



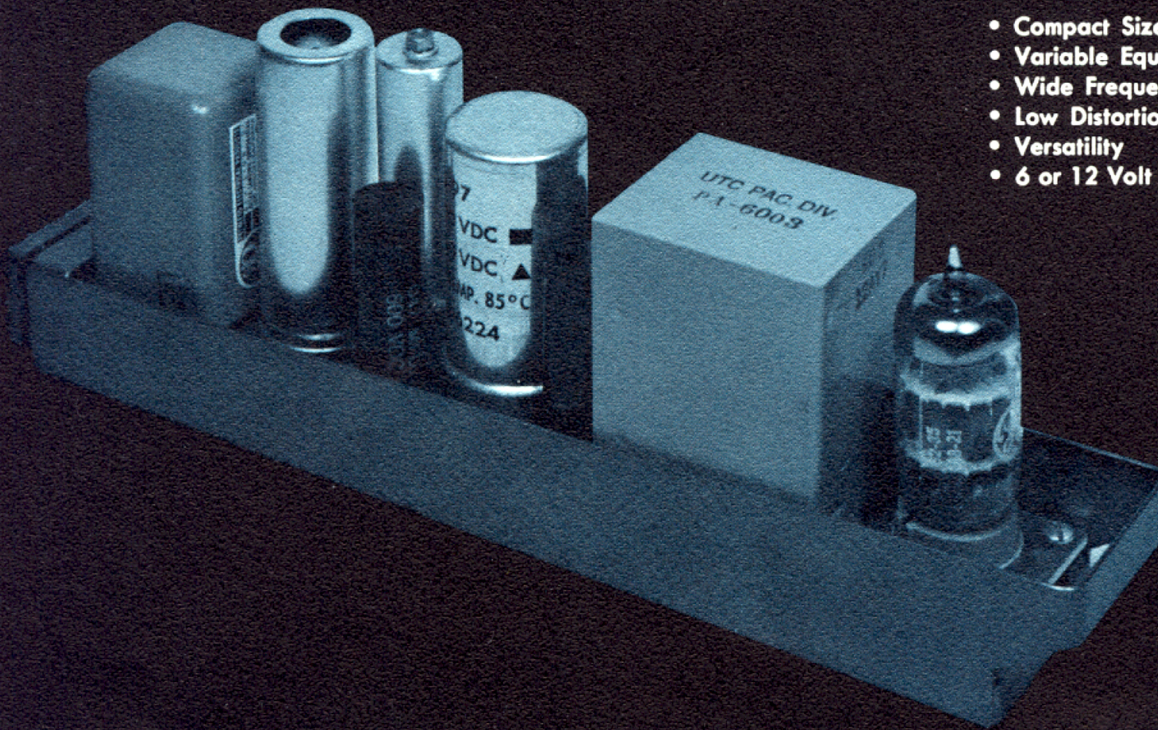
UNIVERSAL AUDIO INC.

6000 SUNSET BLVD., HOLLYWOOD 28, CALIFORNIA

MICROPHONE PREAMPLIFIER MODEL 1008A

ADVANTAGES

- Compact Size
- Variable Equalization
- Wide Frequency Range
- Low Distortion
- Versatility
- 6 or 12 Volt Filament Connection



Universal Model 1008A is a miniature two-stage high-performance microphone preamplifier housed in a modular plug-in type package. Excellent characteristics together with a unique provision for use with an external plug-in equalizer (Universal 508A) make the Model 1008A a highly versatile unit.

The stability of this new model under every conceivable reactive load characteristic is outstanding. Frequency response has been extended beyond 30,000 cycles with negligible phase shift throughout the usable audio range.

Model 1008A is the only compact microphone preamplifier available today with provision for variable equalization. The advantages of this equalization method are discussed in an article which appeared in the Audio Society Journal, April, 1960. When operated in conjunction with the Universal Equalizer Model 508A, equalization is accomplished

in a manner which affords no loss in gain. Low frequency equalization can be set at 0; plus 3, 6, or 9 db boost; and minus 3 or 6 db roll-off at 50 cps. High frequency equalization can be set at 0; plus 3, 6, or 9 db boost; and minus 3 or 6 db roll-off at either 5 or 10 kc. The 1008A can also be operated without the equalizer as an uncompensated preamplifier.

