

KS-20159 EQUALIZER-AMPLIFIER CONNECTIONS

1. GENERAL

1.01 This section contains the connection diagram for the KS-20159 L1 (Manufacture Discontinued) and KS-20159 L2 equalizer-amplifiers.

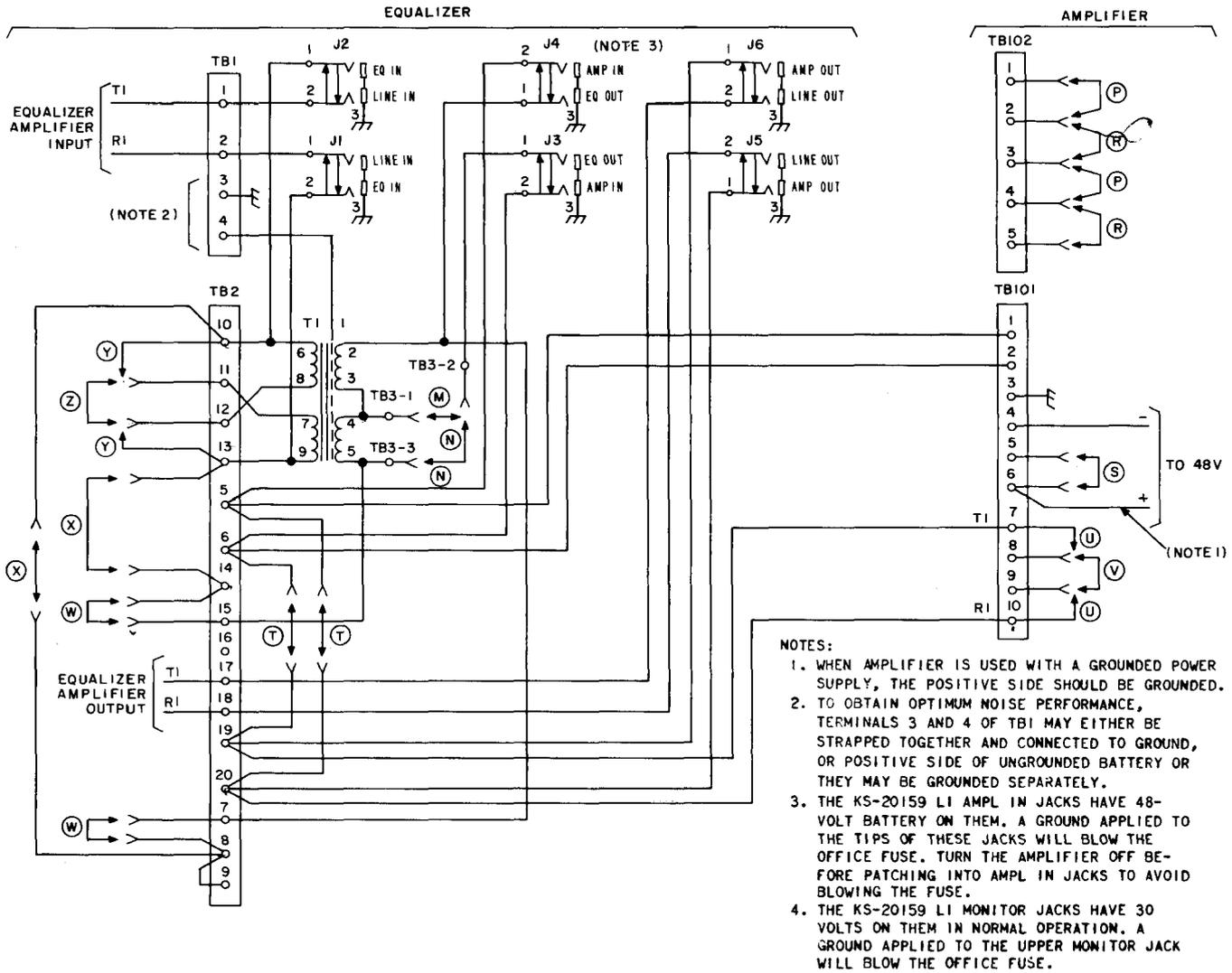
1.02 This section is reissued for the following reasons:

- To add the KS-20159 L2 equalizer-amplifier which replaces the KS-20159 L1 equalizer-amplifier.

