



**Woodham**

*10th Anniversary*

**OWNERS MANUAL**

**WOODHAM 300B SINGLE ENDED CLASS A  
STEREO / MONO POWER AMPLIFIER**

Manufactured in the United Kingdom by

C. R. Developments Limited.  
8 Craftsman Square,  
Temple Farm Industrial Estate,  
Sutton Road,  
Spouthend-on-Sea, Essex, SS2 5RH.

## INTRODUCTION

C.R. manufacture a range of high quality tube amplifiers which have established a world wide reputation for high quality audio performance. Our integrated amplifiers demonstrate that high quality audiophile performance and cleanly styled aesthetics are compatible and not mutually exclusive !

We hope that our products will combine with other elements of your hi-fi system to provide hours of musical enjoyment.

Please read the following information which will help you obtain the best results from your C.R. tube amplifier.

## WOODHAM POWER AMPLIFIER

All triode single ended pure Class "A" power amplifier which may be used in either Stereo or Mono configuration, the mode of operation is selected simply by external connections to the phono input sockets and loudspeaker binding posts.

For Stereo operation connect left and right hand channels as shown by the markings on the rear panel for stereo operation. If the amplifier is to be used as a mono power amplifier the connections are shown on the rear panel are clearly marked :-

- 1 Switch the amplifier off.
- 2 Fit the short phono to phono cable to join the left and right input sockets.
- 3 Connect the loudspeaker to the binding posts marked:-  
MONO OUTPUT, COMMON - 8OHM

## INSTALLATION

Carefully unpack the amplifier, it is recommended the packaging is retained for reuse if the unit is to be transported later.

The standard finish for C.R. amplifiers is paint and polished stainless steel. These are very durable but the use of cleaning agents, abrasives and polishes should be avoided if the high quality finish is to be retained. Dusting with a soft cloth is all that will be required to maintain the product in good condition.

Some amplifier models are delivered with the output tubes removed and individually packed. Each tube is marked with a number which corresponds to the position in which it should be placed. (See fig. 1)



## **INSTALLATION cont.**

Carefully insert each tube in turn, ensure tubes are fitted in the correct orientation and pushed firmly into their sockets.

NOTE: The 300B output tubes must be fitted correctly, inspect the tube base and notice 2 large pins and 2 smaller pins, ensure the large pins are correctly fitted into the 2 large sockets on the tube socket.

The optional protective cover or cage is fitted to the amplifier by screws which fit into pre-drilled holes in either side of the main chassis. Do not attempt to fit or remove the cover while the amplifier is in use.

Use only the moulded mains cable provided.

Ensure the amplifier is connected to a mains earth at all times during use.

Position the amplifier on a suitable support table or shelf capable of supporting the units weight (please see the separate specifications for each model). Allow adequate space for ventilation.

## **CONNECTIONS AND CABLES**

Use high quality phono plugs and interconnect cables for connection to source components.

It is recommended that all interconnect cables are kept as short as possible to minimise signal loss. Low capacitance cables are preferred and generally these types will minimise losses.

Connect the amplifier to loudspeakers with a nominal impedance of at least 6 Ohms for optimum performance. Loudspeaker cables with a minimum cross section of 1.5 sq. mm are recommended.

Take care no loose strands of wire are visible between the loudspeaker terminals, short circuits may damage the amplifier.

After making all connections connect the amplifier to a mains supply, ensure the volume control is turned down to minimum and switch on. After a few seconds the valve heaters will begin to glow. After approximately 15 seconds adjust the volume control to the desired sound level, the sound quality should be crisp and clear. If there is audible distortion or unwanted noise switch off and check all wiring and connections.

If problem persists consult your dealer or telephone 01702 469055 for advice.



## CONNECTIONS AND CABLES cont.

In the event of the amplifier becoming faulty please contact your retailer or return the unit for manufacturers repair. Do not attempt to dismantle, modify or repair the amplifier, to do so may invalidate the manufacturers warranty.

**NOTE:** No user replacement parts are fitted, return to manufacturer for repair.

**ENSURE THE VALVE AMPLIFIER IS NOT SWITCHED ON WITHOUT THE LOUDSPEAKERS CONNECTED.**

## OPERATION

Valves, or Themionic Tubes, are rugged components but they have a finite operating life of several thousand hours continuous use. Observation of the following points will help prevent premature failure and ensure many hours of listening pleasure.

- 1 Valve amplifiers warm up rapidly, it is not necessary or desirable to leave the amplifier permanently switched on to ensure the best performance. It is recommended that the amplifier should be switched off when not in use to conserve valve life.
- 2 Do not switch the amplifier on when hot, i.e. immediately after prior use, always allow the valves to cool completely before switching on again.
- 3 Always use the amplifier within it's performance envelope, persistent overloading, indicated by "clipping", a clearly harsh and audibly distorted sound, will shorten tube life.

The valve set supplied with the amplifier is guaranteed for 6 months only.

## VALVE REPLACEMENT

The tubes are the heart of an amplifier, they have a finite operating life and will finally require replacement. Routine replacement is not necessary, an obvious deterioration in sound quality, output power or both, will be clearly apparent.

