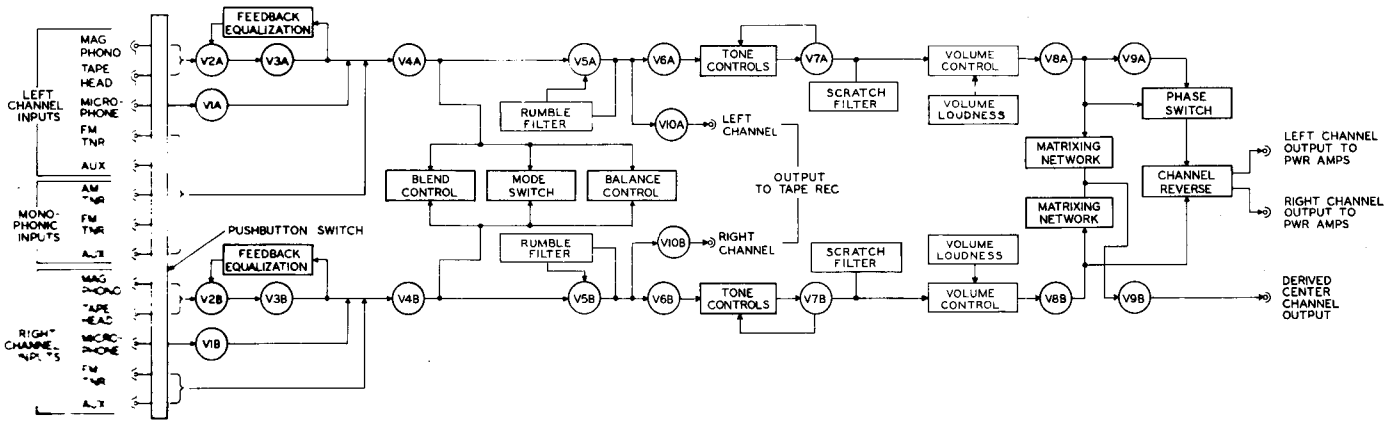

BLOCK DIAGRAM

in the STEREO position. The signal from the PHONO input is first amplified by tubes V2A and V3A. Following these two stages of amplification, RIAA equalization is provided by a feedback network consisting of resistor R45, and capacitors C5 and C7. The signal from the TAPE HEAD, with NAB equalization provided by capacitor C9 and resistor R47 is applied to tube V2A when the TAPE HEAD button is pressed. When the MIC button is pressed, the signal from the MIC input is first amplified by tube V1A and then is applied to tube V4A. Each of the other inputs, when selected with the pushbutton switch, is applied directly to tube V4A.

After equalization the signal is amplified by tube V4A and applied to tube V5A for further amplification. The signal from V4A also goes through BLEND control R59 and the MODE switch. From tube V5A the signal goes through BALANCE control R118 and the RUMBLE FILTER switch. This filter is made up of resistor R73 and capacitors C25 and C27. The signal from V5A is also applied to tube V10A, a cathode follower stage. This tube, V10A, provides a low impedance output to feed a tape recorder. The BLEND control, the MODE switch, and the BALANCE control are in parallel with both channels to permit a varied amount of mixing and balancing of the channels. From the RUMBLE FILTER switch, the signal continues to tube V6A for further amplification.

From tube V6A the signal is applied to the left channel Baxandall type feedback tone control circuitry, consisting of: BASS control R85, TREBLE control R87, and the left channel P.E.C. tone control network. The tone control network constitutes a complex feedback loop, including tube V7A.

The amplified signal from the plate of tube V7A is applied to the SCRATCH FILTER made up of resistors R105 and R107, capacitors C33 and C35, and coil L3. Resistor R103 is switched into the circuit when the switch is in the OUT position.

From stage V7A the signal goes through the VOLUME-LOUDNESS switch to VOLUME control R61. The VOLUME-LOUDNESS switch, with resistors R66 and R67, and capacitors C21 and C22, provides the compensation necessary for the VOLUME control to operate as a LOUDNESS control with the switch in the LOUDNESS position. The desired amount of signal chosen with the VOLUME control is applied to tube V8A.

Tube V8A amplifies this signal and applies it to tube V9A as well as the PHASE switch. Tube V9A does not amplify but reverses the phase of the signal. This signal from tube V9A is also applied to the PHASE switch. From the PHASE switch, the signal goes to the CHANNEL REVERSE switch and then to the LEFT CHANNEL OUTPUT.

The transformer-operated power supply uses two silicon diodes, D1 and D2, in a full-wave voltage-doubler arrangement to supply B+ voltages. Filtering is accomplished by filter choke L1, electrolytic capacitors C48A, C48B, C48C, C48D, and C49, and resistors R128, R130, R131, and R132. Diodes D3 and D4 are used as full-wave rectifiers to supply DC voltage for the tube filaments. Filtering for this voltage is provided by resistor R129 and electrolytic capacitors C45A, C45B, and C50.