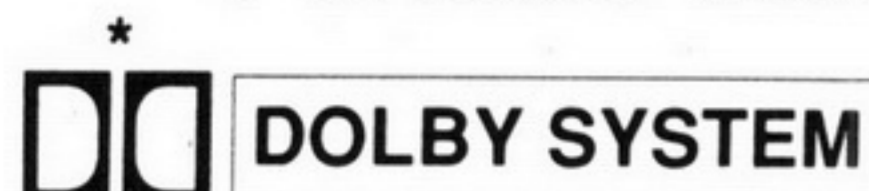


Service Manual

Portable Stereo Component System

Radio Cassette



RX-CT990



Color

(K).....Black Type

Areas

Country Code	Area	Color
(EB)	Great Britain	(K)
(EG)	Continental Europe F.R. Germany & Italy	

RX-FD55 Mechanism Series (AR300)

■ SPECIFICATIONS

General:

Power Requirement: AC; 230~240 V, 50Hz
 Battery; 15V (10 UM-1, R20/LR20 batteries)
 Memory Back-up for Computer/Clock;
 6V (4UM-3, R6/LR6 batteries)

Power Consumption: 57W (AC only)

Power Output: Woofer; 60W (30Wx2)...PMPO
 Tweeter; 20W (10Wx2)...PMPO

Speaker: Woofer; 12cmx2PM Dynamic speaker (2.7Ω)
 Tweeter; 8cmx2PM Dynamic speaker (8Ω)

Input: MIX MIC; 5mV/200~600Ω, ø3.5
 DC IN; 13.2V (12~15V)
 CD/AUX; 316mV/47kΩ

Outputs: HEADPHONE; 32Ω, ø3.5
 SPEAKER; LOW; 2.7~8Ω
 HIGH; 8~16Ω

Dimensions: 641(W) x 255(H) x 232(D)mm
 Main unit; 313(W) x 255(H) x 232(D)mm
 Speaker box; 174(W) x 254(H) x 188(D)mm

Weight: 8.4kg without batteries

Radio Section:

Frequency Range: FM; 87.5~108MHz
 LW; 144~288kHz
 MW; 522~1611kHz

Intermediate Frequency: FM; 10.7MHz
 AM; 459 kHz

Sensitivity: FM; 2.0μV/50mW output (-3dB Limit Sens.)
 LW; 160μV/m/50mW output
 MW; 140μV/m/50mW output

Tape Deck Section:

Frequency Range: 30~16,000 Hz (with normal tape)
 30~17,000 Hz (with CrO₂tape)

Recording System: AC bias, AC arese

Tape Speed: 4.8 cm/s

Monitor System: Variable sound monitor

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

* Dolby noise reduction manufactured under license from Dolby Laboratories Corporation. "Dolby" and the double-D symbols are trademarks of Dolby Laboratories licensing Corporation.

Notes:

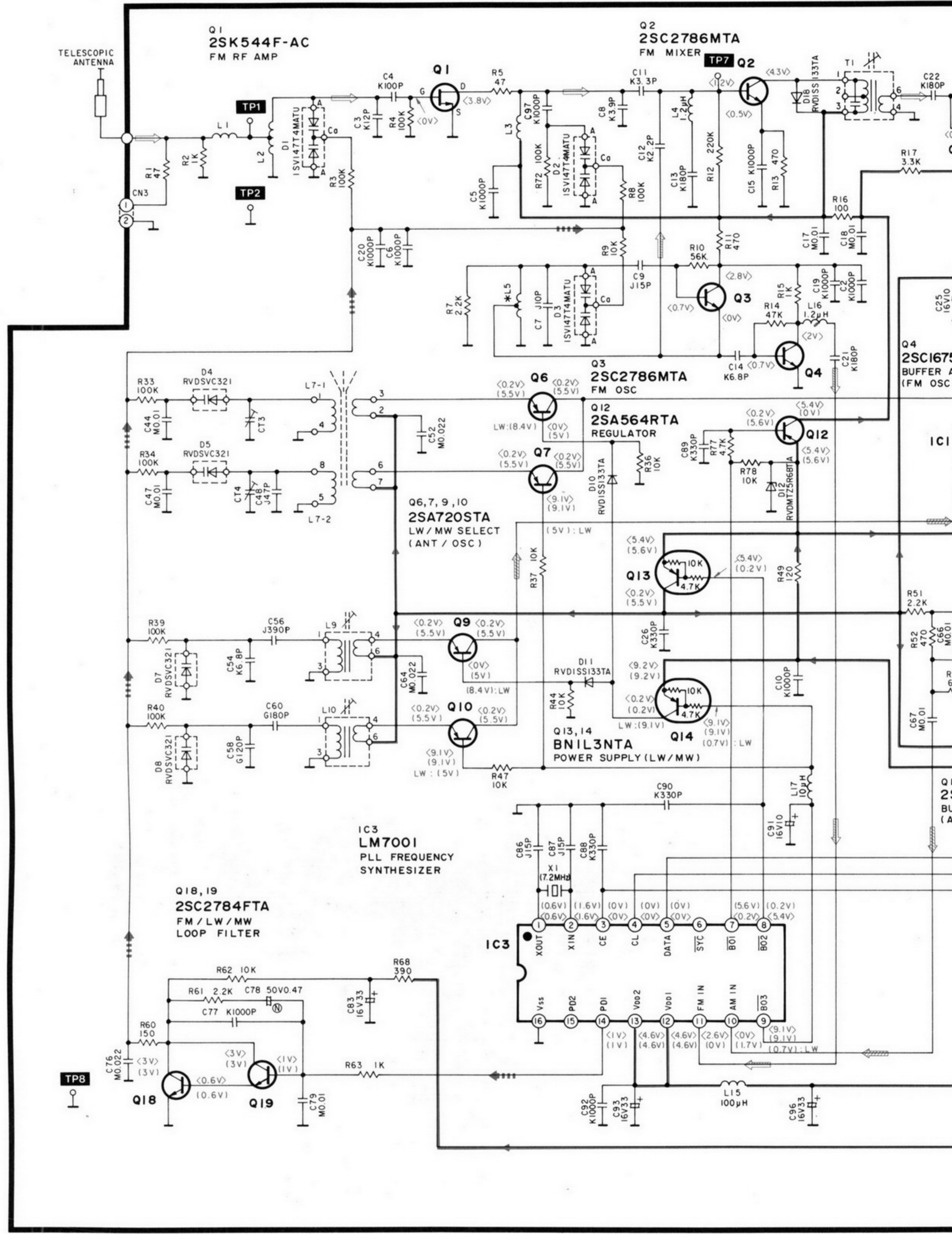
1. Weights and dimensions shown are approximate.
2. Designs and specifications are subject to change without notice.

