

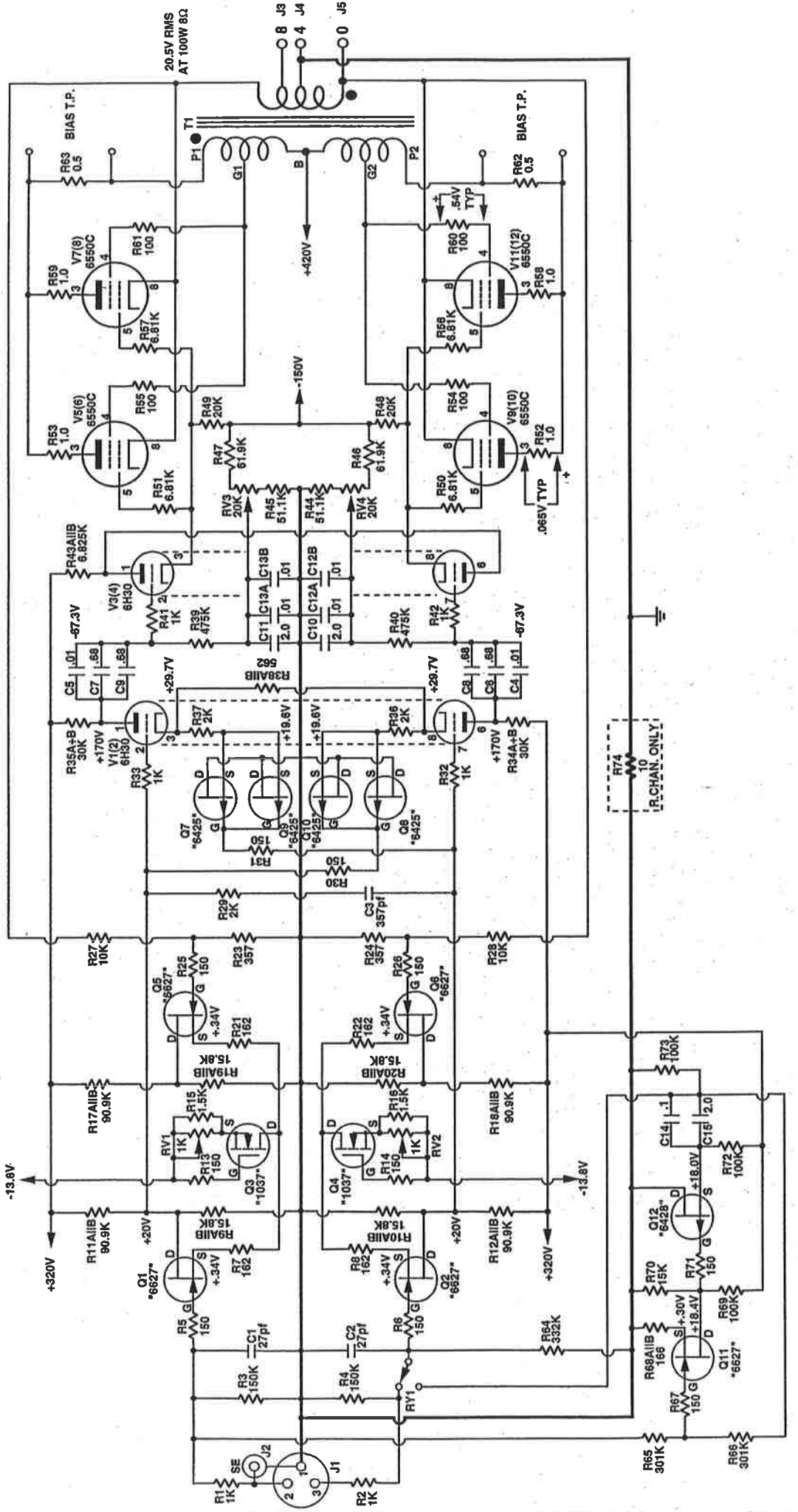
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3900 ANNAPOLIS LANE NORTH / PLYMOUTH, MINNESOTA 55447-5447 / PHONE: 763-577-9700 FAX 763-577-0323

VT100MKIII SCHEMATIC

2/6/01



VT100MKIII
 AUDIO REV 4.1
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AUDIO RESEARCH CORPORATION
 8740 GREEN CIRCLE DRIVE
 MINNETONKA, MN 55343-4424

