

Service Manual

Portable Stereo CD System

Radio Cassette

RX-DS45

COMPACT
disc
DIGITAL AUDIO



Color

(K) Black Type

Areas

Country Code	Areas	Color
(EB)	Great Britain	(K)
(EG)	Continental Europe and F.R. Germany	

TAPE DECK: RX-FD55 MECHANISM SERIES (AR300)
TRAVERSE DECK: RX-DT55 MECHANISM SERIES (S0DD110)

■ SPECIFICATIONS

General:

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

Power Consumption: 46 W (AC only)
Power Output: 22.5 W×2...PMPO
Speaker: Woofer; 10 cm×2 PM Dynamic speaker (2.7Ω)
Tweeter; 8 cm×2 PM Dynamic speaker (8Ω)

Inputs: MIX MIC; 4.5 mV/200~600Ω, Ø3.5

AUX; 200 mV/47 kΩ

Output: HEADPHONES; 32Ω, Ø3.5

Dimensions: 648 (W)×175 (H)×250 (D) mm

Weight: 5.8 kg without batteries

Disc Player Section:

Sampling Frequency: 44.1 kHz

D-A Conversion: 16-bit linear

Light Source: Semiconductor laser (wavelength 780 nm)

No. of Channels: 2 channels, stereo

Frequency Range: 20~20,000 Hz (+1/-2 dB)

Dynamic Range: 95 dB

S/N Ratio: 100 dB

Wow and Flutter: below measurable limit

Radio Section:

Radio Frequency Range: FM; 87.5~108 MHz
LW; 144~288 kHz

MW; 522~1611 kHz

Intermediate Frequency: FM; 10.7 MHz

AM; 459 kHz

Sensitivity: FM; 5 µV/50 mW output (-3 dB Limit Sens)

LW; 100 µV/m/50 mW output

MW; 60 µV/m/50 mW output

Tape Deck Section:

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

Recording System: AC bias (67 kHz), AC erase

Tape Speed: 4.8 cm/s

Monitor System: Variable sound monitor

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

Notes:

