

STR-AV210/AV310

SERVICE MANUAL

AEP Model
STR-AV210/AV310

UK Model
STR-AV310



This photo is STR-AV310.

SPECIFICATIONS

Continuous RMS power output

STR-AV210: 20 W + 20 W (8 ohms, at 40 Hz – 20 kHz less than 0.8% total harmonic distortion)

STR-AV310: AEP, WG models
30 W + 30 W (8 ohms, at 40 Hz – 20 kHz less than 0.8% total harmonic distortion)

STR-AV310: UK model
50 W + 50 W (8 ohms, at 40 Hz – 20 kHz less than 0.8% total harmonic distortion)

Power output

DIN: STR-AV210 30 W + 30 W (4 ohms at 1 kHz 0.7%)
STR-AV310 AEP, WG models
50 W + 50 W (4 ohms at 1 kHz 0.7%)
STR-AV310 UK model
55 W + 55 W (8 ohms at 1 kHz 0.7%)

IEC: STR-AV210 30 W + 30 W (4 ohms at 1 kHz 0.7%)
STR-AV310 AEP, WG models
50 W + 50 W (4 ohms at 1 kHz 0.7%)
STR-AV310 UK model
55 W + 55 W (8 ohms at 1 kHz 0.7%)

Harmonic distortion

Less than 0.8% at rated output

Frequency response

PHONO: RIAA equalization curve ± 0.5 dB
CD
VIDEO } 40 Hz – 50 kHz ± 0.5 dB
TAPE }

Inputs

	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	2.5 mV	50 kilohms	74 dB 72 dB* (A, 2.5 mV)
CD VIDEO TAPE	150 mV	50 kilohms	95 dB 80 dB* (A, 150 mV)

Outputs

REC OUT, VIDEO (AUDIO) OUT	Voltage 150 mV Impedance 10 kilohms
SPEAKER A, B	Accepts speakers of 4–16 ohms (STR-AV210/AV310: AEP, WG models) or 8–16 ohms (STR-AV310: UK model)
HEADPHONES	Accepts low and high impedance headphones

Tone controls BASS: ± 8 dB at 100 Hz
TREBLE: ± 8 dB at 10 kHz

Muting –20 dB (STR-AV310 only)

	FM tuner section	AM tuner section
Tuning range	87.5 – 108 MHz	531 – 1,602 kHz
Antenna terminals	75 ohms, unbalanced	External antenna terminal
Sensitivity at 40 dB quieting	18.3 dBf, 4.5 μ V (mono) 38.3 dBf, 45 μ V (stereo)	—
Usable sensitivity	11.2 dBf, 2 μ V (IHF)	Loop antenna: 500 μ V (at 1,000 kHz)
Signal-to-noise ratio	76 dB (mono) 70 dB (stereo)	54 dB (at 50 mV/m)

— continued on next page —

FM STEREO / FM-AM RECEIVER
SONY®



	FM tuner section	AM tuner section
Harmonic distortion	0.3% (mono), 0.5% (stereo) at 1 kHz	0.5% (at 50 mV/m, 400 Hz)
Selectivity	60 dB at 400 kHz	30 dB at 9 kHz
Separation	45 dB at 1 kHz	—
Frequency response	30 Hz - 15 kHz ± 3 dB	—

General

System Tuner section: PLL quartz-locked digital synthesizer system
 Pre-amplifier section: low-noise NF type equalizer amp
 Power amplifier section: quasi-complementary SEPP

Power requirements

STR-AV210/AV310: AEP, WG models: 220V AC, 50/60Hz
 STR-AV310: UK model: 240V AC, 50/60Hz

Power consumption

STR-AV210: 80 W
 STR-AV310: AEP, WG models: 120W
 STR-AV310: UK model : 230W
 In standby condition: 5 watts (STR-AV310 only)

AC outlets

One switched (100 watts) (STR-AV310 only)

Dimensions

Approx. 430 × 105 × 300 mm (w/h/d)
 (17 × 4 1/8 × 11 7/8 inches)

Weight

including projecting parts and controls
 Approx 6 kg (13 lb 4 oz) net (STR-AV210)
 Approx. 6.4kg (14 lb 2oz) net (STR-AV310: AEP, WG models)
 Approx. 6.5kg (14 lb 5oz) net (STR-AV310: UK model)

Accessories supplied

Remote Commander RM-S70 (1)
 (STR-AV310: AEP, WG models)
 Remote Commander RM-U90 (1)
 (STR-AV310: UK model)
 Sony batteries SUM 3(NS) (2) (STR-AV310 only)
 FM wired antenna (1)
 (Except for WG model)
 AM loop antenna (1)

WARNING !!

ADVARSEL!

Lithiumbatteri – Eksplosionsfare
 Udskiftning må kun foretages af en sagkyndig, og som beskrevet i servicemanualen.