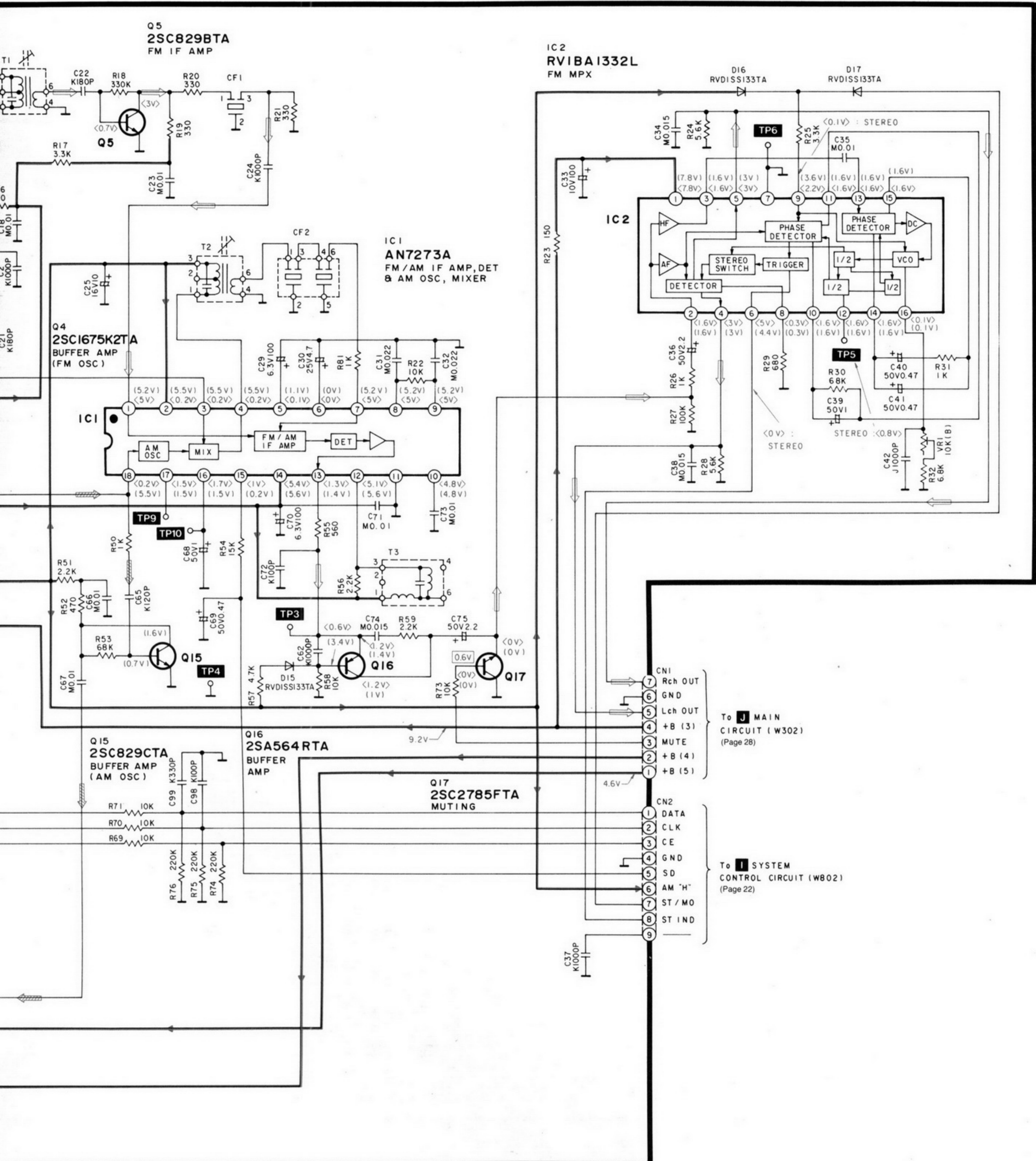
Panasonic

1 2 3 4 5

A
B
C
D
E
F

A TUNER CIRCUIT





Notes:

- VR1: FM VCO adjustment VR.
- DC voltage measurements are taken with electronics voltmeter. The negative terminal of the battery provides negative meter connection point.

