

Product Manual: OR60

Thank you for choosing Orange.

Since its founding in 1968, Orange Amplification has been built by guitarists, for guitarists. Today, backed by a team of passionate industry-leading engineers, the company continues to push the limits of traditional amp design—delivering cutting-edge heads, cabinets, and combos for players everywhere.

Orange's commitment to quality control, construction and craftsmanship is long established, and each amplifier passes through a rigorous test procedure before shipping, resulting in complete confidence that you will be delighted with your new purchase, and that it will provide you many years of enjoyment and reliability.

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.

WARNING! TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE

Where indicated or stated on the product/unit, 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
2. This device must accept any interference received, including interference that may cause undesired operation.

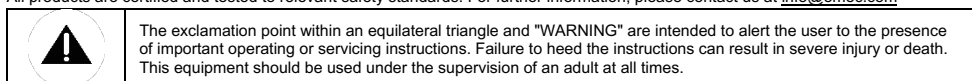
Note: This equipment has been tested and found to comply with the limits for digital devices of its class, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or a qualified technician for help.

Note: Changes or modifications not expressly approved by Orange Music Electronic Company, Ltd. could void the user's authority to operate the equipment.

For customers in Canada: Where indicated or stated on the product/unit, this digital apparatus complies with Canadian Interference Regulations CAN ICES-3(B)/NMB-3(B).

All products are certified and tested to relevant safety standards. For further information, please contact us at info@omec.com



	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.
	This symbol indicates this product is classified as Waste Electrical and Electronic Equipment (WEEE) in the European Union and should not be discarded with household waste. Contact your local authority for more information and details of your nearest approved disposal facility.
	The "Caution, hot surface" symbol indicates that the marked item may be hot. Ensure the apparatus is installed with plenty of space around the unit (> 6"/12.5cm) as this apparatus may generate heat under normal use. This equipment is not intended to be used on soft support (like beddings, blankets etc.). This equipment should always be placed on a flat, stable surface.
	To reduce the risk of fire and electric shock do not expose this apparatus to rain or moisture. Do not use in damp environments, e.g. bathrooms etc.
	Do not place objects containing liquids on, or near the product. Do not operate this apparatus or connect/disconnect a power plug whilst hands are wet.
	Do not attempt to gain access to the interior of the product. No user serviceable parts inside. Refer all servicing to qualified servicing personnel.

BEFORE USING YOUR AMPLIFIER

Voltage selection: 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 inlet 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 IEC 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 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 devices such as these generate extremely high levels of electronic noise.

Speaker output connections:

1. Make sure the correct speaker is connected at all times during operation.
2. Do not connect to a speaker load which is less than 8 Ohms in total.
3. Always connect to a cabinet of an appropriate power rating/handling.
4. Never use two cabinets of different/mismatched impedance.
5. Only connect speakers using a quality dedicated speaker cable. Never use an instrument cable.
6. Never connect headphones to the speaker outputs.
7. If you are unsure, please contact your Orange dealer.

Amplifier Heads:

- For one 16 Ohm cabinet — Use the 16 Ω speaker jack socket (rear panel).
- For two 16 Ohm cabinets — Use both the 8 Ω speaker jack sockets (rear panel).
- For one 8 Ohm cabinet — Use either of the 8 Ω speaker jack sockets (rear panel).

Valves

When powering up, ensure the amplifier is set to the warmup position on the front panel for a minimum of two minutes prior to performance. This will prolong the life of the valves. The HT fuse(s) (rear panel) will blow in the event of an output valve failure in order to protect the internal circuitry from damage. Orange recommends output valves are replaced in matched sets. Please note that Orange models fitted with EL34, 6L6 (except MK Ultra) & 6550/KT88 valves will also benefit from a bias adjustment, which should be undertaken by a qualified technician. When changing the HT fuse, gently push down on the fuse holder and turn anticlockwise to release the fuse.

