



# USER MANUAL PURPOSE

This user manual is dedicated to the use of the bass amplifiers DUAL.

The manual includes the following information:

- · General information (technical data and packaging);
- · Description of the amplifier's functions.

All the information described in this user manual is verified. The manufacturer reserves the right to update or modify their product without any notice.

## PACKAGING AND STORAGE

### PACKAGING

DUAL is packed in a special cardboard box. The box contains the amplifier, power supply cable, and user manual.

#### **TRANSPORT**

Please handle the box with care. A specific position during the transport is not required.

#### STORAGE

Please keep the amplifier in a dry and ventilated place. Ideal storage conditions: the temperature within -20C and 40C, Humidity 20% to 80%.

#### PRODUCT DISPOSAL

Please follow the disposal instructions issued by your local council. By European Directive 2002/96 / EC, all electrical and electronic products should be disposed of by specific collection facilities appointed by the government or the local authorities.

## **DECLARATION OF CONFORMITY**

The product complies with the following European directive:

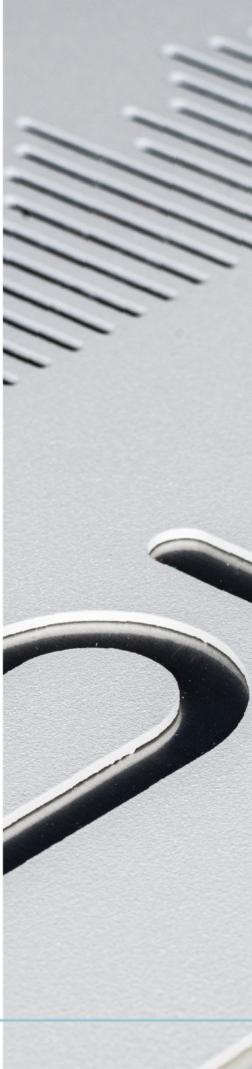
2014/35 / EU - Electrical Safety

2014/30 / EU - Electromagnetic Compatibility

2011/65 / EU - Limited use of certain hazardous substances in electrical and electronic equipment.

A full copy of the declaration of conformity is available from the manufacturer.

The manufacturer is not responsible for any damage due to improper use of the product.



## DESCRIPTION

The GR-DUAL bass head offers the best compromise between portability and versatility for the modern bass player. This powerful amp holds two separate channels (each with dedicated functionality), giving you the possibility to set up your rig in many different ways.

Ch1 and Ch2: Gain, 4 Band EQ, Deep Boost, Bright Boost, Line Out, DI, and Master Volume.

extra on Ch1: Tuner, Pure Sound (by-pass of all EQ functionality), Send/Return, and Headphones.

extra on Ch2: Drive with a low cut, drive modes and blend function.

The main possible setups are:

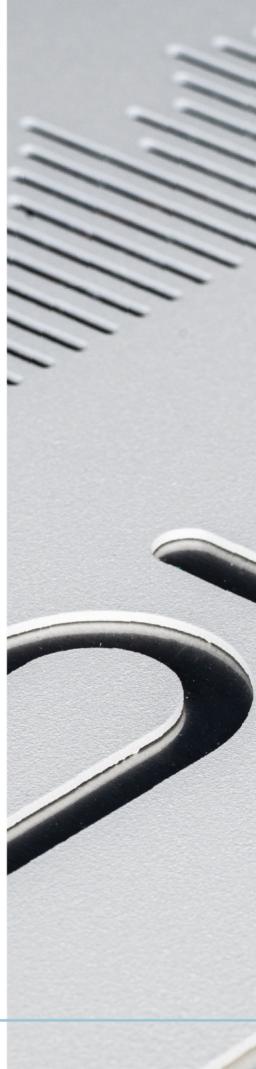
A: Use the two different EQ settings with the same instrument (connected to Ch1 INPUT).

Using the CHANNEL SELECTOR on MIX it is possible to mix the two settings into the same output or change between the two (also possible by using the separately sold pedalboard).

B: Two different instruments (such as a bass and a double bass or a keyboard) on two independent channels.

The dedicated DI OUT for each channel is an important feature of our GR-DUAL:

- Ch1 and Ch2 DI can run separately, one for each channel.
- Both channels could be mixed into one DI (out on Ch1). Being able to manage two different sounds at once could make a huge difference in both live and studio situations.



