

Manual V1.0

CRUSH 20RT 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

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.

This Orange product fulfils the requirements of IEC 60065:2001 (Seventh Edition) + A1:2005 + A2:2010 for Audio, Video and Similar Electronic Apparatus.

This 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.

This device complies with the Canadian Interference Regulations CAN ICES-3(B)/NMB-3(B).

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, 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.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

BEFORE YOU TURN IT ON...

BEFORE USING YOUR AMPLIFIER

IMPORTANT!

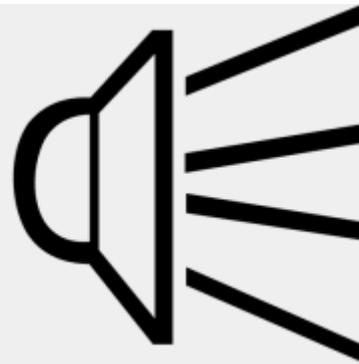
The voltage selector switch and mains fuse is set at the factory for the country or region in which this Orange product is intended to be sold. To prevent serious damage to the product, ensure that the rated AC mains voltage indicated on the product's rear panel agrees with the mains voltage from your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

PANEL FEATURES





Volume



Dirty/Clean

Adjusts the output level for each channel. Higher settings on the **Clean** channel will produce natural overdrive and breakup. *Note: with the **Dirty** channel **Gain** set to zero, no sound will be heard on the **Dirty** channel.*



Treble

Adjusts the high-end response. Increasing the **Treble** produces brighter tones.



Middle

Adjusts the mid-range response. Increase the **Middle** control for a 'fatter' tone, especially with thin sounding pickups. Reduce the **Middle** control with higher **Gain** settings for a 'scooped' modern tone.



Bass

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



Gain

Dirty Channel

Experiment with the **Gain** control for a wide range of ‘crunch’ and heavily distorted tones. Higher settings add more distortion and saturation. Balance with the **Dirty Volume** control to achieve the desired output level.



Power

The power light will illuminate when the **Power** switch (rear) is set to **ON**.



Phones

Connect headphones via a stereo 1/4" jack for silent practice. The **Phones** output features Cabinet Simulation and can also be used to connect the amp to a mixer or recording console. *Avoid using headphones for extended periods at loud levels.*



Aux In

Connect MP3 players etc. to the Aux Input using a 3.5mm stereo jack. *Note: Audio is summed to mono and is unaffected by the amp's controls.*



Clean/Dirty Selector Switch

Selects between the **Clean** and **Dirty** channels. This can be switched remotely via a footswitch (see rear panel)



Input

Connect your instrument to the **Input** jack via a quality shielded instrument cable.



Reverb

Adjusts the reverb level for both channels. Higher settings add longer trails for a spatial effect.

Tuner

Depress the ON/OFF button to engage the integrated chromatic **Tuner**.

*Set the **Volume** to zero for silent tuning if required.*

The appropriate red LED will illuminate on the display to indicate the note being played. If the green # LED also illuminates, this indicates a chromatic note, e.g. F Sharp (F#).

The > arrow LED indicates the note is tuned too **low** in pitch.

The < arrow LED indicates the note is tuned too **high** in pitch.

Adjust the string's pitch in the direction shown by the arrows until the green **OK** LED lit.

ORANGE

CRUSH 20RT



AC INPUT

- 100V
- 120V
- 230V

FUSE:
100V/120V: T630mA
230V: T315mA

~ AC MAINS
50/60Hz



39VA

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, THIS APPARATUS SHOULD NOT BE EXPOSED TO RAIN OR MOISTURE, AND SHOULD NOT BE FILLED WITH LIQUIDS SUCH AS WATER. SHOULD NOT BE PLACED ON THIS APPARATUS TO PREVENT THE RISK OF FIRE. HAZARD! REPLACE WITH SAME TYPE 250 VOLT FUSE.

AVIS: DANS LE BUT DE RÉDUIRE LES RISQUES D'INCENDIE OU DE DÉCHARGE ÉLECTRIQUE, CET APPAREIL NE DOIT PAS ÊTRE EXPOSÉ À LA PLUIE OU À L'HUMIDITÉ ET AUCUN OBJET NE DOIT ÊTRE POSÉ SUR L'APPAREIL POUR PRÉVENIR LE RISQUE D'INCENDIE. REMPLACEZ LA LIQUIÈRE, S'IL Y A UN VASE, NE DOIT ÊTRE POSÉ SUR CE CÉLÉPHI REMPLACER PAR UN LISSIBLE DE MÊME TYPE ET DE 250 VOLTS.

POWER



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ORANGE LONDON ENGLAND VOICE OF THE WORLD	
MODEL	CRUSH 20RT
TYPE	GUITAR AMPLIFIER
POWER	20 WATTS RMS
SERIAL NO.	SSS02-0614
Designed in England made in China	



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Channel

Connect a latching footswitch (e.g. FS-1) to remotely switch between **Clean** and **Dirty** channels. *The front panel channel switch is disengaged when using a footswitch. An*

*Orange FS-1 LED will illuminate when the **Clean** channel is selected.*

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 pull-out tray underneath the AC Mains Input. If the mains fuse blows, replace **only** with the exact rating for your region . If the mains fuse continues to blow contact your **Orange** dealer.

100V/120V: T630mA

230V: T315mA

Voltage Selector Switch

IMPORTANT!

Refer to '**Before Using Your Amplifier**'.

Power Switch

Ensure the amp's volume controls are set to zero before switching on power to the amplifier. Switch off when not in use.

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

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

RELATED ACCESSORIES

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