() MW/LW < > FM



<p>CXA1102M</p>	<p>M51167BFP</p>	<p>BU4066B</p>	<p>LM7001</p>	<p>AN7273A</p>	<p>LA4108R</p>
<p>BA7755</p>	<p>BA6418N</p>	<p>RVIBA1332L</p>	<p>BA3822LS-M</p>	<p>AN7134N-R</p>	<p>S8053HNB-T S81250HGT</p>
<p>LC7995-8502</p>	<p>UPD75308GB46</p>	<p>DN6851 ALB</p>	<p>BA1A4MTA BA1L4ZTA</p> <p>BA1L4MTA BA1F4ZTA</p>	<p>BN1L3NTA 2SC2784FTA 2SC2785FTA 2SC2786FTA BA1F4MTA BN1A4MTA BA1L4LTA</p>	<p>2SK301QTA</p>
<p>2SA720STA 2SC2001KTA</p>	<p>2SA952KTA 2SB621RTA 2SC829BTA 2SC1684HRTA 2SC1845FTA 2SC2001LTA 2SD965RTA</p>	<p>2SK544F-AD</p>	<p>2SJ40CDTA</p>	<p>2SB1185E</p>	<p>2SC1846R</p>
<p>1N5402BM21</p>	<p>1SV147T4MATU</p>	<p>RVDSVC321</p>	<p>SLR33VC160 SLR33MC160</p>	<p>RVDMTZ4R7BTA RVDMTZ5R6BTA RVDMTZ12BTA RVDMTZ6R8BTA RVDMTZ15ATA RVDMTZ10BTA RVDMTZ5R1BTA</p>	
<p>RVD1SS133TA</p>					

Notes:

(MAIN CIRCUIT)

- S901: AC/DC select switch in "DC" position.

No mark... TAPE PLAYBACK

(G. EQUALISER CIRCUIT & SYSTEM CONTROL CIRCUIT)

- S351 : Timer check switch. (TIMER CHECK)
- S352 : Timer recording switch. (TIMER REC)
- S353 : Sleep switch. (SLEEP)
- S354 : Timer Select switch. (TIMER)
- S355 : FM1 select switch. (FM1)
- S356 : FM2 select switch. (FM2)
- S357 : Station memory switch. (1)
- S358 : Station memory switch. (2)
- S359 : Station memory switch. (3)
- S360 : Station memory switch. (4)
- S361 : Time adjust switch. (ADJUST)
- S363 : Time set and tuning switch. (TIME SET/TUNING -)
- S364 : Time set and tuning switch. (TIME SET/TUNING +)
- S365 : FM3 select switch. (FM3)
- S366 : AM select switch. (AM)
- S367 : Station memory switch. (5)
- S368 : Station memory switch. (6)
- S369 : Station memory switch. (7)
- S370 : Station memory switch. (8)
- S371 : Power switch. (POWER ON/OFF)
- S372 : Function select switch. (TAPE)
- S373 : Function select switch. (TUNER)
- S374 : Function select switch. (CD/AUX)
- S375 : Memory select switch. (MEMORY)
- S376 : Memory scan switch. (MEMORY SCAN)
- S378-1~S378-2 : FM mode/B.P. switch in "MONO/I" position. (M/I...MONO/I, ST/2...STEREO/II, ST/3...STEREO/III)
- VR351-1~VR351-2 : G.E.Q. level control VR. (100 Hz)
- VR352-1~VR352-2 : G.E.Q. level control VR. (330 Hz)
- VR353-1~VR353-2 : G.E.Q. level control VR. (1 kHz)
- VR354-1~VR354-2 : G.E.Q. level control VR. (3.3 kHz)
- VR355-1~VR355-2 : G.E.Q. level control VR. (10 kHz)
- VR356-1~VR356-2 : S-XBS level control VR. (XBS)
- VR357 : Balance control VR. (BALANCE)

No mark...TAPE PLAYBACK

(VOLUME CIRCUIT)

- VR361-1~VR361-2 : Volume control VR. (VOLUME)

No mark...TAPE PLAYBACK

(TAPE DECK CIRCUIT)

- VR401 : DECK 2 playback gain adjustment VR. (Lch)
- VR402 : DECK 1 playback gain adjustment VR. (Lch)
- VR403 : Recording calibration adjustment VR. (Lch)
- VR501 : DECK 2 playback gain adjustment VR. (Rch)
- VR502 : DECK 1 playback gain adjustment VR. (Rch)
- VR503 : Recording calibration adjustment VR. (Rch)
- VR601 : Speed adjustment VR. (HIGH)
- VR602 : DECK 2 speed adjustment VR. (NOR)
- VR603 : DECK 1 speed adjustment VR. (NOR)
- VR604 : Bias voltage adjustment VR.

No mark...TAPE PLAYBACK []... Recording

(MECHANISM DECK CIRCUIT)