LITHIUM BATTERY

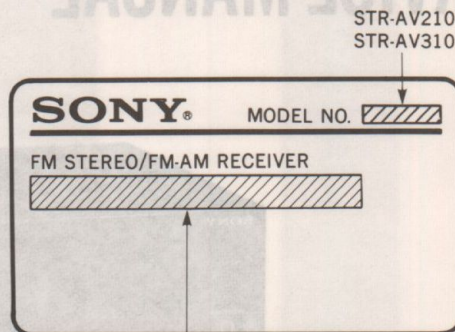
SHOULD ONLY BE CHANGED BY TECHNICAL PERSONNEL. THERE IS A RISK FOR EXPLOSION AT A WRONG HANDLING.

“Batteriet må kun udskiftes med et batteri af samme fabrikat og type”.

Because of the risk for explosion the battery must be replaced with the same type and manufacture.

MODEL IDENTIFICATION

—Model Number Label—



STR-AV210 : AEP, WG model : AC 220V~50/60Hz
 STR-AV310 : AEP, WG model : AC 220V~50/60Hz
 STR-AV310 : UK model : AC 240V~50/60Hz
 (WG : West Germany)

TABLE OF CONTENTS

Section	Title	Page
1. GENERAL		
1-1.	Location and Function of Controls	3
2. ELECTRICAL ADJUSTMENTS		5
3. DIAGRAMS		
3-1.	Block Diagram	6
3-2.	Semiconductor Lead Layouts	9
3-3.	Printed Wiring Boards	10
3-4.	Schematic Diagram	13
4. EXPLODED VIEWS		
4-1.	Cabinet, Front Panel Section	18
4-2.	Chassis Section	19

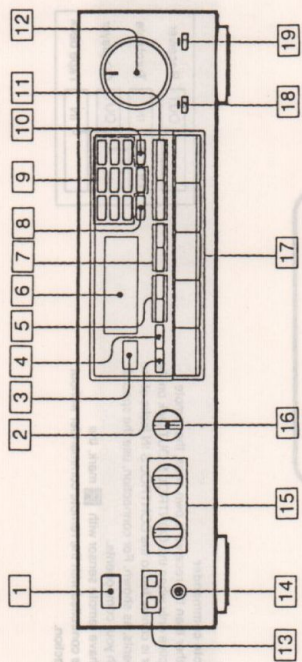
5. ELECTRICAL PARTS LIST 20

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK **▲** OR DOTTED LINE WITH MARK **▲** ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

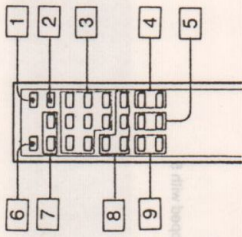
SECTION 1 GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS

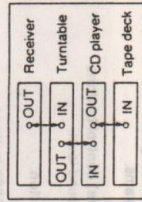


- 1 SYSTEM POWER switch (STR-AV310)
POWER switch (STR-AV210)
- 2 DIRECT TUNING button
- 3 Remote sensor (STR-AV310 only)
- 4 FM MODE button
When an FM stereo program is noisy or hard to receive, press this button. The STEREO indicator goes out (the sound is heard in monaural, but the reception will be improved). To return to the stereo mode, press again or change the frequency.
- 5 BAND selectors
- 6 Display window
- 7 TUNING +/- buttons
- 8 MEMORY button
- 9 Numeric buttons
- 10 SHIFT button
- 11 PRESET +/- buttons
- 12 VOLUME control and indicator
The indicator is only equipped with the STR-AV310
- 13 SPEAKERS selectors
Depress to select which speaker system to drive. For both speaker systems, depress A and B.
- 14 HEADPHONES jack (stereo phone jack)
- 15 TONE controls
Turn the TREBLE control to adjust the high frequency sound. Turn BASS control to adjust the low frequency sound.
- 16 BALANCE control
Turn clockwise to decrease the left channel volume, and turn counterclockwise to decrease the right channel volume.
- 17 Function selectors
- 18 DBFB (Dynamic Bass Feed Back) button and indicator button.
To reinforce the bass frequency sound, press this button.
- 19 MUTING button and indicator (STR-AV310 only)
Press to attenuate the sound level immediately (-20 dB ATT). Pressing this button makes the indicator be lighted. To restore the sound level, press again.

Remote Commander RM-S70 (STR-AV310 : AEP, WG models only)

