

ORANGE™

AMPLIFICATION

OB1 SERIES
BASS GUITAR AMPLIFIER

USER MANUAL



ORANGE MUSIC ELECTRONIC CO. LTD
LONDON, ENGLAND
SINCE 1968
www.orangeamps.com

INTRODUCTION

In 1968, Orange founder and CEO Cliff Cooper borrowed £50 to start a musical instrument shop and recording studio in London's West End. Against the backdrop of one of the city's most vibrant districts, the shop was decorated with psychedelic script and painted a bright shade of orange which gave the company its name.

Shortly after, Orange began designing and manufacturing products which quickly established a reputation for their innovation, superior quality and distinctive sound. We have been a pioneering force in the guitar amplification industry ever since, and today, with a team of the world's finest amplifier engineers we continue to push back the boundaries of conventional amplifier design. From our very humble beginnings on New Compton Street, Orange Amplification has grown into an iconic global brand, earning legions of loyal supporters along the way who continue to make the *'Voice of the World'* heard.

We are confident that you will be delighted with your new purchase and that it will provide you with many years of enjoyment. Congratulations, you are now a member of the *Legendary British Guitar Amplifier Owners Club!*

THE OB1 SERIES

For years bassists have combined guitar and bass amps to remarkable effect, adding harmonics and layers of overdrive from a guitar amp to their core bass tone in pursuit of the ultimate live sound. Taking our inspiration from this 'bi-amping' trend, the OB1 Series takes care of this and more besides, with its unique Blend and Gain circuit. The result is a 'bi-amped' sound, without the hassle of taking two rigs to the show.

The OB1 splits the input signal two completely separate paths. One side amplifies the clean signal, whilst the other adds up to two stages of controllable gain to the upper register. These two elements can then be combined using the Blend control. The low end remains warm and punchy, whilst the overall tone is enhanced with additional harmonic content from the Gain circuit. Dial in anything from everything from fat cleans to heavy grind, and everywhere in between.

PRODUCT REGISTRATION

Register your purchase online for a **free** extension to the standard manufacturer's warranty. In the interests of continued product development and improvement, the contents of the manual may be subject to change without notice. Ensure you are viewing the latest version at: www.orangeamps.com

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarised or grounding-type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons. Terminals labelled as "Speaker Outputs" must be connected to a speaker cabinet of the designated load rating using an un-shielded two conductor cable for speaker use at all times during operation.



The exclamation point within an equilateral triangle and "WARNING" are intended to alert the user to the presence of important operating instructions. Failure to heed the instructions will result in severe injury or death.



This product complies with the essential requirements of the EMC Directive, Low Voltage Directive and Restriction of Hazardous Substances (RoHS2) Directive. This product conforms to UL 60065 Standard for Safety for Audio, Video and Similar Electronic Apparatus – Safety Requirements (7th Edition, Dated June 30, 2003 with revisions through July 24, 2013) and is certified to CAN/CSA-C22.2 No. 60065-03, Amendment 1: 2006, Amendment 2: 2012.



This Orange product complies with the WEEE Directive (2002/96/EC) marking requirement. This affixed product label indicates that you must not discard this electrical/electronic equipment in domestic household waste. Please contact your local authority for details of your nearest approved recycling facility.

BEFORE USING YOUR AMPLIFIER

IMPORTANT!

The voltage selector switch and mains fuse are set at the factory for the country or region in which this Orange product is intended to be sold. To prevent serious damage to the product, ensure that the rated AC mains voltage indicated on the product's rear panel agrees with the mains voltage from your AC mains outlet before connecting the supplied IEC power cable.

If the product is to be used outside of the factory-set region, please ensure the voltage selector switch (found on the rear or side panel) is set to the correct voltage for the new country/region and that the appropriate mains fuse is fitted in the pull-out fuse tray below the AC Mains inlet.

The correct mains fuse rating for the product is printed on the chassis. **Use only the type and rating specified for the product.** Be advised that different operating voltages require the use of different types of line cord and attachment plugs. If you are unsure, please contact your Orange Dealer.

SPEAKER OUTPUTS

Make sure the correct speaker load is connected at all times during operation. Failure to observe these points may cause damage to both the amp and cabinet(s)!

