

single-throw switch required to make this circuit perform as either an automatic mono-stereo circuit or to operate in mono only. Here, operating bias for the 19 Kc amplifier is removed completely.

d. Output Audio Amplifier Circuit Description

Since there are now two audio channels (Left and Right) coming from the Multiplex section, the amplifiers, filters and equalizers are duplicated on the Output Audio Amplifier printed circuit board.

Each of the amplifiers, which consist of Q1 and Q2 or Q101 and Q102, are feedback pairs. The FM 75 microsecond de-emphasis network is part of the feedback circuit.

For 100% modulation (± 75 Kc), the audio output voltage coming from the Ratio Detector, and measured between the two outputs, is about 150 millivolts. This signal is reduced to about 40 millivolts when going through the Multiplex section. The Audio Amplifiers increase this signal to about 1.6 volts, one which is of

sufficient strength to drive most audio preamp or power amplifiers.

The output impedance of the complete Audio Amplifier board is quite low, 5000 ohms, thus allowing use of long cables. This impedance will go up when the LEVEL controls, R7 and R107, are turned down. In some power amplifiers with shorting type inputs, slight cross-talk between the tuner and phono inputs may be noticed when the LEVEL controls are fully clockwise, as viewed from the rear of the LT-112. Under these circumstances it may be advantageous to turn down the LEVEL controls in order to increase the output impedance of the LT-112 and thus decrease the audio current going through the shorted input in the power amplifier.

On the output of each of the Audio Amplifiers in the LT-112, is an M-derived filter. It has notches at 19 Kc and 38 Kc, acting as a low-pass filter.

If you have stayed with us throughout — congratulations — and we hope that we have added to your understanding and enjoyment of your Scott LT-112 tuner.

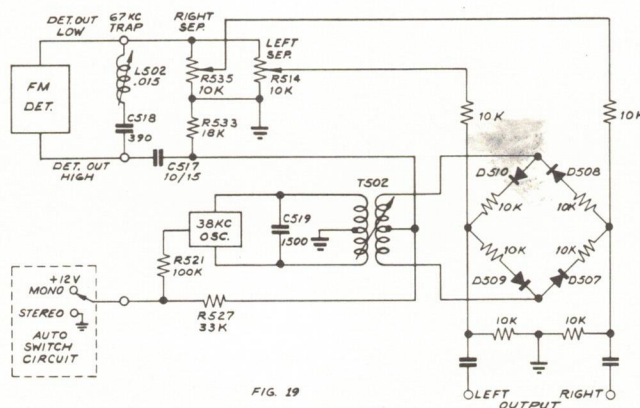
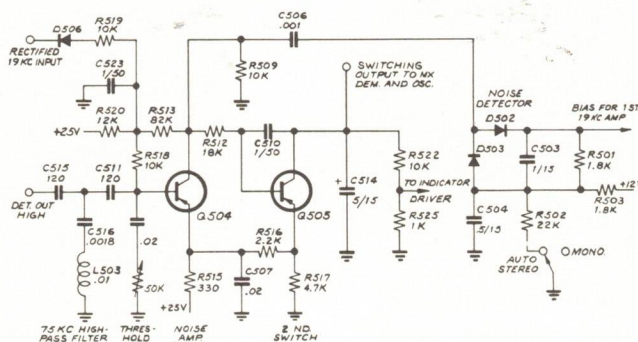


FIG. 19
MX DEMODULATOR CIRCUIT



CONTROL CIRCUIT
FIG. 20