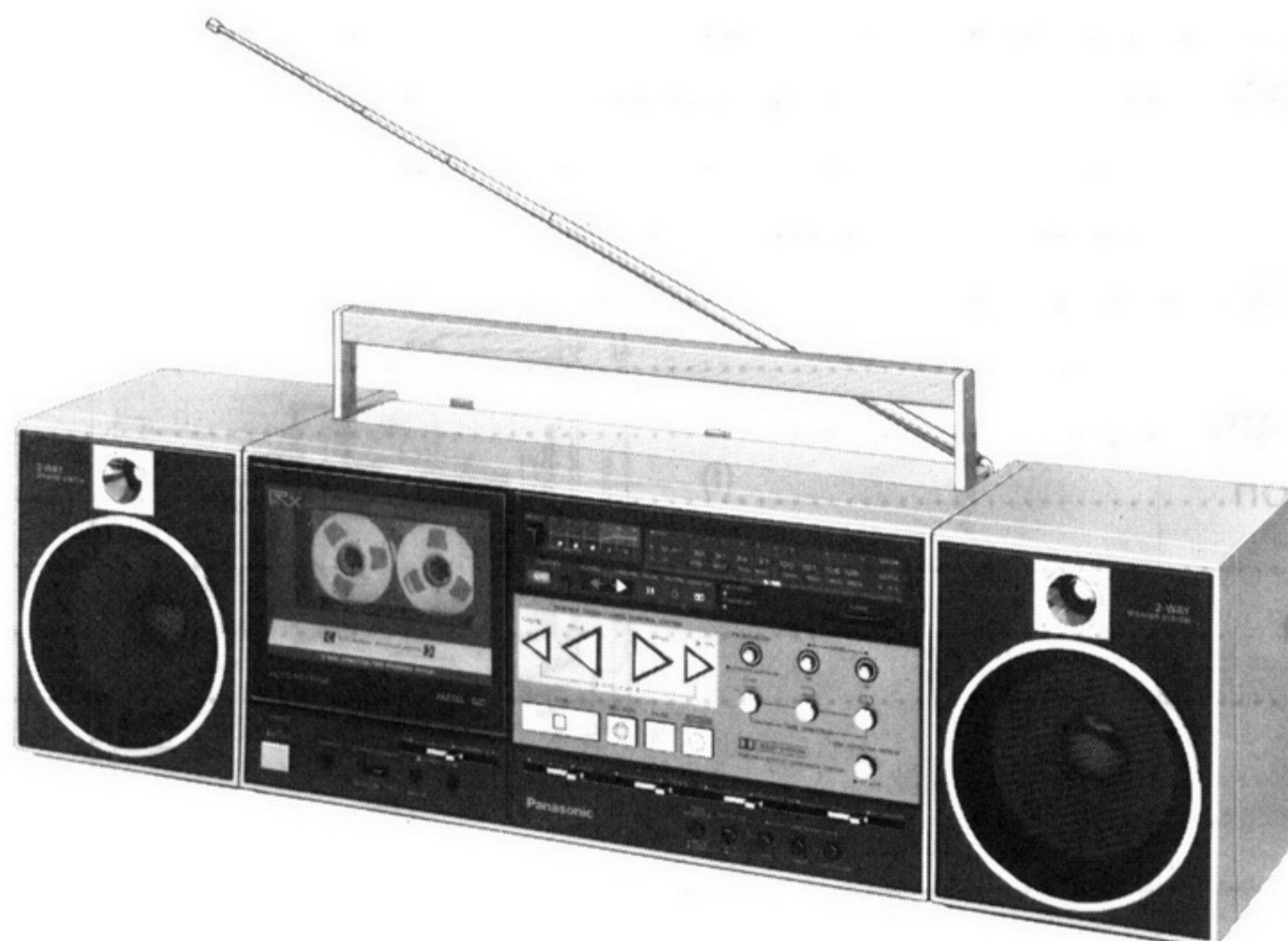


Service Manual

Portable Stereo Component System

RX-C52L

(Silver)



This is the Service Manual for the following areas.

Z ...For all European areas except United Kingdom & Germany.

E ...For United Kingdom.

■ SPECIFICATIONS

General:

Power Requirement: AC; 220V 50Hz
Battery; 12V (Eight "D" Size Flashlight Batteries)
(Panasonic UM-1 or equivalent)
Car battery; with optional car adaptor RP-952

Power Consumption: 27W (AC only)
Power Output: 15W (7.5W×2)...(max.)
Speaker: Woofer; 10cm (4") PM Dynamic Speaker (3Ω)
Tweeter; 3cm (1¹/₄") Ceramic Speaker (400Ω)

Input: MIC; sensitivity 0.25mV/applicable microphone impedance 200~600Ω
PHONO; sensitivity 5mV/47kΩ over
LINE IN; sensitivity 200mV/47kΩ over
DC IN; 13.2V

Output: LINE OUT; sensitivity 360mV/4.7kΩ under
EXT SP; 3~8Ω
HEADPHONES; 32Ω

Dimensions: 549mm(W)×153mm(H)×152mm(D)
(21⁵/₈×6×6")
Main Unit
321mm(W)×153mm(H)×152mm(D)
(12⁵/₈×6×6")
Speaker Box
120mm(W)×153mm(H)×134mm(D)
(4³/₄×6×5⁵/₁₆)"

Weight: 5.2kg (11 lb. 7.4 oz.) without batteries

Radio Section:

Radio Frequency Range: FM; 87.5~108MHz
LW; 150~285kHz (2000~1053m)
MW; 520~1610kHz (577~186m)
SW; 5.9~18MHz (50.8~16.7m)

Intermediate Frequency: FM; 10.7MHz
AM; 455kHz (470kHz [E])

Sensitivity: FM; 2.6μV (-3dB Limit sens)
LW; 74μV/m/50mW output
MW; 40μV/m/50mW output
SW; 2.7μV/50mW output

Tape Deck Section:

Frequency Response: 40~12,000Hz (with normal tape)
40~16,000Hz (with Metal tape)

Recording System: AC bias, AC erase

Tape Speed: 4.8cm/s, (1⁷/₈ ips)