- ✓ 1 x 8 Ohm cabinet: Use either speaker output
- ✓ 2 x 8 Ohm cabinets: Use both speaker outputs
- ✓ 1 x 4 Ohm cabinet: Use either speaker output

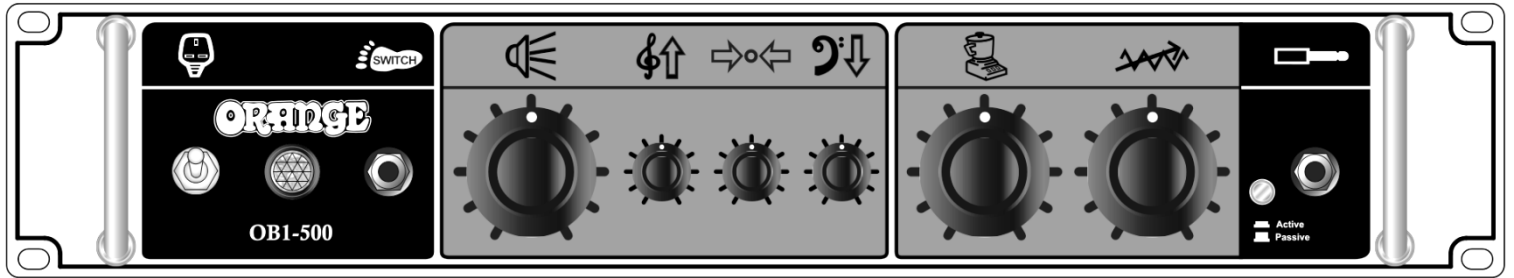
A speaker load must remain connected to the Speaker Outputs when the Balanced Output and/or Line Output is in use!

- Never use two speaker cabinets of mismatched impedance!
- Never connect a speaker load which is less than 4 Ohms!
- Always connect to a speaker load of suitable power handling:
 - **One cabinet:** The cabinet's power rating should be **at least equal** to the amp's output power.
 - **Two cabinets:** Each cabinet should have a rating of **at least 50%** of the amp's output power.
- Never connect speakers using an instrument cable! Only use a quality dedicated speaker cable.

VENTILATION & GENERAL USE

OB1 series amplifiers must remain sufficiently ventilated at all times. During sustained periods at high volume levels the internal fan will start operate and may be audible. Do not obstruct the fan or the cooling vents. Never place liquids or vessels containing liquid on the amplifier. To prevent hum and electrical noise operate your amplifier and instruments as far away from other electronic devices (especially fluorescent and neon lamps) as possible as these generate extremely high levels of electronic noise.

