

ORANGE



CRUSH PRO SERIES OWNERS MANUAL

CR60C, CR120C & CR120H

THANK YOU!



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 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 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.

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IMPORTANT SAFETY INFORMATION



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.

- 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.
- Servicing: 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.



The voltage selector switch and mains fuse are factory set for the region in which your amplifier is intended to be sold. Do not tamper with this switch without express permission from Orange Music Electronic Company Ltd.



Connect the supplied mains cord to the AC Mains Input on the amplifier to your AC mains wall outlet. This Class I electrical equipment must be earthed. The correct mains fuse value for your region are displayed on the unit, close to the AC Mains Input. Replace only with the same type and value. If the mains fuse repeatedly blows, contact your Orange dealer.

EMI

To reduce the possibility of outside electrical interference during performance, operate your amplifier and instrument away from appliances/equipment that generate high levels of electronic/electromagnetic noise. This may include, but is not limited to: fluorescent lighting, refrigerators, motors, mobile phones, radios, computers etc.

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 Class B digital device, 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 into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Note: Changes or modifications to this equipment not expressly approved by Orange Amplification may void the user's authority to operate this equipment.

This Class B digital apparatus complies with Canadian Interference Regulations CAN ICES-3(B)/NMB-3(B). *Cet appareil numérique de classe B est conforme aux règlements CAN ICES-3(B)/NMB-3(B).*

BEFORE USING YOUR AMPLIFIER

Always ensure the correct speaker load (Ω) is connected to the **SPEAKER OUTPUT** terminal(s) at all times during operation. The speaker outputs are found on the rear of the amplifier and are wired in parallel. The minimum total load is 8Ω . Only connect cabinets as described below.

Note:

- Never use instrument cable to make speaker connections.
- Use only quality, unshielded speaker cable.
- Speaker cabinets must have power handling at least equal to the amplifier's rated output power.
- Never use two cabinets of mismatched impedance (Ω).

CR120 Head

- 1 x 8Ω OR 1 x 16Ω cabinet connected to either **SPEAKER OUTPUT** terminal.
- 2 x 16Ω cabinets connected to either **SPEAKER OUTPUT** terminal.

CR120C & CR60C Combos

The Crush Pro 60 and 120 Combos both have an internal speaker load of 16Ω . The internal speaker(s) is connected at the factory. When using an extension cabinet, connect a **16Ω** extension cabinet to the other speaker output.

FRONT PANEL FEATURES



POWER:

This switch turns on the mains power to the amplifier.



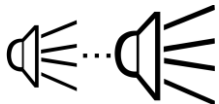
INPUT:

Plug your instrument into this jack socket.



CHANNEL:

This switches between CLEAN and DIRTY channels.



MASTER VOLUME:

Controls the overall volume of both CLEAN and DIRTY channels.



MASTER REVERB:

Controls the level of reverb applied to both CLEAN and DIRTY channels. The reverb type is selected using the toggle switch for either PLATE, HALL or SPRING.

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**VOLUME (Clean/Dirty Channel):**

This controls the volume of the corresponding channel. At higher VOLUME settings, the CLEAN channel will begin break up into natural overdrive for a more vintage ‘crunch’ tone. The overall volume can then be reduced by turning down the MASTER VOLUME control.

**BASS (Clean/Dirty Channel):**

This controls the low frequency response of the corresponding channel. Increasing the BASS produces deeper tones.

**TREBLE (Clean/Dirty Channel):**

This controls the high frequency response of the corresponding channel. Increasing the TREBLE brightens the sound whilst reducing the TREBLE darkens the tone.

**MIDDLE (Dirty Channel only):**

Controls the mid-range frequency response. Reducing mids will ‘thin out’ the tone, and can be used for a ‘scooped’ sound. Increasing the mids adds fullness.

**GAIN (Dirty Channel only):**

This controls the GAIN level. Increasing the GAIN will increase the distortion level. NOTE: With the GAIN control set to zero, no sound will be heard on the Dirty Channel. At lower GAIN settings, the Dirty Channel VOLUME control may have to be increased to compensate.

REAR PANEL FEATURES



SPEAKER OUTPUTS (16 Ohm, 16 Ohm)



Always ensure the correct speaker load is connected at all times during use. Please refer to “Using Your Amplifier” for correct speaker connections.



FOOTSWITCH jack sockets

Connect a latching footswitch, e.g. Orange FS-2, with a Tip/Sleeve (Mono T/S) instrument cable connection to remotely switch channel and/or engage the reverb.



FX LOOP (Send and Return)

Use the “Send” jack socket to go to the input of effects pedals such as delay, chorus, etc. Use the “Return” jack socket to return from the output of the effects being used.

FREE EXTENDED WARRANTY OFFER

Orange amplifiers are under warranty for one year subject to consumer protection laws in the country of purchase and distributor's terms and conditions, an additional year can be added by registering.

Speakers supplied with an Orange amp 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.

REGISTER RIGHT NOW AT www.orangeamps.com



This product complies with the WEEE Directive (2002/96/EC) marking requirement in the European Union. This affixed product label indicates that you must not discard this electrical/electronic product in domestic household waste in EU member states. Other territories may vary. Contact your local authority for more information.

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