The 1008A preamplifier is available with or without the 508A equalizer. The 1008A is designed for rack mounting in plug-in trays and can be installed remotely up to 25 feet from the equalizer. When used in conjunction with the 508A equalizer, one resistor is removed from the preamplifier connector and the equalizer cable is connected in its place. With the equalizer substituted for this resistor, neither gain nor distortion is affected. Military type printed circuit boards are used in the preamplifier to insure consistent quality and performance.



SPECIFICATIONS

GAIN: 40 db, terminated input
45 db, unloaded input

INPUT IMPEDANCE: 30 to 600 ohms
(Input transformer
virtually unloaded)

OUTPUT LOAD IMPEDANCE: 150 or
600 ohms balanced. (Due
to low internal impedance,
output voltage change with
change in load is negligi-
ble.)

MAXIMUM OUTPUT POWER: +20 dbm at
less than 0.5% IM. +22 dbm
at less than 1% IM. (Using
40 cycles at 7 kc, 4:1.
THD less than 0.7% from
50 cycles to 15 kc.

MAXIMUM INPUT LEVEL: -20 dbm.

OUTPUT NOISE LEVEL: Equivalent to
input signal of less than
-126 dbm.

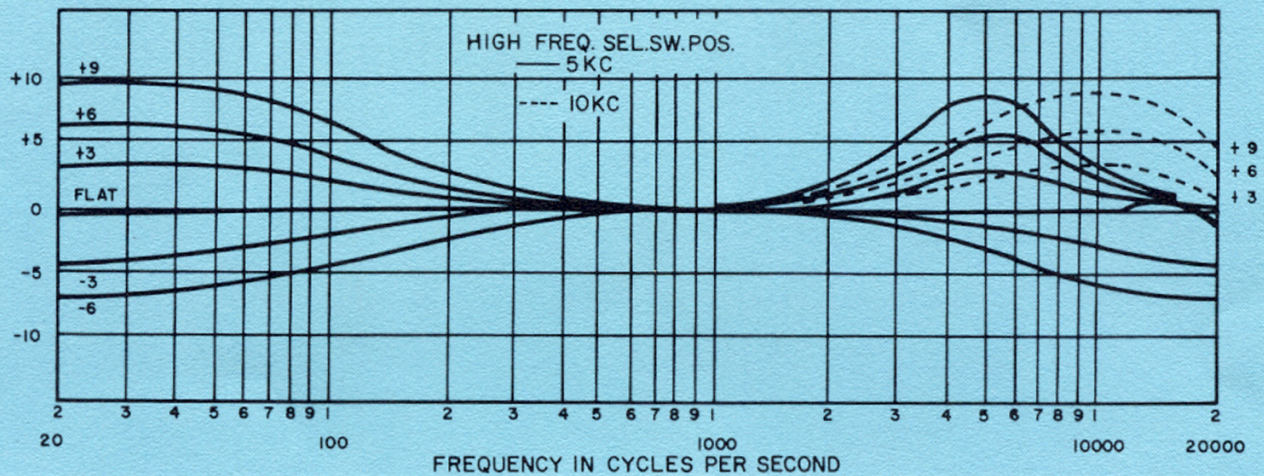
FREQUENCY RESPONSE: ± 1 db, 20 to
30,000 cps.

TUBE COMPLEMENT: One 12AX7 (ECC83)
and one 12AY7. First stage
cascode and second parallel.
Total net feedback is 33 db.

POWER REQUIREMENTS: 325V @ 9 MA,
6.3V @ 600 MA or 12.6 V
@ 300 MA.

DIMENSIONS: 1 1/2 in. wide (incl tray)
3 1/4 in. high
9 in. long

**FREQUENCY RESPONSE CURVES
1008A PREAMPLIFIER WITH 508A EQUALIZER**



PLUG-IN EQUALIZER—MODEL 508A

The 508A plug-in equalizer is a variable, environmental equalizer network which substitutes for one resistor in the 1008A Preamplifier.

