

# Service Manual

Radio Cassette

## RQ-V180

Stereo Radio Cassette Player

Color

(K)..... Black Type

Area

| Country Code | Areas                | Color |
|--------------|----------------------|-------|
| [E]          | Continental Europe.  | (K)   |
| [EG]         | F.R. Germany/ Italy. |       |



### ■ SPECIFICATIONS

#### General:

Power Requirement: Battery; 3V (Two "AA" size, R6/LR6 batteries)  
 AC; with optional Panasonic AC adaptor RP-AC33

Power Output: 40mW (20mW×2)···RMS (max.)

Input: DC IN; 3V (⊖ ⊕)

Output: Headphones; 24Ω, ϕ3.5

Dimensions: 86.5(W)×121.2(H)×33.6(D)mm

Weight: 265g without batteries

#### Radio Section:

Radio Frequency Range: FM 87.5~108MHz  
 AM 522~1611kHz

Intermediate Frequency: FM 10.7MHz  
 AM 459kHz

Sensitivity: FM 3.58μV/0.5mW output  
 (-3dB Limit, Sens)  
 AM 79.4μV/m/0.5mW output

#### Tape Deck Section:

Frequency Response: 40~14,000Hz (with a normal tape)  
 40~16,000Hz (with a CrO<sub>2</sub> type tape)  
 40~16,000Hz (with a Metal tape)

Tape Speed: 4.8cm/s

Program Time: 1 hour with C-60 cassette tape

Track System: 4-track, 2-channel, stereo playback

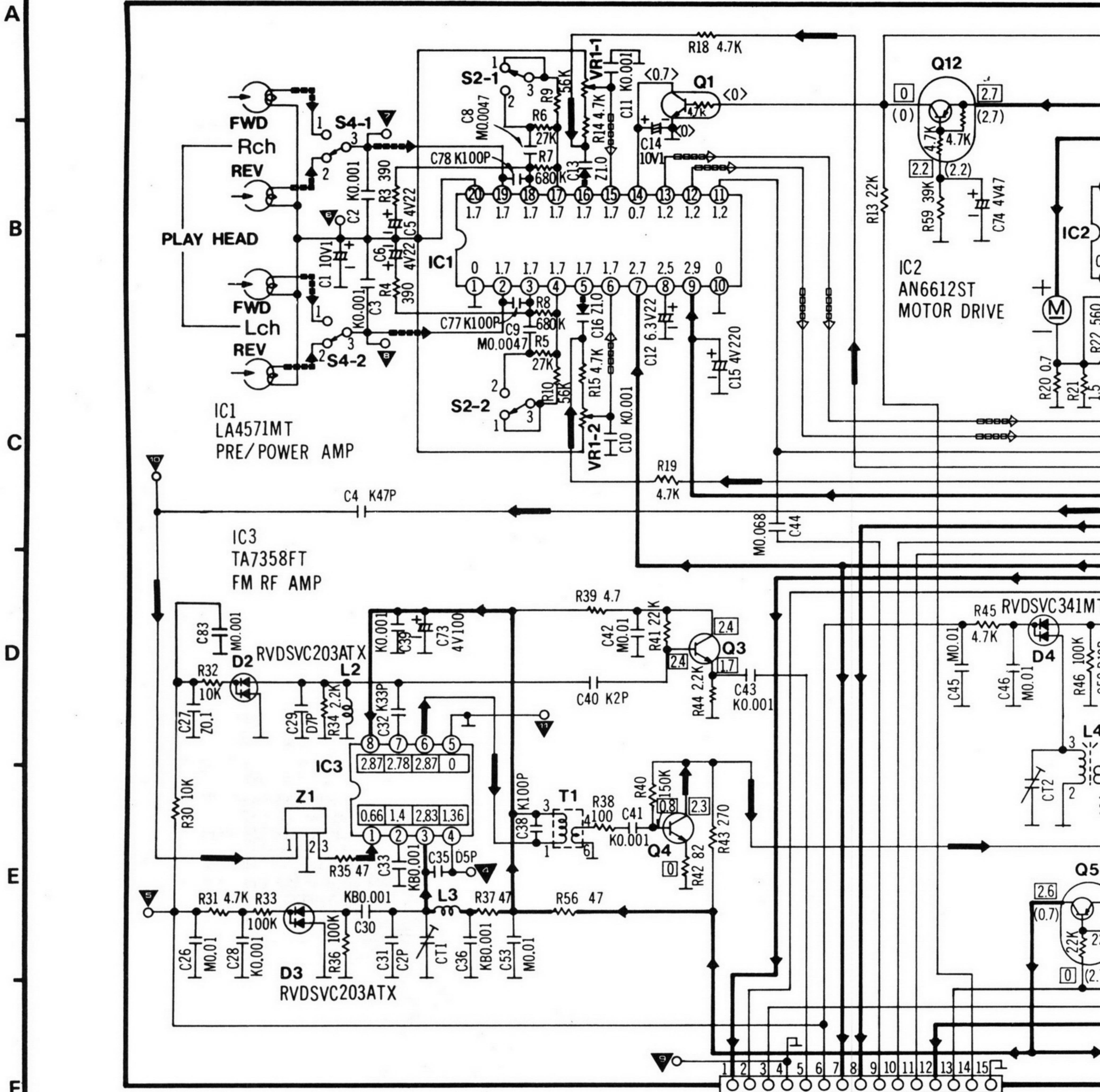
#### Notes:

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

# Panasonic

# SCHEMATIC DIAGRAM

|              |                                  |                                    |                                |                                       |
|--------------|----------------------------------|------------------------------------|--------------------------------|---------------------------------------|
| 1            | 2                                | 3                                  | 4                              | 5                                     |
| MAIN CIRCUIT | Q1<br>RVTDT143TUX<br>MUTING CONT | Q12<br>RVTDTA143EUX<br>MUTING CONT | Q2<br>2SB1132RTX<br>MOTOR CONT | Q8<br>2SA1577QT106<br>POWER SWITCHING |

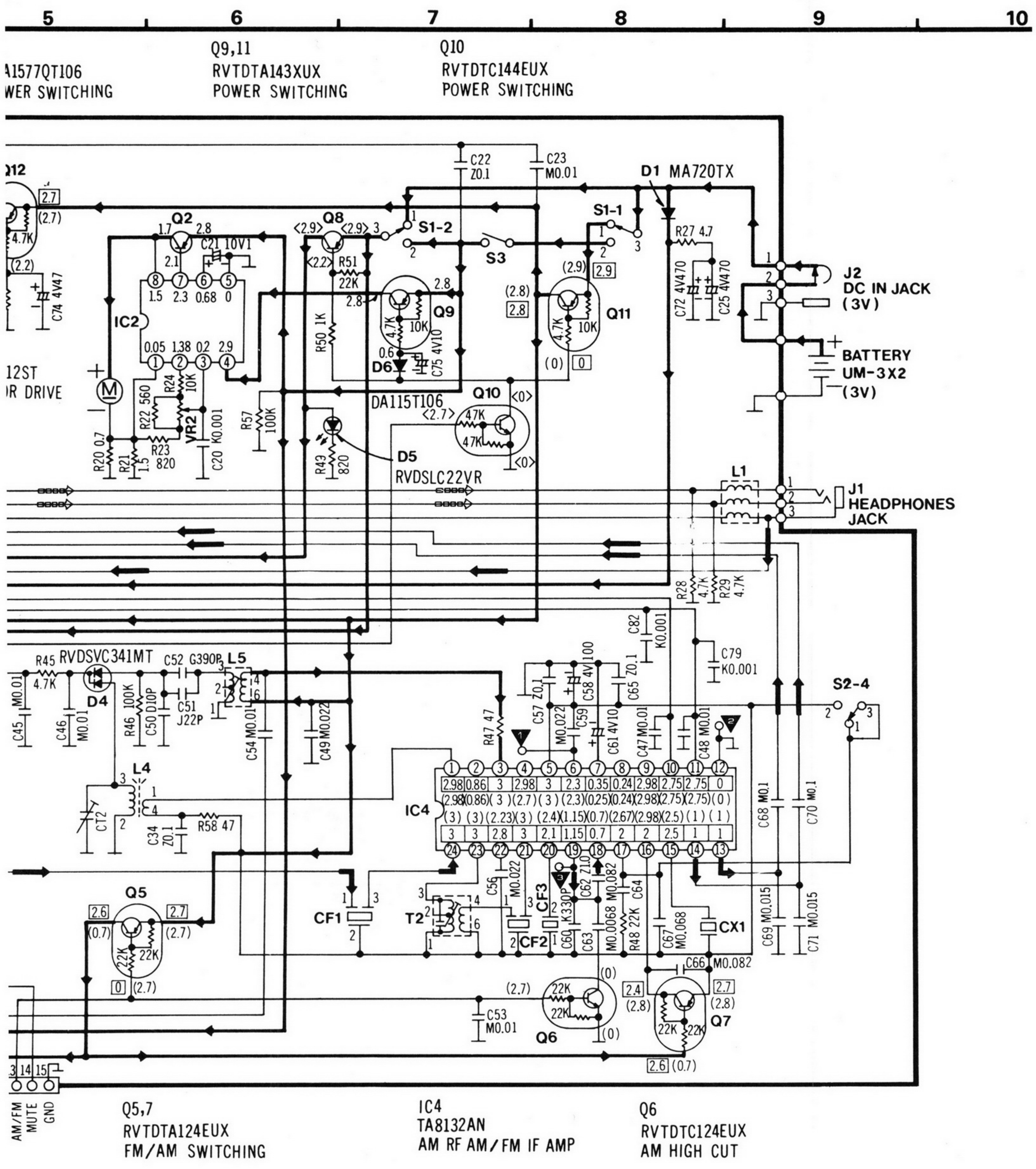


Q3  
2SC4326LKRTX  
BUFFER AMP

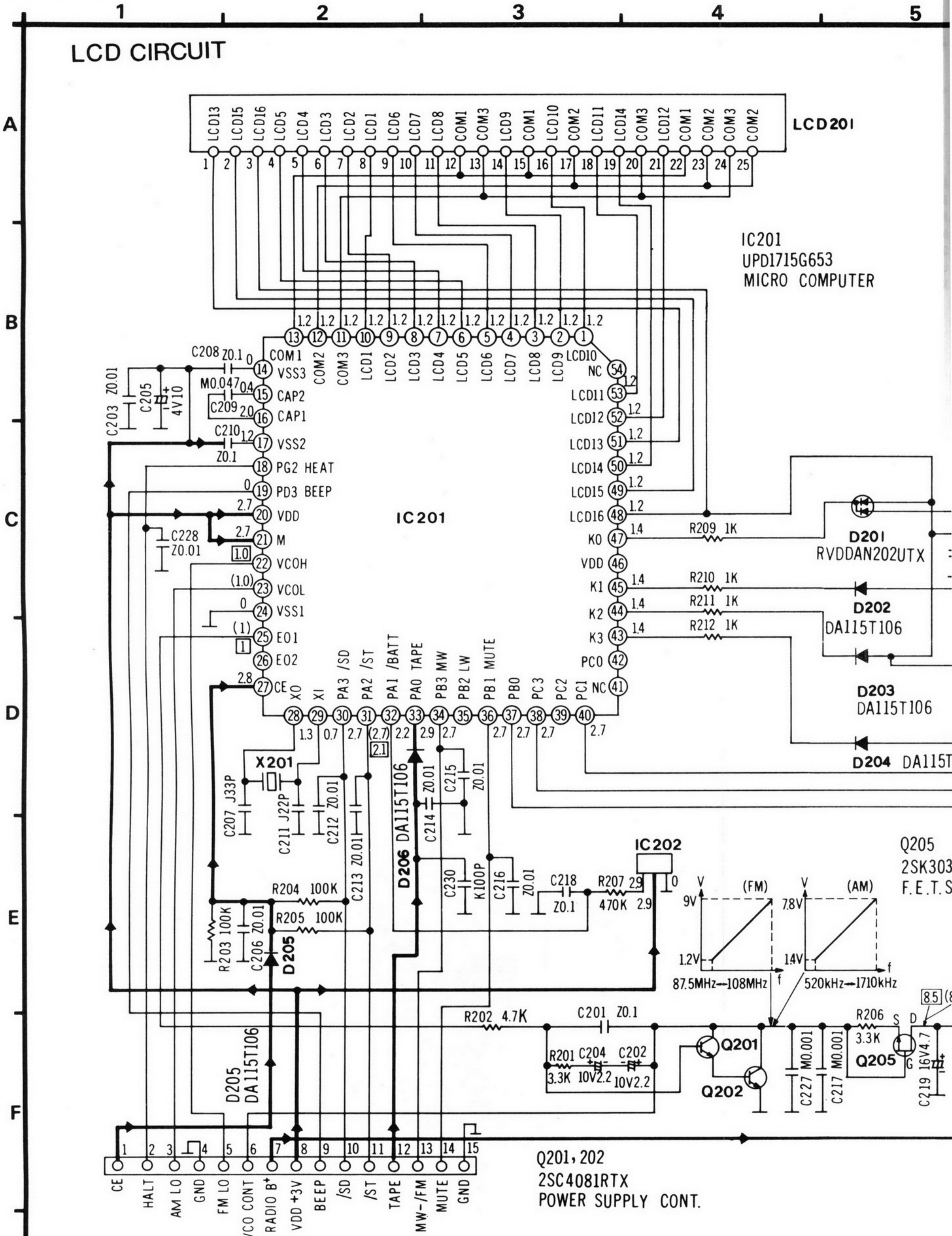
Q4  
2SC2413KPTX  
FM IF AMP

EC  
HALT  
AM LO  
GND  
FM LO  
VCO CON+  
RADIO B  
VDD +3V  
BEEP  
/SD  
/ST  
TAPE  
AM/FM  
MUTE  
GND

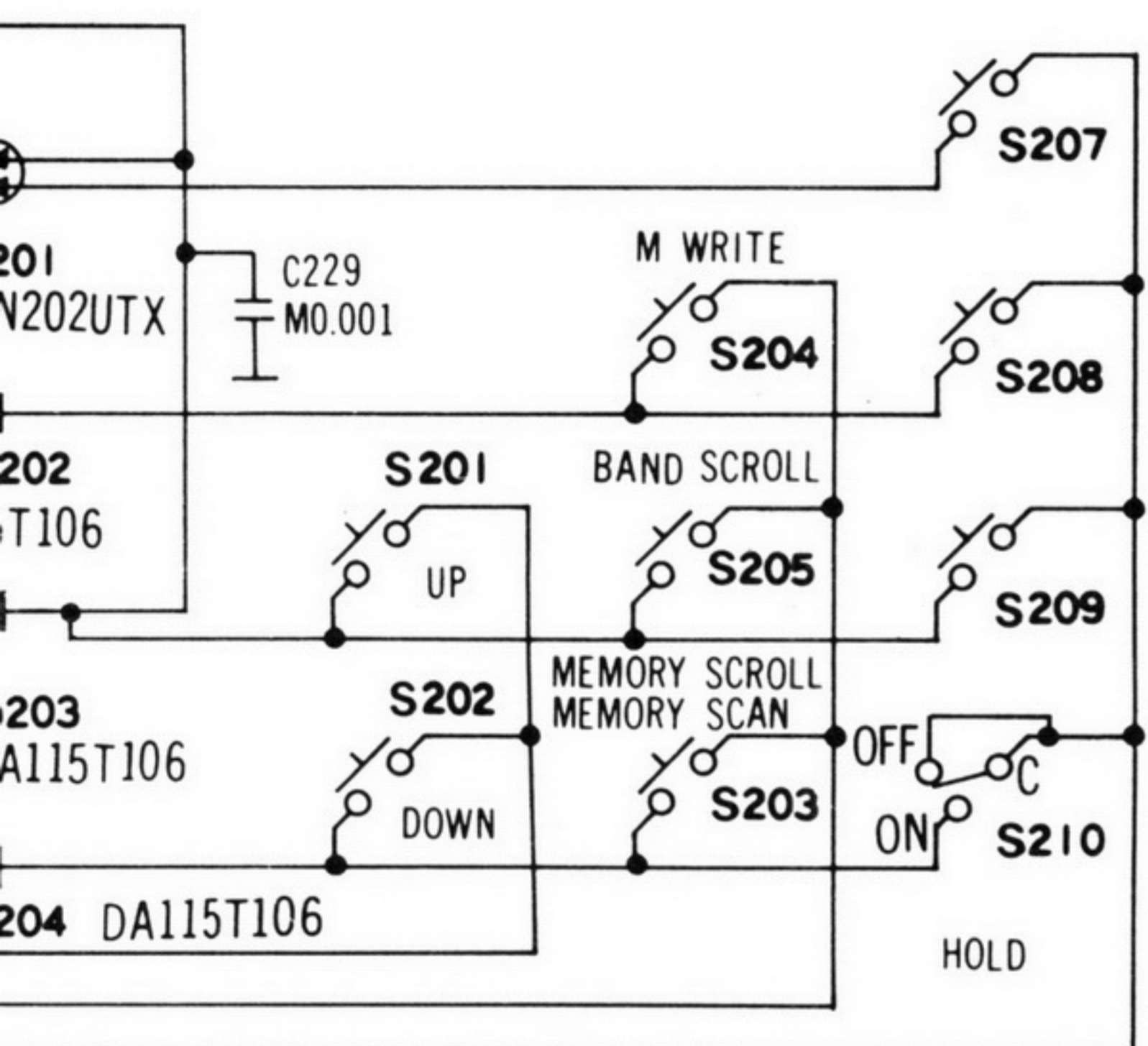
Q5,  
