



VM220 AMPLIFIER

POWER SUPPLY

PAGE 2 OF 2 12-29-03

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F1 120 VAC 50/60 HZ
 MDA10

PARTS LIST

As of FEB 6 04

PRODUCT: VM220

NOTES: LAST CHANGED PER TPD#242 ON 2/2/04

Schematic Symbol	Quantity	ARC Part #	Description
C CAPACITORS			
C1,2	2	53270101	CAP., 27pf ±1pf 630V PNP
C3	1	53330201	CAP., 330pF ±2.5% 630V PPN
C4-11,32-36	13	53200602	CAP., 2µF ±10% 450V
C12-19,42-45,56,57	14	53220507	CAP., .22µF ±10% 160V
C20-23	4	53470404	CAP., .047µF ±20% 250V
C24-31	8	50470807	CAP., 470µF 450V "LYTIC"
C37-40,53	5	53100507	CAP., 0.1µF ±10% 630V
C41	1	53100412	CAP., .01µF ±10% 600V RTX
C46	1	53470513	CAP., 0.47µF ±10% 160V
C47	1	53220201	CAP., 220pf ±2.5% 630V PPN
C48	1	53100800	CAP., 1µF ±10% 450V
C49	1	53470511	CAP., .47µF ±20% 250V
C50,54	2	50100908	CAP., 1000µF 63V
C51,52	2	53200603	CAP., 2µF ±10% 250V
C55	1	50470902	CAP., 4700uf 35V
C58	1	53100510	CAP., 0.1uf 100V MKP2
C59	1	51220601	CAP., 2.2µF 25V ±20% DIP TANT.
D DIODES			
D1,8-11,16,17	7	30500400	IN4005
D2-5	4	30503310	T6A60, TAITRON
D6,18	2	30500910	1N916B
D7	1	30502200	IN4006
D12-15	4	30501500	IN5400
F FUSES			
F1	1	34501014	(B)FUSE, 10 AMP MDA BUSSMANN
J CONNECTORS			
J1,2,5,6,9,10,13,14	8	23201454	JACK, YELLOW TIP
J3,4,7,8,11,12,15,16	8	23201450	JACK, BLACK TIP
J17	1	23201970	CONNECTOR, XLR FEM. #NC3FP-1-B
J18	1	23202102	JACK, PHONO W/RED
J19,20	2	23106330	POST, RED
J21	1	23106340	POST, BLACK
J22	1	23201810	CONNECTOR, HUBBEL REF300
J23,24	2	23202900	JACK, MINI PHONE .140"
LE PANEL INDICATOR			
LE1	1	34300101	L.E.D., GREEN W/O CLIP & RING
Q TRANSISTORS			
Q1-4	4	30011039	FET, GREEN-ORANGE-WHITE
Q5	1	30006765	FET, ORANGE-YELLOW-GREEN
Q6	1	30006727	FET, ORANGE RED VIOLET
Q7	1	30010920	TRANSISTOR, TRIAC 25A

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R RESISTORS			
R1,2,17,18,19,20,25,26,29,30,89,113 R 117,118	14	42100303	RES., 1K Ω MK-3 1% 50PPM
R3,4,37-40,45-48	10	42100503	RES., 100K Ω MK-3 1% 50PPM
R5,6,13,14,33A,33B,34A,34B,92,93	10	42100505	RES., 100K Ω MK-8 1% 50PPM
R7,R8,15,16,27,28	6	42332203	RES., 332 Ω MK-3 1% 50PPM
R9,12,24,88,90,110	6	42150202	RES., 150 Ω MK-2 1% 50PPM
R10,11	2	42750203	RES., 750 Ω MK-3 1% 50PPM
R21	1	42237303	RES., 2.37K Ω MK-3 1% 50PPM
R22,96	2	42100403	RES., 10K Ω MK-3 1% 50PPM
R23A,23B	2	42121303	RES., 1.21K Ω MK-3 1% 50PPM
R31A,31B,32A,32B,91,94,95,100,103	9	42150514	RES., 150K Ω MK-5 1% 50PPM
R35,36,41,42,43,44,49,50	8	42698403	RES., 69.8K Ω MK-3 1% 50PPM
R51,52,59,60,67,68,75,76	8	43100004	RES., 1 Ω 2W 5% BLUE LINE
R53,54,61,62,69,70,77,78	8	42681303	RES., 6.81K Ω MK-3 1% 50PPM
R55,56,63,64,71,72,79,80,85	9	43100200	RES., 100 Ω 5% 2W
R57,58,65,66,73,74,81,82	8	43100007	RES., 1 Ω 2W 5% MATCHED
R83A,83B,84A,84B	4	42768403	RES., 76.8K Ω MK-3 1% 50PPM
R86	1	43500003	RES., 5 Ω 25W \pm 10% W.W.
R87A,87B	2	42200205	RES., 200 Ω MK8 1% 50PPM
R97A,97B	2	42274403	RES., 27.4K Ω MK-3 1% 50PPM
R98A,98B	2	42162503	RES., 162K Ω MK-3 1% 50PPM
R99	1	43100002	RES., 1 Ω 2W 5% W.W.
R101,102,104-107	6	42100203	RES., 100 Ω MK-3 1% 50PPM
R108	1	42619314	RES., 6.19K Ω MK-5 1% 50PPM
R109	1	42150613	RES., 1.5 MEG MK-4 1% 50PPM
R111	1	42182303	RES., 1.82K Ω MK-3 1% 50PPM
R112	1	42261203	RES., 261 Ω MK3 1% 50 PPM
R114	1	42619203	RES., 619 Ω MK-3 1% 50PPM
R115	1	42100103	RES., 10 Ω MK-3 1% 50PPM
R116	1	42100603	RES., 1 MEG MK-3 1% 50PPM
RV CONTROLS			
RV1,2	2	45100301	POT., TRIM 1K Ω
RV3-10	8	45200412	POT., 20K Ω TRIM #3104F-1-203K
RY RELAYS			
RY1	1	64101250	RELAY, 12V POWER
RY2	1	64101810	RELAY, AROMAT TXD2-12V
RY3	1	64101620	RELAY, 48 VOLT VT200
SW SWITCHES			
SW1	1	24101500	SWITCH, TOGGLE REC. SATIN
SW2	1	24102300	SWITCH, ROCKER
T TRANSFORMERS			
T1	1	60019600	XFR, OUTPUT VM220
T2	1	60018714	XFR, POWER VS110

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U			INTEGRATED CIRCUITS
U1	1	31002230	OPA134
U2	1	31004000	REGULATOR, VOLTAGE ADJ POS.
U3	1	31000800	TIMER, NE555N
V			VACUUM TUBES
V1-8	8	32000561	(B)VAC. TUBE, 6550C TESTED
V9-12	4	32002200	(B)TUBE, 6N1P SVETLANA
ZD			ZENER DIODES
ZD1	1	30500300	IN4740A
ZD2	1	30502100	1N5234B
ZD3	1	30504900	ZENER, 11V BZX55C11
ZD4,5	2	31000705	FET, GREEN
ZD6	1	30503500	IN5359A OR B
ZD7	1	30504400	IN5240B