



# VOLFRAM LIMITER

## 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

Equipment is set to operate only at the voltage indicated on the back of the 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

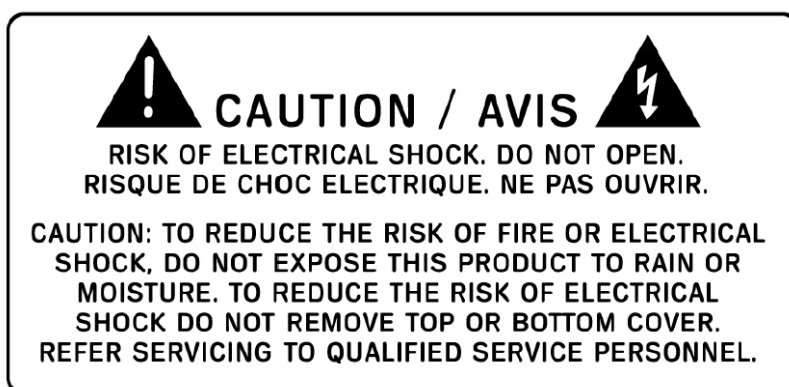
**DO NOT** expose the unit to rain or moisture. If the unit should become so exposed **REMOVE** the mains power immediately.

#### CABLES

**PROTECT** the mains power cord from damage though 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 VOLFRAM LIMITER 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 VOLFRAM LIMITER packing should contain an VOLFRAM LIMITER with IGS Audio tag and power cord and this manual with the Warranty and RoHS/CE/WEEE Declaration attached.

**Compatibility and Power**

There is a fuse socket near the power cable connector on the on the back of the unit. Ensure that the correct fuse is being used before plugging the VOLFRAM LIMITER to the power outlet.

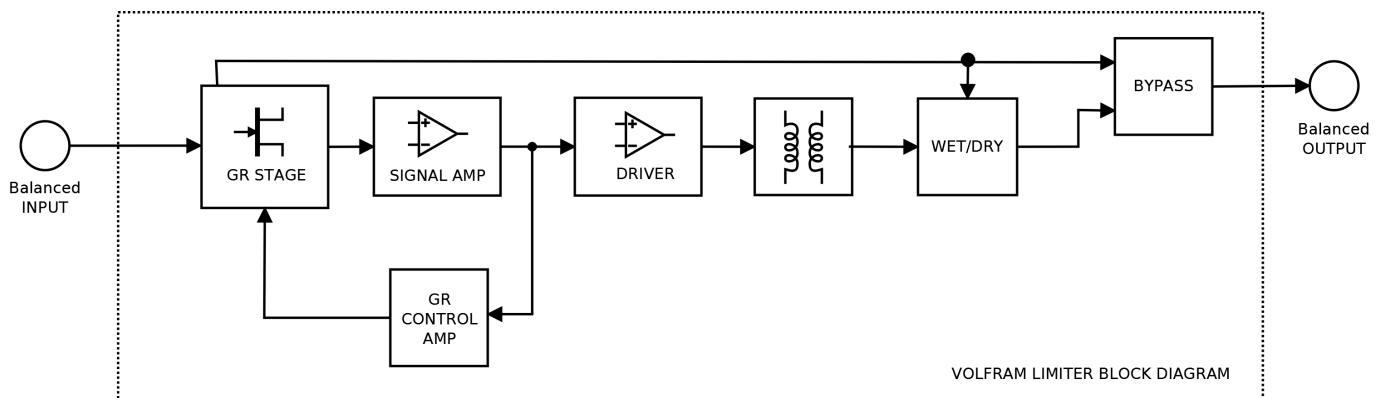
- For US area (115V) use 630mA Slow Blow (Type T).
- For Europe and rest of the world area (230V) use 315mA Slow Blow (Type T).

