OWNER'S MANUAL



CRUSH 20 GUITAR 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 rear of the amplifier's chassis. 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.

CAUTION! TO REDUCE THE RISK OF FIRE. REPLACE ONLY WITH SAME TYPE FUSE

ATTENTION! UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK **WARNING!** DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT REMOVE CHASSIS(OR BACK), NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

THE UNIT SHOULD BE INSTALLED SO THAT ITS LOCATION OR POSITION DOES NOT INTERFERE WITH ITS PROPER

VENTILATION. FOR EXAMPLE, IT SHOULD NOT BE SITUATED ON A BED, SOFA, RUG OR SIMILAR SURFACE THAT MAY

BLOCK THE VENTILATION OPENINGS.

INTRODUCTION

Since 1968, Orange has been a pioneering force in the guitar amplification industry. With a team of the world's finest engineers, Orange continues to push back the boundaries of conventional amplifier design. We hope your new purchase gives you many years of service and pleasure. Welcome to the legendary British guitar amplifier owners club.

USING YOUR AMPLIFIER

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

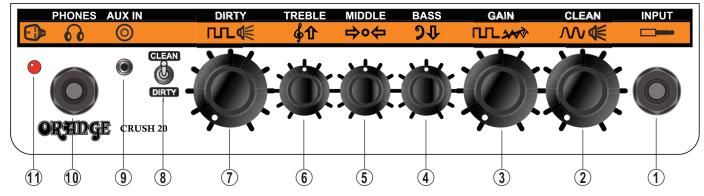
To prevent hum and electrical noise operate your amplifier and instruments as far away from other electronic devices (especially fluorescent and neon lamps) as possible as these generate extremely high levels of electrical noise.



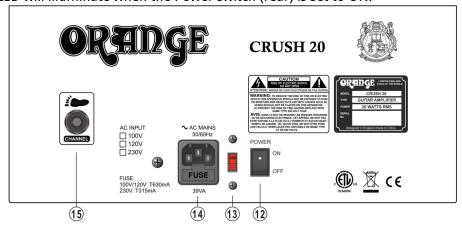
CAUTION

OF ELECTRIC SHOCK DO NOT OPEN

ORANGE MUSIC ELECTRONIC CO. LTD



- 1) Input Use a quality shielded instrument cable to connect your instrument to the Input jack socket.
- **2) Clean Volume** Adjusts the output volume of the Clean channel. At higher settings, the amplifier will break-up into natural overdrive.
- **3) Gain** Adjusts the gain level for the Dirty channel. Experiment with the Gain control for a wide range of 'crunch' and heavily distorted tones.
- **4) Bass -** Adjusts the low-end frequencies. Increasing the Bass control produces deeper tones.
- **5) Middle -** Adjusts the mid-range frequencies. Increasing the Middle control produces a 'fatter' sound. With higher Gain settings, reduce the mid-range frequencies for a more 'scooped' modern tone.
- **6) Treble** Adjusts the high-end frequencies. Increasing the Treble control produces brighter tones.
- **7) Dirty Volume** Adjusts the output volume of the Dirty channel. NOTE: With the Gain set to zero, no sound will be present.
- 8) Clean/Dirty Switch Selects between the Clean or Dirty channel.
- 9) AUX In For use with MP3 players, laptops etc. The audio signal is internally summed to mono.
- **10) Phones -** For use with most stereo headphones. The Phones jack also features 'cabinet simulation' for sending a signal to a recording console/mixer. The internal speaker is disconnected when the Phones jack is in use.
- 11) Power This LED will illuminate when the Power switch (rear) is set to ON.



- 12) Power Switch Switches the mains power supply to the amplifier ON/OFF.
- **13) Voltage Selector Switch IMPORTANT:** The voltage selector switch and mains fuse is set at the factory for the country or region in which the product is intended to be sold.

Europe: Voltage selector set to 230V, fuse = T315mA North America / Japan: Voltage selector set to 120V/100V, fuse = T630mA

- **14) AC Mains inlet and fuse holder** Connect the supplied IEC cable to your mains supply. The mains fuse is located in the fuse tray beneath the inlet.
- **15) Footswitch** Connect a latching footswitch (e.g. Orange FS-1) to remotely switch between Clean and Dirty channels.