Tube replacement is a simple procedure and may be carried out by your dealer, chosen by C.R. for his technical expertise, who will also inspect the amplifier. Alternatively the user may install the replacement valve providing the following procedures are carefully followed.

Valves may be replaced as either a complete set of drive and output valves or, depending upon the age and level of use, only the output valves may require replacement.



## VALVE REPLACEMENT

- 1 Switch off the amplifier, disconnect the mains supply and allow the valves to cool completely.
- 2 Unpack the new tubes and inspect for obvious damage, e.g. bent pins or broken glass.
- 3 Carefully unplug and remove each valve and replace with a new one. Ensure the new valve has the same identifying part number as the component it is replacing.

## GROUND LIFT SWITCH

All power amplifiers are fitted with "Ground Lift" switches to simplify installation of multi amplifier systems.

This switch removes the ground or earth connection between the amplifier electronics and chassis. The switch does not affect the mains earth connection, it is essential that the amplifier is always connected to a mains earth.

## SIGNAL INPUTS

C.R. power amplifiers have been designed for use with our pre-amplifiers and integrated amplifiers.

As all models have high impedance inputs it is important that signal input are not left "open circuit" or unconnected. Open inputs may cause instability or spurious oscillations and should be avoided when the amplifier is switched on.

Do not insert or remove signal connections while the amplifier is switched on.



## Woodham Power Amplifier

All triode single ended pure Class "A" power amplifier.

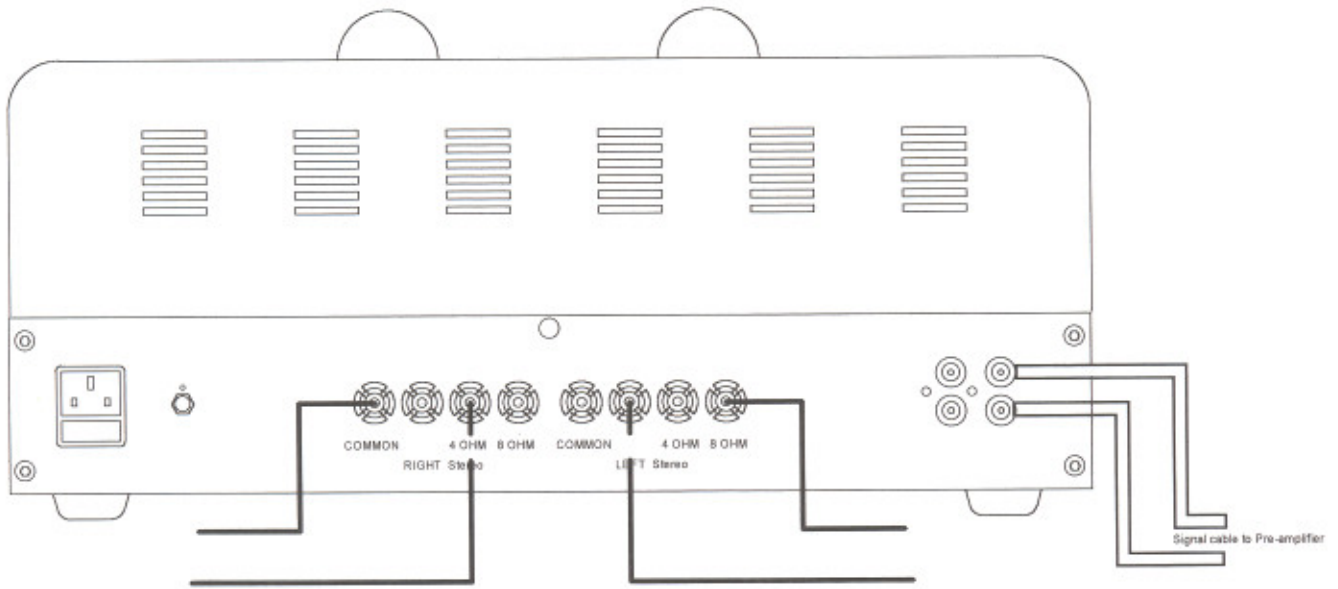
### SPECIFICATION

INPUT SUPPLY	115/230v 50/60Hz
POWER CONSUMPTION	130 VA
OUTPUT POWER	Stereo      7 W.P.C. 8 Ohm load 4 ohm and 8 ohm output taps Mono         11 Watts
SENSITIVITY	775mV for full output.
INPUTS	1 input via rear mounted Phono sockets.
VALVES	3 off type 6SN7 2 off type 300b output triode .
DIMENSIONS	430mm wide x 220mm high x 390mm deep (overall)
WEIGHT	14 Kg. (Each)
PACKED DIMENSIONS	510mm x 410mm x 240mm weight 15 Kg. (Each)