Program Timer: 1 hour with C-60 cassette tape

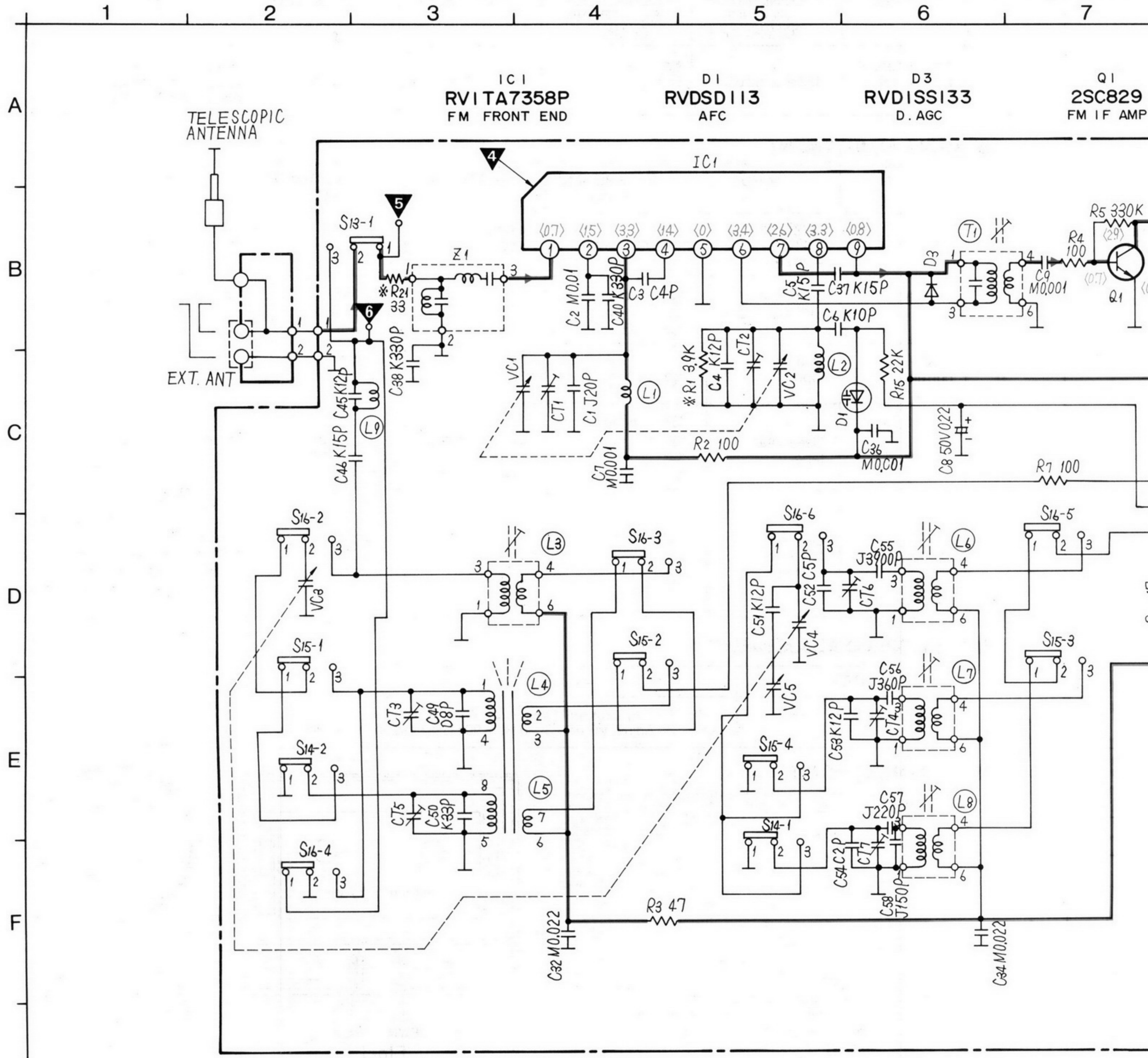
Track System: 4-track 2 channel stereo recording and playback

Specifications are subject to change without notice.

Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

SCHEMATIC DIAGRAM (Tuner)

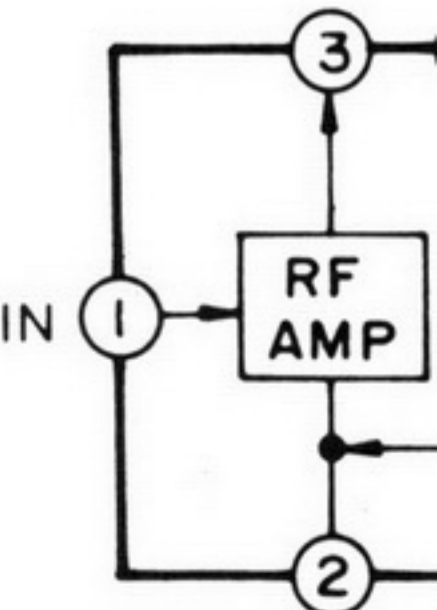


Notes:

1. S12: FM mode switch in "STEREO" position. (1...STEREO, 3...MONO)
2. S13~S16: Band switch in "FM" position. (S13-1, S13-2...FM, S14-1, S14-2...LW, S15-1~S15-4...MW, S16-1~S16-4...SW)
3. VR1: VCO adjustment VR.
4. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
< >...FM, ()...MW
5. For resistors, using printed types except those with * mark.

— + ⊕ Voltage Line.
 → Radio (FM) Signal Line.

