CARLSBRO

INSTRUCTION GUIDE

SHERWOOD BABY Electro Acoustic Guitar Combo

1.1 INTRODUCTION

Thank you for purchasing a Carlsbro Sherwood Baby combo. With care it will provide many years of reliable service. In order to obtain the best from the amplifier, please take a little time to read this guide thoroughly.

The Sherwood Baby is a straightforward but versatile 30 watt amplifier designed primarily for the acoustic guitarist. It features twin inputs for passive and active guitars, three band active EQ with parametric mid, an effects loop and line out socket. A phase inversion switch is provided to aid feedback cancellation and correct phase polarity when combining the use of the amplifier with a microphone for recording purposes.

1.2 UNPACKING AND INSPECTION

After unpacking the unit please inspect it carefully. If the unit appears to have been damaged during transit, return it to the dealer from whom it was purchased in its original packaging.

1.3 SAFETY INSTRUCTIONS

Should a mains plug not be fitted, the following wiring convention must be used:

BROWN	LIVE
BLUE	NEUTRAL
GREEN & YELLOW	EARTH

IMPORTANT: This unit must be earthed! Mise à la Terre

The mains fuse is located below the IEC mains power input socket. Should it need replacing, ensure that the fuse fitted is of the same type and rating. This unit contains no user serviceable parts. Should a fault occur, please refer servicing to a qualified engineer. Do not expose the unit to rain or moisture.

2.1 FRONT PANEL FEATURES

1) *Phase inversion switch*: Depressing this switch inverts the phase of the input to the amplifier. By inverting the phase of the amplifier, any acoustic feedback from the amp back to the guitar can be minimised (dependent upon the distance of the player from the amp). Try this switch in both positions to discover the one that enables the maximum volume before feedback occurs.

2) *Passive input*: This is an ultra-high impedance input equally suited to piezo transducers, passive pickups and electric guitars.

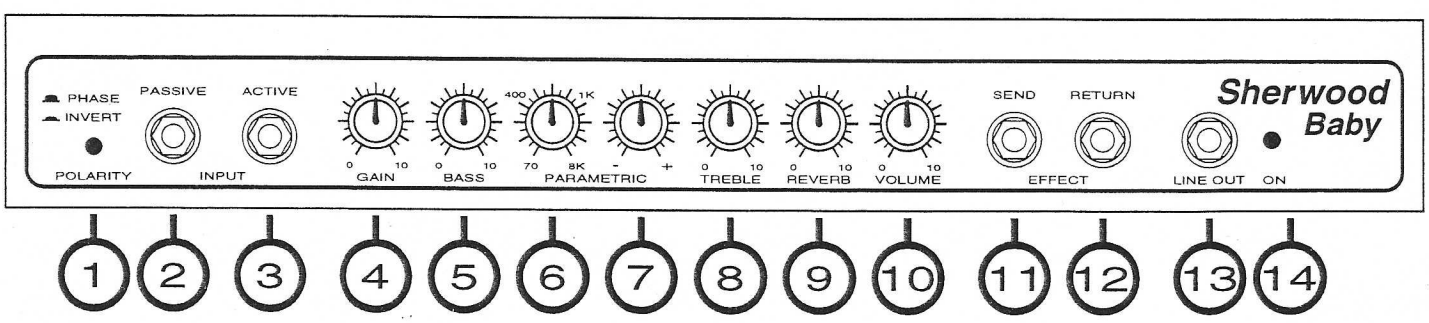
3) *Active input*: This input is suitable for guitars featuring an onboard battery powered pre-amp.

7) *Cut/Boost*: Determines the amount of cut or boost at the frequency selected by control (6). Use these two controls together to obtain the best sound. Note that dramatic settings will sound unrealistic.

8) *Treble*: Determines the amount of treble in the sound.

9) *Reverb*: This control sets the level of reverberation effect from the inbuilt Accutronics spring reverb.

10) *Volume*: This is the master volume control for the amplifier. It should be adjusted in conjunction with control (4) for the best compromise of low noise and low distortion.



4) *Gain*: Sets the input gain of the amplifier. Adjust this knob in conjunction with the main volume and tone controls to give a reasonable volume level without distortion.

5) *Bass*: This control determines the amount of bass in the sound.

6) *Frequency*: This control sets the frequency at which the mid control operates. It can be adjusted from the lowest 'E' a guitar can produce (about 80Hz) right up to 8KHz (to enhance the higher harmonics for a more 'sparkling' sound).

11) *FX Send* and (12) *FX return*: Insert any effects processor (such as digital reverb, chorus, delay etc) between the send and return sockets. The level of output that appears at the send socket can be controlled by the input gain (4).