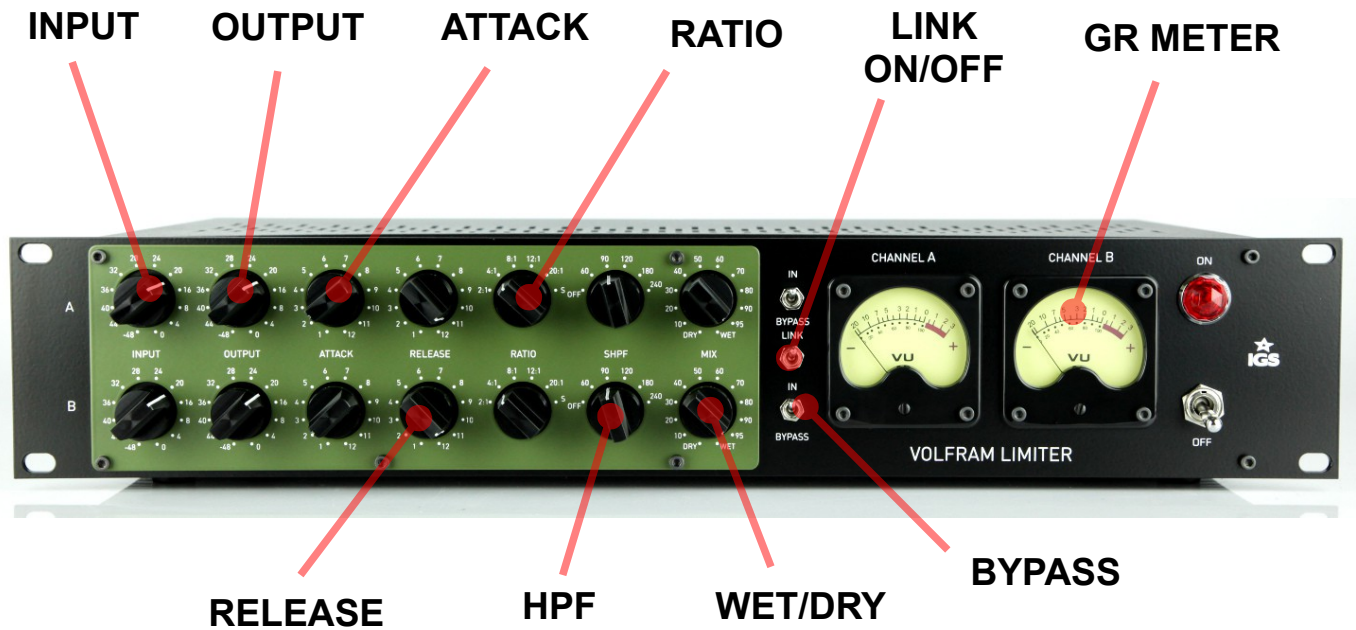
**Always check the voltage selector on the back of the unit** to ensure that it is set to the proper voltage available in your country.

## IGS AUDIO VOLFRAM LIMITER – Stereo FET compressor/limiter

The Volfram Limiter is a dual mono version of the legendary 1176 archetype. The 1176 is a very well known and appreciated compressor in professional recording studios all over the world. Whoever heard how this compressor works with vocals will never be able to manage without one. Additionally the Volfram works great with drums and synthesizers. It is a 45dB transistor amplifier equipped with a remarkable limiter. Compression is achieved with the FET transistors. At extreme settings the Volfram adds some pleasant distortion to the output. The core of versatility in sound of the 1176 lies in the balance between the Input, Output, and Release knobs. All manipulators are 12-pole (6-pole for ratio, HPF) switches. It is a pure A class circuit.

### Block diagram





**GR METER** Big GR meter showing the amount of gain reduction applied

**INPUT** Input level knob.

**RATIO** Allows to adjust the compressor ratio. From 2:1 up to 20:1. SLAM mode = all buttons in.

**ATTACK** Time delay between the appearance of the signal and the compressor reaction.

**RELEASE** Time delay between the disappearance of the signal and the compressor reaction.

**WET/DRY** MIX knob for parallel compression.

**BYPASS** The audio signal passes thru the compressor circuit when this switch is set to „IN”. The „BYPASS” setting causes the circuit to be taken off the signal path.

**OUTPUT** Output level knob.

**HPF** This switch applies the high pass filtering to the sidechain circuit. It allows to avoid the „pumping” sound of ie. the kick drum – low frequencies will not trigger the compressor. Set to OFF or one of the available frequencies.

**LINK ON/OFF** Channel linking option for stereo compression.

### **VOLFRAM LIMITER technical specification:**

- Legendary FET design
- A-class design
- Two linkable channels
- Wet/Dry mix knob for parallel compression

Operating Level	+4dBu
Maximum Input	+18dBu
Maximum Output	+18dBu
Input impedance	10k ohm
Output Impedance	600 ohm
Max Gain Reduction	30
Maximum Gain	45
Attack Time	0.1 – 1 ms
Release Time	0.1 to 1,5s
Frequency response	20Hz - 20kHz
THD+N @0dBu	80 dB (A)
Power consumption	20 W
Shipping weight	7kg
Dimensions	19" 2U, 230mm deep

## **Troubleshooting**

### **My unit doesn't light up (the VU meter is dark):**

- Please check the power cord and the switch at the front of the unit is in ON position
- Check the fuses

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

- Please check the bypass switch
- Check the MIX knob – should be turned fully clockwise.

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

- Please check the cables connecting the rack.

### 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. 19" 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.**