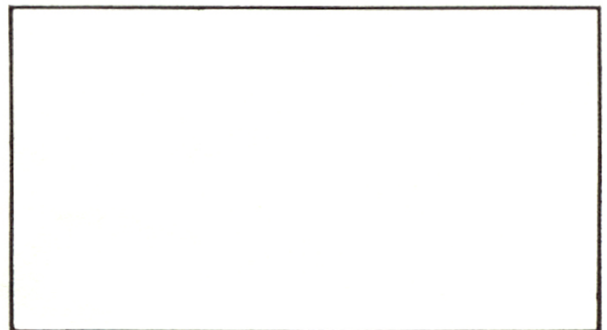
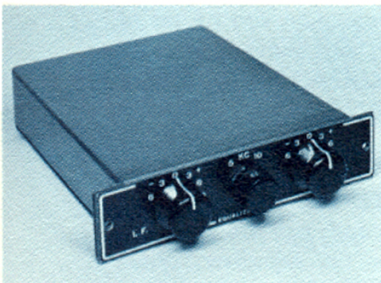
Only 1 pair of two conductor shielded is required for the connection of the equalizer unit and it may be operated as far as 25 feet from the 1008A Preamplifier satisfactorily.

The gain of the 1008A Preamplifier remains constant at 1000 cycles with or without the equalizer connected.

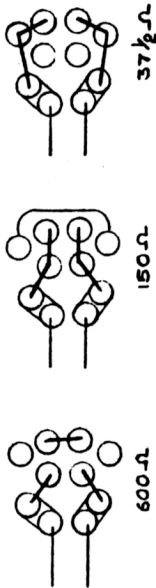
Military type printed circuitry is used for stability and consistent performance.

508A H— for horizontal mounting.

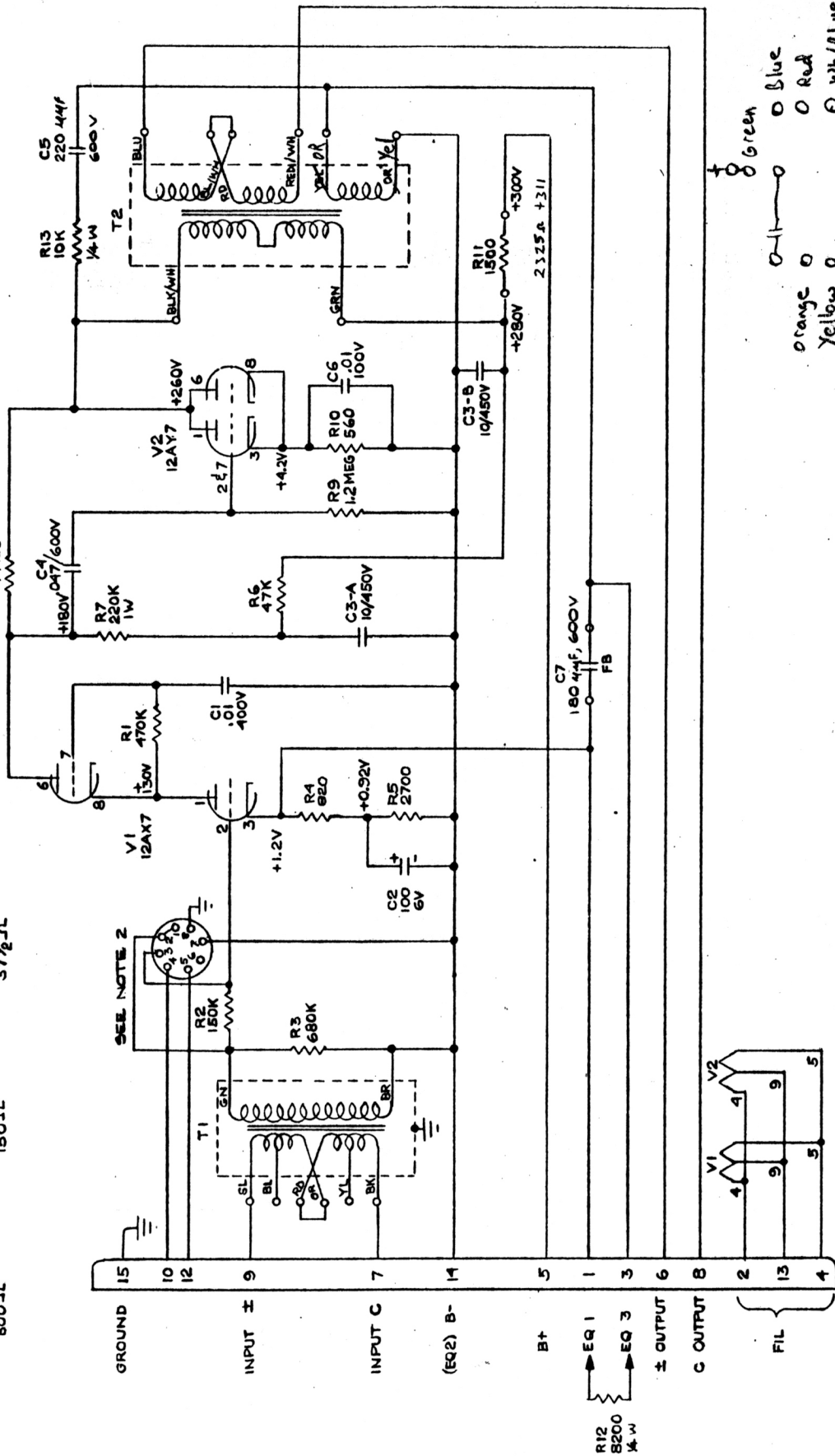
508A V— for vertical mounting.



