

audio research

H I G H D E F I N I T I O N[®]

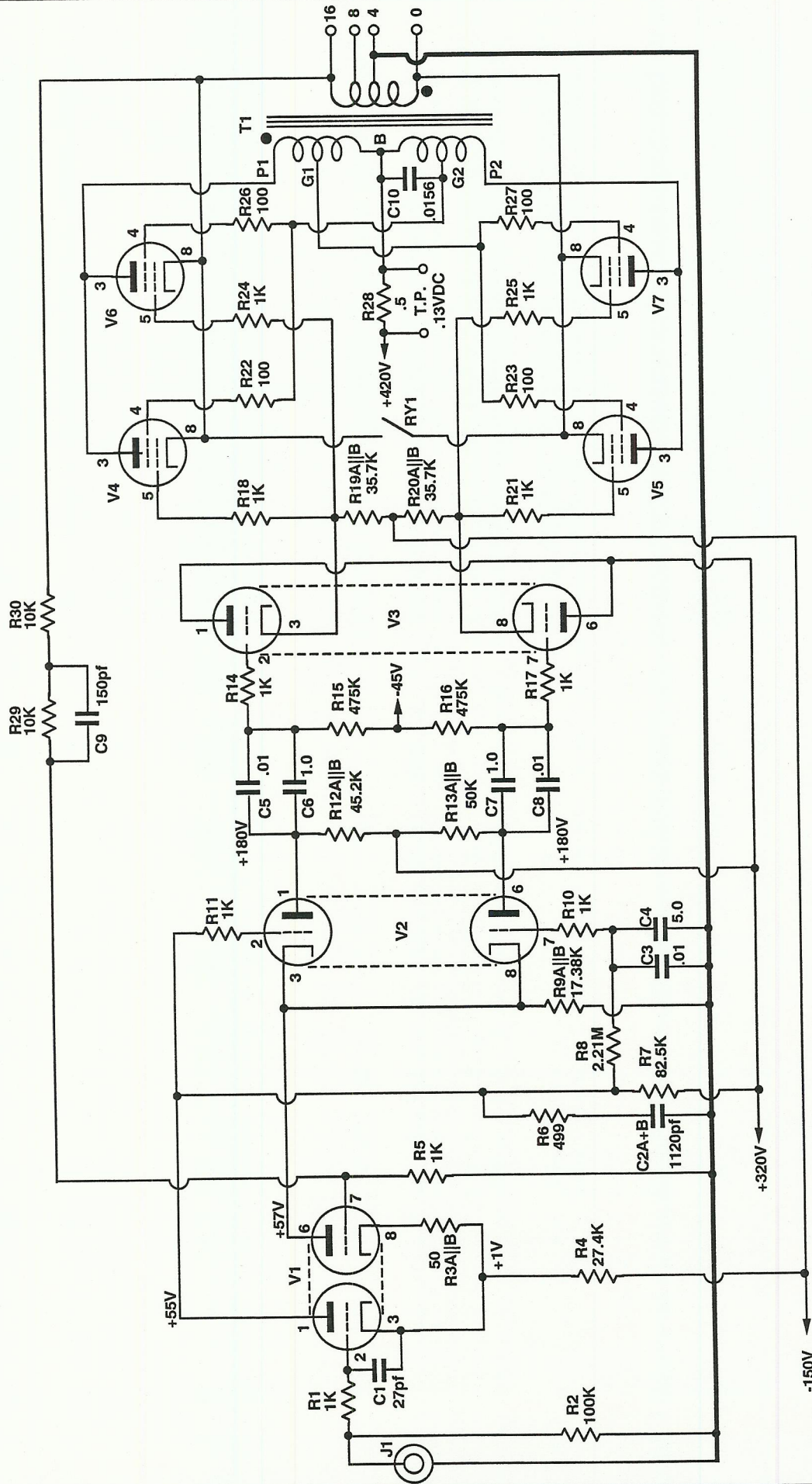
5740 GREEN CIRCLE DRIVE / MINNETONKA, MINNESOTA 55343-4424 / PHONE 612/939-0600 FAX 612/939-0604

VTM120 AMPLIFIER

SCHEMATIC

AND PARTS LIST

9-22-94



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AUDIO RESEARCH CORPORATION
 5740 GREEN CIRCLE DRIVE
 MINNETONKA, MN 55343-4424

VTM120 AMPLIFIER
 PAGE 1 OF 2 9/22/94

PARTS LIST

As of OCT 18 94

PRODUCT: VTM120

NOTES:

