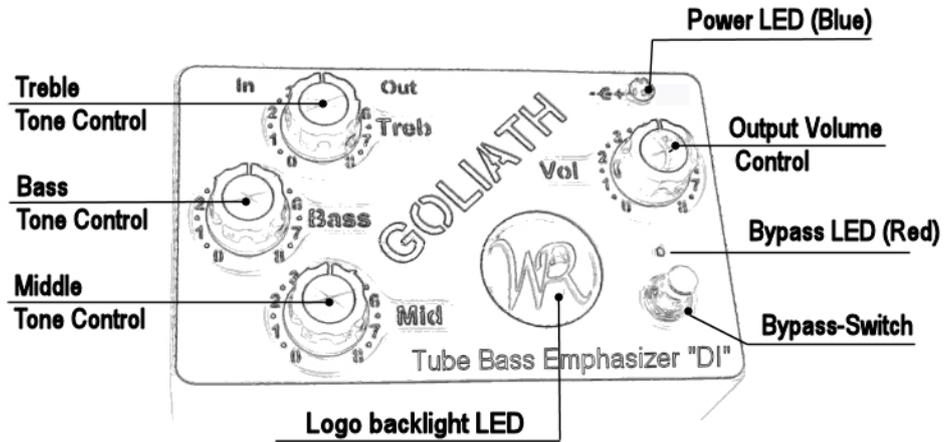
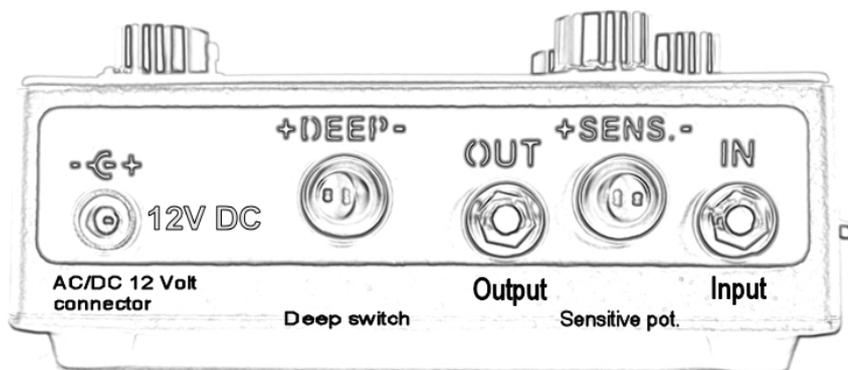


# WR GOLIATH TUBE BASS EMPHASIZER "PLUS"

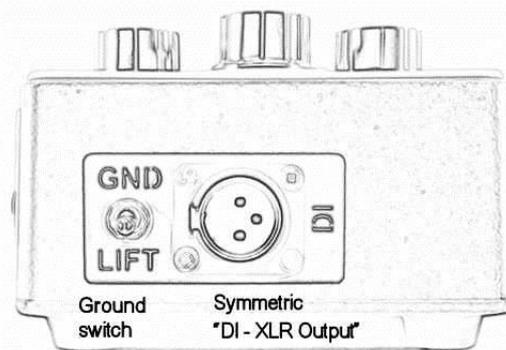
## Control and Indicator Light Layout – Faceplate



## Controls and In/Out Connections – Top of Unit



## Controls and XLR-DI Out Connector



# WR Goliath Tube Bass Emphasizer “Plus”

The **Goliath “Plus”** is an exciting new development for bass players wanting the richer, enhanced tonality associated with tubes.

This unique and innovative design is based on a specialised and limited availability ECC86 NOS tube, optimized to operate on 24 Volt DC, to create wonderful tone in a limited-edition, hand-built unit.

No bass pedal board should be without one!

Equally effective across the frequency range (20 Hz – 18 KHz), from low-level to LOUD, the quality of the sound is consistently high, allowing the same amazing sound on stage as achieved in the studio. Tone controls and switches allow creating unique sounds, thanks to the way they interact together. The Goliath will **not** change the basic sound of your Bass Guitar(s) as other preamps often do. The Goliath is equipped with a “DI-XLR” Output for galvanic isolation with a “Lehle LTDI-L transformer”. The “DI” Output also works in "bypass mode" and even without connecting the power supply. This unit is also wired for “true bypass” operation.

## Description

- The **Goliath “Plus”** was created as a way of adding the warm harmonic sounds associated with the use of tubes to set-ups using solid-state amplifiers: to ‘push-up’ the sound.
- This unit is powered by a **12 Volt DC** power supply and operate internally with 24 Volt – as required by the tube. This special feature of this pre-amp ensures user safety because there is no high voltage on interior or exterior components.
- The Goliath has been designed to give the best results: a great sound from a robust and easy to use product. The construction methods and components used are selected only for their high quality and the positive effects they contribute (paper in oil capacitors).
- The Goliath is not a mass-produced product. The components are carefully checked, and then each unit is assembled individually, using point-to-point (hand soldered) connections.
- All these steps combine to create a limited edition, hand-built pre-amp of the highest quality that will enhance the sound of any bass guitar setup.