IC1 RV1TA7358P



M (Tuner) MODEL RX-C52L

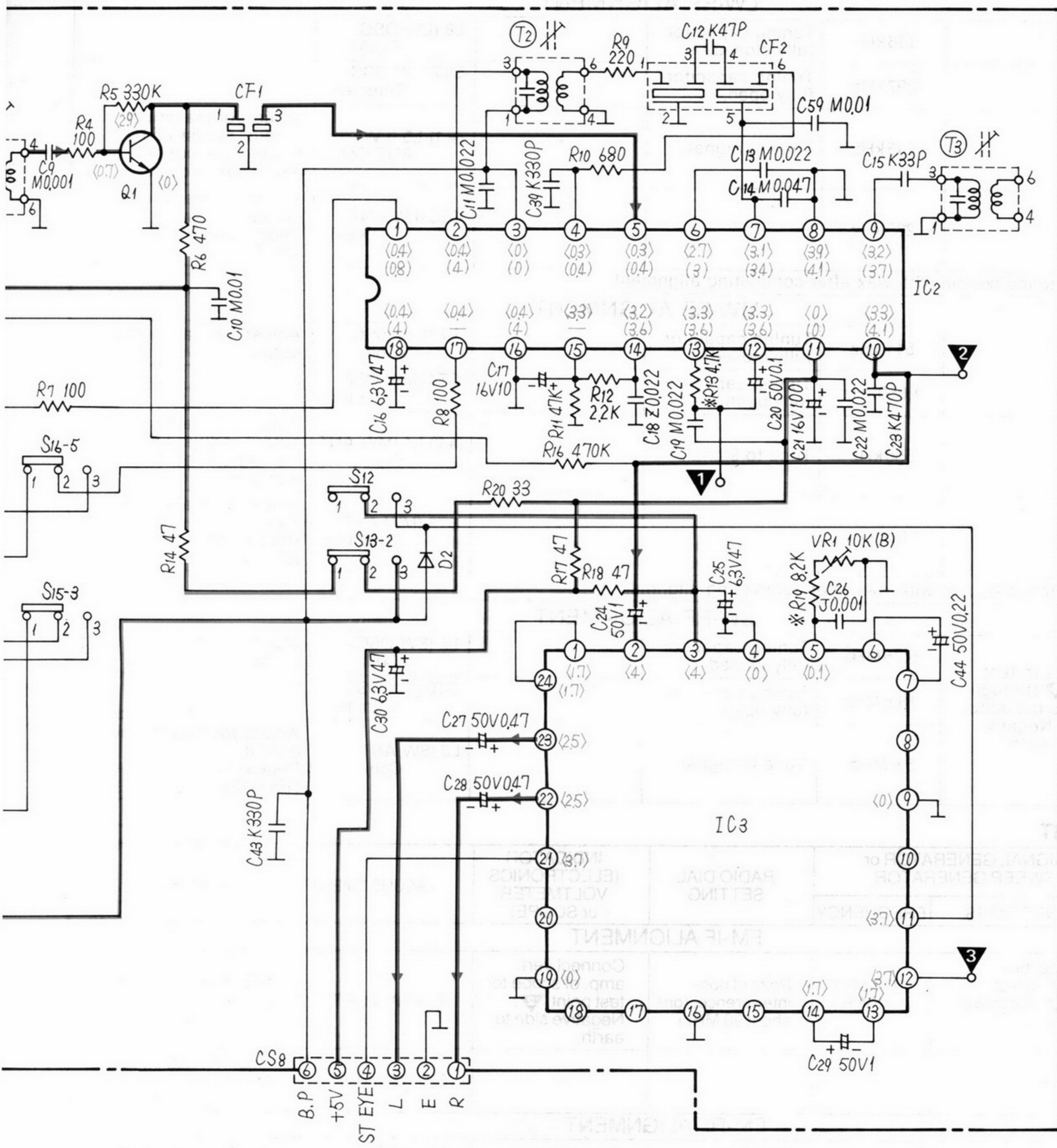
7 8 9 10 11 12

Q1
2SC829
FM IF AMP

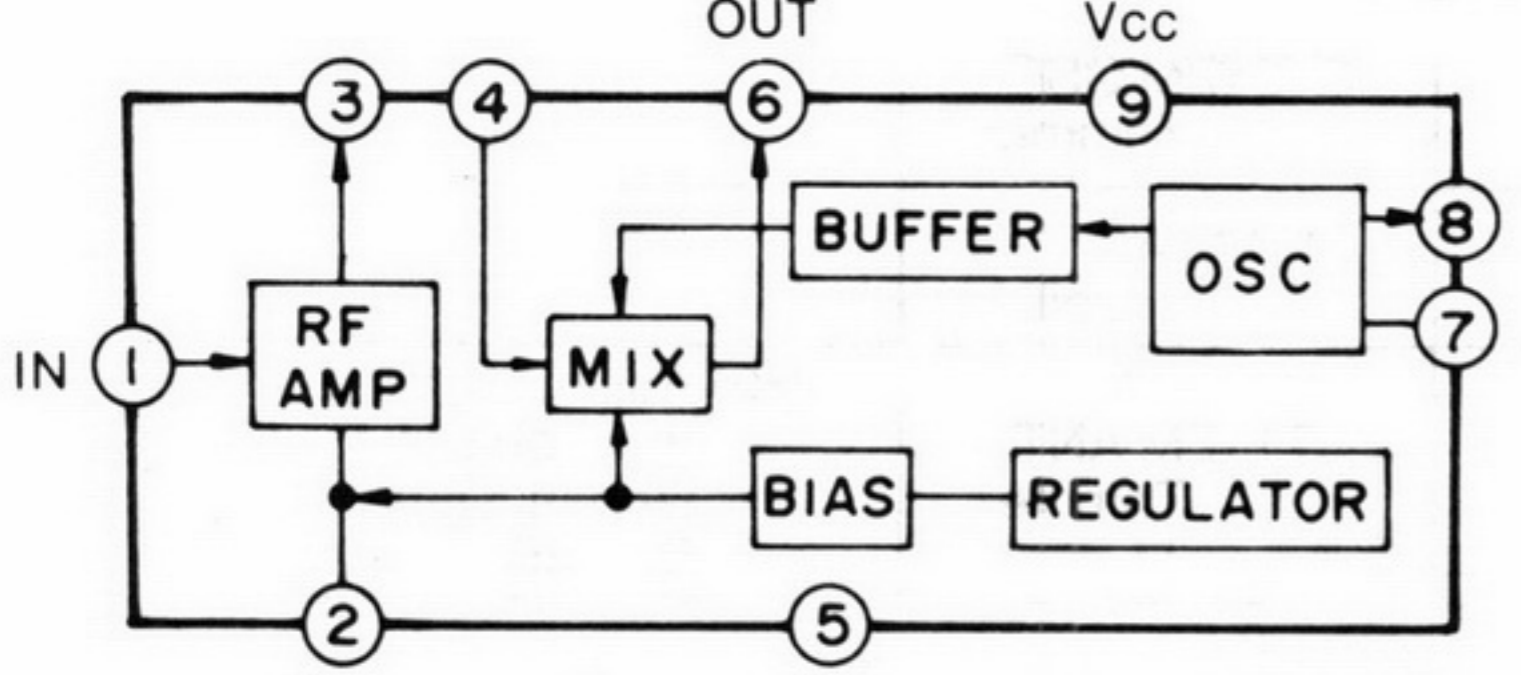
D2
RVDISS133
SWITCHING

IC2
AN7220A
FM/AM IF AMP/DET,
AM OSC/MIX

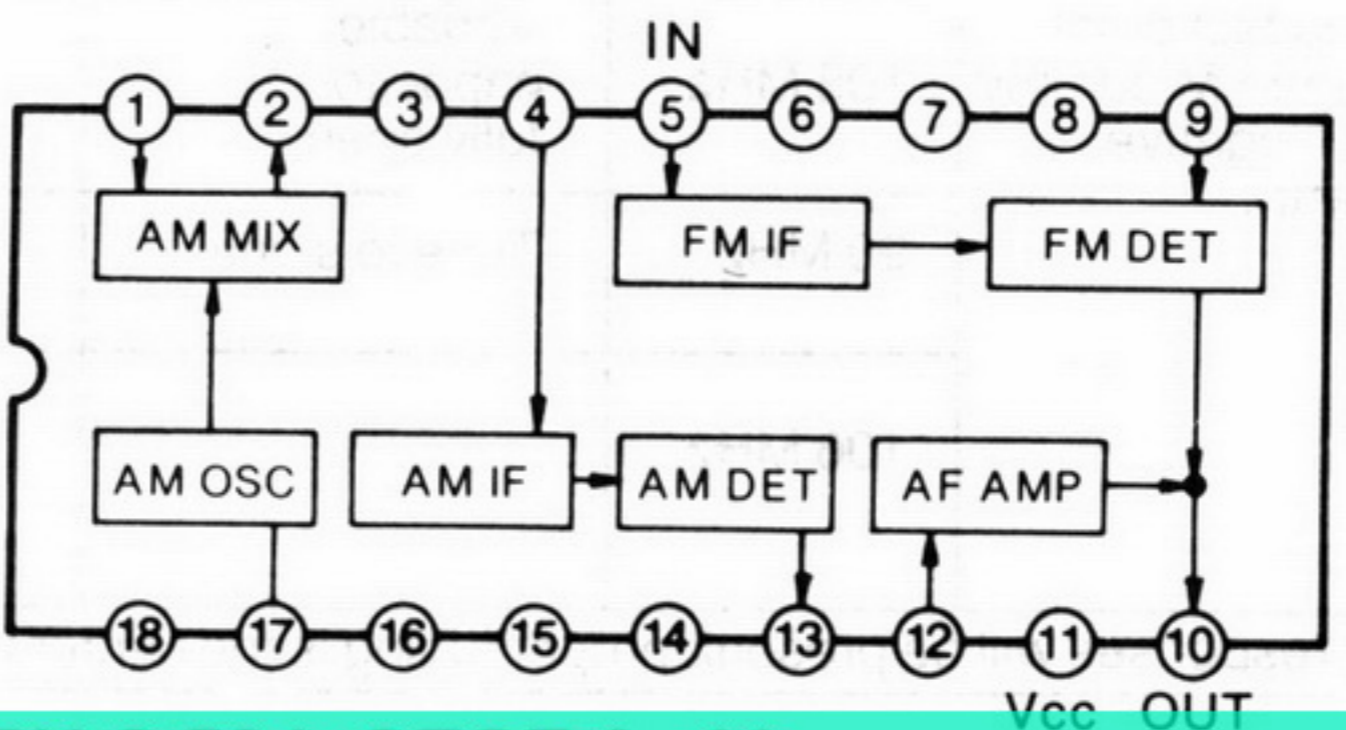
IC3
RXRA1AB
MPX



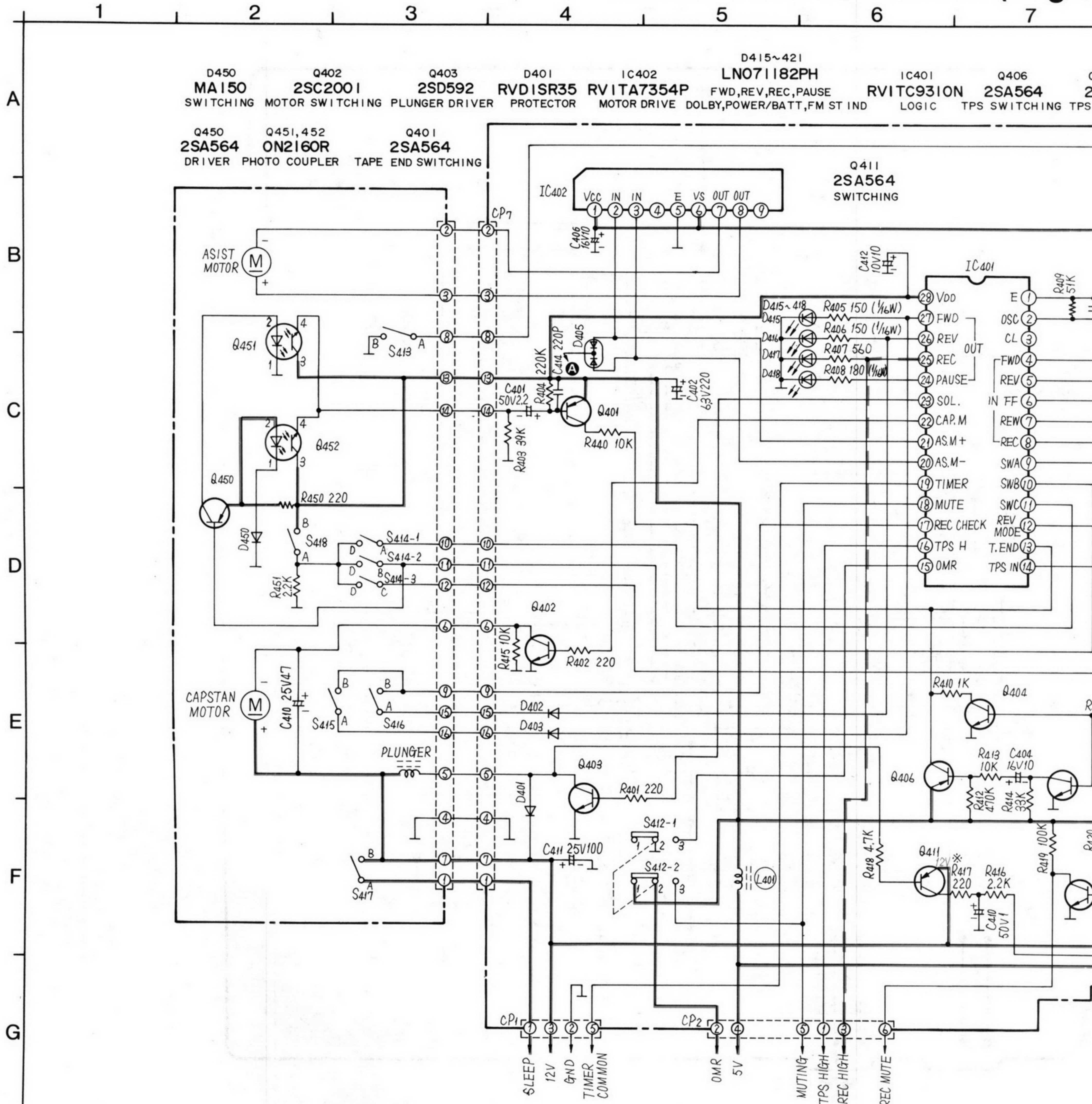
IC1 RVITA7358P



IC2 AN7220A



SCHEMATIC DIAGRAM (Logic)



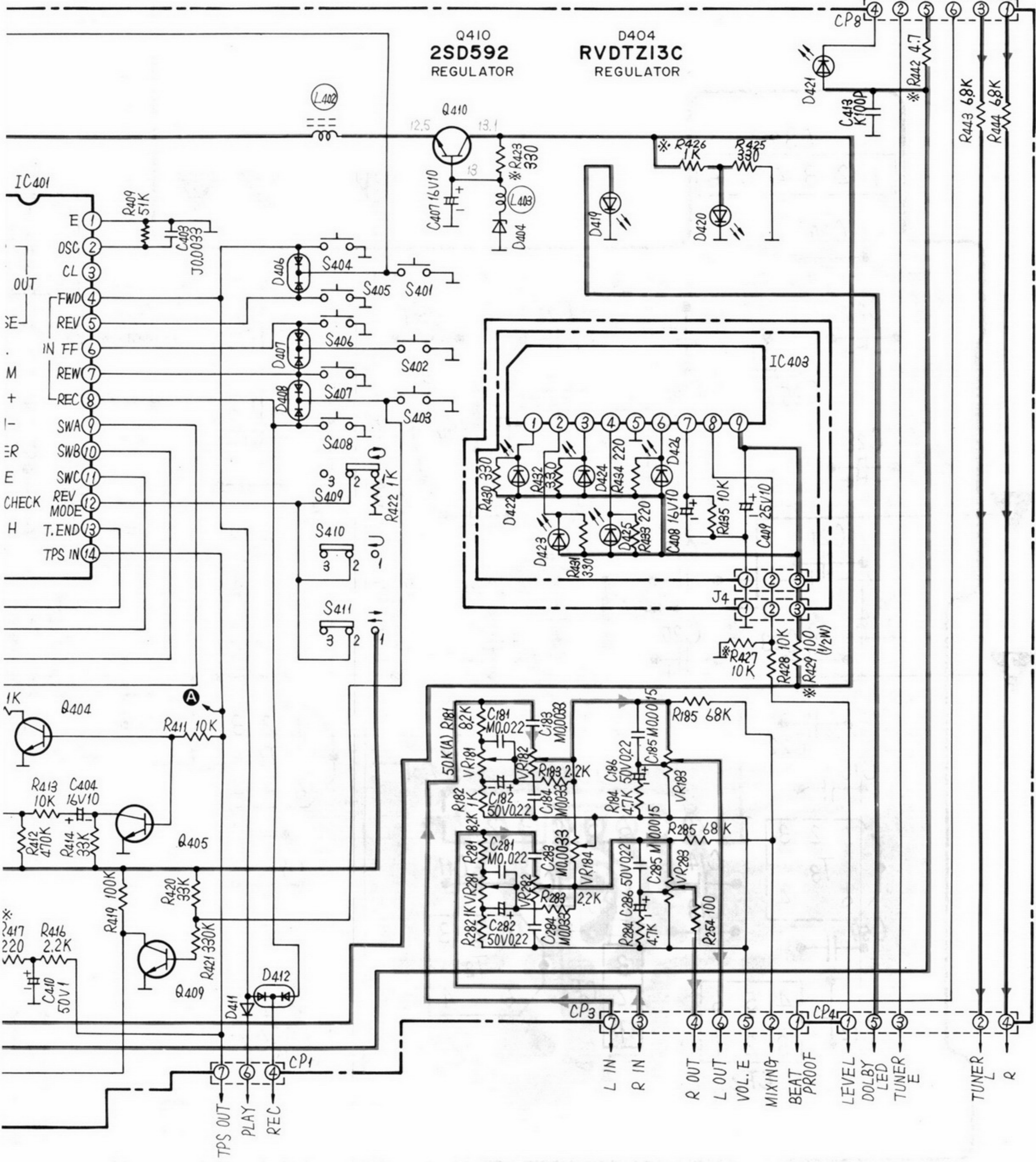
Notes:

- 1. S401: Stop switch.
- 2. S402: Pause switch.
- 3. S403: Record Muting switch.
- 4. S404: Forward switch.
- 5. S405: Reverse switch.
- 6. S406: Fast Forward/TPS switch.
- 7. S407: TPS/Rewind switch.
- 8. S408: Record switch.
- 9. S409~S411: Tape direction switch.
(S409...repeat two-side playback or two-side recording, S410...two-side playback or recording, S411...one-side playback or recording)
- 10. S412-1, S412-2: One program repeat switch in "OFF" position.
(1...OFF, 3...ON)
- 11. S413: Eject switch.
- 12. S414-1~S414-3: Rotary switch.
- 13. S415, S416: Record Check switch.
- 14. S417: Sleep
- 15. S418: Fast
- 16. VR181, 28
- VR182, 28
- VR183, 28
- VR184: Ba
- 17. DC voltage
- negative te
- 18. For resistor