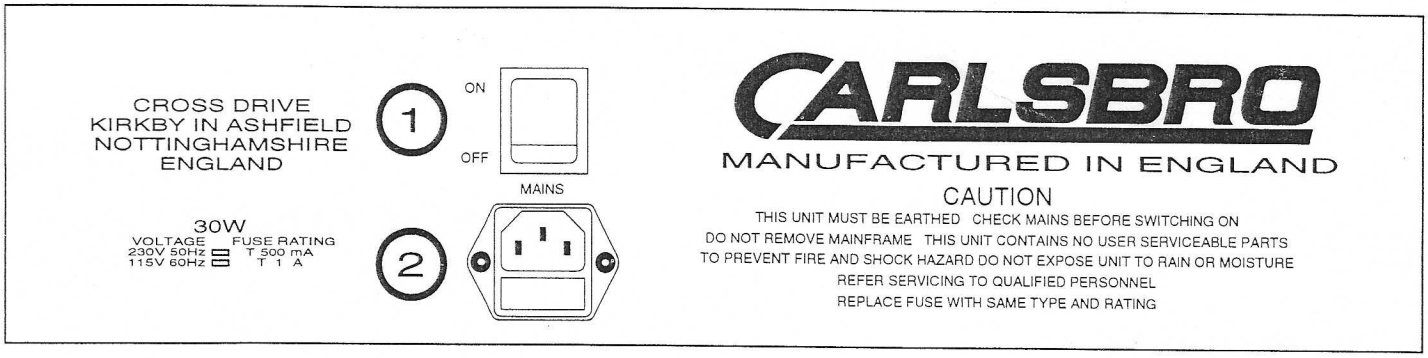
13) *Line out*: This is a line level output suitable for connection to recording equipment, PA or an external mixing desk.

14) *Power on LED*: When the unit is switched on, this LED will illuminate immediately. When power is switched off, the LED will extinguish gradually.

2.2 REAR PANEL FEATURES

1) *Mains switch*: Turns mains power to the unit on and off.
NOTE: Always set the volume control to '0' before switching the unit on or off.

2) *IEC input socket*: Connect the supplied IEC mains lead here. Should the mains fuse need replacing, it is located below the mains input. Replace the fuse only with one of the same type and rating.



2.3 ELECTRO-ACOUSTIC TECHNIQUES

There are several types of electro-acoustic guitar: those with pickups and/or piezo transducers, those with a battery powered pre-amplifier or simple passive transducers. The Sherwood Baby has been designed with all of these guitars in mind, including conventional electric guitars.

Because of the construction of an acoustic guitar, there are several panel and body resonances which, when vibrated by the strings, amplify their sound and give the guitar its familiar timbre. When the guitar is electrified, however, these resonances become frequencies at which the guitar is prone to acoustic feedback from the speaker of the amplifier. The Sherwood amplifier is provided with two simple means of minimising this effect. By 'finding' the frequency of the feedback using the mid sweep control and then cutting the response at this frequency using the parametric mid control, a single frequency of feedback can be eliminated. However, this has the effect of changing the sound of the guitar.

Feedback occurs when sound from the amplifier arrives at the guitar in phase with the vibration of the strings or body. The frequency of the feedback is dependent on the distance of the guitar from the amplifier - by moving half a wavelength of the feedback frequency, that feedback can be eliminated! The phase inversion switch is provided to aid with feedback elimination in this manner. It is not important to understand why this helps; simply try the switch in both positions each time you use the amp (or move the guitar) and use the one that sounds best. When using the guitar close to the amplifier, you may find that the amp sounds different dependent upon whether you have the switch in or out. This is not the case: what you are hearing is the sum (or difference) of the amplifier's output and the guitar's actual acoustic sound.

2.4 SPECIFICATIONS

Power output:	30 watts rms (at onset of clip)
Input impedance (passive):	>10MΩ (AC bootstrapped)
Input impedance (active):	100KΩ
Bass:	±14dB @ 70Hz (shelving)
Mid sweep:	70Hz to 8KHz
Mid cut/boost:	±20dB (Q = 1)
Treble:	±14dB @ 15KHz (shelving)
Sensitivity (gain at max):	35mV rms (nominal for full power)
Send:	0dBu (0.775Vrms) @ 100Ω (nominal)
Return:	0dBu (0.775Vrms) @ 100KΩ (nominal)
Line out	0dBu (0.775Vrms) @ 100Ω (nominal)
Power requirements:	230VAC ± 10% @ 500mA (max)
	115VAC ± 10% @ 1A (max)
Height:	410 mm
Width:	480 mm
Depth:	230 mm
Weight:	12Kg

In pursuing a policy of continual improvement, Carlsbro Electronics Ltd reserve the right to alter the above specifications without prior notice

SERVICE

All possible care has been taken to ensure every CARLSBRO product is satisfactory and reliable. Each unit has been thoroughly examined and tested before leaving the factory. If correctly used for the purpose for which it was designed, it will give good service for many years. In the case of a technical problem, please go through the following procedure:

Contact the dealer from whom the unit was purchased and describe the symptoms of the fault. The dealer should be the specialist in your area best able to service your equipment and may be able to resolve your problem immediately. If it is necessary to return the equipment to the national distributor for your country, it is most important that you use the original packaging in order to protect the unit from physical damage. CARLSBRO or the distributor cannot be held responsible for damage to the unit if it is not properly packaged. Include a note with the unit giving details of the symptoms of the problem and give your name and address. The unit does not contain any user serviceable parts. Always consult your dealer first if any problem arises, or write directly to your CARLSBRO distributor quoting the serial number and date of purchase of the equipment.

ON TOUR SPARES

In order to maintain the appearance and maximise the value of the product, CARLSBRO produce a range of "ON TOUR" spares and accessories. All items can be purchased through your local dealer, or in the event of difficulty by contacting the Sale office at the address below.

CARLSBRO

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