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

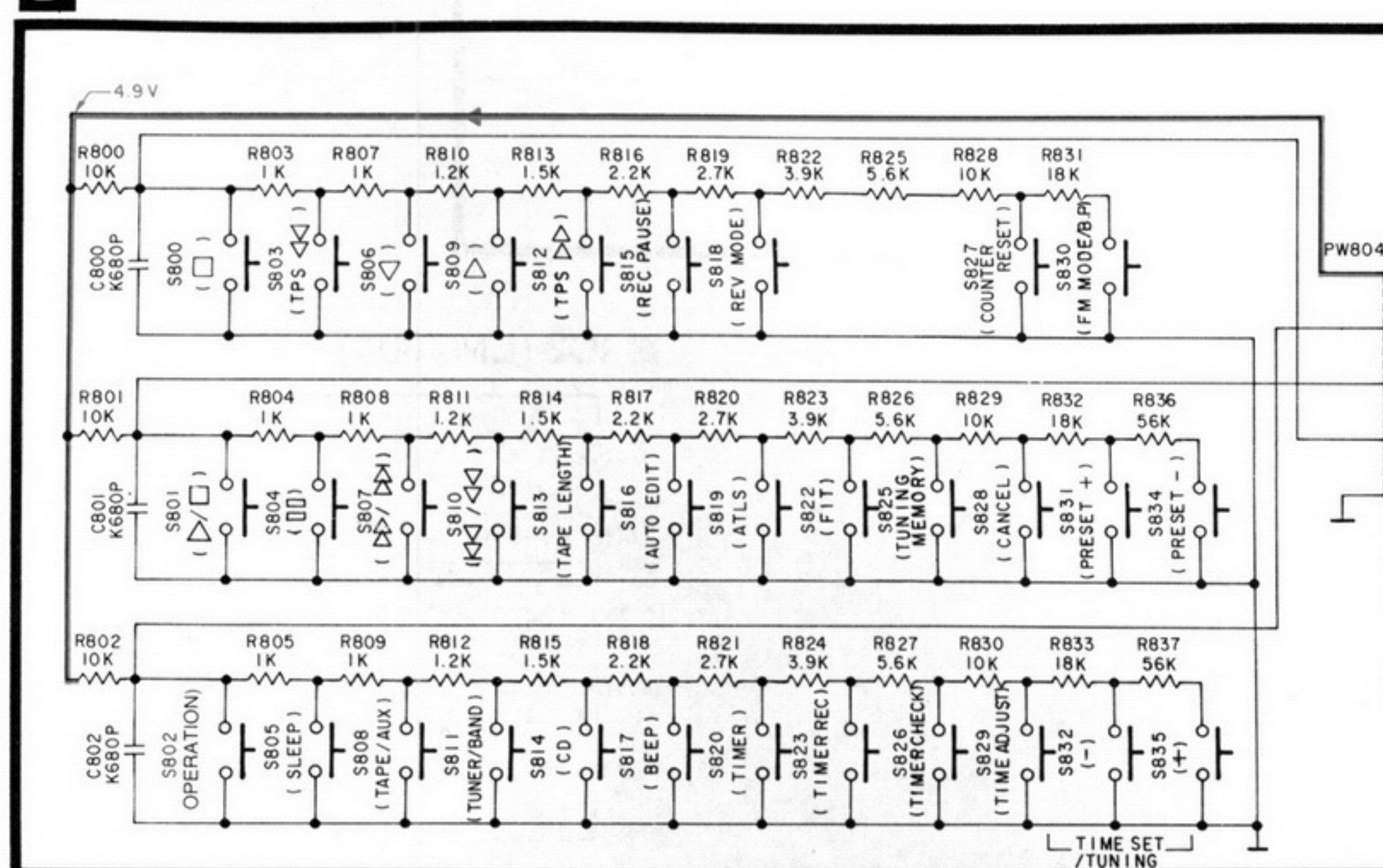
Panasonic

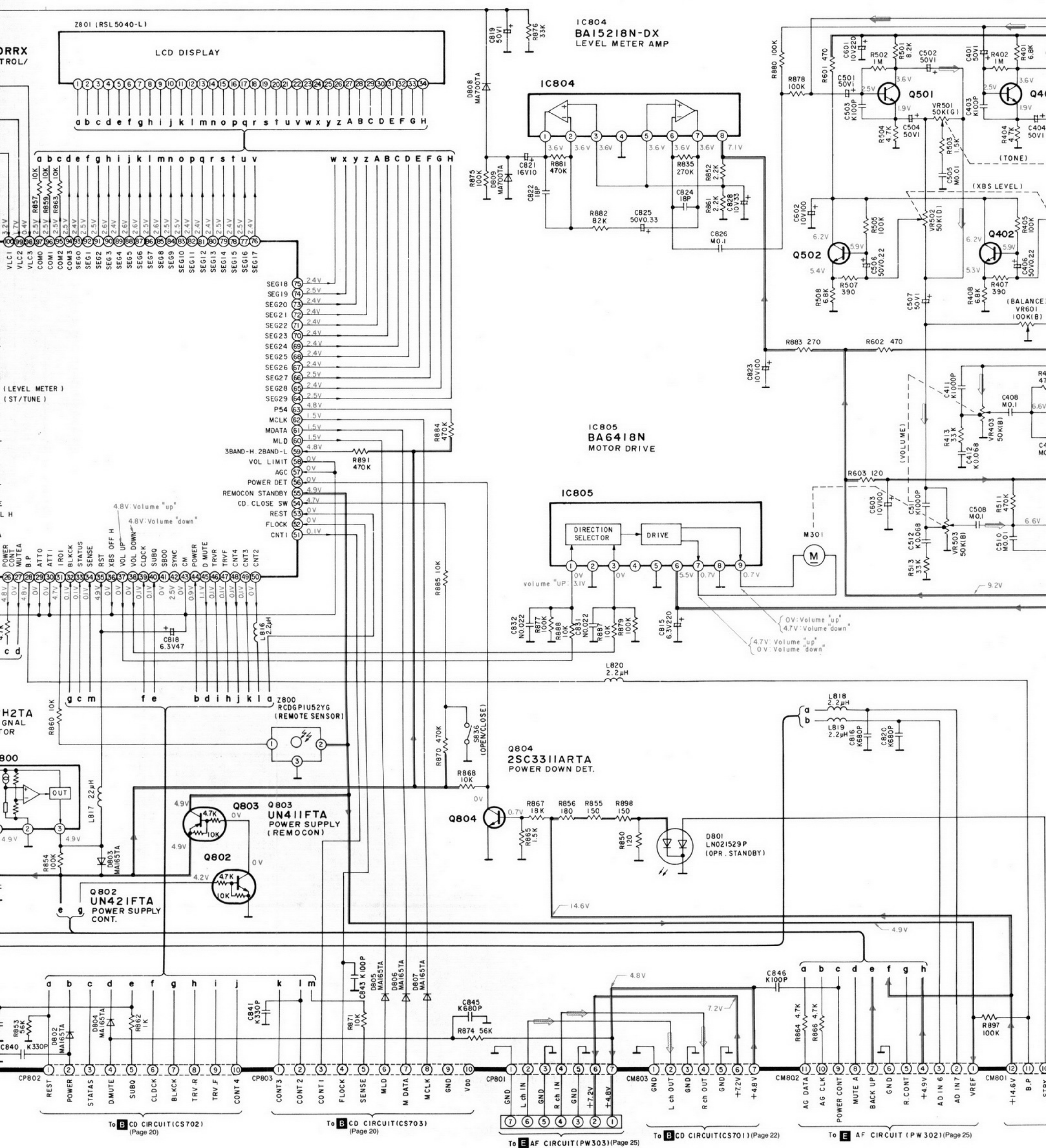
SCHEMATIC DIAGRAM • SYSTEM CONTROL AND OPERATION CIRCUIT (Parts list on pages 57-58)

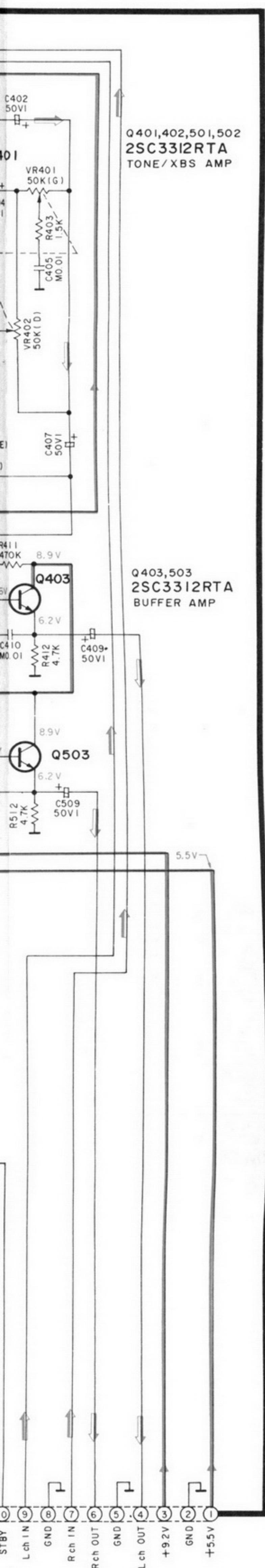
C SYSTEM CONTROL CIRCUIT

To **A** TUNER CIRCUIT (CPI) (Page 15)