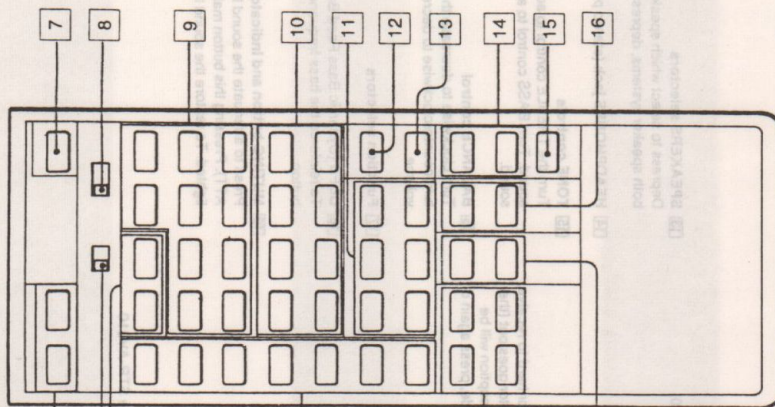



- 1 POWER switch
- 2 DBFB button
- 3 Tape deck operation buttons
TAPE ◀ or ▶. Selects the TAPE function and starts tape playback.
DECK A/B. Set this switch to select a deck of a double-deck unit.
- 4 VOLUME +/- buttons
- 5 TUNER PRESET +/- buttons
Depress to tune in a preset station.
- 6 MUTING button
- 7 Turntable system operation buttons
PHONO START. Selects the PHONO function and starts the playing of a phono disc.
- 8 CD player operation buttons
DISC SKIP. When your CD player is equipped with 5 disc trays, use this button to skip loaded disc.
CD ▶. Selects the CD function and starts CD playback.
- 9 TUNER/VIDEO function buttons
Select TUNER or VIDEO function.



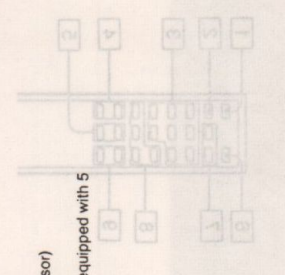
Notes on the remote commander
For the functions other than the receiver's own ones, the remote commander is effective only when the CONTROL S OUT jack on the back of the receiver is connected to the CONTROL S IN jacks of the respective components, as shown. For connection, use the special cables supplied with your components.
If the components have remote sensor with mark, the components can be controlled with the remote commander without CONTROL S connection.

Remote Commander RM-U90 (STR-AV310 : UK model only)



Notes on the remote commander
For the functions other than the receiver's own ones, the remote commander is effective only when the receiver's CONTROL S OUT jack on the back of the receiver is connected to the CONTROL S IN jacks of the respective components, as shown. For connection, use the special cables supplied with your components.
If the components have remote sensor with  mark, the components can be controlled with the remote commander without CONTROL S connection.

- 1 TV/VTR POWER buttons**
TV: Turns the power of the TV on or off.
VTR: Turns the power of the VTR on or off.
- 2 DECK selector**
A: Selects the tape in a single-deck unit or the tape in the "A" deck of a double-deck unit.
B: Selects the tape in the "B" deck of a double-deck unit.
- 3 PHONO buttons**
START: Starts record play.
STOP: Stops record play.
- 4 Function selectors**
- 5 TV CH (channel) and VOL (volume) buttons**
CH+: Selects a higher numbered channel.
CH-: Selects a lower numbered channel.
VOL+: Increases the TV sound level.
VOL-: Decreases the TV sound level.
- 6 VTR CH (channel) buttons**
+: Selects a higher-numbered channel.
-: Selects a lower-numbered channel.
- 7 POWER button**
Turns off the power of the receiver on or off.
- 8 VTR selector**
Used to select the type of the VTR.
1: Betamax VTRs
2: 8 mm VTRs
3: VHS VTRs
- 9 CD buttons**
▶: Starts play.
⏸: Pause
⏹: Stops play.
▶◀/▶▶: AMS (Automatic Music Sensor) PGM: Program play.
DISC SKIP: Disc skip (for a CD player equipped with 5 disc trays)
- 10 TAPE buttons**
REPEAT: Repeat play.
SHUFFLE: Shuffle play.
CONTINUE: Continuous play.
▶◀: Reverse fast winding
◀: Reverse play
▶▶: Forward fast winding
▶: Forward play
⏸: Stop
⏹: Pause
●: Recording (While pressing ●, press ◀ or ▶)
○: Record muting
- 11 VTR buttons**
◀◀: Rewind
▶▶: Play
▶▶▶: Fast forward
⏸: Stop
⏹: Pause
●: To start recording (While pressing ●, press ▶)
- 12 ANT (antenna) TV/VTR button**
Selects the output signal from the antenna terminal on the VTR, either a TV signal or VTR programs.
- 13 TV/VIDEO button**
Selects the input signal to the TV set, either a TV signal or VTR programs.
- 14 VOL (volume) control buttons**
Adjust the sound level.
- 15 MUTING button**
- 16 TUNER PRESET buttons**
+: Selects the higher preset number.
-: Selects the lower preset number.

