

THEORY OF OPERATION * AR-326 * OUTPUT POWER CONTROL MODULE

The AR-326 consists of two identical head phone driver amplifiers. The input, from the lower mini phone jack, is attenuated by P1, and coupled into op amp U1 through C1. U1 drives Q1 and Q2, which form class AB power amp, which is biased by constant-current source (Q3). Feedback from the output to pin2 of U1 establishes the proper gain and keeps distortion low. The output is coupled to (1) 1/2 of a stereo phone jack, and (2) an RCA phone jack. R9 and R10 provide the proper impedance for driving both low and high impedance phones, and also provide short-circuit protection.

In addition, two sets of jacks provide +10 volts and -10 volts (approximately) from voltage dividers R11-R13 and R12-R14.

There are two sets of four jacks connected together, provided for assistance in multiple patching.

Finally, the power switch S1, and pilot light PL1, from the synthesizer power supply are mounted on the front panel.