M (Logic) MODEL RX-C52L

7 8 9 10 11 12

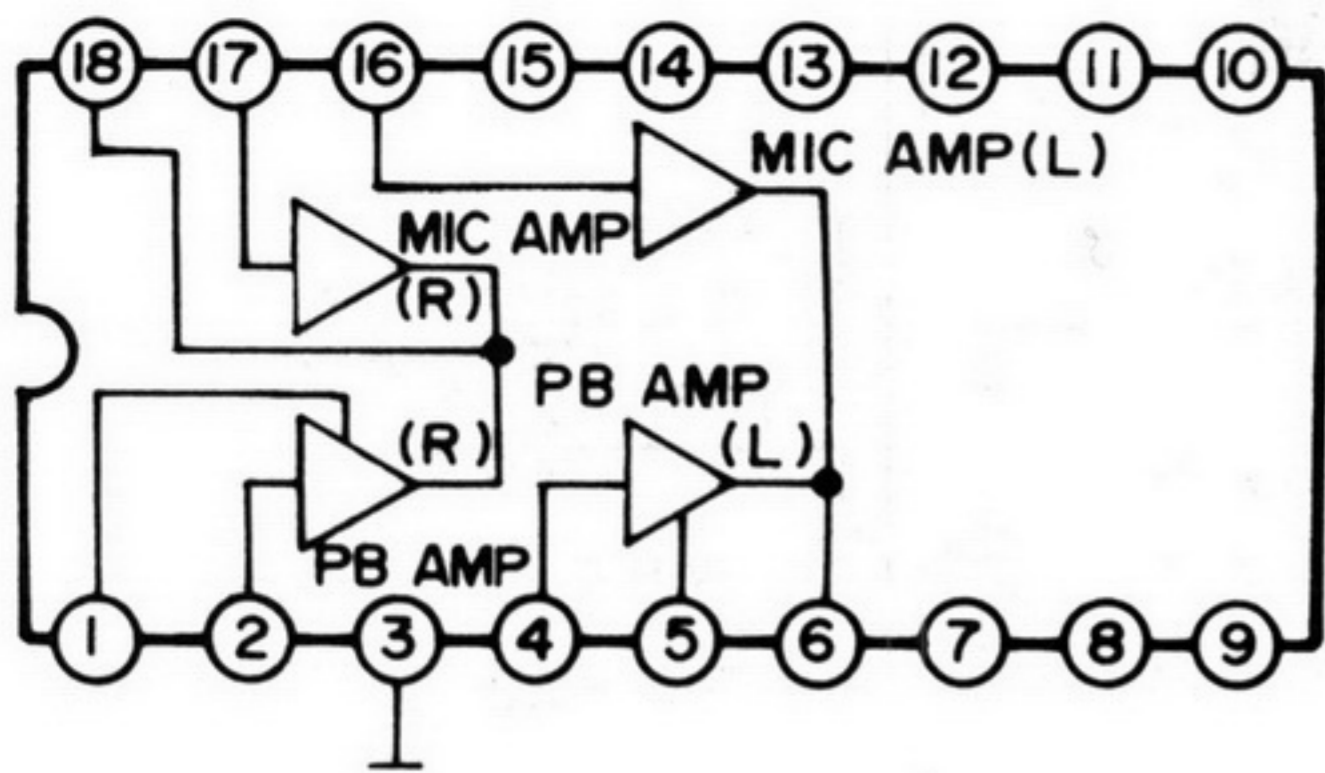
Q406 Q404,405 Q409 D405~408,412 D402, 403,411 IC403 D422~426
 ↓ 2SA564 2SC1740 2SC1740 MA175WK RVDISS133 RV1BA6154 LN051181P
 TPS SWITCHING TPS SWITCHING REC MUTE SWITCHING SWITCHING LEVEL METER LEVEL METER



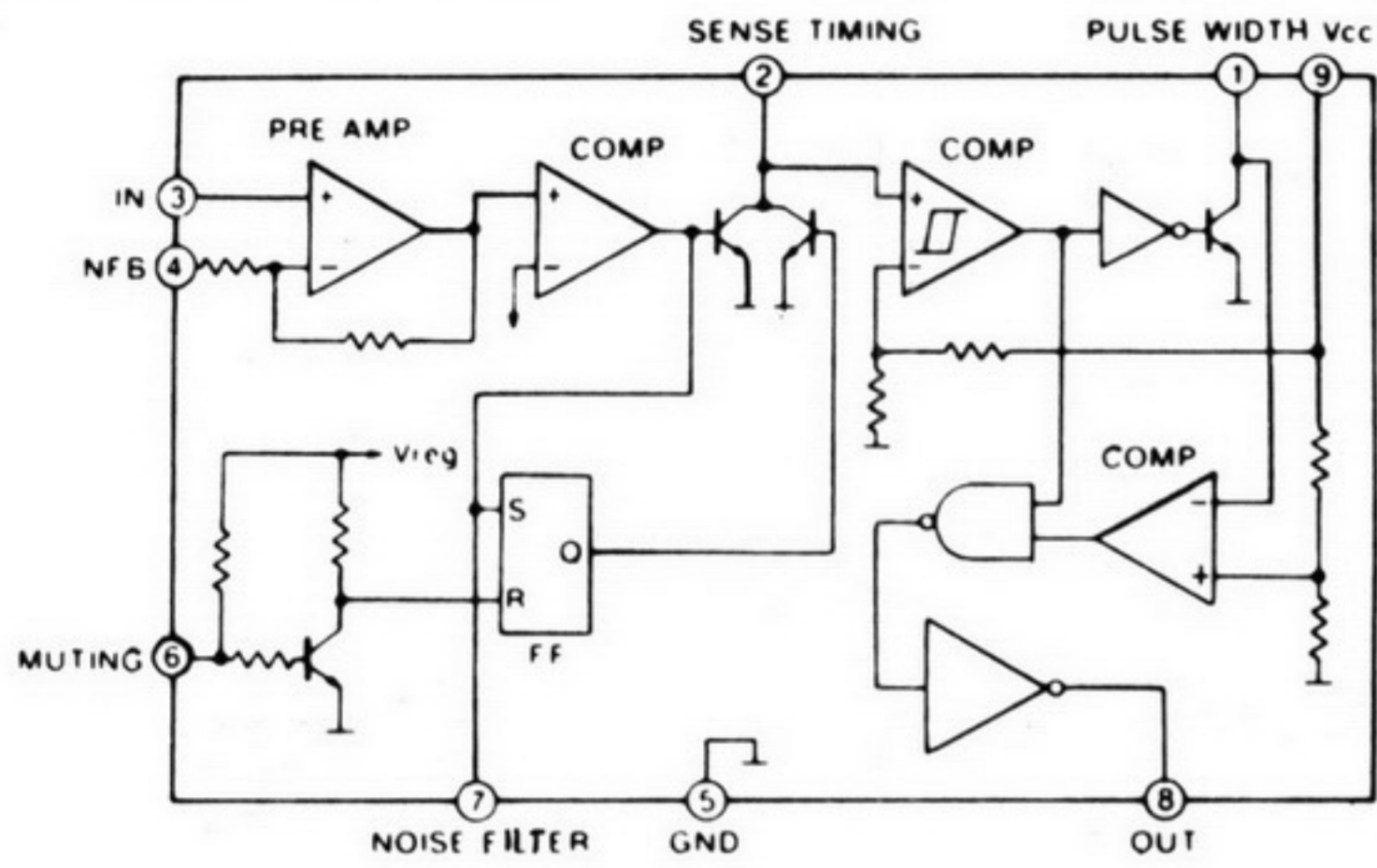
- 14. S417: Sleep switch.
- 15. S418: Fast Forward/Rewind switch.
- 16. VR181, 281: Bass control VR.
 VR182, 282: Treble control VR.
 VR183, 283: Volume control VR.
 VR184: Balance control VR
- 17. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
- 18. For resistors using printed types except those with * mark.