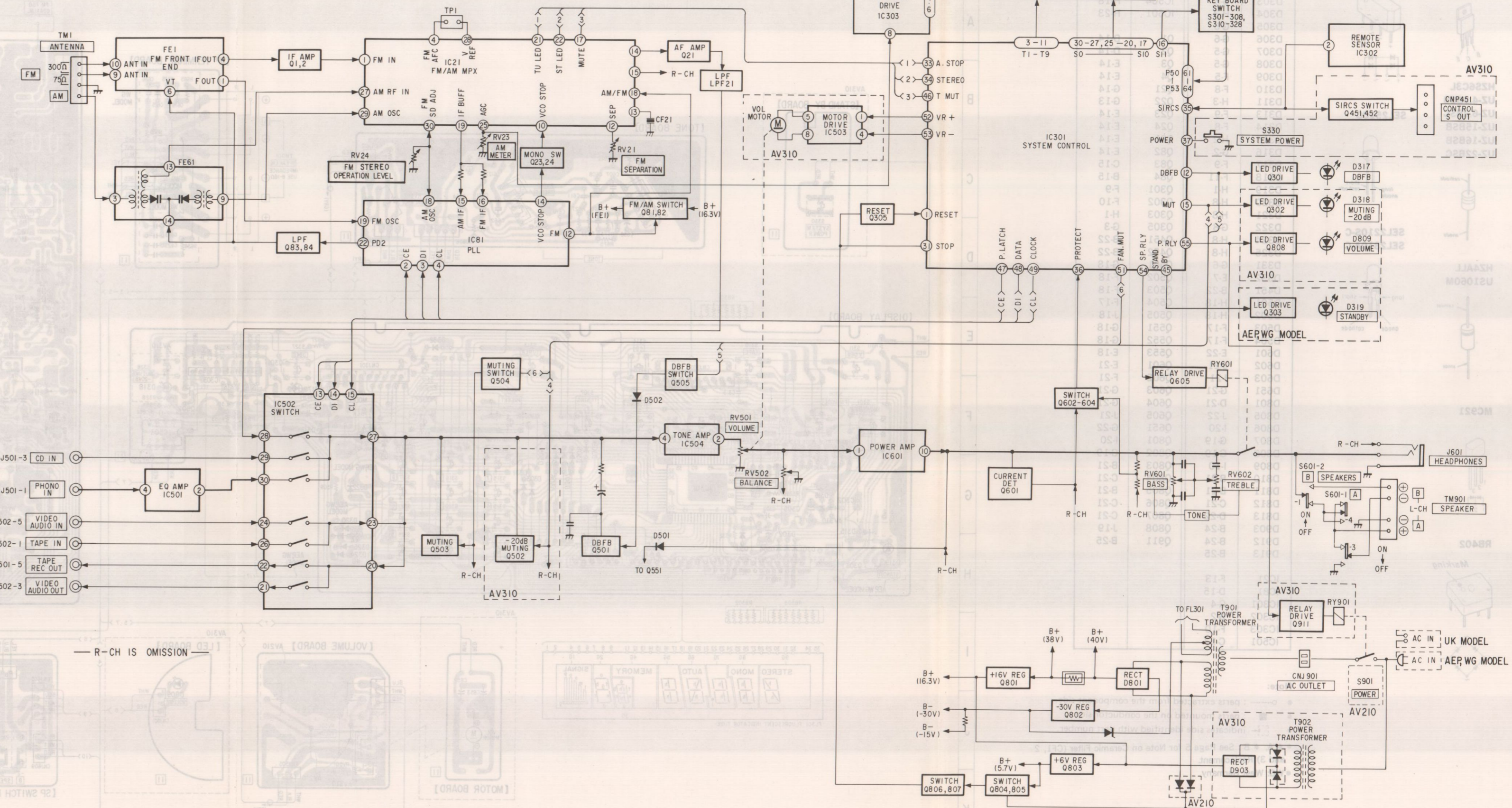


Remote Commander RM-U90 (STR-AV310 : UK model only)

SECTION 2 ELECTRICAL ADJUSTMENTS

SECTION 3 DIAGRAMS

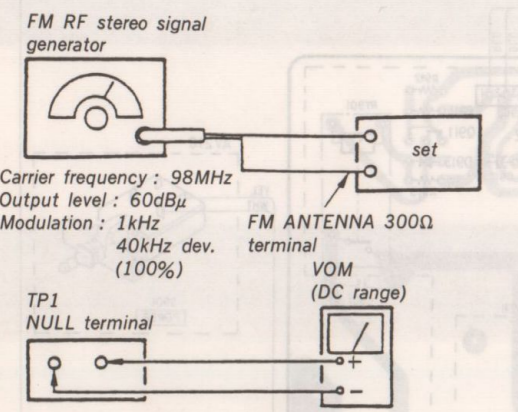
3-1. BLOCK DIAGRAM



FM SECTION

FM Discriminator (NULL) Adjustment

Setting:



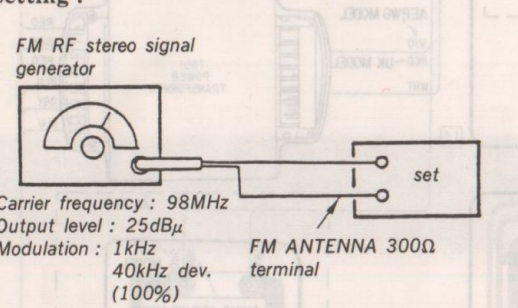
Procedure:

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note: FM Tuning Level adjustment should be made after FM discriminator adjustment.

