

Increasing Power Output of Model 217 Auxiliary Amplifier when used with Model 28 Remote Volume Control

The Model 217 Amplifier is primarily designed as an auxiliary amplifier to be used in cases where good sound distribution is desired over a wide area through a number of speakers operated at a pleasing volume.

Many people have the idea that this amplifier as constructed is a booster amplifier which should be used where increased power, above the output of the phonograph is needed. Should it be desirable to use this amplifier as a power booster rather than an auxiliary amplifier, the following changes may be made:

A single shielded wire (Part #321 tone arm cable may be used) is routed along with the remote control cable from the auxiliary control unit to the Model 28 Terminal Box in the phonograph. This is wired to the "speaker volume" control in place of the green wire. The output from the Model 503 phonograph amplifier is then fed through a tone compensation network made up of a .02 mfd. condenser and a 15,000 ohm resistor. These values should be closely adhered to as they are chosen to prevent overloading of the auxiliary amplifier, especially in the low frequency range. The 6000 ohm resistor bridged across the "phonograph volume" control preserves the balance in the cathode circuit of the 6SN7 tube.

The Model 28 Remote Volume Control is installed exactly as in the instructions supplied with the kit, with the exception of the wiring change outlined above and pictured on the reverse side of this page.

The "phonograph volume" control on the auxiliary unit will now control the volume of both the phonograph amplifier and the auxiliary amplifier, while the "speaker volume" control can be used to control the volume of the auxiliary amplifier alone. Extremely loud volume from the auxiliary amplifier is possible even with the phonograph volume at low level. Care should be taken not to overload the auxiliary amplifier by turning the "speaker volume" control too high when the "phonograph volume" control is operated at higher than normal levels and extreme precautions should be taken against burning out speakers. Operated in this manner, the 217 should be used with not less than three of the current models of indoor speakers, if a high volume level is maintained.

Drawing on reverse of this page shows how the circuit wiring is changed.



W-189