— + ⊕ Voltage Line
 — Tape (PLAY BACK) Signal Line
 — Radio (FM) Signal Line
 - - - Recording control signal line

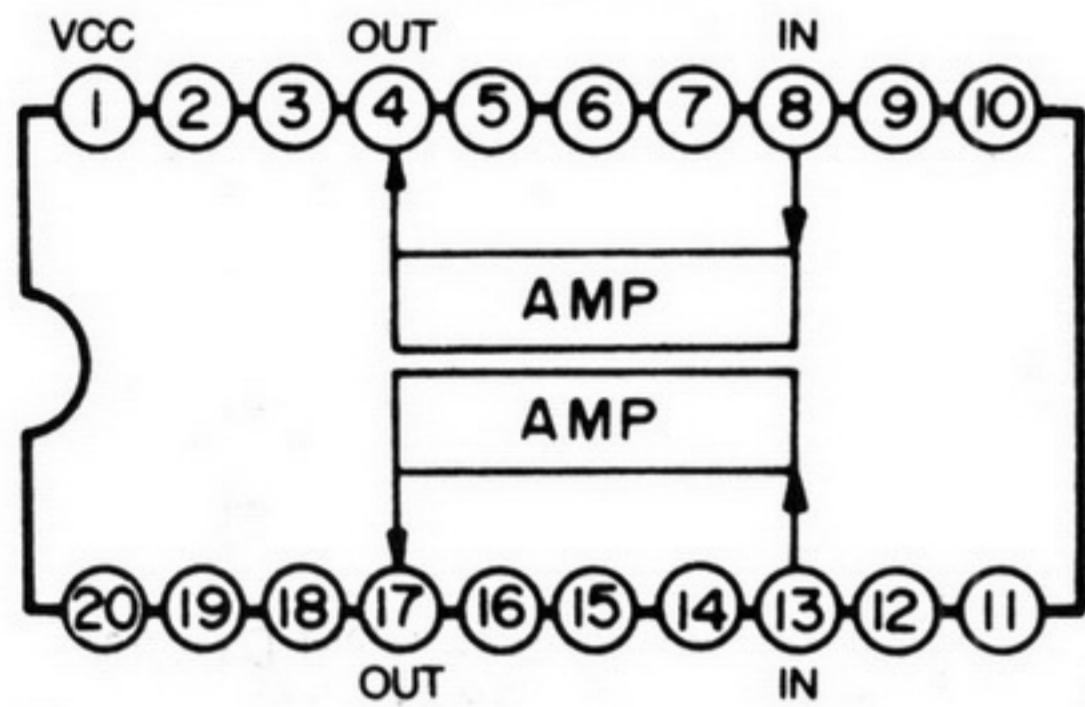
IC101 AN6205



IC103 RVIBA338

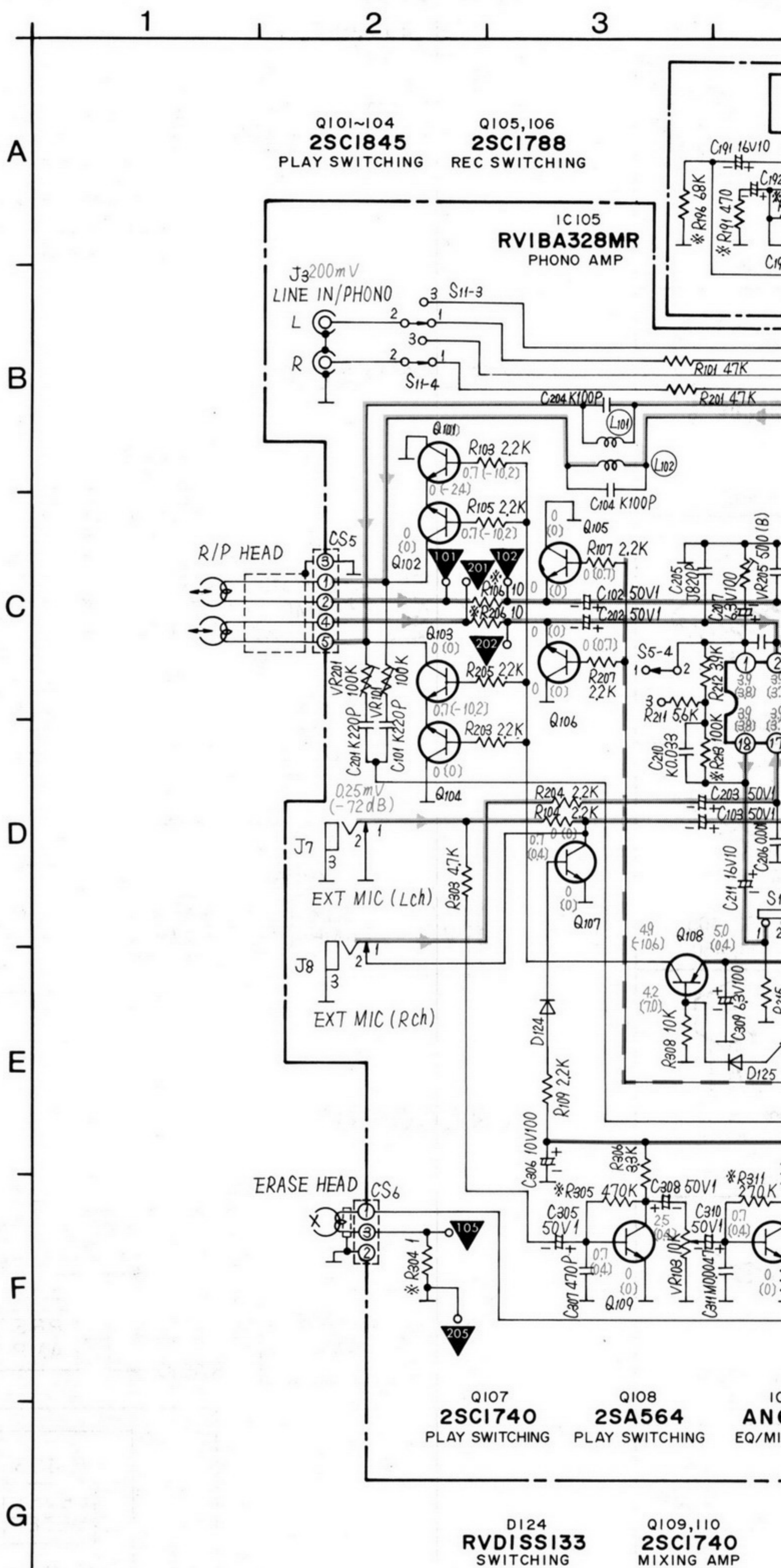
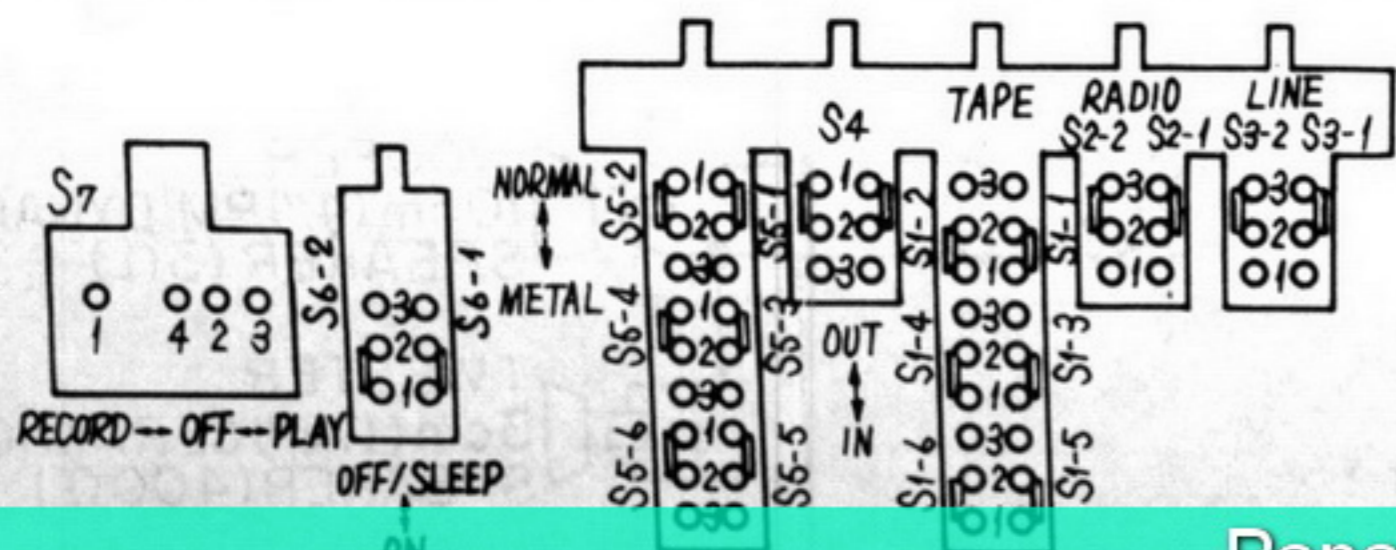