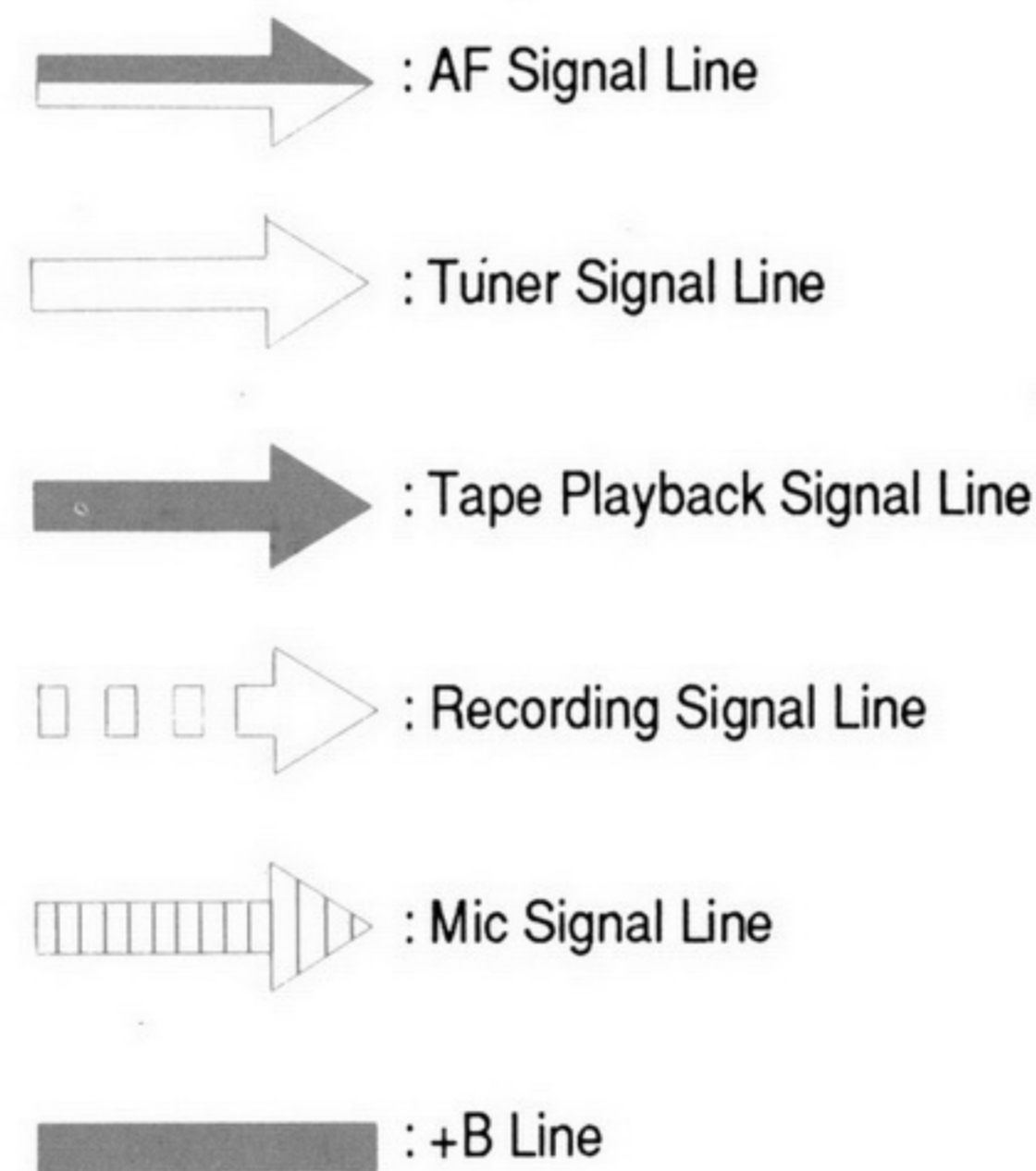
- S951 : DECK 1 mode detect switch.
- S952 : DECK 1 cassette tape insertion detect switch.
- S953 : DECK 1 CrO2 tape detect switch.
- S971 : DECK 2 mode detect switch.
- S972 : DECK 2 cassette tape insertion detection switch.
- S973 : DECK 2 record prevention tab detect switch. (REV)
- S974 : DECK 2 record prevention tab detect switch. (FWD)
- S975 : DECK 2 CrO2 tape detect switch.

(DECK OPERATION CIRCUIT)

- S601 : Dolby select switch. (DOLBY ON/OFF)
- S602 : One touch edit switch. (REW AUTO/AUTO)
- S603 : One touch edit switch. (EDIT)
- S604 : Deck select switch. (DECK 2)
- S605 : Deck select switch. (DECK 1)
- S606 : Deck stop switch. (STOP)
- S607 : Record pause switch. (REC PAUSE)
- S608 : Forward side playback switch. (FWD)
- S609 : Reverse side playback switch. (REV)
- S610 : Fast wind switch. (FF)
- S611 : Fast wind switch (REW)
- S612 : Reverse mode select switch. (REV MODE)
- S613 : One touch edit switch. (SPEED HIGH/NOR)

• DC voltage measurements are taken with electronics voltmeter. The negative terminal of the battery provides negative meter connection point.

• This schematic diagram may be modified at any time with the development of new technology.



