

Monophonic sources, when reproduced in this way over both speakers, may be given a "pseudo-stereo" effect by adjusting the tone controls so that one channel contains mostly high frequencies and the other channel contains mostly low frequencies. This will give an added dimension to orchestral music, since some instruments will seem to be located on one side, and others on the other. The overall effect bears some resemblance to true stereophonic sound, hence the term "pseudo-stereo".

The following additional use of the MODE switch should be noted: Any normally-phased stereo phono cartridge will play monophonic records successfully if its two "hot" terminals are tied together. Since both channels are tied together when the MODE switch is in the MONO position, monophonic records may be played in this way with a stereo pickup.

PHASE -

This is a two-position slide switch, providing for phase reversal of the left channel output.

SPEAKER PHASING: The two speakers should be connected to the amplifier so that they are "in phase" when the PHASE switch is in the NORM position. "In phase" means that both speaker cones move in the same direction at the same time. (If multi-speaker systems are used, phasing refers to the low-frequency woofers).

Speaker phasing can be easily determined in the following manner: Disconnect the tape head, if used, from the TAPE HEAD input jacks and depress the TAPE HEAD pushbutton. Advance the VOLUME control until a hum is heard in the speakers. If necessary, introduce

a hum in both channels by inserting and holding a screwdriver or piece of wire in one of the MONOPHONIC INPUT sockets, and depressing the corresponding pushbutton. Place the speakers side by side or, better, face to face. Find the position of the PHASE switch which gives the loudest hum. If this is the NORM position, the speakers are in phase when the switch is in the NORM position. If it is the REV position, reverse the wires to one of the speakers; then they will be in phase when the switch is in NORM position. The switch should normally be left in the NORM position. If you encounter stereo program material which seems to be out-of-phase, you can correct it by throwing the switch to REV. Correct phasing is definitely important for proper stereo reproduction.

CHANNEL REVERSE -

This is a two-position slide switch, permitting instant CHANNEL REVERSE. When the CHANNEL REVERSE switch is in the NORM position, the external stereo connections should be such that the left channel feeds the LEFT speaker (defined as the listener's left when facing the speakers) and the right channel the RIGHT speaker. Turning the CHANNEL REVERSE switch to the REV position reverses the two channels, with respect to the speakers. This switch position serves as a convenient corrective for stereo material which might be reversed. For example, many radio stations today broadcast stereo by means of FM transmission, but there is no set standard as to which is left and which is right. By means of the NORM and REV positions of the CHANNEL REVERSE switch, the channels may be instantly reversed, if the situation demands.

IN CASE OF DIFFICULTY

1. Recheck the wiring. Trace each lead in colored pencil on the Pictorials as it is checked. It is frequently helpful to have a friend check your work. Someone who is not familiar with the unit may notice something consistently overlooked by the constructor.
2. It is interesting to note that about 90% of the kits that are returned for repair, do