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VT100MKIII

PARTS LIST

1-9-02

PARTS LIST

As of JAN 9 02

PRODUCT: VT100MKIII

| Schematic Symbol | Quantity | ARC Part # | Description |
|--------------------|----------|------------|---------------------------------------|
| C CAPACITORS | | | |
| C1,2,3B | 6 | 53270101 | CAP., 27pf \pm 1pf 630V PNP |
| C3A | 2 | 53330201 | CAP., 330pF \pm 2.5% 630V PPN |
| C4,5 | 1 | 53100417 | CAP., .01uf 600V TEFLON |
| C6,7,8,9 | 8 | 53680505 | CAP., .68 μ F 425V INFINICAP GRN |
| C10,11,15,61 | 5 | 53200603 | CAP., 2 μ F \pm 10% 250V |
| C16-19 | 4 | 53100407 | CAP., .01 μ F \pm 20% 250V |
| C20-31 | 12 | 50470807 | CAP., 470 μ F 450V "LYTIC" |
| C32,33 | 2 | 50120801 | CAP., 120 μ F 450V "LYTIC" |
| C34,39 | 6 | 53200602 | CAP., 2 μ F \pm 10% 450V |
| C44,55 | 2 | 53100412 | CAP., .01 μ F \pm 10% 600V RTX |
| C45,47,49,51,58,59 | 6 | 53220507 | CAP., .22 μ F \pm 10% 160V |
| C46,48,50,52,60 | 5 | 53100410 | CAP., .01uf \pm 10% 400V |
| C54 | 1 | 53100610 | CAP., 1.0 μ F \pm 10% 400V PPMF |
| C56,57 | 2 | 50100909 | CAP., 1000 μ F 100V "LYTIC" RAD. |
| C63 | 1 | 50220903 | CAP., 2200 μ F 35V ELECTROLYTIC |
| D DIODES | | | |
| D1,8-13,16,17 | 9 | 30500400 | IN4005 |
| D2-5 | 4 | 30503310 | T6A60, TAITRON |
| D6,7,14,15 | 5 | 30500910 | 1N916B |
| FAN FANS | | | |
| FAN1 | 1 | 64000220 | FAN, PAPST 4800X |
| J CONNECTORS | | | |
| J1 | 2 | 23201970 | CONNECTOR, XLR FEM. #NC3FP-1-B |
| J2 | 1 | 23201509 | JACK, CHASSIS RED |
| J2 | 1 | 23201510 | JACK, CHASSIS WHITE |
| J3,4,5 | 6 | 10036620 | BINDING POST, & KNOB |
| J6,7 | 2 | 23202900 | JACK, MINI PHONE .140" |
| J8 | 1 | 23201800 | INLET, IEC MALE POWER |
| L INDUCTORS | | | |
| L1,2 | 2 | 61000160 | CHOKE, 2.7 μ H \pm 10% |
| LE PANEL INDICATOR | | | |
| LE1 | 1 | 34300320 | L.E.D., GREEN SPOT L424GDT |
| Q TRANSISTORS | | | |
| Q1,2,5,6 | 24 | 30006504 | FET, WHITE YELLOW |
| Q3,4 | 4 | 30011037 | FET, GREEN-ORANGE-VIOLET |
| Q7,8,9,10 | 8 | 30006425 | FET, GRAY, GRAY, DOT |
| Q12 | 2 | 30006428 | FET, GRAY GRAY |
| Q13 | 1 | 30006765 | FET, ORANGE-YELLOW-GREEN |

