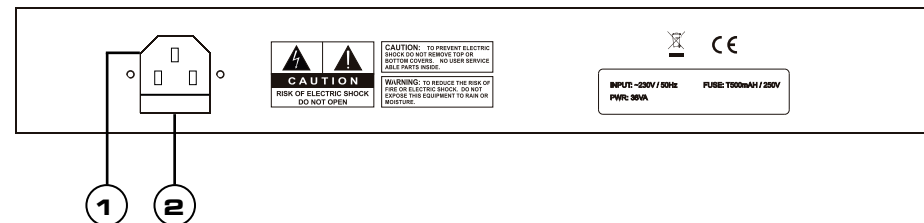


## FRONT PANEL:

- 1. INPUT:** Plug your guitar in here. We recommend that you always use a high-quality shielded guitar cable to prevent any background noise interference or unwanted feedback.
- 2. VOLUME:** This control determines the output volume of the amplifier's clean setting.
- 3. (Overdrive) GAIN:** This control determines the distortion intensity of the amplifier's overdrive setting. Adding GAIN will make your guitar sound more distorted.
- 4. (Overdrive) SWITCH:** This switch activates the amplifier's built-in overdrive function, which adds distortion to the signal.
- 5. (Overdrive) VOLUME:** This control determines the output volume of the amplifier's overdrive setting. Adding VOLUME will make your distorted guitar sound louder and clearer.
- 6. TREBLE:** This control determines the level of high frequencies in the output signal. Adding TREBLE will make your guitar sound brighter and sharper.
- 7. MID:** This control determines the level of middle frequencies in the output signal. Adding MID will make your guitar sound rounder and fuller.
- 8. PARAMETRIC MID:** This control allows you to fine tune your guitar sound by cutting or boosting the mid frequency parameters of the output signal. At a low level, the PARAMETRIC MID control will emphasize the lower mids, while increasing the level will bring out the upper mids. The PARAMETRIC MID control can help you explore a wide variety of different guitar tones.
- 9. BASS:** This control determines the level of low frequencies in the output signal. Adding BASS will make your guitar sound warmer and heavier.
- 10. BUILT-IN EFFECT:**
  - **SPRING REVERB (20 GA R only):** This is the reverb intensity control. This controls the amount of reverb that is added back to the original dry signal. Adding REVERB will produce a reverberation effect in your guitar sound, as though you were playing in a large hall. A little can go a long way in adding that special depth to your sound. If engaged, the reverb is always active in either overdrive or clean mode.
  - **DIGITAL DELAY (20 GA DR only):** This control adds a DIGITAL REVERB effect, as well as a short DIGITAL DELAY to the dry signal. Turning the control up will increase the reverb as well as the number of repeats.
  - **DSP (20 GA DSP only):**
    - **Volume:** This control determines the mix level of the amplifier's internal DSP effects in relation to the dry signal when DSP is engaged.
    - **Program:** This selector enables the user to choose among 16 internal DSP effects: **1**-Long dry Delay • **2**-Flanger + short Reverb • **3**-Flanger + long Reverb • **4**-Short Delay w/ multiple repeat + medium Reverb • **5**-Medium Delay w/ multiple repeat + long Reverb • **6**-Short Reverb 2 • **7**-Medium Reverb 2 • **8**-Deep Chorus + medium Reverb • **9**-Normal Chorus + short Reverb • **10**-Short Delay w/ short repeat • **11**-Slap-back Delay • **12**-Cathedral • **13**-Large Hall • **14**-Short Reverb 1 + very light Chorus • **15**-Medium Reverb 1 • **16**-Medium wet Delay w/ multiple repeat.

- 11. CD/MP3 INPUT:** This is a line level 1/4" (Ø 6.3 mm) stereo jack into which an MP3/CD/Tape player may be connected.
- 12. EXTERNAL SPEAKER (GA 20, 20 R & 20 DR only):** This is a 1/4" (Ø 6,3 mm) jack for connecting an external speaker cabinet. The external speaker must have a minimum impedance of 4 Ohms.
- 13. PHONES:** This is a 1/4" (Ø 6.3 mm) stereo jack output to connect the headphones. When headphones are connected, no sound is produced from the speaker.
- 14. POWER LED:** When this red LED is lit, the amplifier is ready to work. When it is off, it means the amplifier is powered off.
- 15. POWER:** This switch turns the amplifier on or off.



