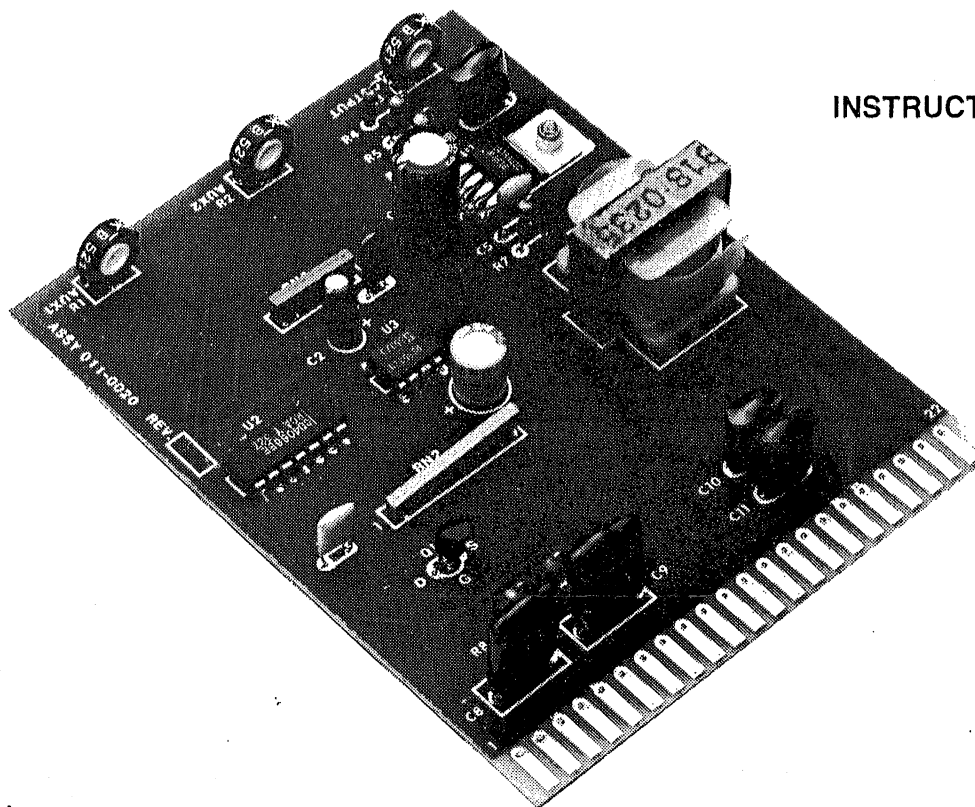


MODEL A-508



SUMMING LINE DRIVER CARD

098-0293
INSTRUCTION MANUAL



GENERAL

The Model A-508 four-input summing amplifier and line-driver card is designed for use with a Model E-509 sequential tone generator card in a Series 211 or similar panel. It is also useful with other tone encoders such as the Series 389.

Two of the four inputs have level adjustments and are muteable from external logic or from a switch.

The high-output-level line driver has a 600-ohm or 2400-ohm output impedance plus an unbalanced 200-ohm auxiliary output. The 2400-ohm output may be used to bridge an existing terminated 600-ohm line (300 ohms impedance), or up to four A-508s may be paralleled and used to terminate a 600-ohm line.

The A-508 will develop up to +8 dBm into either of these loads from the 2400-ohm output terminals.

WARRANTY

Vega signaling products are guaranteed to be free from defects in materials and workmanship for a period of three years from the date of shipment. Warranty is for factory repair or replacement only.

SPECIFICATIONS

Input Impedance: 600 ohms (auxiliary); 22 k ohms (tone and auxiliary tone)

Output Impedance: 600 and 2400 ohms balanced, and 200 ohms unbalanced auxiliary

Output Level: -30 to +20 dBm adjustable into 600 ohms; -30 to +8 dBm when 2400-ohm output is bridging a terminated 600-ohm line