1 2 3 4 5

A

B

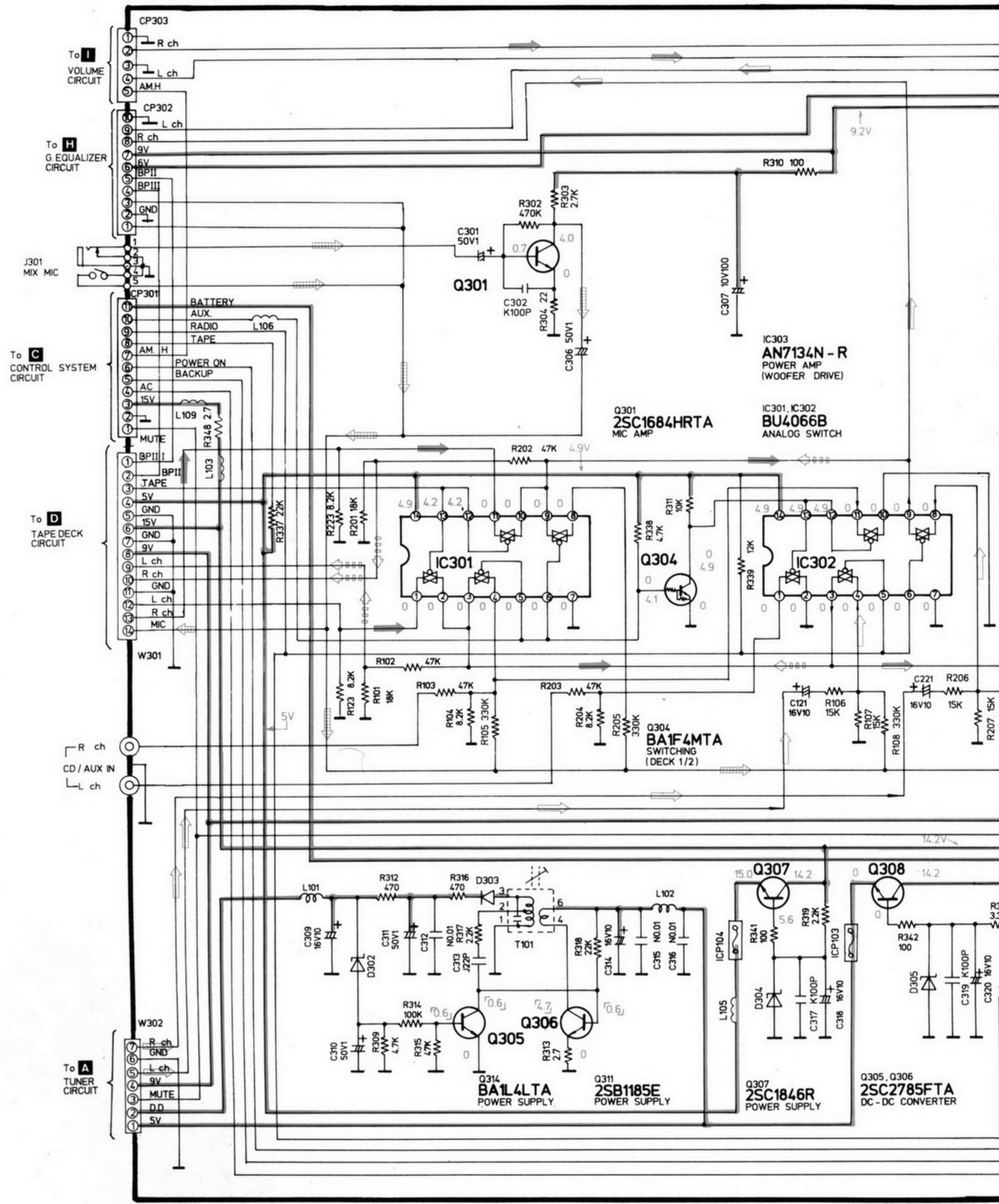
C

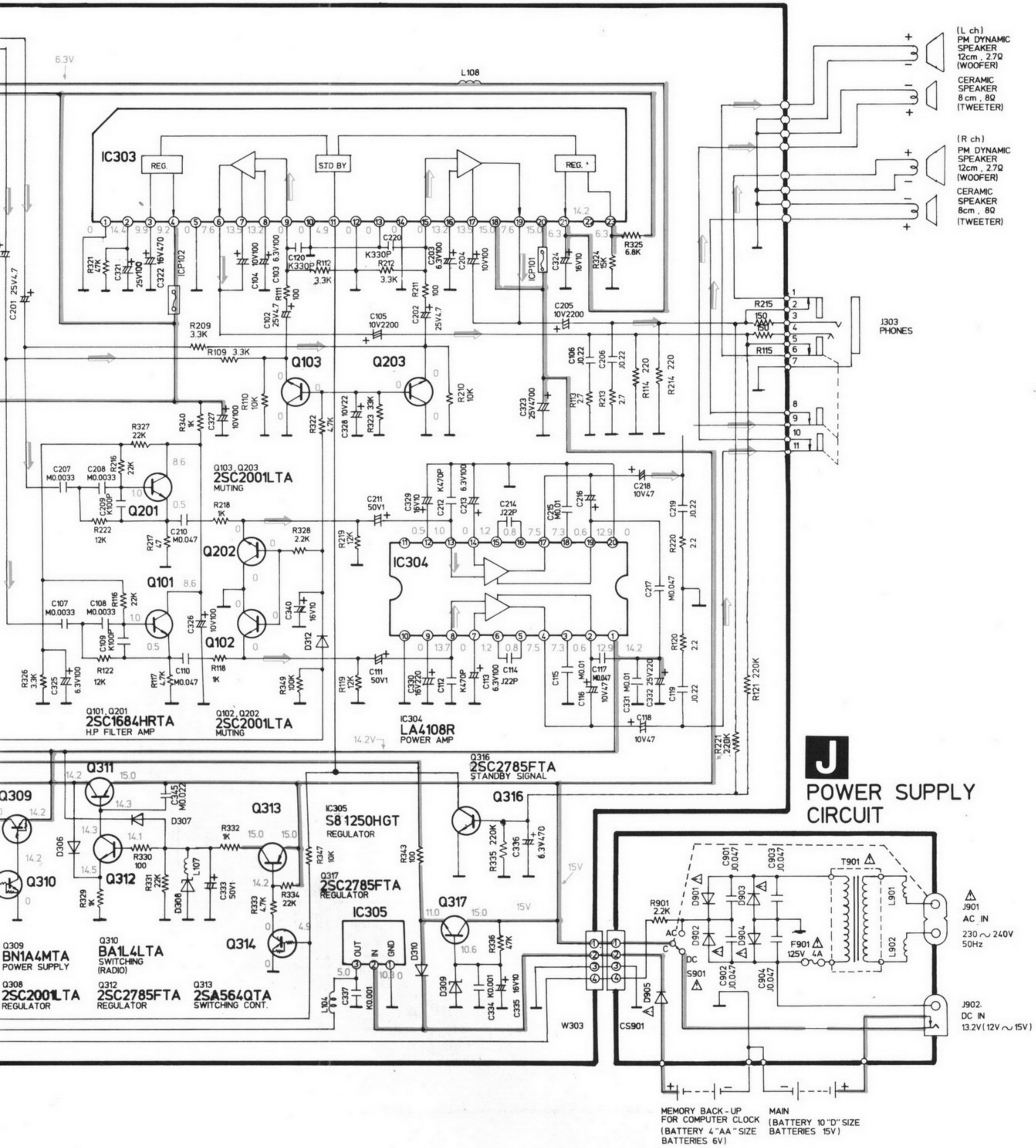
D

E

F

B MAIN CIRCUIT





(L ch)
PM DYNAMIC
SPEAKER
12cm, 27Q
(WOOFER)
CERAMIC
SPEAKER
8cm, 8Q
(TWEETER)

(R ch)
PM DYNAMIC
SPEAKER
12cm, 27Q
(WOOFER)
CERAMIC
SPEAKER
8cm, 8Q
(TWEETER)