D OPERATION CIRCUIT







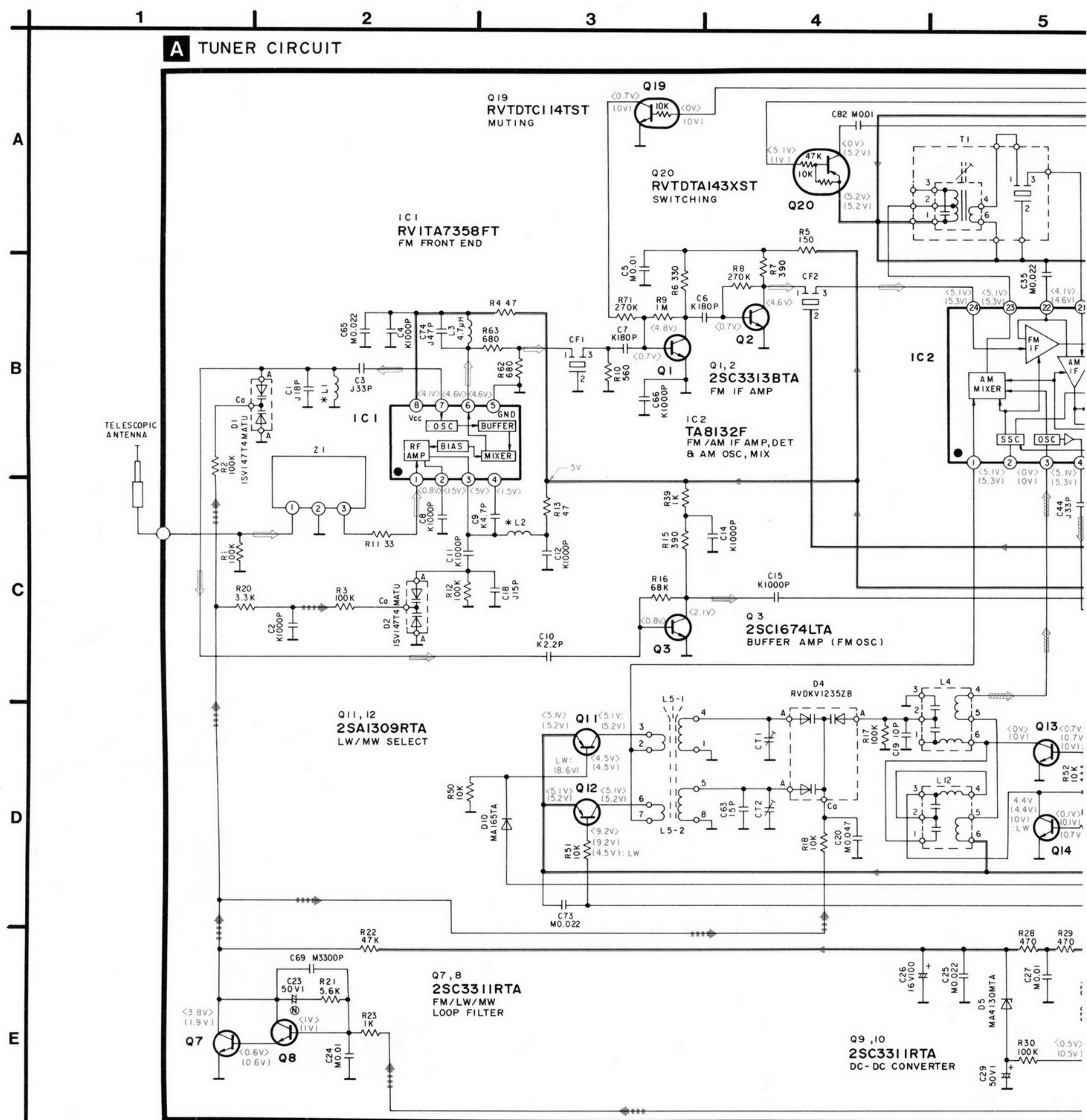
NOTES:

- S800 : Deck stop switch. (□)
- S801 : CD playback/stop switch. (▷/□)
- S802 : Operation switch. (OPERATION)
- S803 : Deck fast/TPS switch. (◁◁/TPS)
- S804 : CD pause switch. (□□)
- S805 : Sleep switch. (SLEEP)
- S806 : Deck reverse side playback switch. (◁)
- S807 : CD skip/search switch. (▷▷/▷▷□)
- S808 : Function select switch. (TAPE/AUX)
- S809 : Deck front side playback switch. (▷)
- S810 : CD skip/search switch. (◁◁/◁◁)
- S811 : Function select switch. (TUNER/BAND)
- S812 : Deck fast/TPS switch. (TPS/▷▷)
- S813 : Tape length switch. (TAPE LENGTH)
- S814 : Function select switch. (CD)
- S815 : Recording pause switch. (REC PAUSE)
- S816 : Auto editing switch. (AUTO EDIT)
- S817 : Beep on/off switch. (BEEP)
- S818 : Reverse mode select switch. (REVERSE MODE)
- S819 : ATLS switch. (ATLS)
- S820 : Timer set switch. (TIMER)
- S822 : Fit edit switch. (FIT)
- S823 : Timer recording switch. (TIMER REC)
- S825 : Tuning memory switch. (TUNING MEMORY)
- S826 : Timer check switch. (TIMER CHECK)
- S827 : Tape counter reset switch. (COUNTER RESET)
- S828 : CD program cancel switch. (CANCEL)
- S829 : Time set switch. (TIME ADJUST)
- S830 : FM mode select/beat proof switch. (FM MODE/B.P.)
- S831 : Preset tuning switch. (+)
- S832 : Time set/manual tuning switch. (-)
- S834 : Preset tuning switch. (-)
- S835 : Time set/manual tuning switch. (+)
- S836 : CD cover open/close switch.
- VR401 : Tone control VR (Lch)
- VR402 : S-XBS level control VR (Lch)
- VR403 : Volume control VR (Lch)
- VR501 : Tone control VR (Rch)
- VR502 : S-XBS level control VR (Rch)
- VR503 : Volume control VR (Rch)
- VR601 : Balance control VR (Rch)
- 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.