# MAIN FEATURES

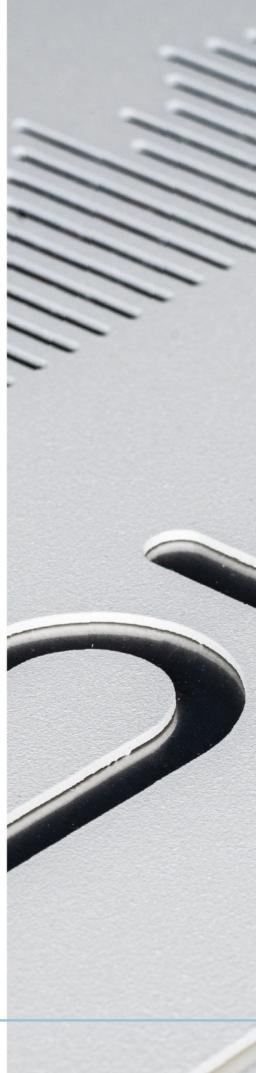
- 2 SPEAKON audio outputs (DUAL 1400: 1400W),
  2 SPEAKON audio output (DUAL 800: 800W)
- XLR DI Independent out (Ch1, Ch2)
- DI volume (Ch1, Ch2)
- · Anti-bump on DI out
- Pre/post Eq. DI (Ch1, Ch2)
- Ground Lift DI (Ch1, Ch2)
- Headphones Output
- Tuner Output
- Send-Return (Ch1)
- Aux-In
- Output 9V, 250 mA
- · Output USB charger, 300mA
- Gain control (Ch1, Ch2)
- · Channel selector
- Bass, Mid-Low, Mid-High and High equalization control (Ch1, Ch2)
- Mid-Low frequencies switch (Ch1, Ch2)
- Mid-High frequencies switch (Ch1, Ch2)
- Deep boost (Ch1, Ch2)
- Bright boost (Ch1, Ch2)
- Pure Sound setting (Ch1)
- Mute
- · Headphones volume
- Master Volume control
- VU-Meter
- Chromatic tuner
- "Studio" and "Live" fan mode operation
- OVERDRIVE
- Drive Low Cut filter
- Drive
- Blend
- Drive mod

## **TECHNICAL FEATURES DUAL 1400**

- POWER RMS 1400W @ 4Ω
- DYNAMIC RANGE: 117dBA
- Parameters of nominal distortion output: a) TDH+N: 0.005 % @ 1 W (4  $\Omega$ , 1 kHz), 0.0008 % @ 50 W (4  $\Omega$ , 100 Hz)
- Low output impedance: 6mW
- Total Efficiency: 84 % @ 1400W, 4Ω

### **TECHNICAL FEATURES DUAL 800**

- POWER RMS 800W @  $4\Omega$
- DYNAMIC RANGE: 117dBA
- Parameters of nominal distortion output: a) TDH+N: 0.005 % @ 1 W (4 $\Omega$ , 1 kHz), 0.0008 % @ 50 W (4 $\Omega$ , 100 Hz)
- · Low output impedance: 6mW
- Total Efficiency: 84 % @ 800W, 4Ω



## CONTROLS DESCRIPTION

#### FRONT PANEL CONTROLS



1.a INPUT JACK Ch1

1.b INPUT JACK Ch2

Input jack for your bass. We suggest using a good quality cable, to obtain the best audio performance

2. AUX-IN

3.5mm jack Auxiliary input to connect an external audio device

3.a GAIN CONTROL KNOB Ch1

3.b GAIN CONTROL KNOB Ch2

Sets the input signal amount of the pre-amp

4.a BASS KNOB Ch1

4.b BASS KNOB Ch2

Increases or reduces the bass frequencies of the signal

5.a MID-Low KNOB Ch1

5.b MID-Low KNOB Ch2

Increases or reduces the mid-low frequencies of the signal

6.a MID-High KNOB Ch1

6.b MID-High KNOB Ch2

Increases or reduces mid-high frequencies of the signal

7.a HIGH KNOB Ch1

7.b HIGH KNOB Ch2

Increases or reduces the high frequencies of the signal

8.a DEEP BUTTON Ch1

8.b DEEP BUTTON Ch2

Gives a more deep sound

9.a BRIGHT BUTTON Ch1

9.b BRIGHT BUTTON Ch2 Gives a more bright sound

10.a MID-Low SWITCH Ch1

10.b MID-Low SWITCH Ch2

Use this switch to change the frequency of the mid-low band from 185 Hz, 375

Hz, and 800 Hz

11.a MID-High SWITCH Ch1

11.b MID-High SWITCH Ch2

Use this switch to change the frequency of the mid-high and from 600 Hz, 1200

Hz, and 1800 Hz

12. PURE SWITCH

Allows bypassing all the equalization filters of the preamplifier. The pure-mode activation is signaled by the LED on the top of the button 13.a DI KNOB Ch1

13.b DI KNOB Ch2

Controls the DI volume

14. HEADPHONES KNOB

Controls the headphones volume

15. HEADPHONES OUTPUT

3.5mm plug for headphones

16.a MASTER KNOB Ch1

Controls the overall volume of the channel 1 output

16.b MASTER KNOB Ch2

Controls the overall volume of the channel 2 output

17. OPERATION LED

Green = normal operation.

Orange = high level of the input signal (clip)

18. VU-METER - Chromatic tuner \* (Works only on the CH1)

24 LEDs that can be used as VU-METER and/or chromatic tuner. The 6 central LEDs marked with the letters B E A D G C, are the reference LEDs when using the chromatic tuner. These marked LEDs identify the reference note. When the corresponding note is tuned the LED changes from red light to blue light. The more red

LEDs light up the more the note is out of tune

19. LED BUTTON

By pressing this button you can:

A.- scroll through the four VU-Meter display modes,

B.- select the mode tuner,

C.- turn off the 24 LED bar

The last selection made on this button is always memorized.