J
POWER SUPPLY
CIRCUIT

J901
AC IN
230 ~ 240V
50Hz

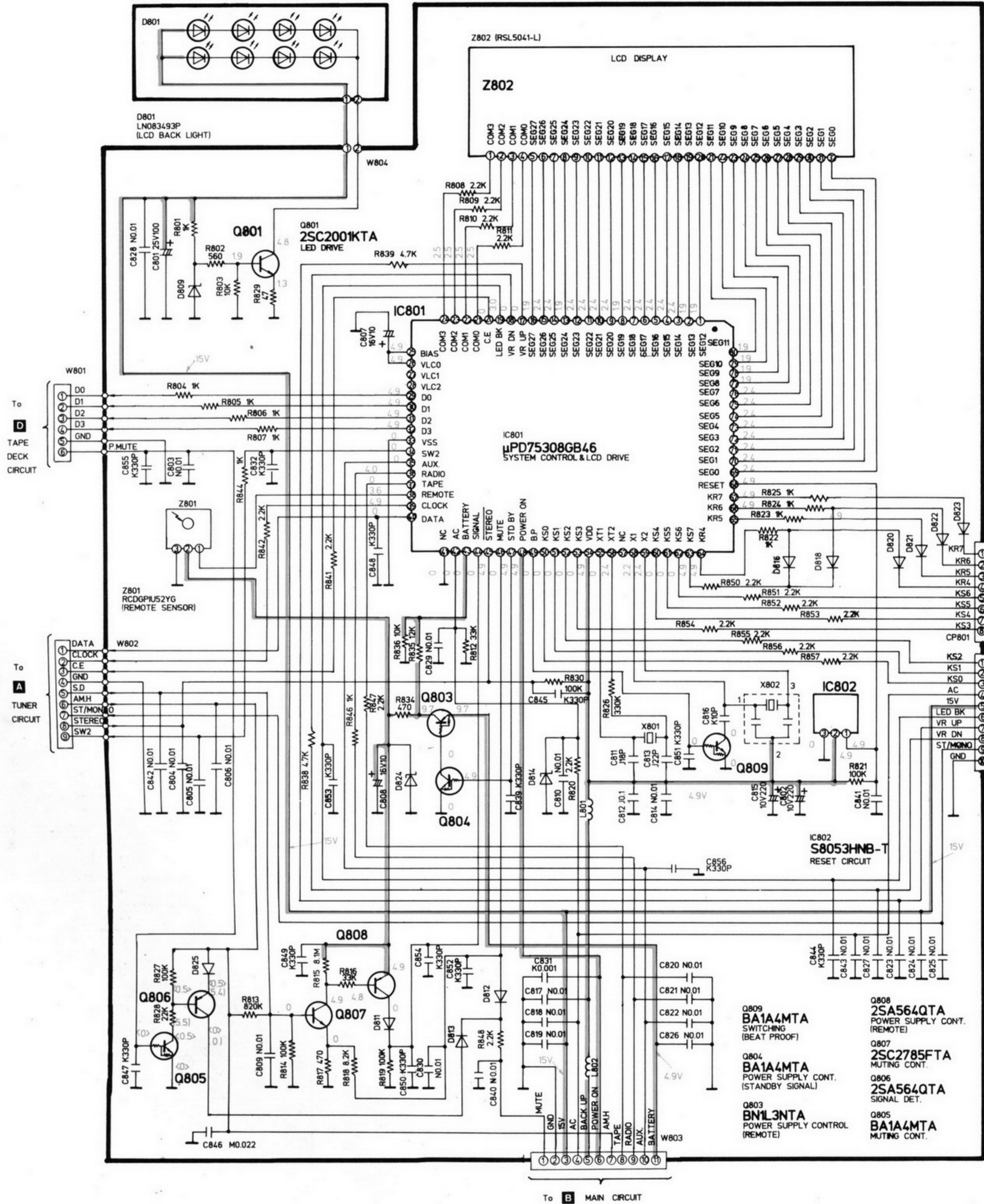
J902
DC IN
13.2V (12V ~ 15V)

MEMORY BACK-UP
FOR COMPUTER CLOCK
(BATTERY 4 "AA" SIZE
BATTERIES 6V)

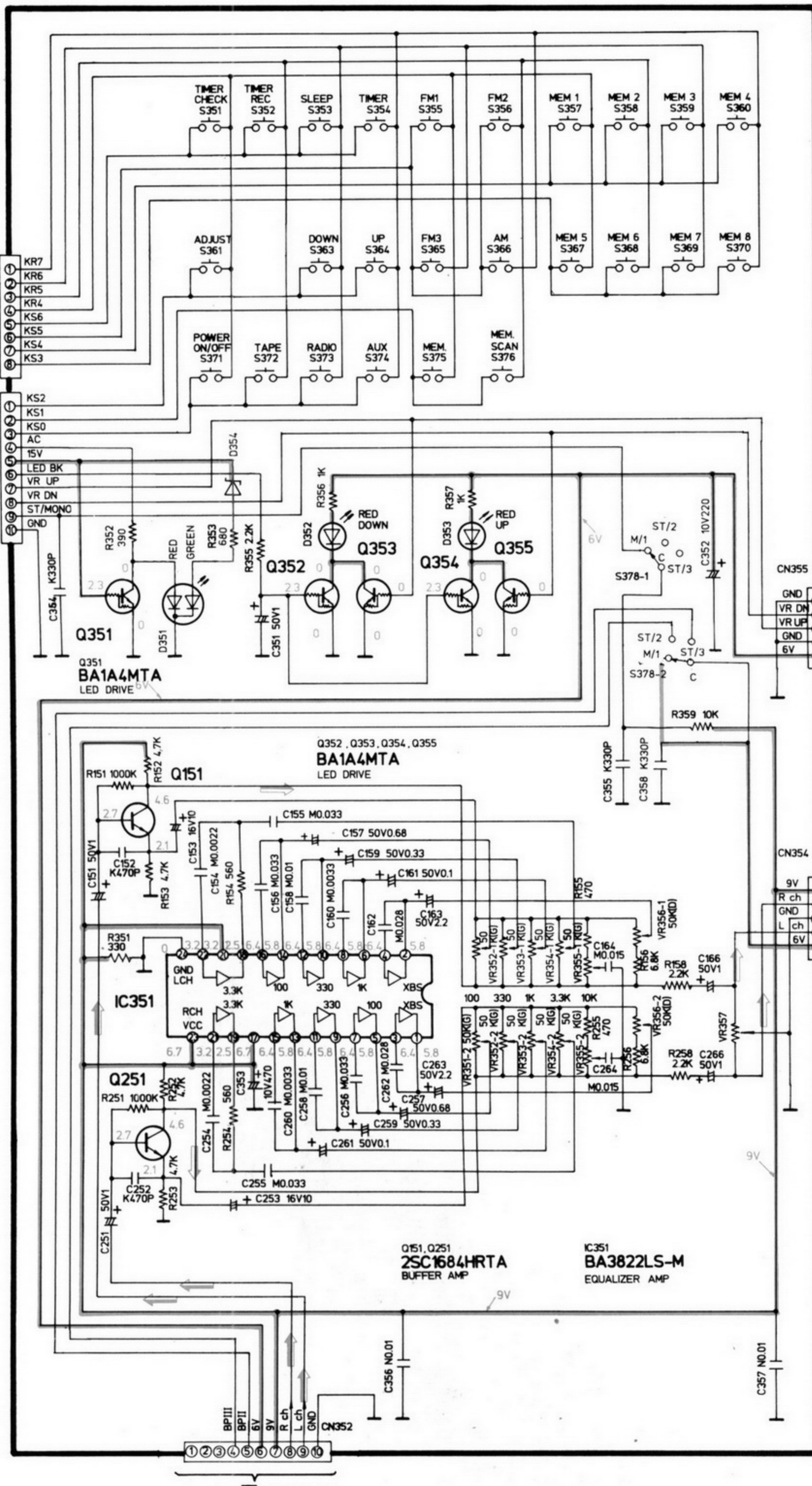
MAIN
(BATTERY 10 "D" SIZE
BATTERIES 15V)

