

# ORANGE™



## Dual Terror Owners Manual

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# ORANGE™

## Before Operating Read These Important Safety Instructions



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may

be of sufficient magnitude to constitute a risk of electric shock to persons. Terminals labeled 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 read the instructions will result in severe injury or death.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near liquid.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- **Service:** Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards.
- Refer all servicing to qualified service personnel.
- **Damage Requiring Service:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions: (a) When the power-supply cord or plug is damaged; (b) If liquid has been spilled, or objects have fallen into the product; (c) If the product has been exposed to rain or water; (d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation; (e) If the product has been dropped or damaged in any way; (f) When the product exhibits a distinct change in performance - this indicates a need for service.
- **Replacement Parts:** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.



This Orange Amplifier conforms to UL Standard 60065 for Audio, Video and Similar Electronic Apparatus - Safety Requirements; Certified to CAN/CSA-C22.2 No. 60065-03; IEC 60065 2001 + A1:2005

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



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### **Thank you for choosing Orange. You are now a member of the 'Legendary British Guitar Amplifier' owners club!**

Since 1968, when the company was founded, 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 tube amplifier design.

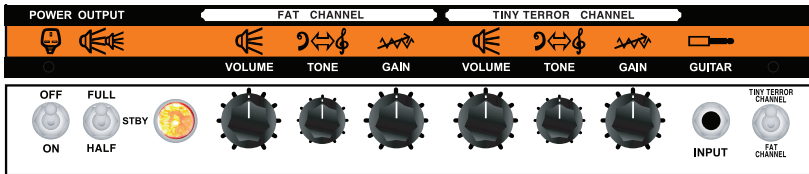
Our commitment to craftsmanship and quality control has allowed our amplifiers to stand the test of time, giving their owners as much pleasure now, as the day they were bought. To maintain this level of excellence, each Orange amplifier is put through many rigorous test procedures before leaving the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

The warmth, tonal quality and rich harmonics generated by a valve amplifier cannot be reproduced by 'artificial' means. Many guitarists have reached the same conclusion: neither the transistor nor microchip is a suitable alternative to valve technology.

This booklet 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.

## Front Panel



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| <ol style="list-style-type: none"> <li>1. <b>Power Switch</b></li> <li>2. <b>Half/Stby/Full power Switch</b></li> <li>3. <b>Power Indicator Lamp</b></li> <li>4. <b>Volume Control (Fat Channel)</b></li> <li>5. <b>Tone Control (Fat Channel)</b></li> <li>6. <b>Gain Control (Fat Channel)</b></li> <li>7. <b>Volume Control (Tiny Terror Channel)</b></li> <li>8. <b>Tone Control (Tiny Terror Channel)</b></li> <li>9. <b>Gain Control (Tiny Terror Channel)</b></li> <li>10. <b>Input</b></li> <li>11. <b>Channel Select Switch</b></li> </ol> | <p>Please refer to the 'Using Your Amplifier' section for correct standby/on procedure.</p> <p>Please refer to the 'Using Your Amplifier' section for correct standby/on procedure.</p> <p>The volume control adjusts the output volume. High levels of volume will overdrive the output valves. When turned to maximum, it is not in the circuit!</p> <p>The tone control filters off high frequency response of the output stage, when turned towards zero. When turned to maximum, it is not in the circuit!</p> <p>The gain control adjusts the amount pre-amp gain. Although clean sounds are available from low levels of gain, high levels of gain will overdrive the pre-amp valves considerably!</p> <p>The volume control adjusts the output volume. High levels of volume will overdrive the output valves. When turned to maximum, it is not in the circuit!</p> <p>The tone control filters off high frequency response of the output stage, when turned towards zero. When turned to maximum, it is not in the circuit!</p> <p>The gain control adjusts the amount pre-amp gain. Although clean sounds are available from low levels of gain, high levels of gain will overdrive the pre-amp valves considerably!</p> <p>Plug guitar into this input.</p> <p>The channel switch (found on front of amplifier) selects either the Tiny Terror channel or the Fat channel. (Must be in Tiny Terror position for footswitch to function!)</p> |
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## Rear Panel



- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <b>Speaker Outputs</b></li> <li>2. <b>2 OUTPUT TUBES/4 OUTPUT TUBES SWITCH</b></li> <li>3. <b>FOOTSWITCH JACK SOCKET</b></li> <li>4. <b>HT Fuse (T500MA)</b></li> <li>5. <b>Mains Socket &amp; Fuse Holder</b></li> </ol> | <p>Connect the amplifier to a speaker cabinet of the correct impedance.</p> <p>Connect 1 x 16ohm cabinet to the 16ohm speaker output jack socket.</p> <p>Connect 1 x 8ohm cabinet to either of the 8ohm speaker output jack sockets.</p> <p>Connect 2 x 16ohm cabinets to both of the 8ohm speaker output jack sockets.</p> <p>The 2 Output Tubes/4 Output Tubes switch (found on rear of amplifier) removes two of the EL84 output valves, when in the 2 OUTPUT TUBES position. This switch also takes care of the speaker impedance (in the background), when in the 2 OUTPUT TUBES position. This means that the speaker impedance is always as stated in the screen print, above each speaker output jack socket, regardless of the position of this switch.</p> <p>The footswitch jack socket (rear of amplifier) enables channel switching using any latching footswitch.</p> <p>The high tension fuse, protects transformers and other circuitry from blowing in the event of an output valve shorting. Please refer to the Technical Specification section for fuse ratings.</p> <p><b>Please contact a qualified service technician if this fuse fails!</b></p> <p>This is where your mains lead plugs in. Also the mains fuse is located here. Please refer to the Technical Specification section for fuse ratings.</p> <p><b>WARNING:</b> This amplifier shall be connected to a mains socket outlet with a protective earthing connection.</p> <p><b>WARNING:</b> Where the mains plug or appliance inlet is used as the disconnect device, the disconnect device shall remain readily operable.</p> |
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Please ensure your amplifier is switched to the correct voltage for your country. If unsure please consult your dealer.