IC104 RVILA4505R



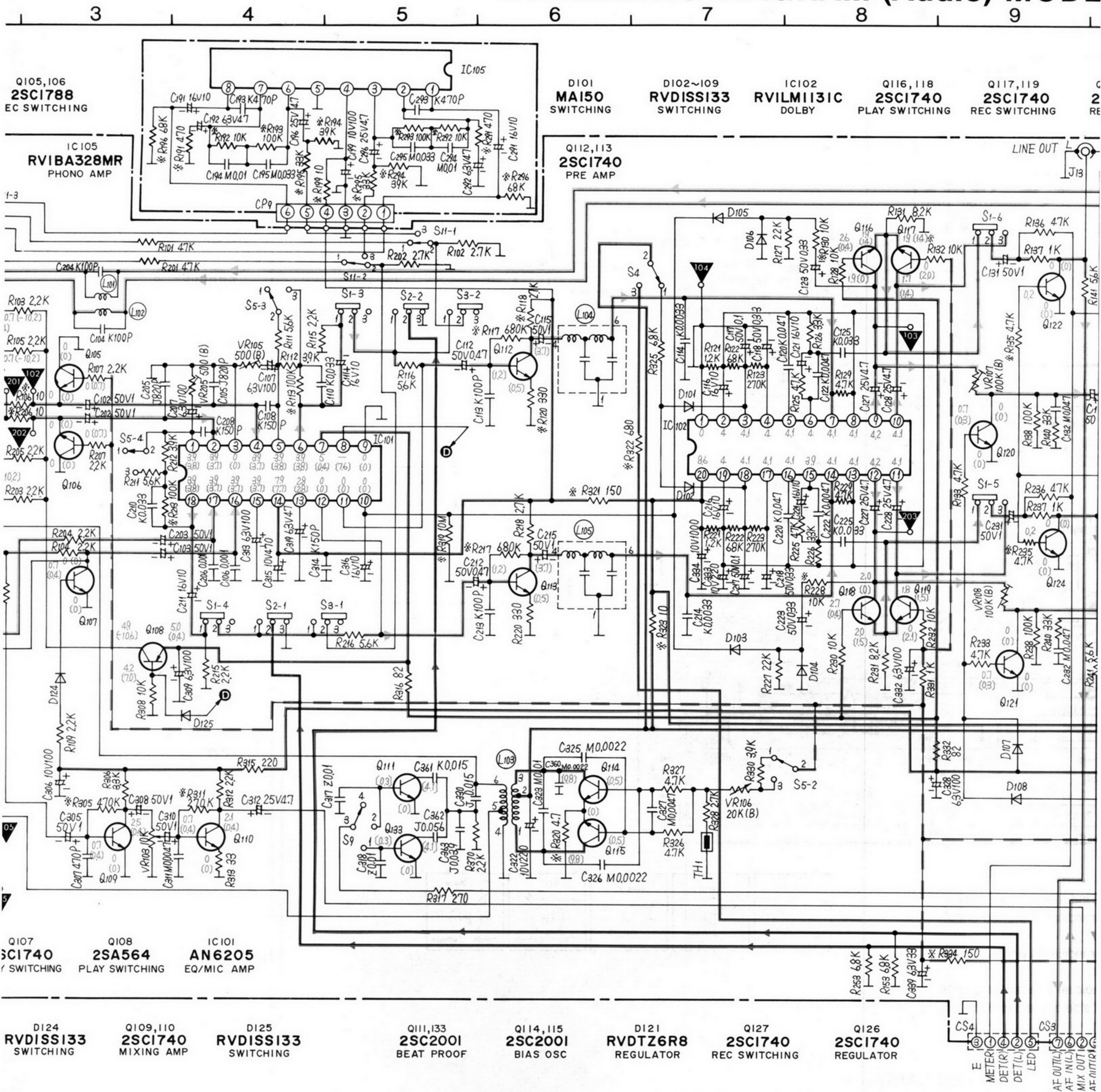
Notes:

1. S1~S3: Function switch in "TAPE" position. (S1-1~S1-6...TAPE, S2-1, S2-2...RADIO, S3-1, S3-2...LINE/PHONO)
2. S4: Dolby noise reduction switch in "OUT" position. (1...OUT, 3...IN)
3. S5-1~S5-6: Tape switch in "NORMAL" position. (1...NORMAL, 3...METAL)
4. S6-1, S6-2: Operation switch in "ON" position. (1...ON, 3...OFF/SLEEP)
5. S7: Timer stand by switch in "RECORD" position. (1...RECORD, 2...OFF, 3...PLAY)
6. S8: AC/DC selector switch in "AC" position.
7. S9: Beat proof switch.
8. S11-1~S11-4: Input switch in "LINE IN" position. (1...LINE IN, 3...PHONO)
9. VR101, 201: Bias current adjustment VR.
VR103: Mixing level control VR.
VR105, 205: Playback level adjustment VR.
VR106: Erase current adjustment VR.
VR107, 108: Overall gain adjustment VR.
10. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery. []...Record
11. Battery current: No signal 177 mA
Maximum output (radio) 1.25A
Maximum output (tape) 1.27A
12. For resistors, using printed types except those with * mark.