## Features

- The **Goliath “Plus”** allows you to get the warm harmonic sound of an electron tube, combined with a little more compression and, if necessary, a higher output volume.
- The Goliath can also be used as standalone unit, for example as a direct plugin to a mixing table or a recording unit etc. in this case be sure to use the symmetric “DI-XLR Output”
- The **“GND/LIFT switch”**: move the ground button on "Lift" position to eliminate hum. If the ground switch is on "Lift" position the built-in “Lehle” transformer ensures galvanic isolation between the shielding of the Goliath and the earth conductor of the XLR cable attached. If this setting generates hum, activating the ground switch may solve this. When the ground button is on position "GND", the shielding of the DI and the earth conductor of the XLR cable are connected.
- The **“Tone controls”** Treble, Middle and Bass allow you to have a good overall sound control, with a good basic Bass sound. The output sound is created by the combination of the settings of all three controls: the frequencies affected by each control are changed somewhat by the settings of the other controls. This allows more frequencies possibilities.
- The **“Sensitive Potentiometer”** the sensitive input-gain potentiometer continuously controls the input gain. This Potentiometer is deliberately **designed to be sluggish** in order to prevent it from unintentionally displaced when handling the Jacks!

- The **“Deep switch”** increases and slightly changes the Bass frequency.
- The **“True Bypass Footswitch”** allows you to switch the unit between active and passive mode.
- Reverse polarity protection.
- All components are individually selected and are carefully checked before installation.

### A respected Bass player has said

*“This unit gives me a warm harmonic sound and the dynamic range over all frequencies of the **WR Goliath** is amazing. I won’t play without it; it gives a pure sound to my ‘solid state’ amplifier and even improves the sound of my tube amplifiers!*

*“The possibility to connect the Goliath directly to recording units, mixing tables or computers using the “DI-XLR” output is a great feature.”*

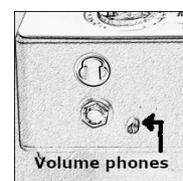
## Operation

- 1) Make sure the power adapter is set to 12 Volts.
- 2) Connect the **Goliath “Plus”** using the **“Jack Output”** to the Input of your power amp. Connect, if needed, to the mixing table or computer using the **“DI-XLR”** Output.
- 3) Turn the Volume potentiometer of the Goliath to ‘0’
- 4) Plug the AC/DC power adapter into a 100 - 220 Volt supply and then connect the lead from the adapter into the DC socket of the Goliath.
- 5) Plug your Guitar into the Jack Input of the Goliath.
- 6) Enjoy.

\* When turning the „Sensitive Potentiometer“, you may occasionally hear a kind of rasping noise (wiper scratch). This is no technical deficiency, but due to the high sensitivity of the unit. I have taken care to leave out all components not absolutely necessary, to keep the basic sound of the bass as authentic as possible.

## Hardware

- Robust Die cast Aluminium Enclosure.
- **Tube: ECC86** or 6GM8 (Russian designation), tube designed to work optimally with 24 Volts.
- A **“Sensitive Potentiometer”**
- A **“Deep switch”**
- A **“True Bypass switch”**
- A **“DI-XLR”** symmetric Output signal plug with Ground switch.
- A **“Lehle LTDI-L Transformer”**.
- Oversized oil film (Paper in Oil) capacitors for improved tone.
- Large Potentiometers.
- Point to point wiring (hand soldered).
- Power supply 100-240 Volt AC to **12 Volt** DC 1 Amp.
- Reverse polarity protection.
- **Adjustable headphone output** (if available!) for silent practice (6.3mm stereo jack). Please only use headphones with a stereo jack! A mono jack could damage the headphone amplifier.



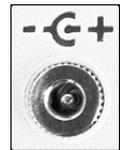
## Package

The package contains:

- 1x **WR Goliath Tube Bass Emphasizer “Plus”**.
- 1x power supply (100 - 240 Volt AC to 12 Volt DC 1 Amp).
- 1x stereo jack adapter (6.3 mm to 3.5 mm) for headphones with 3.5 mm stereo jack plug. (Mini jack plug) only for models with headphone output!
- Operating Manual/Instructions.

## Functionality checks/Problem Solving

- If all LEDs; Power LED (Blue); Switch LED (Red) and logo backlight LED are lit then the unit is working correctly.
- If the Power LED (blue) is not working, there could be a problem with the current supply. Please check the power supply and take a look at the electric poles: + (plus) has to be on the inside, - (minus) on the outside of the jack. (see Picture)



- If the Bypass LED is not lit there may be a problem with the tube heating circuit.
- If a tube replacement is necessary be sure to use only exactly an ECC86 or 6GM8 (Russian designation) type - no other tube types are suitable and will destroy other electronic components in the pre-amp. If you are unable to find an appropriate tube, contact me. I will send you a tube as soon as is possible.

## Technical data

- Weight: 1009 g
- Length: 19,5 cm
- Width: 12,5 cm ?
- Overall height: 8.6 cm
- Voltage range (internally): 24V DC
- Power consumption: max. 390 mA - with phones output 410 mA.
- Frequency range: 20 Hz – 18 KHz
- Input impedance: > 1 MOhm



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