➡ : +B line ➡ : CD signal line ➡ : Main signal line

■ **SCHEMATIC DIAGRAM** ● **TUNER CIRCUIT** (Parts list on pages 57~63)



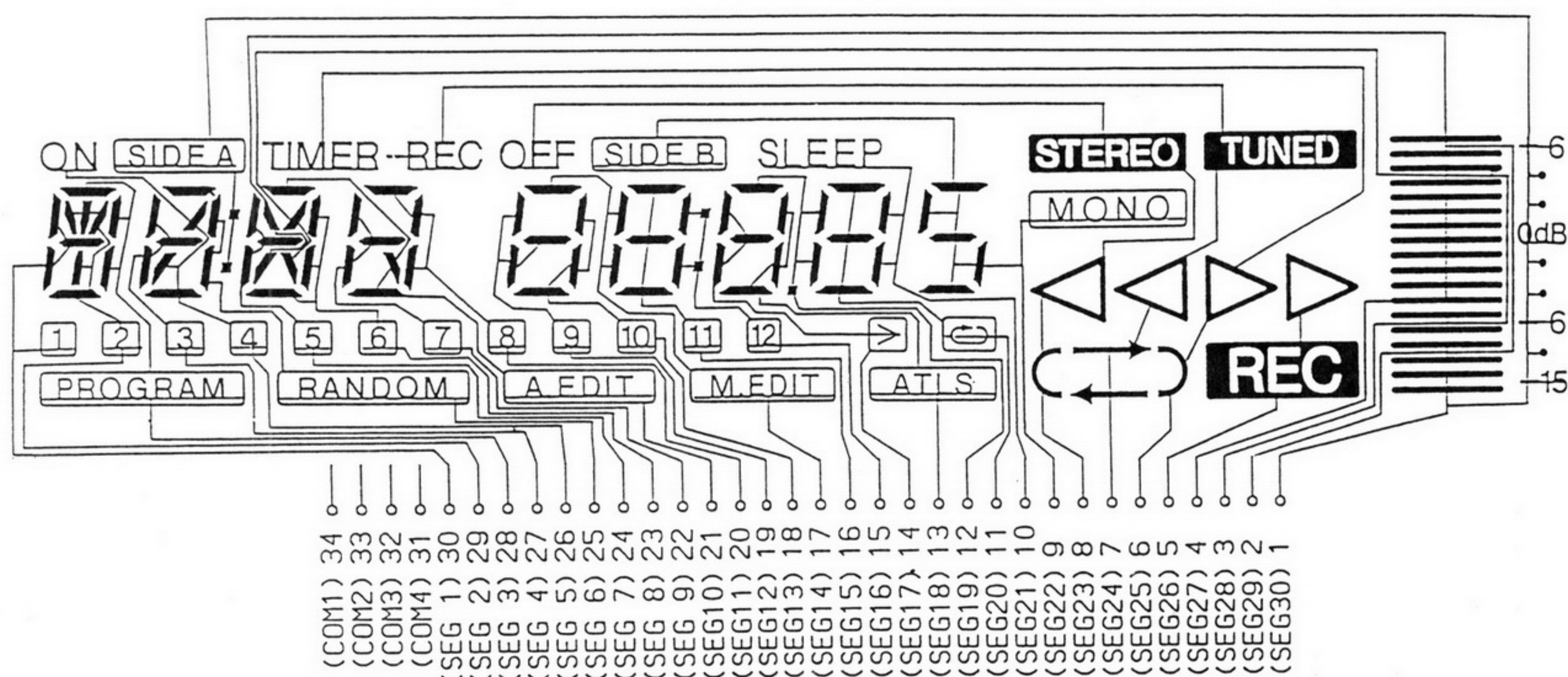
Notes:

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

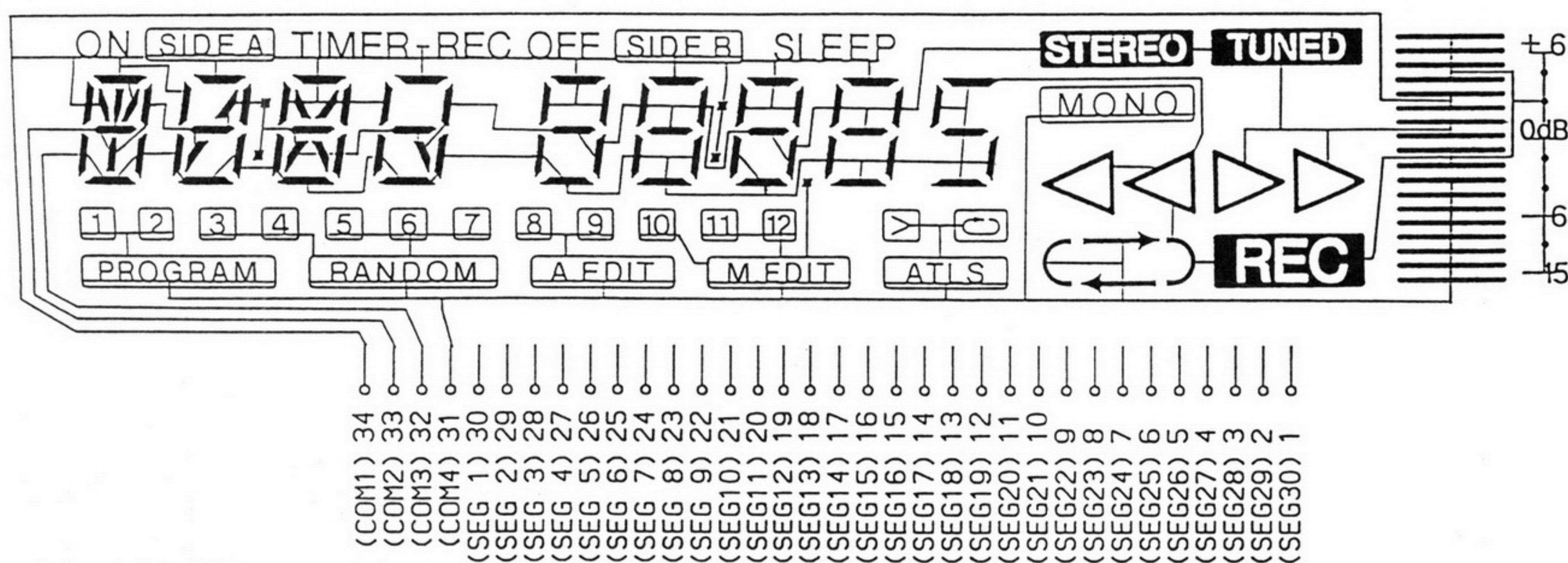
- This schematic diagram may be modified at any time with the development of new technology.

■ LIQUID CRYSTAL DISPLAY (LCD)