# Using Your Amplifier

**IMPORTANT!** Before connecting your amplifier to a power source, please check the following:

1. Ensure your speaker cabinet is connected to the correct impedance speaker output socket, (see Rear Panel, item 1), using a good quality speaker cable. **Do not use guitar leads.**
2. Ensure that the voltage selector switch is set to the correct mains voltage, (see Rear Panel, item 5).

The output (HALF/STBY/FULL) switch (found next to the power switch on front of amplifier) runs the valves at a low plate voltage (reducing output power) in the HALF position and at a higher plate voltage (increasing output power) in the FULL position. The middle position is the standby position. Make sure that the HALF/STBY/FULL output switch is in the Standby (middle) position before switching the power switch to the ON position. (This will maximise the life of your valves)..

**If you are unsure about any of the above points please consult your local Orange supplier.**

## Using The Dual Terror

**IMPORTANT!** Before connecting your amplifier to a power source, please check the following:

1. Ensure your speaker cabinet is connected to the correct impedance speaker output socket, (see Rear Panel, item 2). Always use a good quality speaker cable, do not use guitar leads. Combo models will have it's speaker attached).
2. Ensure that the voltage selector switch is set to the correct mains voltage, (see Rear Panel, item 5).

When powering up your amplifier, switch to the ensure the 'Standby' position is set from the front panel and then switch the power on from the rear panel, two minutes before switching from 'Standby' to the 'On' position. (This will maximise the life of your valves)..

If you are unsure about any of the above points please consult your local Orange supplier.

## Selecting Output / Number of Tubes

The output switch (found next to the power switch on front of amplifier) runs the valves at a low plate voltage (reducing output power) in the HALF position and at a higher plate voltage (increasing output power) in the FULL position. The middle position is the standby position. This switch should be in the standby position for around two minutes after first powering up the amplifier!

### OUTPUT POWER COMBINATIONS.

Output switch HALF, 2 OUTPUT TUBES = 7watts.

Output switch HALF, 4 OUTPUT TUBES = 15watts.

Output switch FULL, 2 OUTPUT TUBES = 15watts.

Output switch FULL, 4 OUTPUT TUBES = 30watts.

## Using Tiny Terror Channel

You have three controls: Volume, Tone, and Gain. Rotating the Gain control clockwise will produce tones that range from clean to crunch to super high gain. Rotating the Tone control clockwise will increase the high frequency response. The Volume control is used to set the output level.

## Using The Fat Channel

You have three controls: Volume, Tone, and Gain. Rotating the Gain control clockwise will produce tones that range from clean to crunch to super high gain. Rotating the Tone control clockwise will increase the high frequency response. The Fat channel has a slightly warmer overall sound with less treble response at lower gain levels.

## Using the Footswitch

The Switch on the front of the amp must be set to Tiny Terror Channel for the footswitch to function. This feature ensures the user will always be able to switch channels even if there is damage to the footswitch jack.

# Technical Specifications

	Dual Terror
Power	30/15/7 Watts RMS 8/16 ohms
Channel Configuration	Fat Channel / Tiny Terror Channel
Fat Channel Controls	Volume / Tone / Gain
Tiny Terror Channel Controls	Volume / Tone / Gain
Footswitch Function	Channels
Power Valves	4 x EL84
Preamp Valve	4 x ECC83 / 12AX7



# WARNING

**VALVES AND FUSES CAN FAIL AT ANY TIME!**

From time to time output and preamp valves may fail. Most users find regular valve replacement to be of benefit to the general upkeep and reliability of their amplifier. We suggest that you always have spare valves available as replacements in the event of a valve failure. Every Orange Class AB Amplifier will require re-biasing when it's output valves are replaced. This may not be necessary if use the same brand of valves with a similar manufacturers rating. If unsure you should have the bias checked. **BIASING SHOULD ALWAYS BE CARRIED OUT BY AN EXPERIENCED TECHNICIAN.** Your amplifier uses various fuses to protect your amplifier from inconsistent voltages. It is highly recommended that you keep a supply of spare fuses in case of failure. For more information on caring for your amplifier, visit the Orange website - [www.orangeamps.com](http://www.orangeamps.com) Tubes, fuses, covers and other accessories for your Orange amplifier are available from our online store - [www.orangeamps.com/shop](http://www.orangeamps.com/shop)

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## FREE EXTENDED WARRANTY OFFER

This Orange product is protected for one year against defects in material and workmanship. This warranty applies to the entire product, except the speakers, which are protected for three months. To extend your warranty to two years, free of charge, simply visit our website and register your purchase.

**REGISTER RIGHT NOW AT**  
**<http://ORANGEAMPS.COM/WARRANTIES.ASP>**