LED BLOCK

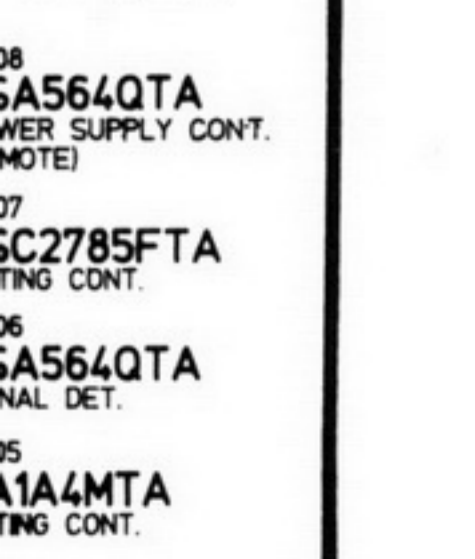
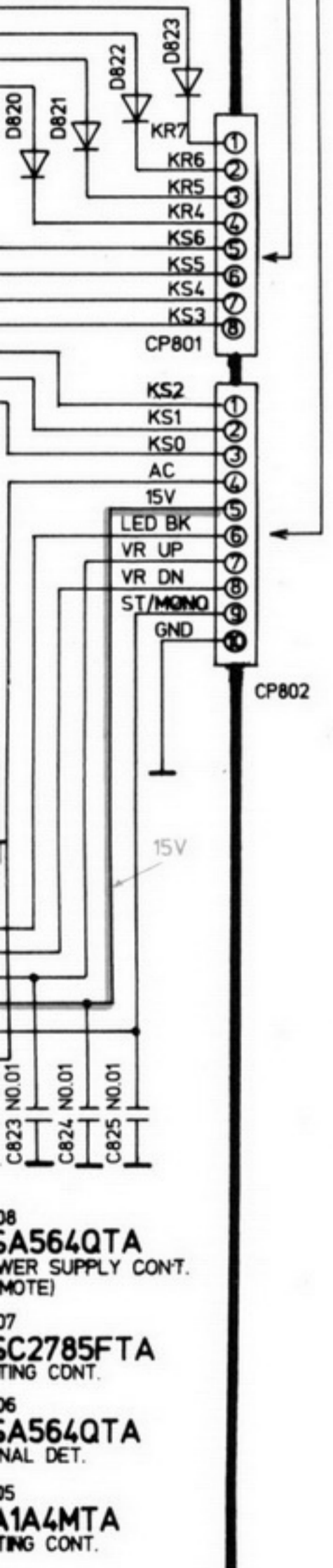
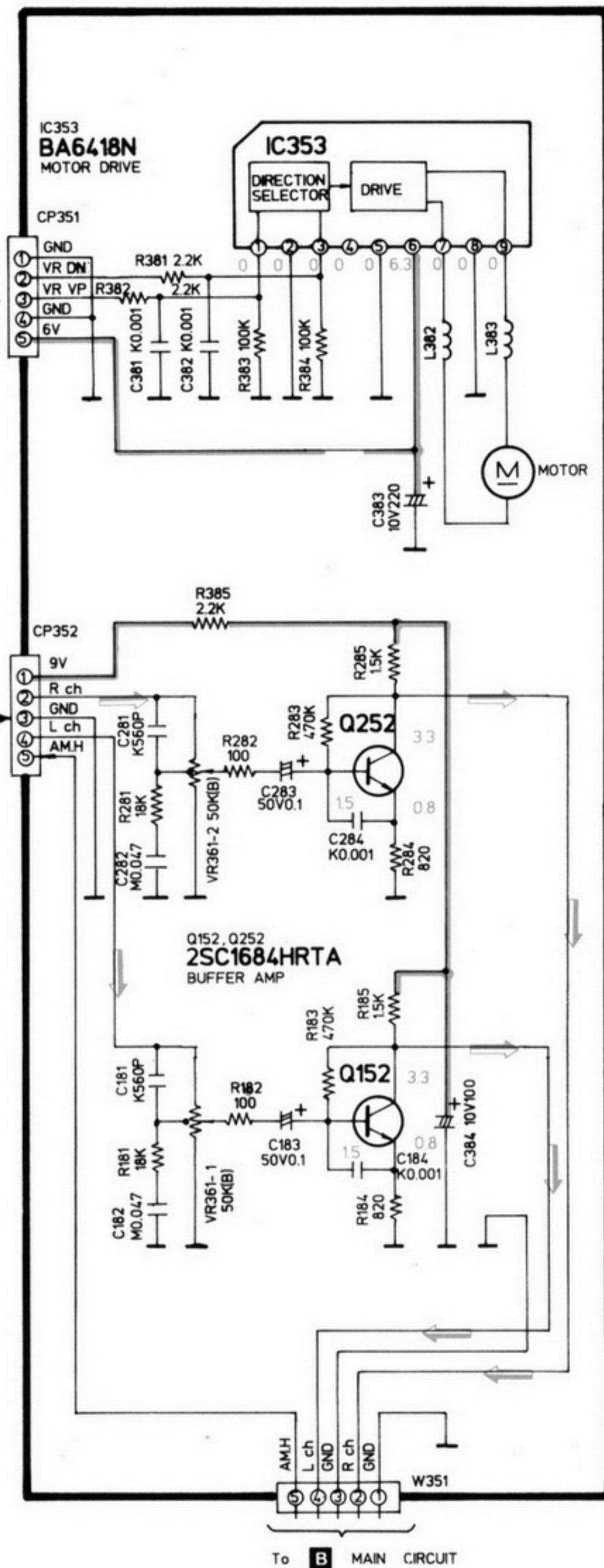
C SYSTEM CONTROL CIRCUIT