FM Stereo Operation Level Adjustment

Setting:

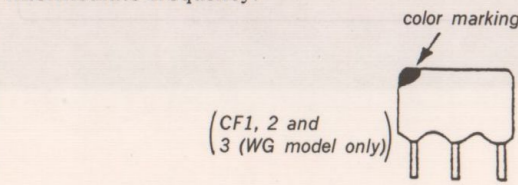


Procedure:

1. Tune the set to 98MHz.
2. Adjust RV24 so that the STEREO LED goes on.

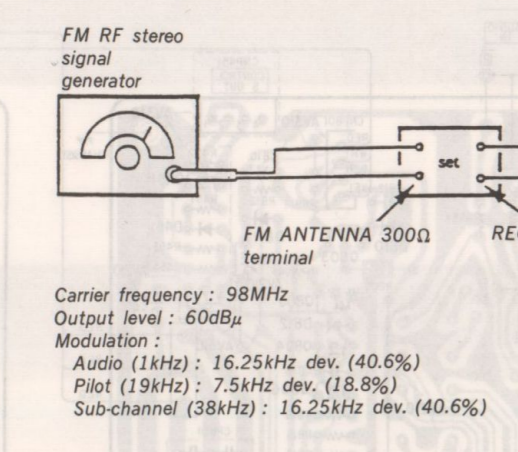
Note on Ceramic Filter (CF1, 2 and 3 (WG model only)) Replacement

This set employs three ceramic filters (CF1, 2 and 3 (WG model only)) which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by (* A, * B) connection is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



FM Stereo Separation Adjustment

Setting:



Procedure:

Tune the set to 98MHz.

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	(A)
R-CH	L-CH	Adjust RV21 for minimum reading.
R-CH	R-CH	(C)
L-CH	R-CH	Adjust RV21 for minimum reading.

L-CH Stereo separation: (A)-(B)

R-CH Stereo separation: (C)-(D)

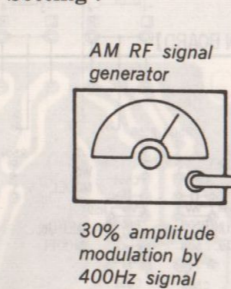
The separations of both channels should be equal.

Color mark	Ceramic filter Center frequency (MHz)	Connection		FM intermediate frequency (MHz)
		* A (D321)	* B (D324)	
White	10.750	○	×	10.750
Red	10.700	×	×	10.700
Black	10.650	○	○	10.650

AM SECTION

AM Meter Adjustment

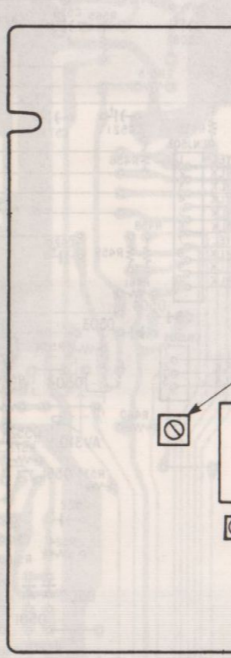
Setting:



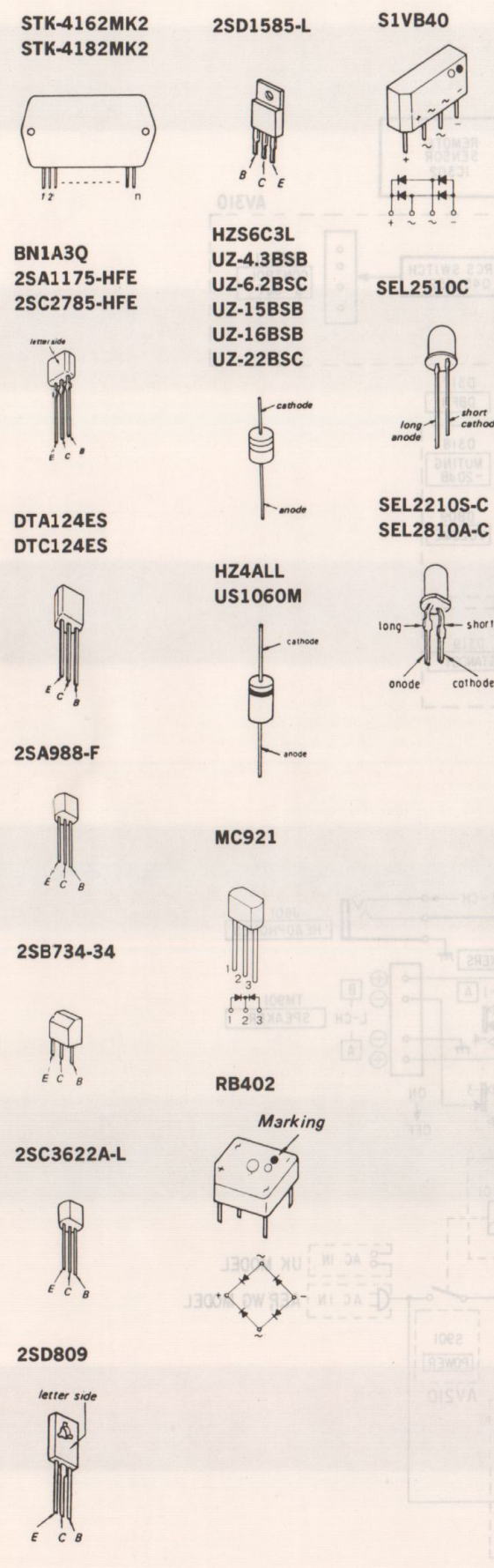
Procedure:

1. Tune the set to 1.404kHz.
2. Adjust the RV23 so that the 4 point segment of the signal meter goes on.

Adjustment Location: tuner board



3-2. SEMICONDUCTOR LEAD LAYOUTS

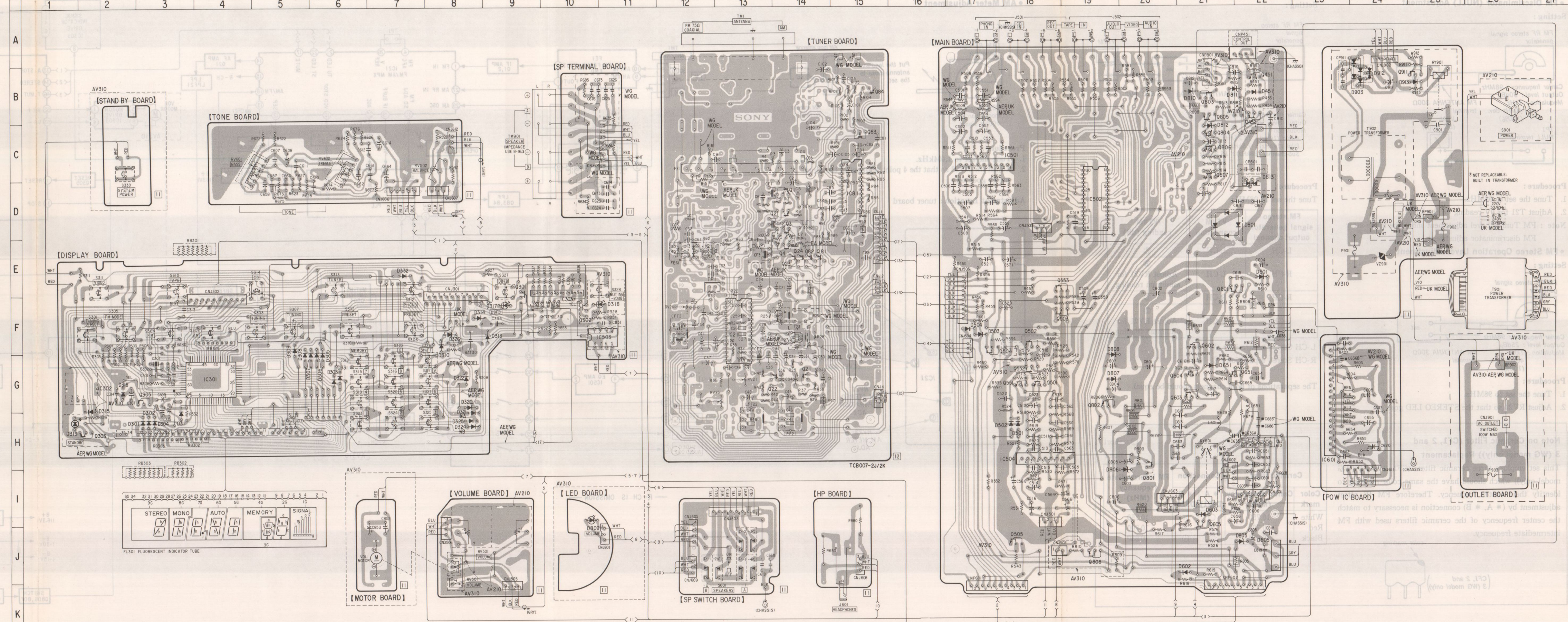


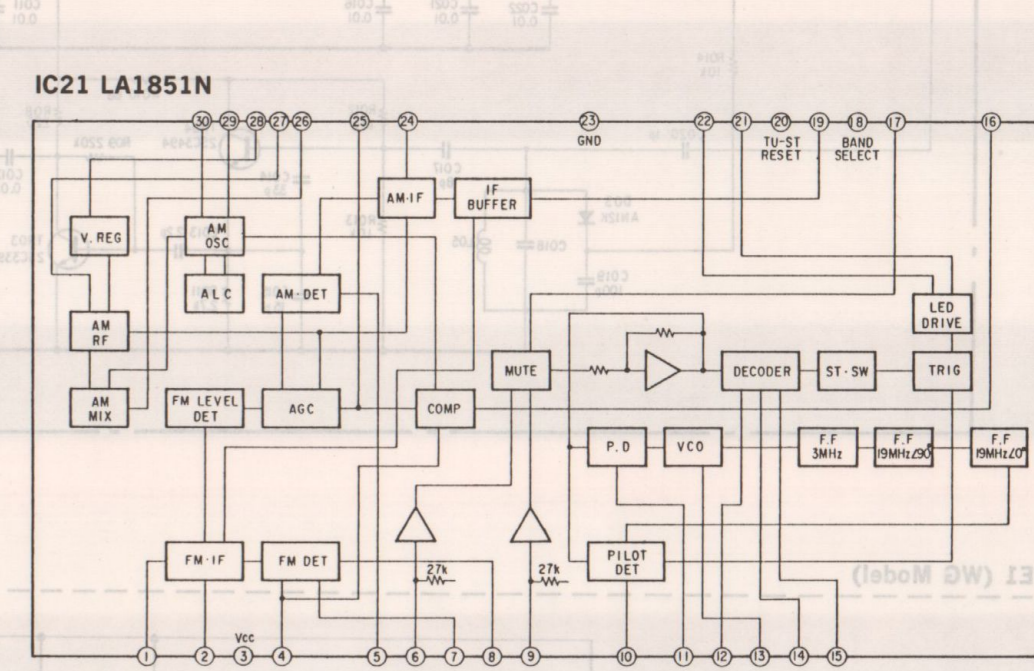
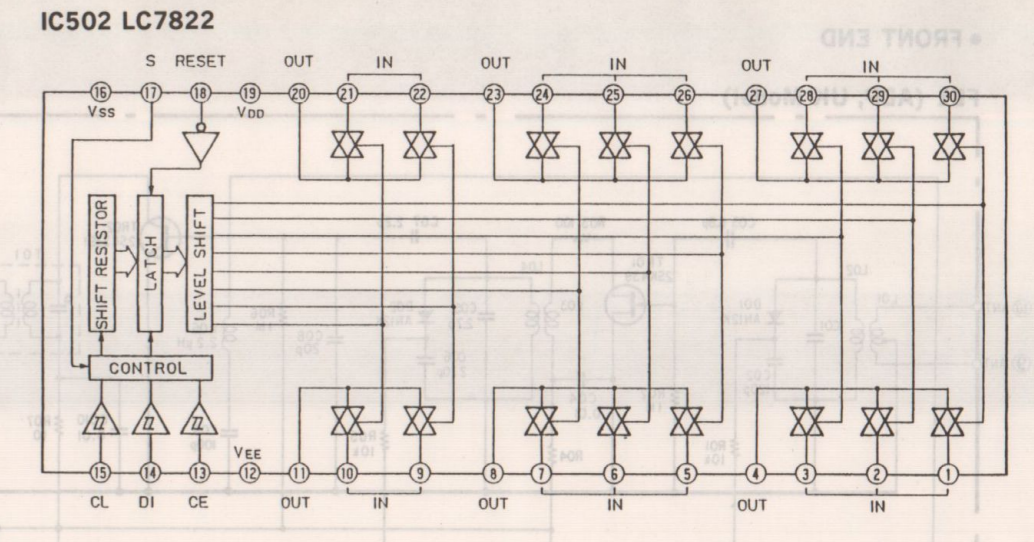