TERMINAL STRAPPING T1



TERMINAL STRAPPING T2



Green
Orange
Yellow
BLK/WHT
Blue
Red
WHT/BLUE
WHT/Red

NOTE:

1. ALL RESISTANCE VALUES IN OHMS, 1/2W, 5%
2. GAIN CONTROL RECEPTACLE FOR 1008 LDR
3. WHEN 508 EQUALIZER IS NOT USED, THE 8200 OHM RESISTOR R12 MUST BE MOUNTED AS INDICATED ON THE RECEPTACLE OR ACROSS "FB" TERMINALS IN AMPLIFIER.
4. FILAMENTS DC & BIASED 60-75V POSITIVE ABOVE GROUND, BYPASSED BY 150 μF MIN

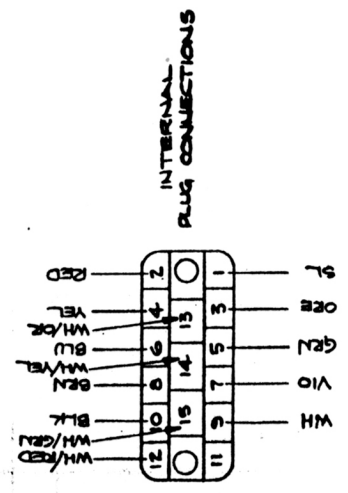
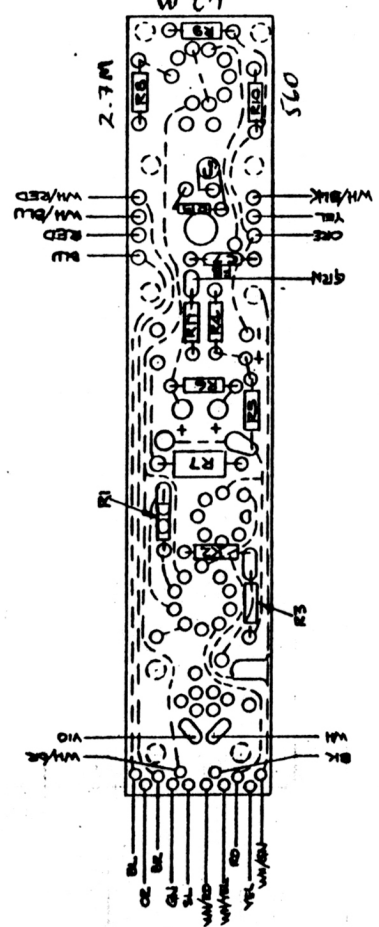
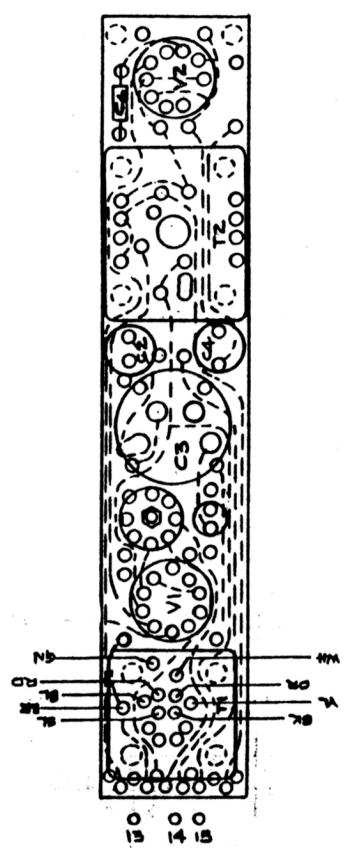
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UNIVERSAL AUDIO DIV.
STUDIO ELECTRONICS CORP.
11922 VALERIO ST.
NO. HOLLYWOOD, CALIF. 91605