RV  
FM



# SCHEMATIC DIAGRAM

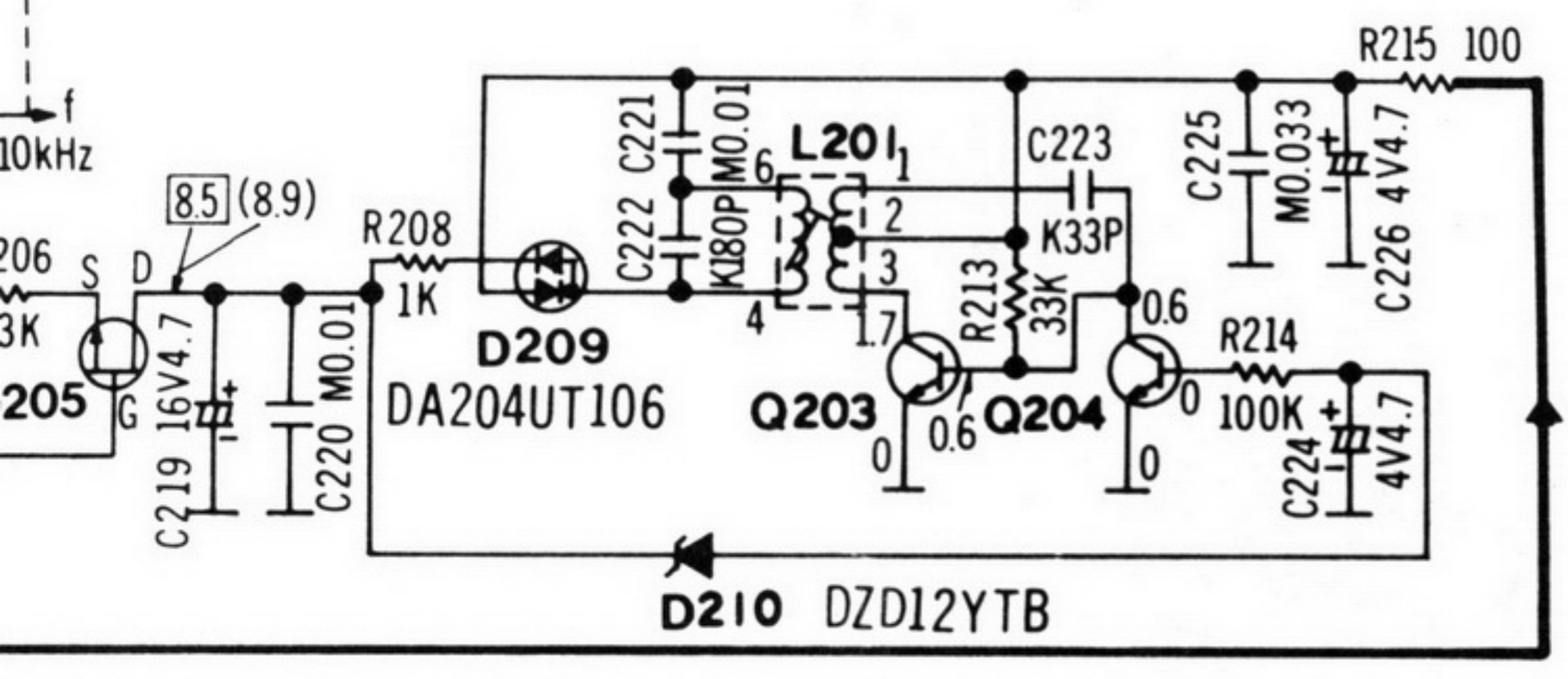


IC202  
S80719AGT1  
RESET



Q205  
2SK303V3TB  
F.E.T. STABILIZER

Q203, 204  
2SC4081RTX  
DC-DC CONV



**Notes:**

- S1-1, 1-2: Selector switch in "RADIO" position. (1...RADIO, 2...TAPE).
- S2-1, 2-2: Tape selector switch in "NOR" position. (1...NOR, 2...CrO<sub>2</sub>/MET)
- S2-4: FM sens switch in "DX" position. (1...DX, 2...LOCAL)
- S3: Motor switch in "OFF" position.
- S4-1, 4-2: FWD/REV select switch in "REV" position. (1...FWD, 2...REV)
- S201: Tuning up switch in "OFF" position.
- S202: Tuning down switch in "OFF" position.
- S203: M. SELECT/M. SCAN switch in "OFF" position.
- S204: Memory select switch in "OFF" position.
- S205: Band select switch in "OFF" position.
- 207 ~ 209: Direct memory switch. [S207:1, S208:2, S209:3]
- S210: Hold switch in "OFF" position.
- VR1-1: Volume control VR (Rch).
- VR1-2: Volume control VR (Lch).
- VR2: Tape speed adjustment VR.
- The mark (▼) shows test point e.g. ▼ = test point 1.
- DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
  - ...FM position, ( ) ...AM position.
  - No mark ...Playback position
- Battery current:
  - Volume minimum output (Radio) ..... 60mA
  - Volume minimum output (Tape) ..... 160mA
  - Volume Maximum output (Radio) ..... 112mA
  - Volume Maximum output (Tape) ..... 220mA
  - (Radio, 74dB 30% Modulation.)
  - (Tape, 315 Hz 0dB tape playback)
- ➔ +B Voltage Line.
- ⋯➔ Playback Signal.
- ➔ FM Signal.
- ◻◻◻➔ Playback and Radio Signal.

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