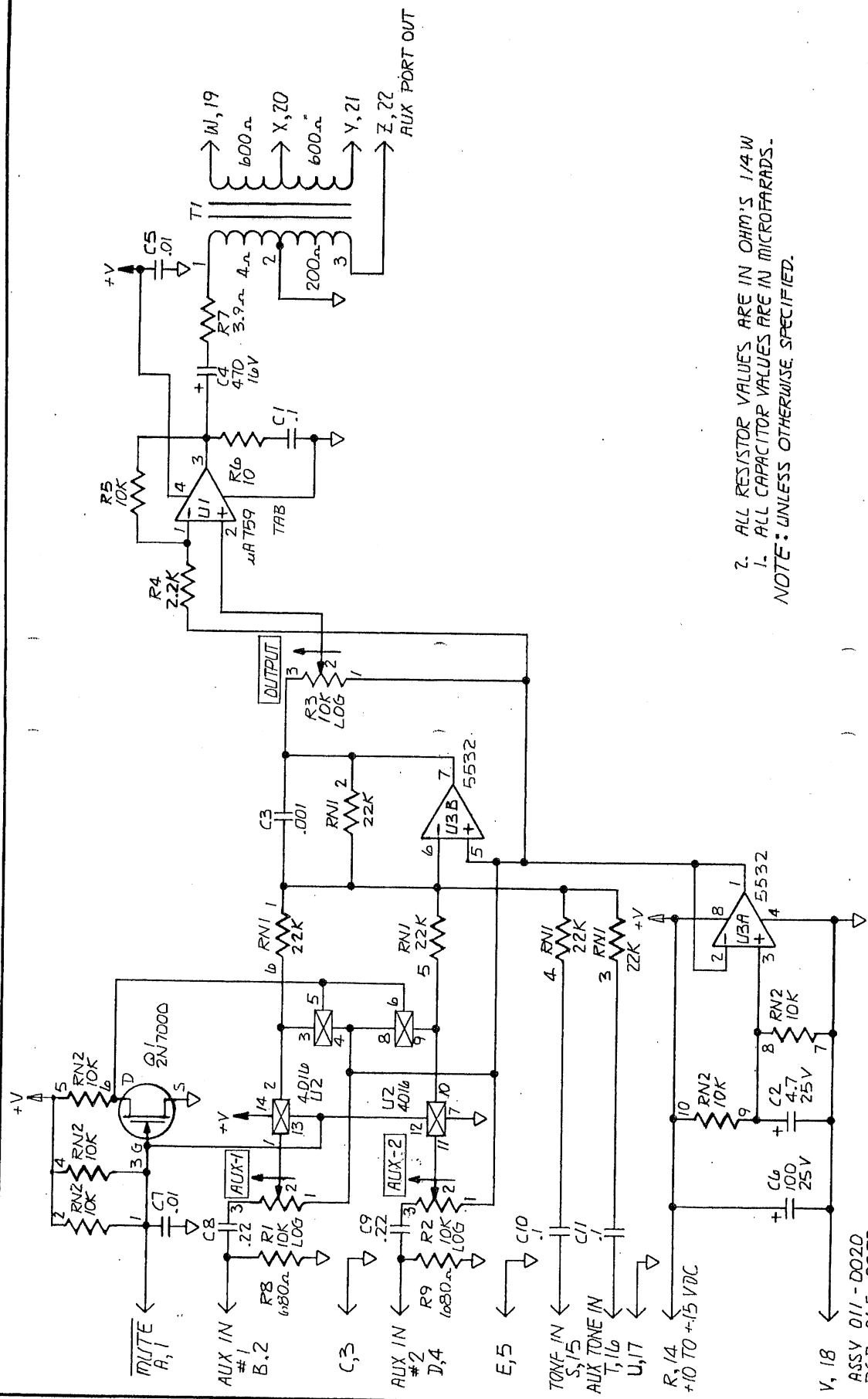
Frequency Response: ± 1 dB, 300 to 3000 Hz

Supply Voltage: +10 to +15 Vdc semiregulated

Supply Current: 22 mA idle, 125 mA maximum, at 12 Vdc supply

Temperature Range: -30 to +70°C

Size: 0.75 H, 3.6 W, 4.5 D inches; 1.9 H, 9.1 W, 11.4 D centimeters



2. ALL RESISTOR VALUES ARE IN OHM'S 1/4 W
 1. ALL CAPACITOR VALUES ARE IN MICROFARADS.
 NOTE: UNLESS OTHERWISE SPECIFIED.

ASSV 011-D020
 PCB 065-0372

A-508 PARTS LIST

Part No.	Description	Ckt Sym
010-0558	Model A-508 summing line driver	—
001-1764	JK-22 connector kit	—
098-0293	Instruction manual for A-508	—
011-0020	A-508 PCB assembly	—
065-0372	PCB for A-508	—
105-1001	0.001 μ F mylar cap., 10%, 100 V	C3
105-1007	0.01 μ F mylar cap., 20%, 100 V	C5
		C7
105-1013	0.1 μ F mylar cap., 10%, 100 V	C1
		C10
		C11
105-1028	0.22 μ F mylar cap.,	C8
		C9
112-1552	470 μ F elec. cap., 16 V	C4
112-1609	100 μ F elec. cap., 20%, 25 V	C6
112-1645	4.7 μ F elec. cap., 25 V, mini	C2
130-0725	10 k ohm log PC h-adj var. res.	R1
		R2
		R3
136-0004	3.9 ohm comp. res., 5%, 1/4 W	R7
136-0008	10 ohm comp. res., 5%, 1/4 W	R6
136-0030	680 ohm comp. res., 5%, 1/4 W	R8
		R9
136-0036	2.2 k ohm comp. res., 5%, 1/4 W	R4
138-0044	10 k ohm comp. res., 5%, 1/4 W	R5
138-0032	5 x 22 k ohm SIP cmn RNET	RN1
138-0038	5 x 10 k ohm SIP iso RNET	RN2
144-0001	2N7000 TO92 SW NDMOS transistor	Q1
318-0235	4/200/600/600 ohm PCB transformer	T1
425-0104	4016 quad SW CMOS IC	U2
425-0202	5532 dual RL600 opamp IC	U3
425-0235	UA759 integrated circuit	U1
523-0081	1/8 x 1/4 pop rivet	—



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