Manufacturer:

Orange Music Electronic Co. Ltd, 108 Ripon Way, Borehamwood, Hertfordshire, WD6 2JA, UK
 Website: orangeamps.com Email: info@omec.com

EU Representative:

Authorised Rep Compliance Ltd, Ground Floor, 71 Lower Baggot Street, Dublin, D02 P593, Ireland
 Website: arccompliance.com

TOP PANEL

	POWER: Switches mains power to the amplifier on/off. Connect the supplied IEC/Mains cord to the AC Mains inlet (rear). The power lamp will illuminate when the mains switch is set to On. Set the VOL control to zero/minimum before switching on power to the amplifier.
	460v/WARMUP/335V: Power mode and warmup switch. In the centre position the amp is in warmup which keeps the valves heated. In the up position the amp is in 60 watts mode and in the down position the amp is in 30 watts mode.
	RESONANCE: The Resonance control adjusts the overall bass response of the amp. When turned anti-clockwise, these low frequencies are gradually removed, and are boosted when the control is turned clockwise. Boosting the resonance is a good way to create a full sound at lower volumes.
	PRESENCE: The Presence control filters the highest frequencies. When turned anti-clockwise, these frequencies are gradually removed, and are boosted when the control is turned clockwise. This upper-treble boost or cut is increasingly noticeable as volume rises, and has a far more dramatic effect on the top end of your tone than the Treble knob (see below).
	FOOTSWITCH VOLUME: The footswitch volume control sets the output volume of the amplifier when the Volume footswitch is plugged in (dis-engaged). As a "non-master"-style channel, the output valves will begin to saturate into overdrive as volume increases, giving your tone greater grit and crunch.
	VOLUME: The volume control adjusts the output volume of the amplifier. It is also the volume control when the footswitch is plugged in (engaged). As a "non-master"-style channel, the output valves will begin to saturate into overdrive as volume increases, giving your tone greater grit and crunch.
	TREBLE: This controls the volume of the treble frequencies.
	MIDS: This controls the volume of the mid-range frequencies.
	BASS: This controls the volume of the bass frequencies.
	GAIN: This adjusts the pre-amp gain level, increasing in saturation as the control is turned clockwise. Lower Gain settings produce cleaner tones and may require an increase in the volume to compensate. No signal will be present with the gain set to zero.
	BRIGHT SWITCH: This is a three-way switch that controls the brightness of the amplifier's tone. It becomes less noticeable as you increase the amps gain. In the central position, no brightness is engaged, leaving the amp as a perfect pedal platform. To the left adds a fine treble, and to the right adds a broad treble. Experiment with this switch turned on or off combined with other settings on your amp to really shape the tone to your exact taste.
	IINPUT: Use a quality shielded instrument cable to connect your instrument to this jack socket.

REAR PANEL	
	SPEAKER OUTPUTS: Use a quality speaker cable to connect your amp to a correctly rated loudspeaker cabinet. Refer to 'Before Using Your Amplifier' to ensure the correct power and impedance ratings are observed, and for more information, refer to our blog post on cab impedance.
	FX LOOP: Use two quality shielded instrument cables to connect external effects processors and pedals to these sockets. Connect the Send socket to the input of the processor or pedal chain, and the Return socket to the chain's output.
	VOLUME FOOTSWITCH: Insert a footswitch into this socket to toggle on and off the Footswitch Volume control on the front panel. Please note, the 'footswitch volume control' is in use when the pedal is dis-engaged. When the pedal is engaged the 'normal volume control' is in use. This is important to know when using a pedal with an LED indicator or some kind of remote switching control.
	VOLTAGE SELECTOR SWITCH: Refer to "Before Using Your Amplifier".
	HT FUSES: This fuse will blow in the event of output valve failure. Replace this fuse only with the exact type and rating as printed on the chassis.
	AC MAINS INPUT: Refer to "Before Using Your Amplifier". Connect the supplied IEC cable to the AC mains input. Ensure the Power switch is set to OFF before connecting the IEC cable.
	MAINS FUSE: The mains fuse is located in the tray directly below the AC Mains Inlet. If the mains fuse blows, replace it only with the exact type and rating as printed on the chassis.. Use only the correct fuse type. If the mains fuse repeatedly blows, contact your Orange dealer.

PRODUCT SPECIFICATION TABLE	
Features	Bright switch, Resonance, Presence, footswitchable volume boost, Changeable output power (60/30W)
Valves	PREAMP AND PHASE INVERTER: 3 X 12AX7 (ECC83) FX LOOP: 1 X 12AU7 (ECC82) OUTPUT STAGE: 2 X 6L6 or 2 x EL34
Output Power	60W (460V) 30W (335V)
Controls	Resonance, Presence, Footswitch Volume, Volume, Treble, Mid, Bass, Gain, Bright Switch
Output Impedance	1×16Ω, 1×8Ω or 2×16Ω
Mains Input Power	250 VA
Mains Input Voltage	100V / 110-120V / 220- 240V (DEPENDING ON REGION)
Mains Fuse	100-120V: T3.15A L 220-240V: T1.6A L
HT Fuse	T630mA H 250V