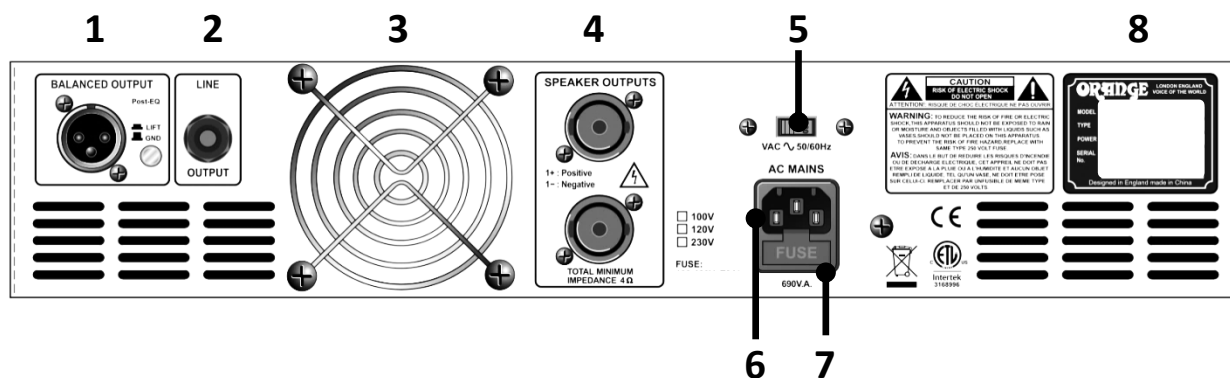
FRONT PANEL FEATURES



THE OB1-300 & OB1-500 SHARE THE SAME FRONT & REAR PANEL FEATURES

- | | | |
|--------------------|--|---|
| INPUT | | Use a quality shielded instrument cable to connect your instrument to the Input jack socket. The Active/Passive switch selects the correct input level for basses with active or passive pickups. |
| GAIN | | Controls the level of gain added to the upper harmonics. The Gain control works in tandem with the Blend control for a variety of sounds. Higher Gain settings produce dirtier tones, whilst lower Gain settings combined with a higher Blend setting can be used for a 'clean' boost to cut through the mix. |
| BLEND | | Controls the amount of upper harmonics and gain blended with the clean signal. The character of the blended signal is defined by how the Gain control is set. Higher Blend settings will add extra volume, so you may adjust the Volume to compensate if necessary. With the Gain set to minimum, the Blend control will have the least effect on the overall sound. |
| BASS | | Adjusts the low-end frequencies with +/-15dB of boost or cut. Increasing the Bass control produces deeper tones. The EQ controls are located after the Blend control for fine control over your overall sound. |
| MIDDLE | | Adjusts the mid-range frequencies with +/- 15dB of boost or cut. The EQ controls are located after the Blend control for fine control over your overall sound. |
| TREBLE | | Adjusts the high-end frequencies with +/-20dB of boost or cut. Higher Gain and Blend settings will also add high-end frequencies and harmonics. Reduce the Treble to compensate if desired. |
| VOLUME | | Adjusts the overall volume level. |
| FOOT SWITCH | | Connect a latching footswitch (e.g. <i>Orange FS-1</i>) to this jack socket to remotely engage/defeat the Gain and Blend controls. Use a standard instrument/tip-sleeve (mono) cable to connect the footswitch. |
| POWER | | Switches mains power to the amplifier on/off. Connect the supplied IEC/Mains cable to the AC Mains inlet (rear). The LED will illuminate when the mains switch is set to ON. Set the Volume control to zero/minimum before switching on power to the amplifier. |

REAR PANEL FEATURES



1 BALANCED OUTPUT Sends a balanced, line-level signal (post-EQ, post-Blend, pre-Master Volume) to a mixer and/or PA system. Engage/depress the ground **LIFT/GND** button if ground hum becomes a problem when connecting the amplifier to external equipment.

*Note: A speaker **must** remain connected to the Speaker Outputs when the DI Output is in use.*

2 LINE OUTPUT Sends an unbalanced, line-level signal (post-EQ, post-Blend, pre-Master Volume) to a mixer and/or PA system.

*Note: A speaker **must** remain connected to the Speaker Outputs when the Line Output is in use.*

3 FAN INTAKE **Do not obstruct or place objects into the fan!** During sustained periods of high volume playing the fan will begin to operate to help cool the amplifier.

4 SPEAKER OUTPUTS **Make sure the correct speaker load and power handling is connected at all times!**
Refer to 'Before Using Your Amplifier'. Total minimum impedance = 4 Ohms.

5 VOLTAGE SELECTOR This is factory-set for the region in which the amplifier is intended to be sold. Refer to 'Before Using Your Amplifier'.

6 AC MAINS INLET Connect the supplied IEC cable to the mains input. Refer to 'Before Using Your Amplifier'.

7 MAINS FUSE The **mains fuse** is located in the tray directly below the AC Mains Inlet. If the mains fuse blows, replace only with the **exact** rating for your region. If the mains fuse repeatedly blows, contact your Orange dealer.

Region/Voltage	OB1-300	OB1-500
100 - 120V	T6.3AL	T8AL
230 - 240V	T3.15AL	T4AL

8 MODEL PLATE The model name, output power and serial number is displayed here. Ensure that the power handling/rating of the speaker cabinet(s) connected to the amplifier is equal to or exceeds the output power of your amplifier.

WARRANTY INFORMATION

All Orange amplifiers are covered by a conditional, non-transferable manufacturing warranty, which covers the product against defects in materials and workmanship for one year from the date of purchase. You can extend this warranty for a further year for **free** by registering your purchase on our website. Please retain all documents and proof of purchase/receipt for your records. Full details, terms and conditions can be found on our support pages.

Always refer servicing to an authorised Orange technician. No user serviceable parts inside.

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