## ADDITIONAL STEREOPHONIC CONTROL FUNCTIONS

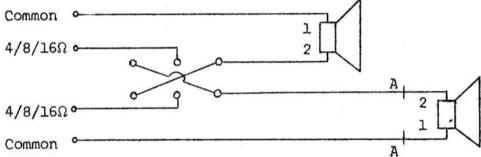
Although stereophonic program material is standardized with respect to channel and phase orientation, auxiliary channel reverse and phase reverse switches will simplify proper reproduction of those rare discs and tapes which are not standard.

Correct phasing of the stereo speakers need be determined only at the time of installation, as this will not vary once the system is correctly installed. In the event that a third speaker is used for a center channel, that speaker must also be connected in phase with the left and right speakers.

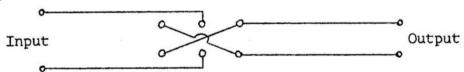
For optimum performance with a reverse-phase source, a phase switch should be installed in the signal leads where they emerge from the arm or tape head, prior to the connection of the shielded cable leading to the input of the preamplifier. FM multiplex broadcasts made in accordance with FCC standards will be properly phased. While a single phase switch cannot cover all situations, it is usually simplest to install one in the speaker leads, as shown below. Out-of-phase source material will cause a drop in volume when the two channels are blended (A+B) or (L+R), and this can only be corrected by phase reversal at the phono arm or tape head, not at the speakers.

Consistently reversed multiplexed programs (left to right) should be cause to doubt the alignment of the multiplex tuner, if phono and/or tape sources are correctly oriented.

A double-pole, double-throw switch may be used for channel reversal when connected between the power amplifiers and their respective speakers thus:



A double-pole, double-throw switch may be used for phase reversal when connected between one power amplifier and its speaker (or between the signal leads of one channel at the source and the preamplifier input cable) as shown below:



A phase switch is needed on one channel only. If both phase and channel switches are to be installed in the speaker leads, the phase switch should be installed at "A" in the top diagram.

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