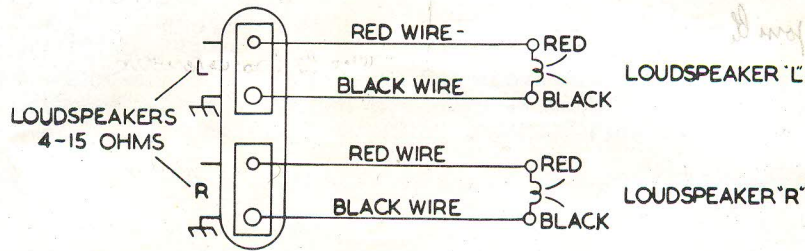


8. Phasing. It is vitally important that the diaphragms of your two loudspeakers move in phase, i.e. in the same direction at the same instant. To make sure of this note very carefully the following:
If you are using identical loudspeakers (as you certainly should if you want true stereo) the manufacturer will doubtless have kept to a convention when marking the terminals, very often simply red and black. In this case the loudspeakers will be in phase when connected as shown below.



If your loudspeaker terminals are unmarked or you are using dissimilar loudspeakers you can check the phase as follows: place the two loudspeakers as close together as possible; set the function switch to 'INPUT R' and the input selector to 'PICKUP'. Connect an unscreened length of wire (about 1 ft.) to the 'PICKUP R' socket. Turn 'BASS' control to maximum and then turn up 'VOLUME' control until the hum picked up by the unscreened lead is fairly loud. Then reverse the leads to one loudspeaker; the condition which gives you noticeably more bass hum is the correct connection, i.e. the loudspeakers are in phase.

9. Do not insert the input plugs into the input sockets unless an input device is connected to the plug via a screened cable. Failure to observe this instruction will result in high noise levels when the selector switch is turned to 'MIC', 'PICKUP' or 'TAPE HEAD'.

OPERATING THE 'STEREO 30'

10. BALANCE CONTROL

The 'BALANCE' control allows you to compensate for differences in sensitivity between loudspeakers, or the 'L' and 'R' sides of any stereo input device. The gain in each channel is identical when the pointer on the 'BALANCE' control knob is at 12 o'clock. A further function of the 'BALANCE' control is mentioned in para. 20.

11. VOLUME CONTROL

The input attenuators on the rear panel of the 'STEREO 30' should be set so that a normal level of reproduction is obtained with the main 'VOLUME' control set to '10 o'clock' or higher. It is better not to listen with the 'VOLUME' control below '10 o'clock', as the channel balance below this setting may vary by more than 1dB.

12. FUNCTION SELECTOR

A four position switch allows the choice of:

(a) MONO. This parallels that L and R circuits, enabling a stereo pickup to play mono LP records.

(b) STEREO.

(c) INPUT R (mono, connects both amplifier channels to the 'R' input device).

(d) INPUT L (mono, connects both amplifier channels to the 'L' input device).

Positions 3 and 4 enable you to reproduce mono signals through both the loudspeakers connected to the 'Stereo 30'. See para. 20.

13. NOISE (Hum and Hiss)

The 'STEREO 30' has a very low noise level which can be checked by removing all the input plugs and turning up the 'VOLUME' control. The high-pitched hiss associated with vacuum tube amplifiers is less noticeable with transistors, the irreducible noise being lower in pitch and unobtrusive.

N.B. When connecting an input plug to the 'STEREO 30' ensure that the screening of the co-axial lead does not touch the chassis of the amplifier as this may cause excessive hum.

CONNECTING STEREO PICKUPS

14. (a) The greatest care has been taken in the design of this amplifier to ensure that any pickup generally available in the world can be connected to give optimum results, i.e. the highest quality obtainable from the chosen make of pickup. Our prime aim is for you to obtain optimum results from the pickup of your choice.