## BACK PANEL:

**WARNING:** This amplifier must be earthed. Please check that the supply voltage details given on the rating label (located on the rear panel) are in accordance with your electricity supply.

- ① MAINS INPUT:** This is the input socket into which the mains power cable must be connected. This amplifier is supplied with a power cable with a moulded-on plug. If the socket outlets in the home are not suitable for this plug, use an appropriate plug adapter that can handle the power required for the amplifier.
- ② POWER FUSE:** In the event of the power fuse having to be replaced, first unplug the power cable from the mains outlet. Then remove the fuse cover and replace the power fuse with another fuse of the same type and value. Never plug the power cable back into the mains outlet without the fuse cover. If the power fuse blows up again when powering on the amplifier, take the apparatus to a suitable service centre for repair.

TECHNICAL SPECIFICATIONS	
<b>Max. Rated Power / Loudspeaker</b>	20 Watts RMS @ 4 Ohms load / 8" Speaker
<b>Frequency Response</b>	80 Hz to 15 kHz
<b>Total Harmonic Distortion</b>	0.8% (Clean Mode)
<b>Signal to Noise Ratio</b>	- 55 dB @ max Rated Power
<b>Input Impedance</b>	220k Ohms
<b>Power Consumption</b>	30 Watts max
<b>Maximum Input Level</b>	45 mV (RMS)
<b>Maximum Gain</b>	42 dB (@ 1kHz)
<b>Dimensions (H x W x D)</b>	37.5 x 41.5 x 21 cm/ 14.8 x 16.3 x 8.3 in.
<b>Weight</b>	8.9 kg / 19.5 lbs

Features and Specifications are subject to change without notice.

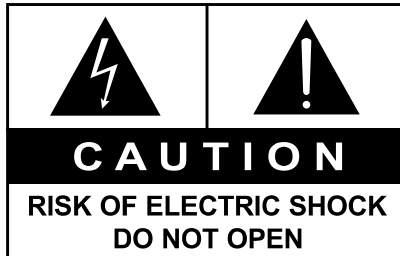
## INSTRUCTIONS FOR USE:

Plug the mains lead into a suitable power socket and connect your instrument to the input socket of the amplifier with a suitable guitar lead (this lead is not supplied with the amplifier, but is normally supplied with the electric guitar). Finally, press the Power Switch to the ON position, the power LED will light up and your amplifier is ready for use.

## IMPORTANT SAFETY INSTRUCTIONS:

### READ AND KEEP THESE INSTRUCTIONS HEED ALL WARNING.

- If, after you have followed the instructions outlined above, your amplifier fails to function, please contact your dealer. Under no circumstances should the amplifier be opened. Leave all servicing to qualified personnel.
- Electrical appliances must never be used in conditions of high humidity or heat. To prevent any risk of fire or electric shock, never spill or splash liquids on the amplifier. Should this happen, unplug the power cable from the mains outlet immediately.
- We would like to draw your attention to the instructions printed on the notice attached to the back of the amplifier.



**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT REMOVE TOP OR BOTTOM COVERS. NO USER SERVICEABLE PARTS INSIDE.

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

- Exposure to extremely high noise levels may cause permanent hearing damage (especially when using headphones). Please use this amplifier responsibly for you and your neighbourhood.

## MARKING & CONFORMITY:

1. The CE mark on this product means it conforms to the EMC Directive (89/69/EEC), CE marking Directive (93/68/EEC) and Low Voltage Directive (72/23/EEC).
2. The «Crossed-out Wheeled Bin» is to draw your attention to the WEEE (Waste Electric & Electronic Equipment) Directive (2002/96/EC). It means this apparatus must be collected separately for recycling.
3. «RoHS compliant» means this device conforms to the Directive (2002/95/EC) on the restriction of the use of certain hazardous substances in electrical and electronic equipments, such as: Mercury, Lead, Cadmium, Hexavalent Chromium, Polybrominated Biphenyl (PBB) and Polybrominated Diphenyl Esters (PBDE).

### DISTRIBUTOR / DEALER



EMD Music 01-2008-UK



## USER'S MANUAL



## GUITAR AMPLIFIER - 20 GA

W/ SPRING REVERB - 20 GA R  
W/ DIGITAL REVERB/DELAY - 20 GA DR  
W/ DIGITAL SIGNAL PROCESSOR - 20 GA DSP