

# OB1-300 & OB1-500 MANUAL

## INTRODUCTION

# THANK YOU FOR CHOOSING ORANGE

Ever since the founding of the company in 1968, **Orange** has been a pioneering force in the guitar amplification industry. Today, with a team of the world's finest amplifier engineers, Orange continues to push back the boundaries of conventional amplifier design.

Our commitment to craftsmanship and quality control has allowed our amplifiers to stand the test of time, giving their owners as much pleasure now, as the day they were bought. To maintain this level of excellence, each Orange amplifier is put through many **rigorous** test procedures before leaving the factory.

This manual contains **valuable technical and safety information**. Please take the time to read this manual as the information may enhance the sound and performance of your amplifier. We are confident that you will be delighted with your new purchase and that it will provide you with many years of enjoyment. You are now a member of the *Legendary British Guitar Amplifier Owners Club!*

**In the interests of product improvement, the contents of this manual may be subject to change without notice. Ensure you are viewing the latest version at [www.orangeamps.com](http://www.orangeamps.com)**

## SAFETY

# IMPORTANT SAFETY INFORMATION

- 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 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.

### **NEVER PLACE LIQUIDS ON OR NEAR THE PRODUCT!**

This Orange product conforms to UL 60065:2001 (Seventh Edition) + A1:2005 + A2:2010 for Audio, Video and Similar Electronic Apparatus. Certified to CAN/CSA CAN/CSA-C22.2 No. 60065:03

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 product in domestic household waste. Please contact your local authority for details of your nearest approved recycling facility.

### **BEFORE YOU TURN IT ON...**

## **IMPORTANT!**

The voltage selector switch and mains fuse is 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 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 input.

The correct mains fuse rating for the product is printed on the chassis (see ‘ Rear Panel Features’). **Use only the same type and rating as 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.

## BEFORE USING YOUR AMPLIFIER

Always ensure the amp's volume control(s) are set to zero before switching on the power to 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.

### SPEAKER OUTPUTS:

Make sure the correct speaker load is connected at all times during operation in one of the following configurations:

- **1 x 8 Ohm cabinet** – Use either speaker output (rear panel).
- **2 x 8 Ohm cabinets** – Use both speaker outputs (rear panel).
- **1 x 4 Ohm cabinet** - Use either speaker output (rear panel).

### IMPORTANT NOTES FOR CONNECTING SPEAKER CABINETS:

- Do not use two speaker cabinets of mismatched impedance!
- Do not connect a speaker load which is less than 4 Ohms!
- Always connect to a speaker cabinet(s) of suitable power handling!
- Only connect speakers using a quality dedicated Speakon connection. Never use an instrument cable!

Failure to observe these points may cause damage to both the amp and cabinet(s).

*Note: A speaker must remain connected when the DI Output and/or Line Output is in use.*

### VENTILATION and RACK MOUNTING:

Rack Units: 2U 19"

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.

## FRONT PANEL FEATURES



## Power

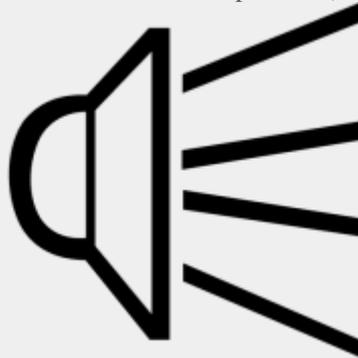
LED will illuminate when the mains switch is set to ON.

Set the **Volume** control to zero/minimum before switching on power to the amplifier.



## Footswitch

Connect a latching footswitch (e.g. FS-1) 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.



### Volume

Adjusts the overall output volume level.



### Treble

*(Active and post-Blend)*

Adjusts the high-end frequencies. Increasing the **Treble** control produces brighter tones. Higher **Gain** settings will also add high-end frequencies. Reduce the **Treble** control to compensate if necessary.



### Middle

*(Active and post-Blend)*

Adjusts the mid-range frequencies.



## Bass

*(Active and post-Blend)*

Adjusts the low-end frequencies. Increasing the **Bass** control produces deeper tones.



## Blend

Controls the amount of upper harmonics 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 master **Volume** to compensate if necessary. With the **Gain** set to minimum, the **Blend** control will have the least effect on the overall sound.



## 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.



## Input

Use a quality shielded instrument cable to connect your instrument to the **Input** jack socket. Use the **Active/Passive** switch to select the input level for active or passive pickups.

# REAR PANEL FEATURES

- 1
- 2
- 3
- 4
- 5
- 6



## 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** button if ground hum becomes a problem when connecting the amplifier to external equipment.

*Note: A speaker **must** remain connected 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 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

Refer to '**Safety/Before Using Your Amplifier**'

This is factory set for the region in which amplifier is intended to be sold.

## 6. AC Mains Input & Fuse Tray

Refer to '**Safety/Before Using Your Amplifier**'

Connect the supplied IEC cable to the mains input.

The mains fuse is located in the tray directly underneath the AC Mains cable input. If the mains fuse blows, replace **only** with the **exact** rating for your region (printed on the rear panel). If the mains fuse continues to blow contact your Orange dealer.

**OBI-300:** 100-120V = T6.3A L // 230-240V = T3.15A L

**OBI-500:** 100-120V = T8A L // 230-240V = T4A L

### WARRANTY

# FREE EXTENDED WARRANTY OFFER

Orange amplifiers are covered by our standard 1 year manufacturer's warranty from the date of purchase, covering manufacturing and component defects. This is non-transferable and is subject to consumer protection laws in the country of purchase and distributor's terms and conditions. An additional year can be added by registering your product online. Valves and speakers supplied with an Orange amplifier or purchased separately at our online store are covered for 90 days from the date of purchase.

The warranty status of any Orange product is subject to its being used for its intended purpose in suitable conditions. As the manufacturer we reserve the right to refuse to warranty any Orange product which has been misused in any way whatsoever. [Full terms and conditions can be viewed on our webpage here.](#)

REGISTER RIGHT NOW AT [www.orangeamps.com](http://www.orangeamps.com)

## FUSES CAN FAIL AT ANY TIME!

Orange amps are protected from damage caused by inconsistent mains voltage by various fuses. We recommend that Orange users have a set of spare fuses.

For more information on maintenance and for accessories and spares, please visit

[www.orangeamps.com](http://www.orangeamps.com)

## RELATED ACCESSORIES

These items are compatible with your Orange product. For customers in the USA please click [here](#).