In the ONE 800 and ONE 1400 amplifiers, holding down the LED button for about 8 seconds, the fan turns off (STUDIO MODE). To reactivate the fan (LIVE MODE) you must hold down the LED button for about 8 seconds or turn off and turn on the amplifier.

In "LIVE" mode, the fan automatically activates when a preset temperature is reached. In "STUDIO" mode the fan is always switched off, except when a critical temperature is reached. In that case the fan automatically reactivates. On the ONE 350 amplifier, pressing the LED button for about 8 seconds allows to toggles the cooling fan activation

20. MUTE BUTTON

Turn off the amplifier output. The activation of this mode turns on the red LED on the left of the button. In this mode, the Tuner is always on, whatever LED mode is on.

21. CutLOW

Cuts low-end frequencies(High-pass filter) before the OVERDRI-VE stage to make more clear and intelligible distorted sound

22. DRIVE KNOB

Increases or reduces the amount of distortion

23. BLEND KNOB

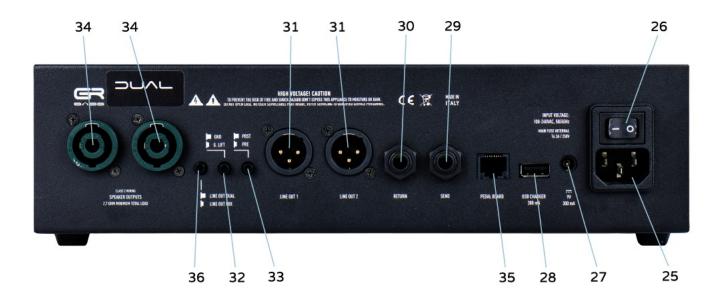
Select the clean/distorted ratio of the signal

24. DISTORTION MOD BUTTON

Select the type of distortion (soft/hard clipping)

## CONTROLS DESCRIPTION

#### **REAR PANEL CONTROLS**



#### 25. AC POWER SOCKET (230V - 115V)

IEC plug for power supply connection. The power supply self-recognition feature allows power to the GR-ONE with a voltage of 230V or 115V. The supplied cable is equipped with a ground wire. For safety and security reasons, never unplug the ground wire from your equipment

# 26. POWER ON/OFF SWITCH

Switch on and off the amplifier

#### 27. 9 VDC Out

9V DC output to connect external equipment (we recommend connecting 4-5 pedal effects maximum). The polarity is center negative.



## 28. USB CHARGER Out

5V DC USB output to charge your phone or any USB device. It delivers up to 300mA of current

## 29. SEND \* (Works only on the CH1)

6.35mm jack plug to connect an external effect's input

# 30. RETURN \* (Works only on the CH1)

6.35mm jack plug to connect an external effect's output

#### 31. DI OUTPUT (Ch1, Ch2)

# XLR plug.

The DI output is equipped with an anti-bump system, which allows you to turn on and off GR-ONE even with the mixer line still on, without causing the annoying and noisy bump.

#### 32. GND LIFT BUTTON (Ch1, Ch2)

Isolates the DI output from the ground wire

#### 33. PRE-POST DI BUTTON (Ch1, Ch2)

Allows you to choose the type of signal to be sent to the DI output DI: PRE EQ or POST EQ

## 34. SPEAKON OUTPUT

It is possible to use a 6.35 mm jack. We recommend using a 2 pole Speakon connector. Never use a 6.35 jack guitar cable to connect your amplifier to your speakers

# LIMITED WARRANTY

The warranty covers five years.

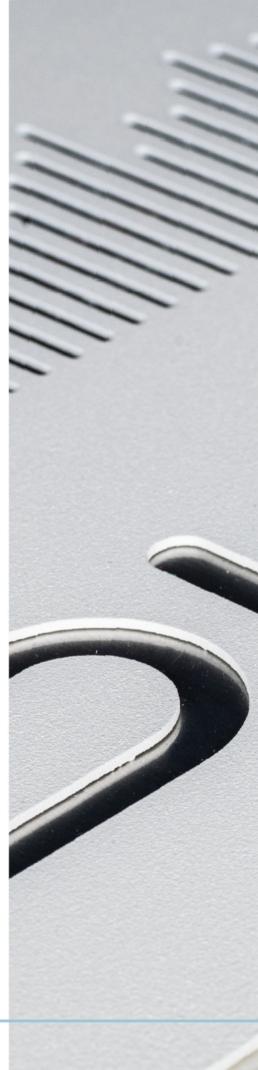
The warranty covers any defects in material or workmanship under normal use during the warranty period. Any shipping cost to/from the repair service center is the customer's responsibility.

In the event of irreparable damage or repeated failure of the same type, the manufacturer may replace the unit, within the term of the original warranty.

The warranty does not cover parts that may result in faulty due to:

- Negligence or careless use
- Improper installation and maintenance
- Tampering made by unauthorized personnel
- Damages that might not be related to manufacturing defects.

The manufacturer accepts no responsibility for any damage due to persons, animals or things, as a consequence of the failure to comply with all the installation requirements and /or use indicated in this user manual.





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