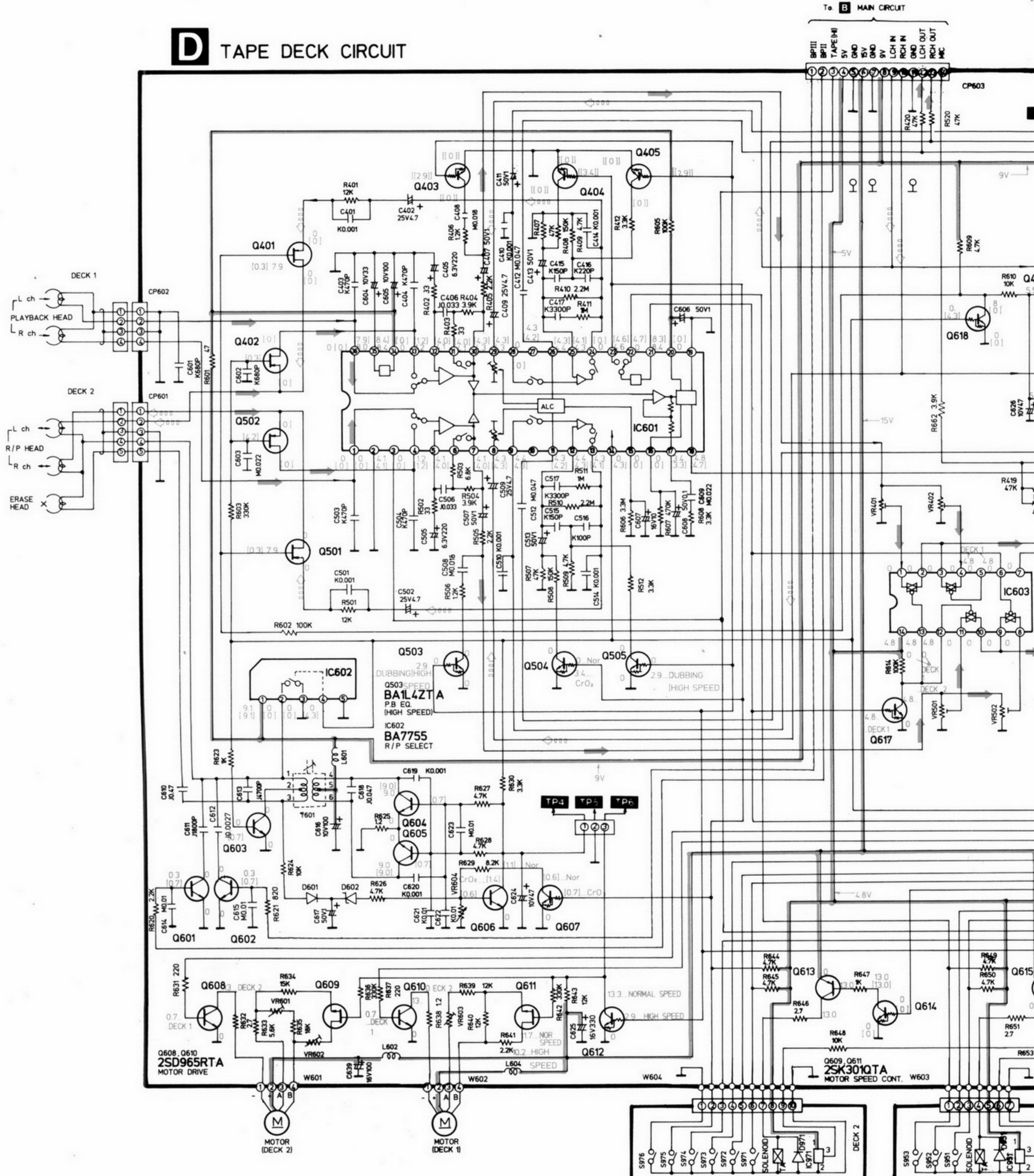
H G. EQUALIZER CIRCUIT



I VOLUME CIRCUIT



D TAPE DECK CIRCUIT



MECHANISM (DECK 2) CIRCUIT

E

MECHANISM (DECK 1) CIRCUIT

F