Schematic Symbol	Quantity	ARC Part #	Description
C CAPACITORS			
C1	1	53270101	CAP. 27 PF +/-1PF 630V PNP
C2A,2B	2	53560201	CAP. 560 PF +/-2.5% 630V
C3,5,8,19,20,24,29,33	8	53100406	CAP. .01 UF +/-10% 630V
C4	1	53500606	CAP. 5 UF +/-20% 250V
C6,7	2	53100800	CAP. 1 UF 450V
C9	1	53150202	CAP. 150 PF 2 1/2% 630V PPN
C10	1	53156400	CAP. .0156 UF +/-2% 630V
C11-14,26	5	50470807	CAP. 470UF 450V
C15,16,27	3	50100508	CAP. 100 UF 450V
C17,18,25	3	53200602	CAP. 2 UF +/-10% 450V
C21,22,23,30,31,32,35,36,38	9	53220507	CAP. .22 UF 10% 160V
C28,34	2	53200603	CAP. 2 UF +/-10% 250V
C37	1	50100908	CAP. 1000 UF 63V
C39	1	53100506	CAP. .1 UF 160V
D DIODES			
D1-4	4	30503310	EDAL #M4G5
D5,6,11,12,17	5	30500910	1N916B
D7-10	4	30502200	IN4006
D13-16	4	30500400	IN4005 GENERAL INSTRUMENT
F FUSES			
F1	1	34500705	FUSE, MDQ-4
J CONNECTORS			
J1	1	23201509	CHASSIS JACK,RED
J2	1	23104401	4 BARRIER TERMINAL BLOCK
L INDUCTORS			
L1,2	2	61000160	CHOKE, 2.7 UH +/- 10%
LE PANEL INDICATOR			
LE1	1	34300102	L.E.D. COLLAR & RETAINING RING
Q TRANSISTORS			
Q1	1	30006836	FET, GREEN BLUE
Q2	1	30009001	FET, RED VIOLET
Q3	1	30010001	2SA1306B, TESTED (BROWN)
R RESISTORS			
R1	1	42100314	RES. 1K 1% MK-5 50PPM
R2	1	42100503	RES. 100K +/-1% MK-3 50PPM
R3A,3B,53,54	4	42100203	RES. 100 OHM 1% MK-3 50PPM
R4,9A,46	3	42274405	RES. 27.4K 1% MK-8 50PPM
R5,10,11,14,17,18,21,24,25	9	42100303	RES. 1K 1% MK-3 50PPM
R6	1	42499203	RES. 499 OHM 1% MK-3 50PPM

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R7,12B	2	42825405	RES. 82.5K 1% MK-8 50PPM
R8	1	42221603	RES. 2.21 MEG 1% MK-3 50PPM
R9B	1	42475414	RES. 47.5K 1% MK-5 50PPM
R12A,13A,13B,34,35	5	42100505	RES. 100K 1% MK-8 50PPM
R15,16	2	42475503	RES. 475K 1% MK-3 50PPM
R19A,20A	2	42681405	RES. 68.1K 1% MK-8 50PPM
R19B,20B,47	3	42750405	RES. 75K 1% MK-8 50PPM
R22,23,26,27	4	43100200	RES. 100 OHM 5% 2W
R28	1	43050004	RES. 0.5 OHM+/-2% 3W W.W.
R29,30	2	42100403	RES. 10K+/-1% MK-3 50PPM
R31A,31B,43A,43B	4	42200205	RES. 200 OHM+/-1% MK8 50PPM
R32	1	42158513	RES. 158K 1% MK-4 50PPM
R33,45,58	3	42196403	RES. 19.6K 1% MK-3 50PPM
R36,48	2	42499303	RES. 4.99K 1% MK-3 50PPM
R37,49	2	42110403	RES. 11K 1% MK-3 50PPM
R38	1	42243503	RES. 243K 1% MK3 50PPM
R39,51	2	42332203	RES. 332 OHM 1% MK-3 50PPM
R40,52	2	43100002	RES. 1 OHM 2W 5% W.W.
R41,42	2	42549103	RES. 54.9 OHM 1% MK-3 50PPM
R44	1	42768403	RES. 76.8K 1%MK-3 50PPM
R50	1	42110503	RES. 110K 1% MK3 50PPM
R55,57	2	42511403	RES. 51.1K 1% MK-3 50PPM
R56	1	42150503	RES. 150K 1% MK-3 50PPM
R59	1	42750203	RES. 750 OHM 1% MK-3 50PPM
R60A	1	43680000	RES. 6.8 OHM 2W 5% SPH
R60B	1	42274103	RES. 27.4 OHM1% MK-3 50PPM
R61	1	42100103	RES. 10 OHM 1% MK-3 50PPM
RV			CONTROLS
RV1	1	45200412	TRIM POT 20K
RY			RELAYS
RY1	1	64101310	MUTE RELAY, VTM120
SW			SWITCHES
SW1	1	24102200	ROCKER SWITCH
T			TRANSFORMERS
T1	1	60012220	XFR. VTM120 OUTPUT
T2	1	60012100	XFR. VTM120 120V.
U			INTEGRATED CIRCUITS
U 1,2	2	31002210	OP176GP
U3	1	31002930	MC7808 REG

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			V VACUUM TUBES
V1,2,3	3	32001150	VAC.TUBE 6922 RUSSIAN
V4,5,6,7	4	32000551	VAC TUBE SOVTEK 6550-TESTED
			ZD ZENER DIODES
ZD1,6	2	30500300	IN4740A
ZD2,7	2	30504210	IN5535A (KNOX ONLY)
ZD3,4,8,9	4	31000705	LM329DZ GREEN
ZD5,10	2	30503500	IN5359 B