13. Important safety notice
Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

SCHEMATIC DIAGRAM (Audio) MODE

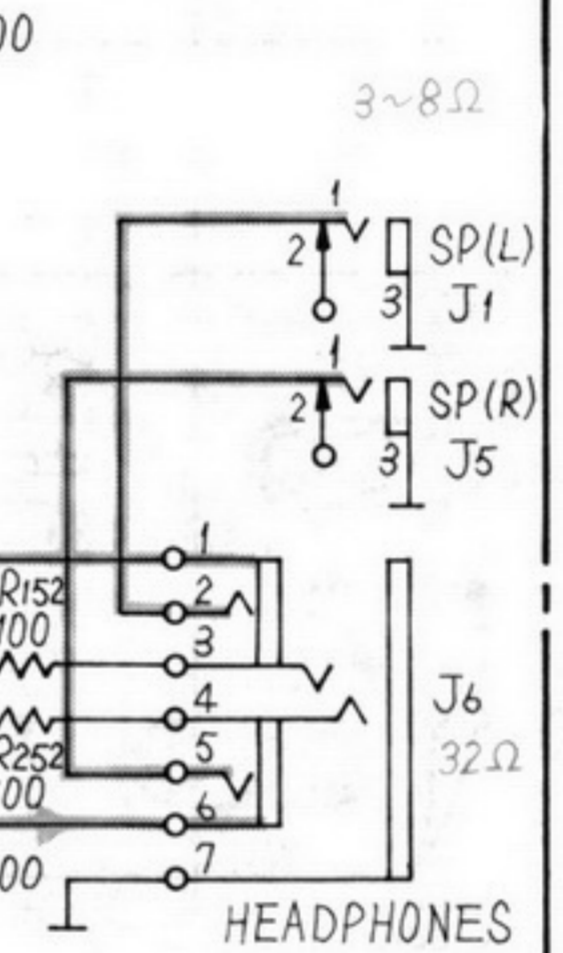
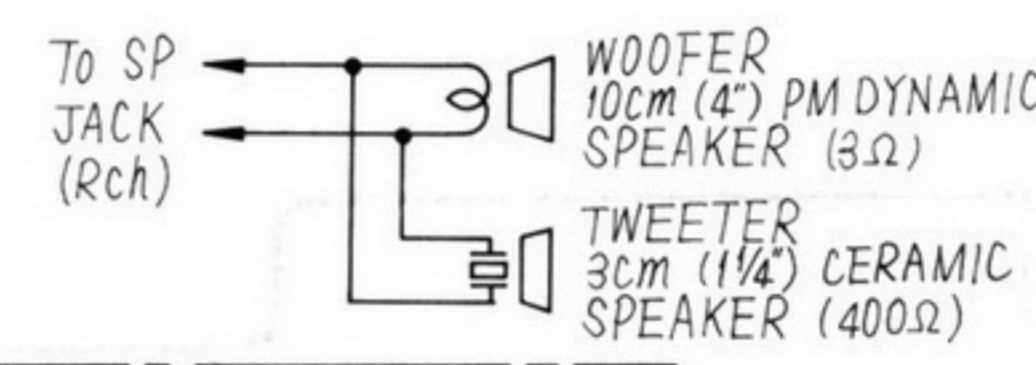
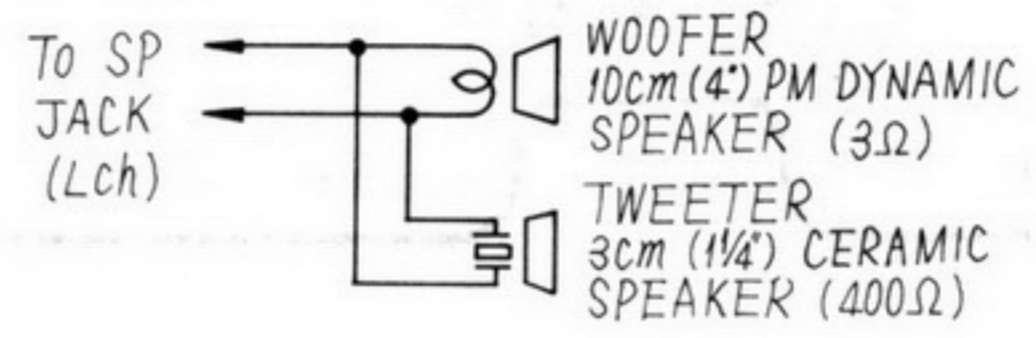
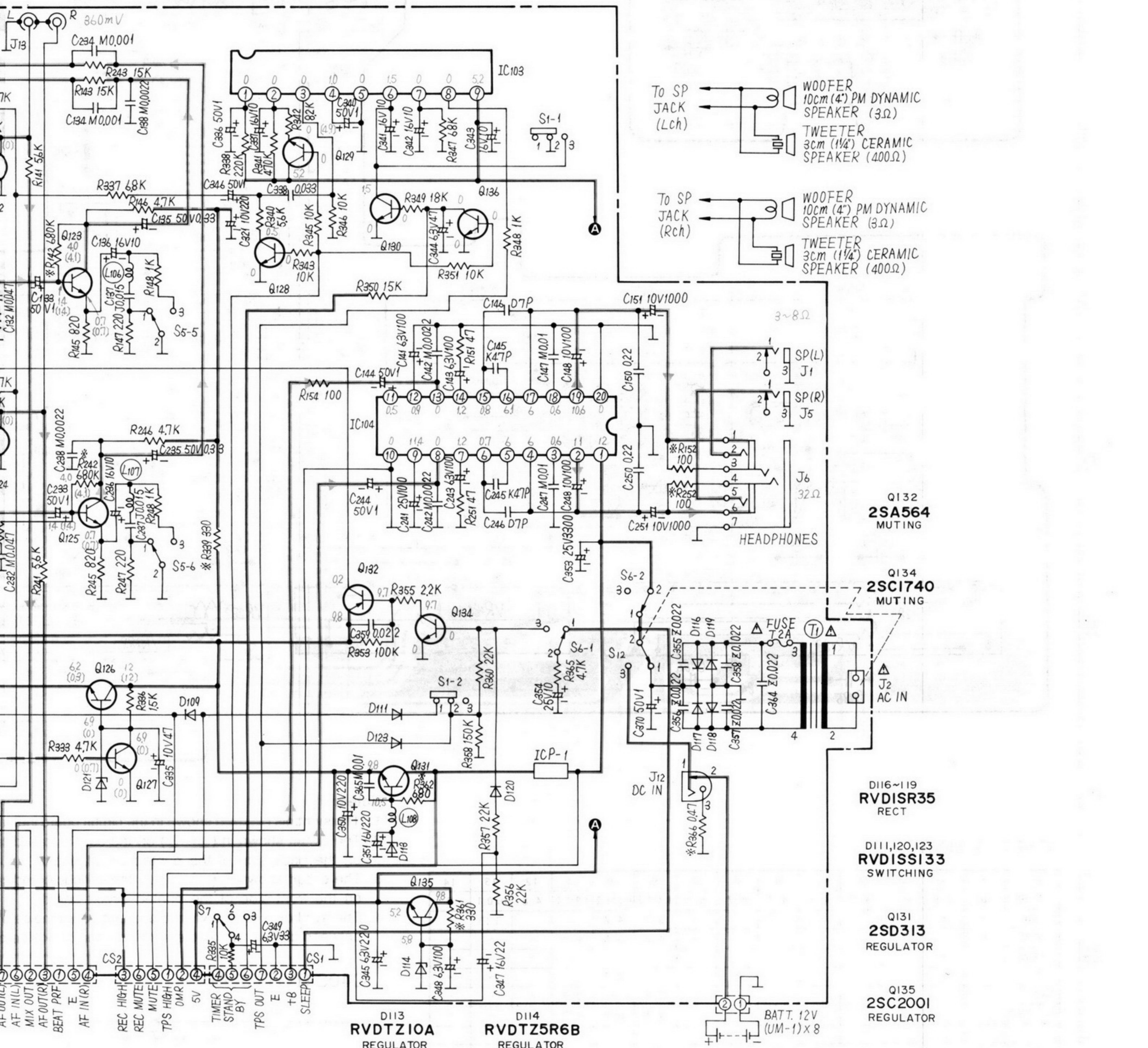


- + B Voltage Line
- Recording control signal line
- Tape (PLAY BACK) Signal Line
- Tape (RECORD) signal line
- Radio (FM) Signal Line

DEL RX-C52L

10 11 12 13 14 15

- Q120,121 **2SC1740** REC MUTING
- Q122,124 **2SC1740** TPS MUTING
- Q123,125 **2SC1740** REC AMP
- Q128,129,136 **2SC1740** TPS SWITCHING
- Q130 **2SC1740** OMR SWITCHING
- IC103 **RVIBA338** TPS AMP
- IC104 **RVILA4505R** POWER AMP



Q132 **2SA564** MUTING

Q134 **2SC1740** MUTING

D116~119 **RVDISR35** RECT

D111,120,123 **RVDISS133** SWITCHING

Q131 **2SD313** REGULATOR

Q135 **2SC2001** REGULATOR

