Boost; High Cut,
  - Stepped frequency control for all bands,
    - True Bypass switch,
    - 21 frequencies,
  - External dedicated power supply,
  - Analog cure for digital disease :)

Operating Level	+4 dBu
Maximum Input	+18 dBu
Maximum Output	+22 dBu
EQ boost/cut range	15 dB
Input impedance	10 kOhm
Output Impedance	600 Ohm
Frequency response	20Hz to 20kHz; +/- 0.1dB
Band amplification	+/-15 dB
Bandwidth Range (Q)	0.4 to 5
Signal to Noise Ratio dBA	81 dB
Crosstalk @ 20Hz - 20kHz	80 dB
IMD (SMPTE) @ 20Hz - 20kHz	0.32%
Dynamic Range @ 1kHz, +18dBu	95 dBA
THD+N @ 20Hz - 20kHz	0.33%
THD @ 20Hz - 20kHz	0.25%
Tube complement	4 x 6N1P-EW
Optional tube replacement	4 x 6BC8 or 6BC7
Power consumption	34 Watts
Transformers	Carnhill, Edcor
Shipping weight	8 kg
Dimensions	2U 19 inches, 230mm deep

## Troubleshooting

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

- Please check the Bypass switch – should be set to IN

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

- Please check the cables connecting the unit.
- Check the PSU.

### **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.**