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PRODUCT: VT100MKIII

| Schematic Symbol | Quantity | ARC Part # | Description |
|---------------------------------|----------|------------|---------------------------------------|
| R RESISTORS | | | |
| R1,2,32,33,41,42 | 12 | 42100314 | RES., 1K Ω MK-5 1% 50PPM |
| R3,4 | 4 | 42150503 | RES., 150K Ω MK-3 1% 50PPM |
| R5,6,13,14,25,26,30,31,67,71,79 | 21 | 42150202 | RES., 150 Ω MK-2 1% 50PPM |
| R7,8,21,22 | 8 | 42162203 | RES., 162 Ω MK-3 1% 50PPM |
| R9A,10A,19A,20A | 8 | 42178403 | RES., 17.8K Ω MK-3 1% 50PPM |
| R9B,10B,19B,20B | 8 | 42140503 | RES., 140K Ω MK-3 1% 50PPM |
| R11,12,17,18,69,72 | 12 | 42100505 | RES., 100K Ω MK-8 1% 50PPM |
| R15,16 | 4 | 42150303 | RES., 1.50K Ω MK-3 1% 50PPM |
| R23,24 | 4 | 42357203 | RES., 357 Ω MK-3 1% 50PPM |
| R27,28,43A | 6 | 42100414 | RES., 10K Ω MK-5 1% 50PPM |
| R29,36,37 | 7 | 42200303 | RES., 2K Ω MK-3 1% 50PPM |
| R34A,34B,35A,35B | 8 | 42150414 | RES., 15K Ω MK-5 1% 50PPM |
| R38A | 3 | 42750203 | RES., 750 Ω MK-3 1% 50PPM |
| R38B | 2 | 42221303 | RES., 2.21K Ω MK-3 1% 50PPM |
| R39,40 | 4 | 42475503 | RES., 475K Ω MK-3 1% 50PPM |
| R43B | 2 | 42215414 | RES., 21.5K Ω MK-5 1% 50PPM |
| R44,45 | 4 | 42511403 | RES., 51.1K Ω MK-3 1% 50PPM |
| R46,47 | 4 | 42619403 | RES., 61.9K Ω MK-3 1% 50 PPM |
| R48,49,97A,97B,98A,98B | 8 | 42200414 | RES., 20K Ω MK-5 1% 50PPM |
| R50,51,56,57 | 8 | 42681302 | RES., 6.81K Ω MK-2 1% 50 PPM |
| R52,53,58,59 | 8 | 43100004 | RES., 1 Ω 2W 5% BLUE LINE |
| R54,55,60,61 | 8 | 43100208 | RES., 100 Ω 5% 3W W.W. |
| R64 | 2 | 42332503 | RES., 332K Ω MK-3 1% 50PPM |
| R65,66 | 4 | 42301503 | RES., 301K Ω MK-3 1% 50PPM |
| R68A,68B,87 | 5 | 42332203 | RES., 332 Ω MK-3 1% 50PPM |
| R70 | 2 | 42150403 | RES., 15K Ω MK-3 1% 50PPM |
| R73 | 2 | 42100503 | RES., 100K Ω MK-3 1% 50PPM |
| R74,99 | 2 | 42100103 | RES., 10 Ω MK-3 1% 50PPM |
| R75 | 1 | 43500003 | RES., 5 Ω 25W \pm 10% W.W. |
| R76A,76B | 2 | 43910201 | RES., 910 Ω 2W \pm 10% W.W. |
| R77A,77B | 2 | 42200205 | RES., 200 Ω MK8 1% 50PPM |
| R78 | 1 | 42475414 | RES., 47.5K Ω MK-5 1% 50PPM |
| R80 | 1 | 42475302 | RES., 4.75K Ω MK-2 1% 50 PPM |
| R81,82 | 2 | 42750405 | RES., 75K Ω MK-8 1% 50PPM |
| R83 | 1 | 42100403 | RES., 10K Ω MK-3 1% 50PPM |
| R84 | 1 | 42150514 | RES., 150K Ω MK-5 1% 50PPM |
| R85 | 1 | 42127403 | RES., 12.7K Ω MK-3 1% 50PPM |
| R86A,86B | 2 | 42562503 | RES., 562K Ω MK-3 1% 50PPM |
| R88 | 1 | 43100002 | RES., 1 Ω 2W 5% W.W. |
| R89-94 | 6 | 42100203 | RES., 100 Ω MK-3 1% 50PPM |
| R95,96 | 2 | 42549103 | RES., 54.9 Ω MK-3 1% 50PPM |
| RV CONTROLS | | | |
| RV1,2 | 4 | 45100301 | POT., TRIM 1K Ω |
| RV3,4 | 4 | 45200412 | POT., 20K Ω TRIM #3104F-1-203K |

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| Schematic Symbol | Quantity | ARC Part # | Description |
|------------------|----------|------------|-------------------------------|
| | | | RY RELAYS |
| RY1 | 2 | 64101600 | RELAY, 12VDC |
| RY2 | 1 | 64101200 | RELAY, 24V POWER ON |
| RY3 | 1 | 64101800 | RELAY, 12V FAST |
| | | | SW SWITCHES |
| SW1 | 1 | 24102300 | SWITCH, ROCKER |
| SW2 | 1 | 24101410 | SWITCH, TOGGLE INPUT REFPHONO |
| | | | T TRANSFORMERS |
| T1 | 2 | 60012220 | XFR., VT100 OUTPUT |
| T2 | 1 | 60013914 | XFR., VT100 POWER DUAL V. |
| | | | U INTEGRATED CIRCUITS |
| U1 | 1 | 31002230 | OPA134 |
| | | | V VACUUM TUBES |
| V1-4 | 4 | 32002301 | (B)TUBE, 6H30P (TESTED) |
| V5-12 | 8 | 32000561 | (B)VAC. TUBE, 6550C TESTED |
| | | | ZD ZENER DIODES |
| ZD1 | 1 | 30500300 | IN4740A |
| ZD2 | 1 | 30502100 | 1N5234B |
| ZD3 | 1 | 30504900 | ZENER, 11V BZX55C11 |
| ZD4,7 | 2 | 31000702 | FET, RED |
| ZD5,8 | 2 | 31000703 | FET, ORANGE |
| ZD6 | 1 | 30503500 | IN5359A OR B |