MICROPHONE PREAMPLIFIER
MODEL 1008
(SERIAL NO. 996 AND HIGHER)
DRAWING NRC-0104
CHECKED APPROVED

C-1062

SYM	REVISIONS DESCRIPTION	DATE
A	TRANSFORMER WIRING REVISED	1/21/63
B	REVISED LIST OF MATERIALS	6/14/63
C	REVISED PER DWG. C-100626	3/9/67



ITEM	NO. REQ.	PART NO.	DESCRIPTION	SYMBOL
30	1		CAPACITOR 100 μ f 600V	C7
29	1		RESISTOR-10K, 1/4W 5%	R13
28	1		RESISTOR-1500 Ω 1/2W 5%	R11
27	1		RESISTOR-560 Ω 1/2W 5%	R10
26	2		GROUND STRAP	
25	1		TUBE SHIELD	
24	1		PLUG	
23	1		SOCKET-7 PIN MINI.	
22	2		SOCKET-9 PIN MINI.	
21	1		TUBE-	VZ
20	1		TUBE-	V1
19	1		TRANSFORMER - OUTPUT	T2

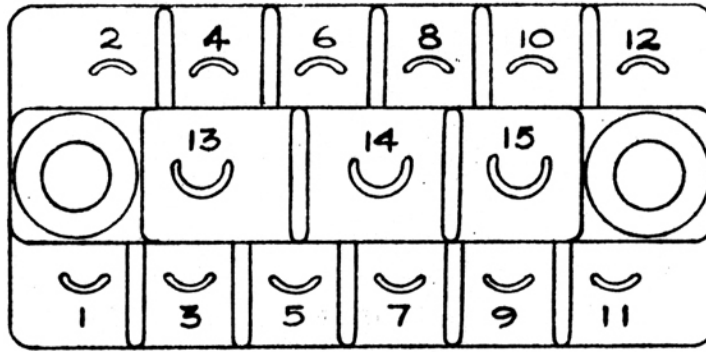
ITEM	NO. REQ.	PART NO.	DESCRIPTION	SYMBOL
18	1	5000	TRANSFORMER - INPUT	T1
17	1		CAPACITOR -.01 μ f 100V	C6
16	1		CAPACITOR - 220 μ f 600V	C5
15	1		SPRAGUE 6 SE-547	C4
14	1		GEN. INST. ATT-2810	C3
13	1		RECEIVER BENCHTOP 15E-516	C2
12	1		CAPACITOR -.01 μ f 400V	C1
11	1		RESISTOR, 8200, 1/4W, 5%	R12
10	1		1.2 MEG, 1/2W, 5%	R9
9	1		2.7 MEG, 1/2W, 5%	R8
8	1		220K, 1W, 5%	R7
7	1		47K, 1/2W, 5%	R6
6	1		2700, 1/2W, 5%	R5
5	1		820, 1/2W, 5%	R4
4	1		680K, 1/2W, 5%	R3
3	1		150K, 1/2W, 5%	R2
2	1		RESISTOR, 470K, 1/2W, 5%	R1
1	1	B-10056	CIRCUIT BOARD	

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CIRCUIT BOARD ASSEMBLY
PRE-AMPLIFIER
MODEL - 100B

DESIGN: GEF/EE 3/63
CHECK: [Signature]
APPROV: [Signature]

C-10067



TERMINAL VIEW

	FOR 1008	FOR 1016
INPUT \pm	9	9
INPUT C	7	7
OUTPUT \pm	6	6
OUTPUT C	8	8
508B EQ 1	1	not used
508B EQ 3	3	not used
300V B+	5	5
B-	14	14
508B EQ 2	14	not used
FIL 12 v. d. c. or FIL 6 v. d. c.	2 & 4 2 - 4 (strapped) & 13	2 & 4 2 - 4 (strapped) & 13
CHASSIS GROUND	15	15
INPUTRIM CONTROL	10 & 12	not used

NOTE- 1008 ONLY: For use without the 508B Equalizer, the 8200 ohm feedback resistor (R-12) may be removed from the amplifier and connected across terminals 1 & 3 of the receptacle. When the 1008 is to be used with the 508B, the resistor must be removed completely.

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1608 TP TERMINAL
CONNECTIONS & STRAPPING

DRAWN RRA/12-20-66
DESIGN
APPVD

A-10738