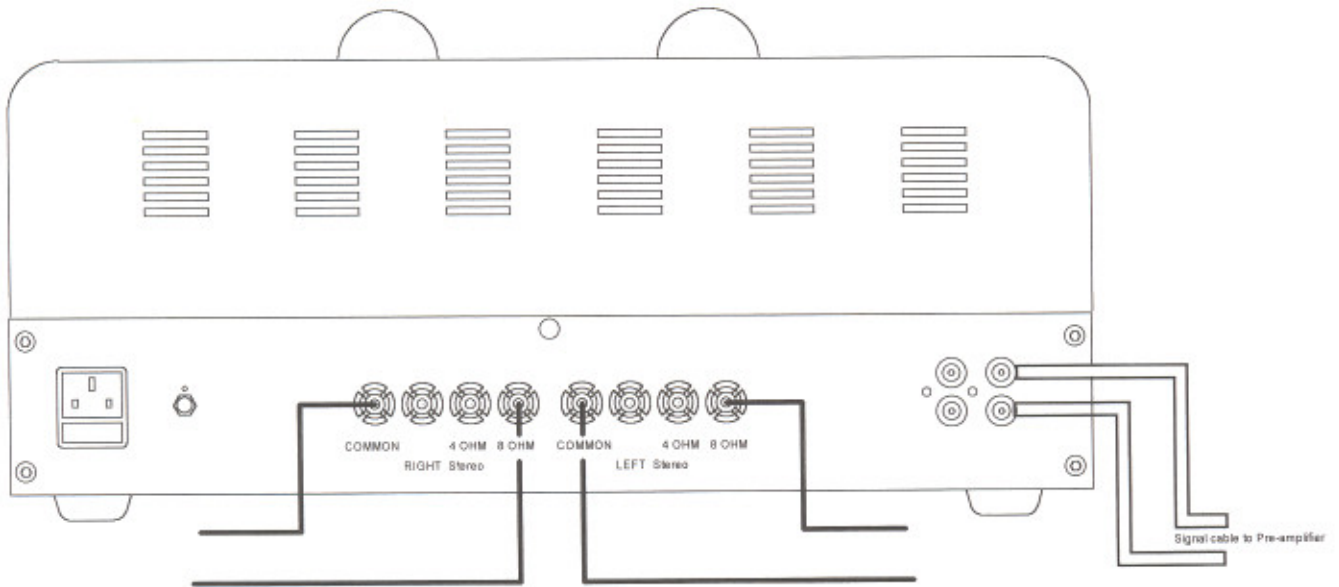
### SAFETY WARNING

**Valve amplifiers contain high voltage DC (Direct Current) power supplies, these high voltages can be Very Dangerous.**

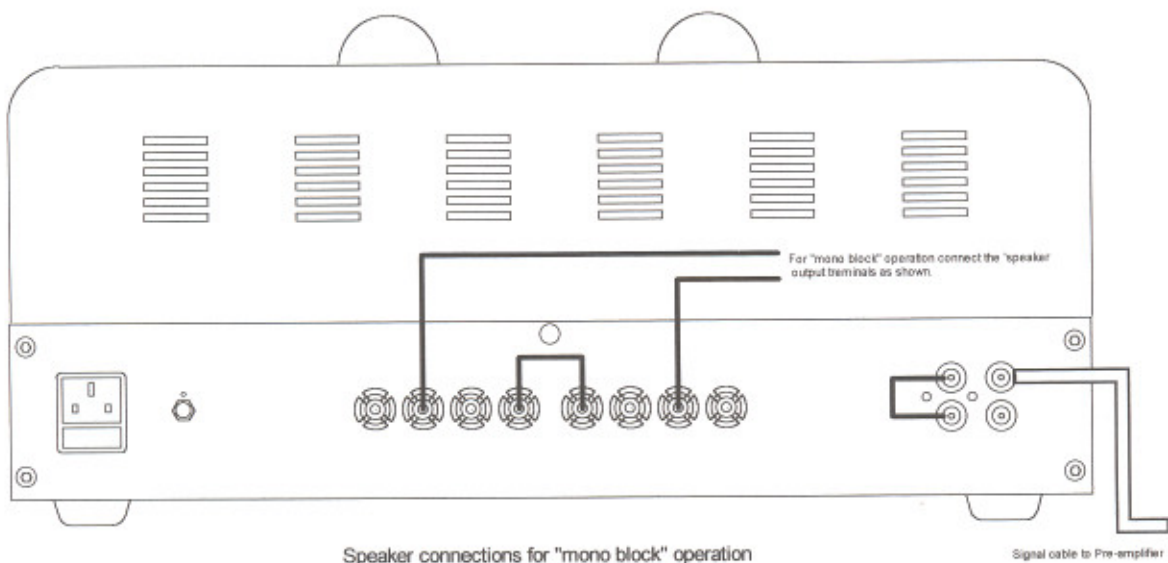
- 1 Do not remove any of the cover panels.
- 2 Do not attempt to operate the amplifier with the cover panel removed
- 3 The amplifier output valves operate at very high surface temperatures, keep out of reach of children and pets.
- 4 Do not touch the tubes (valves) when the amplifier is in use or while they are hot.



Stereo connections for 4 ohm speakers



Stereo connections for 8 ohm speakers



Speaker connections for "mono block" operation for 4 to 8 ohm speakers