- To add notes in Fig. 1 to turn the amplifier OFF when patching to AMPL IN jacks.

2. CONNECTION DIAGRAMS

2.01 Figure 1 shows the connections and options for the KS-20159 equalizer-amplifier. The schematic diagram is SD-99383-01.



- NOTES:
1. WHEN AMPLIFIER IS USED WITH A GROUNDED POWER SUPPLY, THE POSITIVE SIDE SHOULD BE GROUNDED.
 2. TO OBTAIN OPTIMUM NOISE PERFORMANCE, TERMINALS 3 AND 4 OF TB1 MAY EITHER BE STRAPPED TOGETHER AND CONNECTED TO GROUND, OR POSITIVE SIDE OF UNGROUNDED BATTERY OR THEY MAY BE GROUNDED SEPARATELY.
 3. THE KS-20159 LI AMPL IN JACKS HAVE 48-VOLT BATTERY ON THEM. A GROUND APPLIED TO THE TIPS OF THESE JACKS WILL BLOW THE OFFICE FUSE. TURN THE AMPLIFIER OFF BEFORE PATCHING INTO AMPL IN JACKS TO AVOID BLOWING THE FUSE.
 4. THE KS-20159 LI MONITOR JACKS HAVE 30 VOLTS ON THEM IN NORMAL OPERATION. A GROUND APPLIED TO THE UPPER MONITOR JACK WILL BLOW THE OFFICE FUSE.

TABLE A - OPTIONS

INPUT IMPEDANCE MATCHING OF EQUALIZER	150Ω	Y
	600Ω	Z
EQUALIZER TERMINATING IMPEDANCE	150Ω	M
	600Ω	N*
AMPLIFIER OUTPUT LOAD IMPEDANCE	150Ω	U
	600Ω	V
AMPLIFIER INTERNAL OUTPUT IMPEDANCE	MATCHED	R*
	LOW	P
EQUALIZER	LINE SIDE	X
	DROP SIDE	W
EQUALIZER WITHOUT AMPLIFIER		T**
REMOVE FOR POLE OR MANHOLE OPERATION		S

* THIS WIRING SUPPLIED
 ** FURNISHED WITH EQUALIZER ALONE

TABLE B - EQUALIZER STRAPPING

EQUALIZER CONDITION	† TERMINATING IMPEDANCE	TERMINAL STRAPPING		EQUALIZER INPUT TERMINALS	†† EQUALIZER OUTPUT TERMINALS TO AMPLIFIER	AMPLIFIER OUTPUT TERMINALS	LINE OUTPUT TERMINALS
		TB-3	TB-2				
5 AND 8 KHZ	600Ω	2 TO 3	8 TO 9; 9 TO 10; 10 TO 11; 12 TO 13; 13 TO 14	1 AND 2 OF TB1	5 AND 6 OF TB2	19 AND 20 OF TB2	17 AND 18 OF TB2
	150Ω †††	1 TO 2					
15 KHZ	600Ω	2 TO 3	7 TO 8; 8 TO 9; 10 TO 11; 12 TO 13; 14 TO 15	1 AND 2 OF TB1	5 AND 6 OF TB2	19 AND 20 OF TB2	17 AND 18 OF TB2
	150Ω †††	1 TO 2					

† TERMINATING IMPEDANCE IS THE IMPEDANCE INTO WHICH THE EQUALIZER MUST OPERATE.
 †† IF THE EQUALIZER IS USED WITHOUT AN AMPLIFIER THEN ON TB2, TERMINALS 5 AND 6 SHOULD BE CONNECTED TO TERMINALS 19 AND 20.
 ††† THE STRAPPING FOR 150 OHM TERMINATING IMPEDANCE IS REQUIRED ONLY WHEN THE EQUALIZER IS TO BE USED IN CONJUNCTION WITH AN EXTERNAL AMPLIFIER WHICH HAS A 150 OHM INPUT IMPEDANCE.

Fig. 1—KS-20159 Equalizer-Amplifier, Connections and Options