● SEGMENT



● COMMON



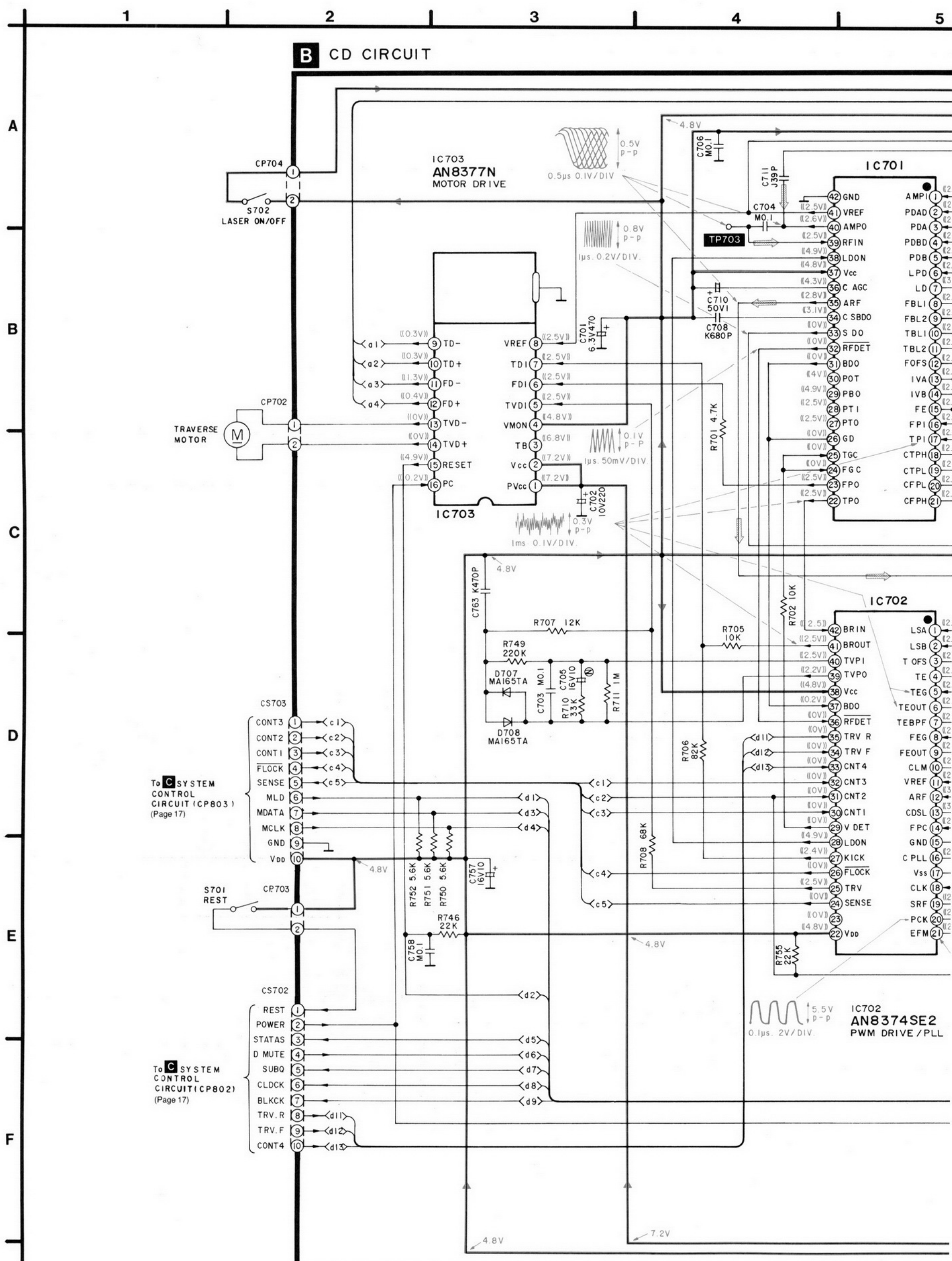
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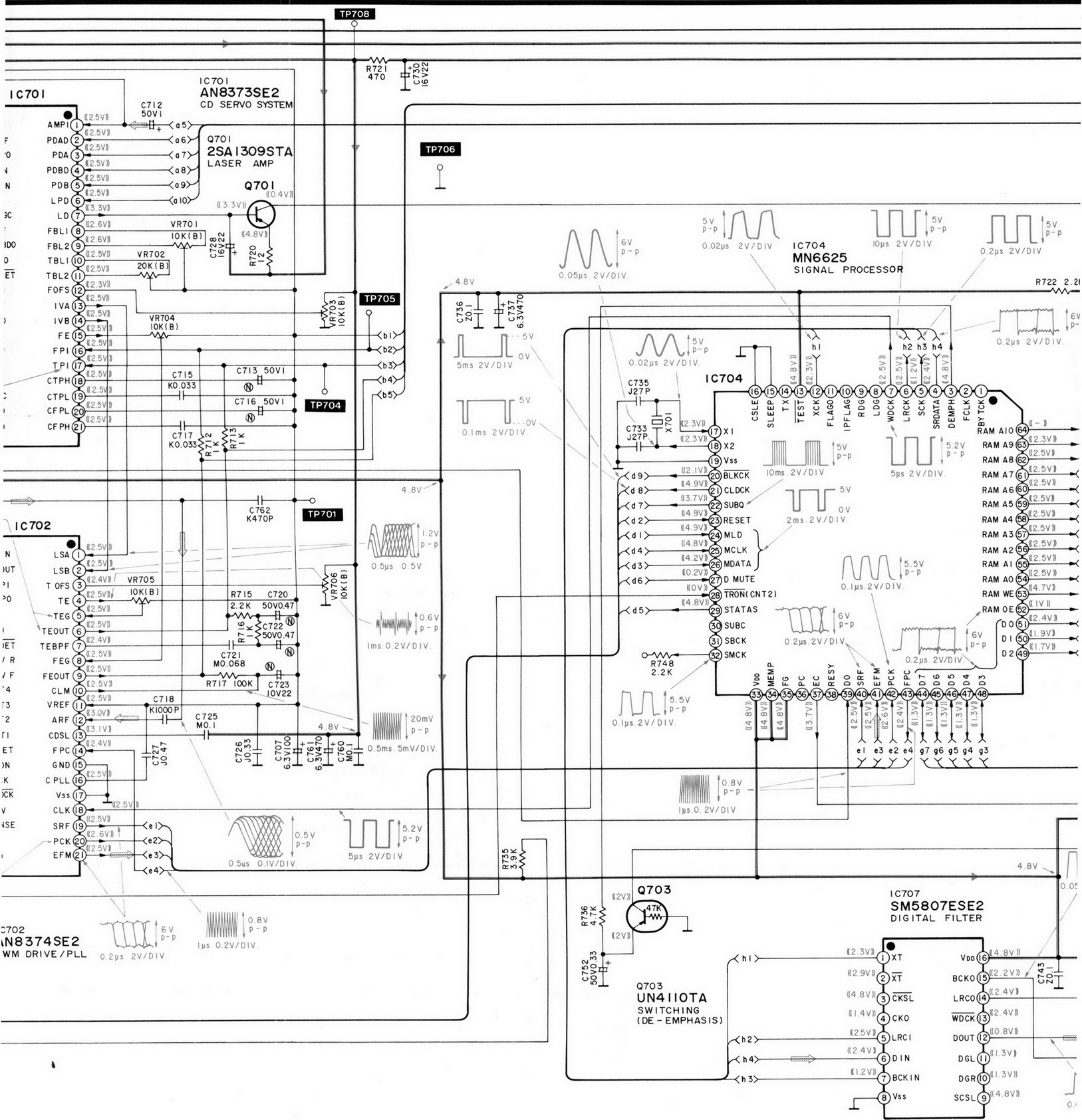
- S701 : Rest switch.
- S702 : Laser ON/OFF switch.
- VR701 : Best eye adjustment VR.
- VR702 : Tracking balance adjustment VR.
- VR703 : Focus offset adjustment VR.
- VR704 : Focus gain adjustment VR.
- VR705 : Tracking gain adjustment VR.
- VR706 : Tracking offset adjustment VR.
- DC voltage measurements are taken with electronics voltmeter.
The negative terminal of the battery provides negative meter connection point.
(())...CD

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

→ : CD signal line → : +B line

■ **SCHEMATIC DIAGRAM** ● **CD CIRCUIT** (Parts list on pages 57~63)







●AF, MECHANISM AND POWER SUPPLY CIRCUIT (Parts list on pages 57







Notes:

- S300 : AC/DC select switch in "AC" position.
- S971 : Deck mode detect switch.
- S972 : Deck cassette tape insertion detect switch.
- S973 : Deck record prevention tab detect switch. (REV)
- S974 : Deck record prevention tab detect switch. (FWD)

●Battery current:

Vol min....199 mA (MW/LW)
 202 mA (FM)
 268 mA (Tape)
 390 mA (CD)

Vol max....461 mA (MW/LW)
 561 mA (FM)
 762 mA (Tape)
 1430 mA (CD)

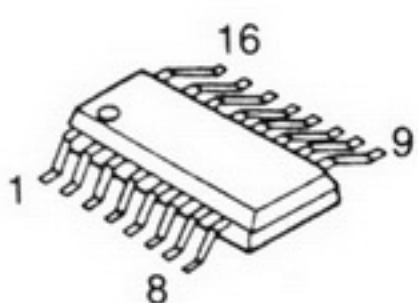
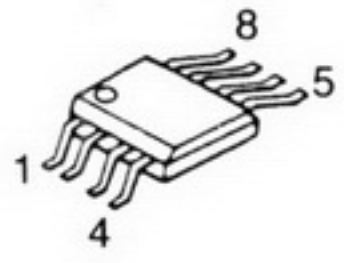
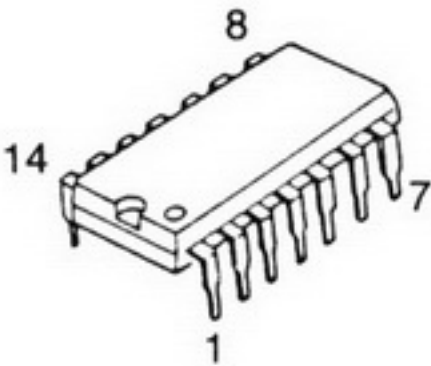
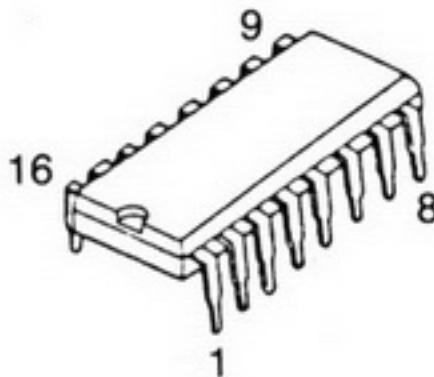
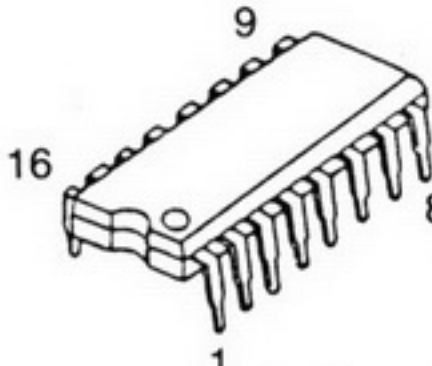
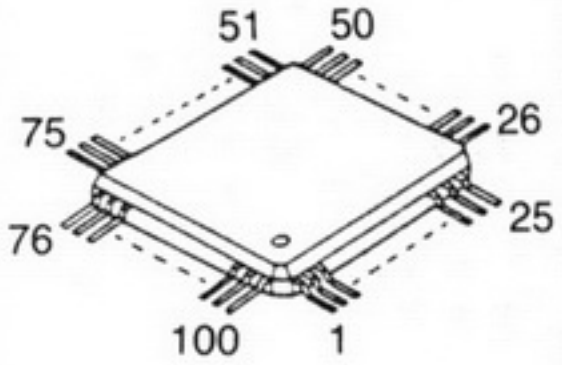
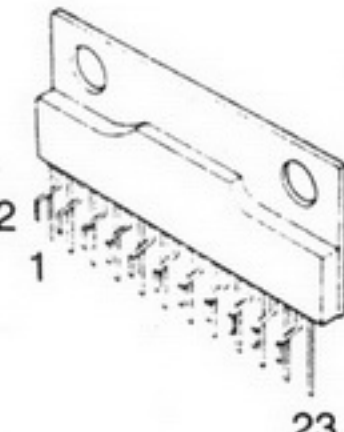
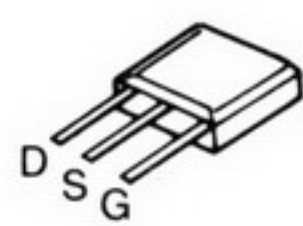
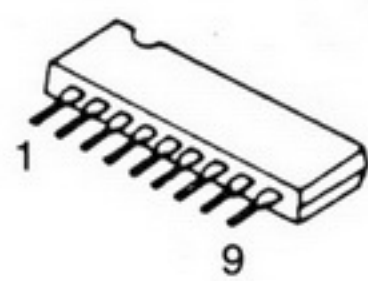
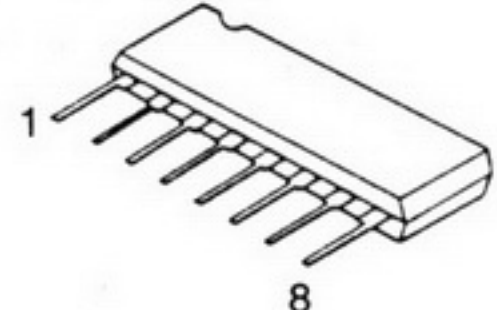
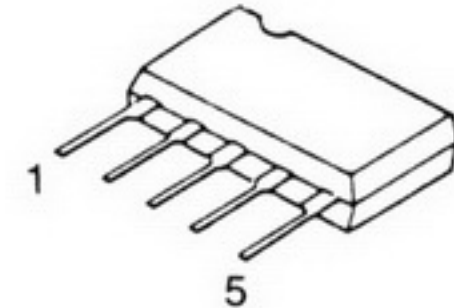
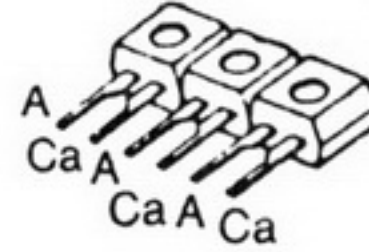
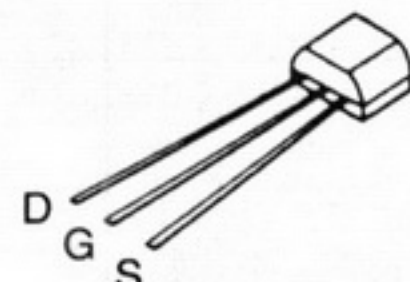
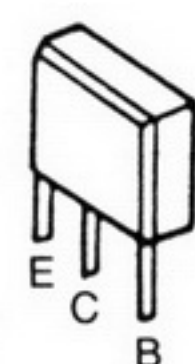
