



THE HARLEQUIN

Spec:	6 Watts. Class A. Single ended output.
Valves:	1 x EL84 output stage. 2 x 12AX7s pre amp
Cabinet:	Solid pine with ply baffle board permanently dadoed into cabinet. Dimensions: 600mm x 450mm x 250mm covered in custom Made ox-blood vinyl. Weight 19kgs.
Speaker:	12" Celestion Vintage 30.
Hardware:	All corners, screws, cup washers, handle fixings etc. are nickel plated. Powder coated chassis. Leather handle.
Transformers:	Custom designed in-house and hand wound.
Construction Methods:	Totally hand wired throughout and hand assembled. No PCBs of any sort.
Controls:	Hi and lo inputs, volume, which simultaneously controls first And second gain stages (tandem pot), treble, bass, master volume and voice switch, which alters the frequency range over which the tone controls operate.

The idea behind the amp is to produce something that captures the rich, classic tones of amps from the past, whilst having the flexibility demanded by the modern player, but without the incredibly high price tag normally associated with products of this quality. To make amplifiers that are hand made and will last a lifetime by employing traditional construction methods using only quality components.

The Harlequin was designed to be used in the studio, where it records superbly, and for home use, where you can get a proper tone in your living room without being too loud.

All of us involved in the company are guitarists and our amplifiers are designed by ear, not oscilloscopes. We always thought that guitarists have a better ear for guitar sounds than your archetypal electronics engineer. This approach to amp design has given us what we feel is most definitely a benchmark tone.

We hope you enjoy playing through the Harlequin. It is very easy to use and is packed with totally authentic class A tones, clean and dirty. Being just 6 watts you can drive the output stage really hard. **HAVE FUN!!!**

Cornford Harlequin Control Operation

Hi Input – This is a high impedance input so as to avoid loading passive guitar pick-ups. Treat this as the normal input.

Lo Input - This is a lower impedance of – 6db sensitivity . This is the input to use should you want less gain.

N.B. When both inputs are in use, they are both low sensitivity.

Voice - The voice switch alters the frequency range over which the tone control operates.

Volume - Simultaneously controls the 1st and 2nd gain stages (tandem pot).

Bass - Adjusts the low frequency response of the pre-amp.

Treble - Adjusts the high frequency response of the pre-amp.

Master - Adjusts the overall output level.

Mains - Power on / off switch.

Speaker Output - Found on the underside of the chassis. Designed to connect the amplifier to 4 or 8 ohm speaker load and is important to note that a resistive load or loudspeaker must always be connected before switching the amplifier on to play.

Suggested settings for the Cornford Harlequin

Please note that these are just a few suggested settings, please experiment and always use your ear.

	Volume	Bass	Treble	Master
Clean	3 – 6*	7	7	11
Crunch	6 – 8	7	7	7 - 11
Lead	11	7	7	7 - 9
Texas blues	8 - 9	8	8	11

* Depending on the guitar that you use.

Voice switch set front or rear to personal choice.

NB. Most people would have this set to the front 80% of the time.

Note also that turning the guitar volume down with crunchy rhythm and lead settings can result in some really fat, clean tones.

The controls are very sensitive and altering them by small degrees will give many different sounds. I.e. Don't just try setting everything to 11 !

Adjust master volume to whatever level is appropriate to the situation that the amp is being used in. These are just some settings at a pretty constant output level that we like.

Important Safety Instructions

WARNING — When using electrical products, basic precautions should be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water – for example, near a bathtub, wash bowl, kitchen sink, in a wet basement, near a swimming pool or the like.
3. This product may cause permanent hearing loss. Do not operate for long periods of time at high volume level or at any level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
4. The product should be located so that its location or position does not interfere with its proper ventilation.
5. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
6. The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
7. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
8. The product should be serviced by qualified personnel when:
 - a. The power supply cord or the plug has been damaged: or
 - b. Objects have fallen, or liquid has been spilled into the product: or
 - c. The product has been exposed to rain or moisture: or
 - d. The product does not appear to operate normally or exhibits a marked change in performance: or
 - e. The product has been dropped, or the enclosure damaged.
9. Do not attempt to service the product. All servicing should be referred to qualified personnel.
10. For continued protection against risk of fire, replace fuses only with those of the same type and rating as indicated on the back of the product.
11. Always connect the speaker before switching on.

GROUNDING INSTRUCTIONS

This product must be grounded (earthed). If it should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. This product is equipped with a supply cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with the local codes and ordinances.

DANGER

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet fitted.

The wires in this mains lead are coloured with the following code:

	EARTH	NEUTRAL	LIVE
U.S.A.	Green	White	Black
U.K.	Green/Yellow	Blue	Brown

CE mark for European Harmonised Standards

The CE mark which is attached to these products means it conforms to EMC Directive (89/69/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (72/23/EEC).

VALVES AND FUSES

All valves and fuses fitted to a Cornford amplifier are consumable items and, therefore, are not covered under the manufacturer's guarantee.