



# BISON 500

## 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 or later reference before attempting to connect this unit to the Power DC Supply.

### **COVERS**

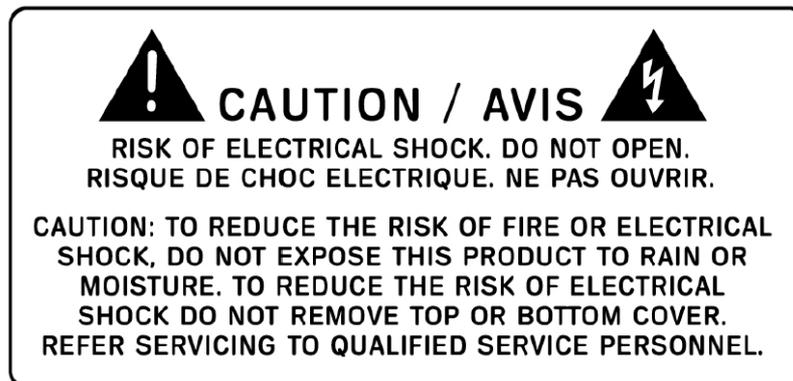
**DO NOT** remove the covers or try to repair the module on your own. Refer servicing to qualified personnel only.

### **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 BISON 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 BISON 500 packing should contain the BISON 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 BISON 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 BISON 500 is rated at **180** 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 BISON 500 – stereo parallel mixer with Mid/Side processing

The IGS Bison 500 is a simple mid/side processor with a dry/wet mixer. It has two stereo jack connectors (2 sends and 2 returns) on the front panel of the device used for plugging in your favorite dual mono or two mono compressors.

With a flick of the switch your compressor(s) start working in Mid/Side mode, where the left channel controls the common/Mid section of the two channels and the right channel controls the difference between the channels referred to as Side. Adding more sides or compressing them differently can increase your stereo image significantly. Always use balanced inserts.

The dry/wet knob can be very useful for parallel mixing. It is great for situations, where you want to pump up the sound without losing the natural dynamics of the dry mix.

4 balanced inserts: 2 sends, 2 returns

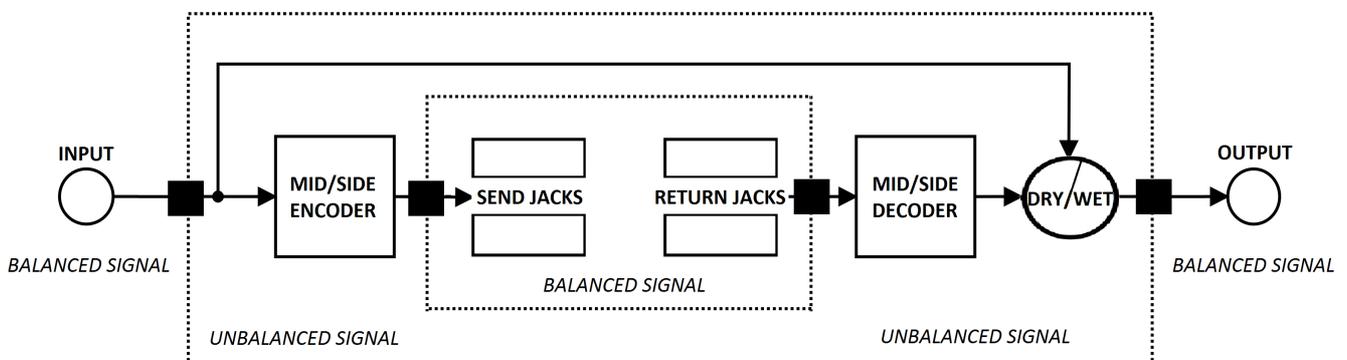
3-position switch: stereo, bypass, Mid/Side

Mix knob range: (Dry) 0% - 100% (Wet)

### Typical usage:

- Widening your stereo image
- Parallel compression
- Using different compressors for mid and sides

### Block diagram



BISON 500 BLOCK DIAGRAM

**STEREO, BYPASS,  
MID/SIDE  
3-Position switch**

**MIX (WET/DRY)  
knob**

**LEFT/MID  
LED VU METER**

**RIGHT/SIDE  
LED VU METER**

**LEFT/MID  
SEND  
Jack socket**

**RIGHT/SIDE  
SEND  
Jack socket**

**LEFT/MID  
RETURN  
Jack socket**

**RIGHT/SIDE  
RETURN  
Jack socket**



**STEREO, BYPASS,  
MID/SIDE switch**

Select the mode in which the devices should operate. Either classical L/R channels, bypass or M/S channels.

**MIX (WET/DRY) knob**

Use it to add some dry signal to your processed, wet signal in order to obtain effects like parallel compression.

**LEFT/MID CHANNEL  
LED VU METER**

VU meter for the Left/Mid channel using colored LEDs

**RIGHT/SIDE CHANNEL  
LED VU METER**

VU meter for the Left/Mid channel using colored LEDs

**LEFT/MID SEND  
Jack socket**

Connect this to the input of the device processing the Left/Mid channel

**LEFT/MID RETURN  
Jack socket**

Connect this to the output of the device processing the Left/Mid channel

**RIGHT/SIDE SEND  
Jack socket**

Connect this to the input of the device processing the Right/Side channel

**RIGHT/SIDE RETURN  
Jack socket**

Connect this to the output of the device processing the Right/Side channel

## RB500 main features and technical specification:

- ✓ 500-series stereo module
- ✓ Balanced inputs, outputs and inserts
- ✓ 3 year warranty

Operating Level	+4dBu
Maximum Input	+18 dBu
Maximum Output	+22 dBu
Dynamic Range	98 dBA (@ 1kHz, +18dBu)
Input impedance(balanced)	10 kOhm
Output Impedance(balanced)	50 Ohm
Frequency response	10Hz to 30kHz; +0.1dB / -0.2dB
Signal to Noise Ratio	81 dBA (@20Hz - 20kHz)
THD+N	0.003% (@20Hz - 20kHz)
IMD (SMPTE)	0.005% (@20Hz - 20kHz)
Crosstalk	78dB (@20Hz - 20kHz)
VU Meter	Yes, 5 LED Bar Display
Power consumption	8 Watts
Shipping weight	3 kg
Dimensions	H 13,3cm x W 3,8 cm x D 15,8cm

- Please ensure that the switch is not set to Bypass.
- Please check the cables connecting the rack.
- Check if the unit has been properly installed.
- Check if your insert Jacks are properly connected.
- Please ensure that the switch is not set to Bypass.
- Lower the input signal.

### 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.



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