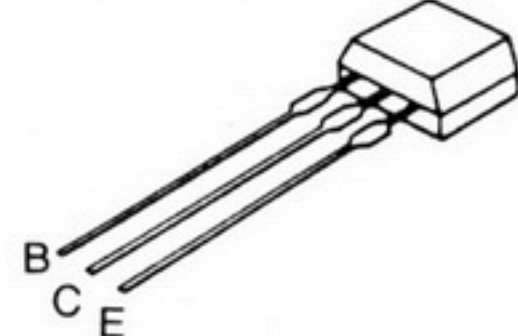
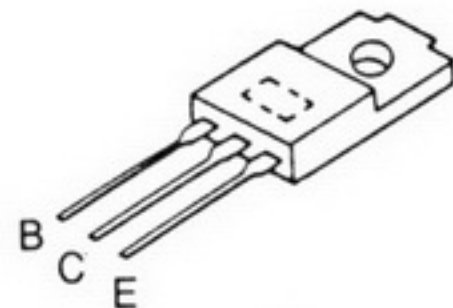
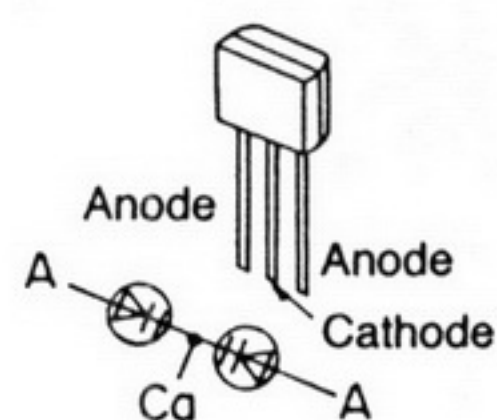
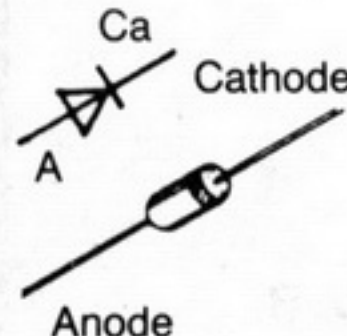
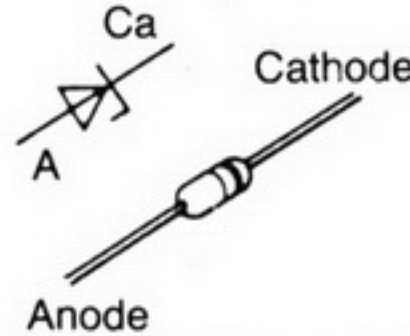
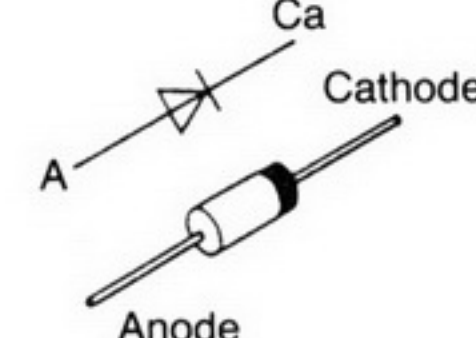
Measurement instruction

(MW/LW: 400 Hz, 30% Mod, 74 dB/m
 FM: 1 kHz, 30% Mod, 60 dB
 CD: 1 kHz playback
 Tape: 315 Hz, 0 dB playback)

●Important safety notice.

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

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

SM5807ESE2 UPD6376GSE2 	RVITA7358FT 	MC14066BCP 	BU2040 	LM7001 TA8410P 	
MN1871610RRX 	AN7134N-R 	2SJ164QTA 	BA6418N 	BA15218N-DX 	BA7755 
RVDKV1235Z2 	2SK381CTA 		2SA1309STA 2SC3311AR 2SC3311R 2SC3312RTA 2SA1309R 2SC3313B 2SD1450RTA UN411FTA	UN421FTA UN4110TA UN4115 UN4216TA UN4217TA UN4216-S	RVTDTA143XST RVTDTA114TST KSC2785GTA 
2SB1393AU 	1SV147T4MATU 		MA165TA MA700TA MA723TA MA165	MA4100LTA MA4130M MA4160M 	RVDP300DLF 
MA4051MTA 