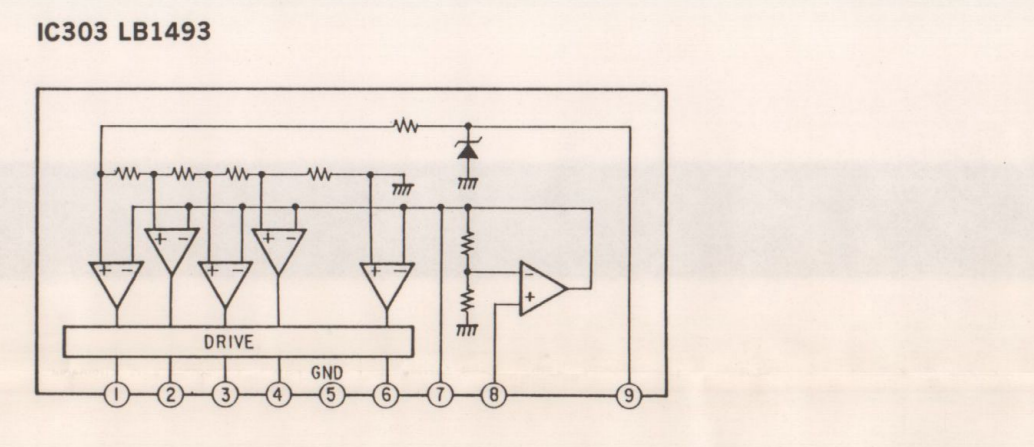
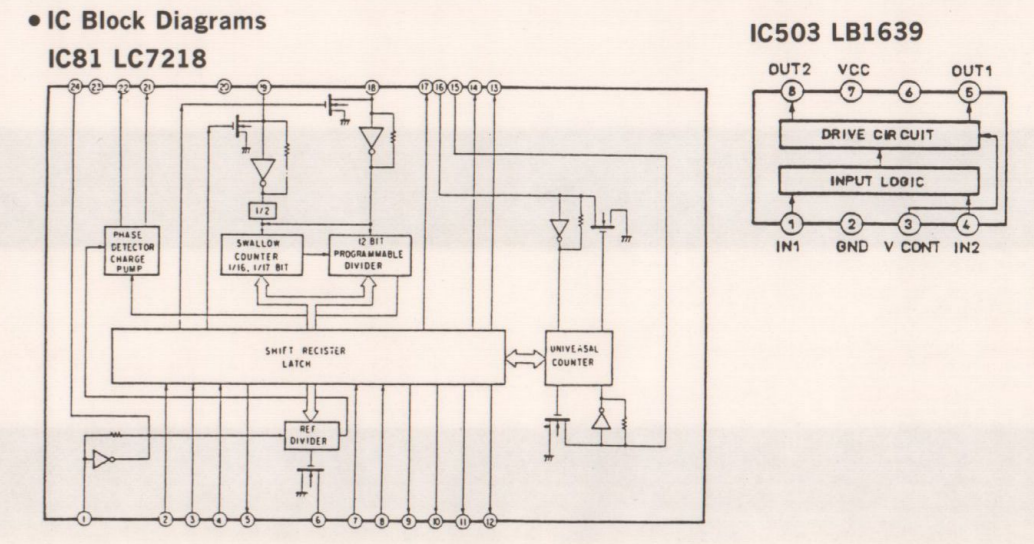
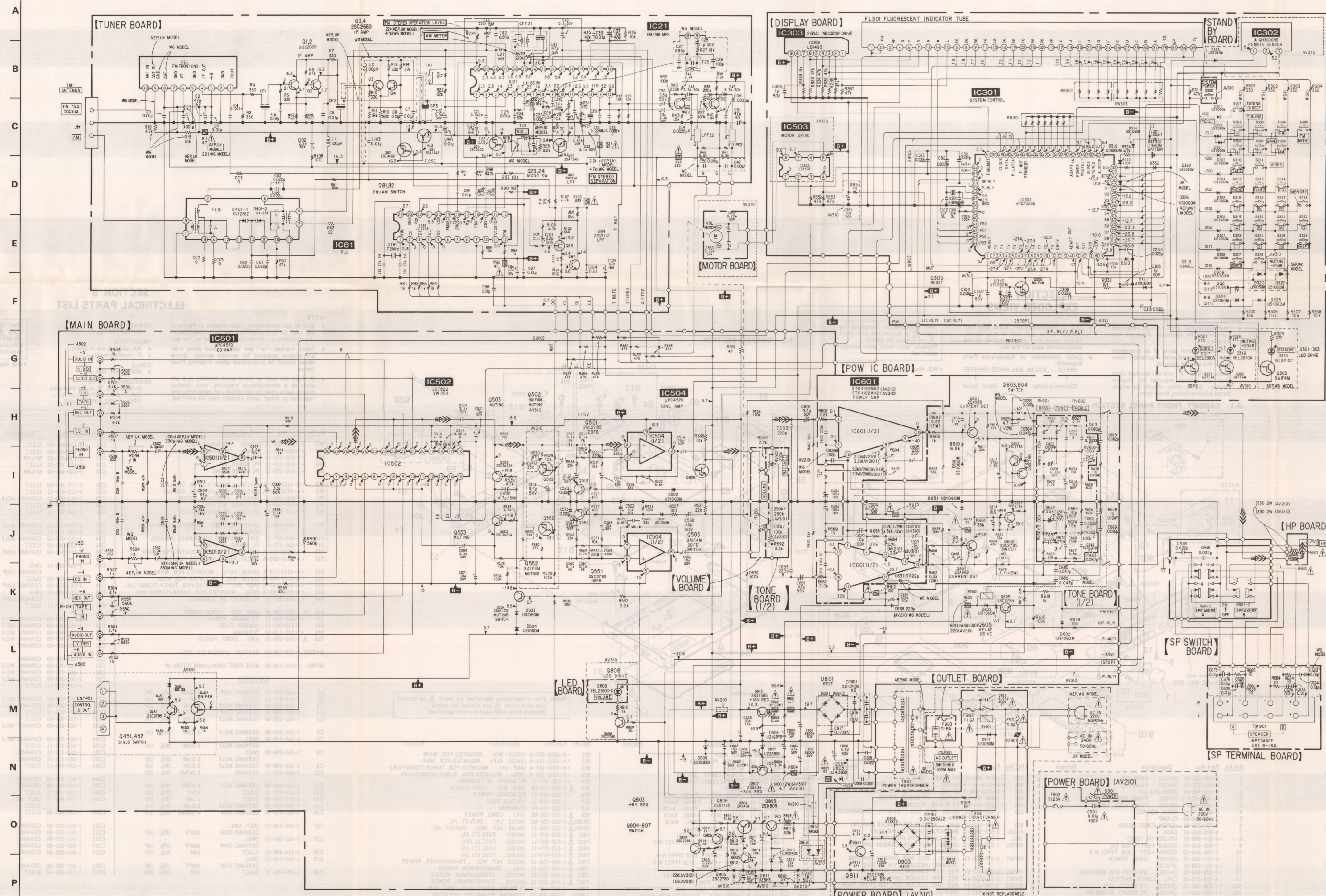
● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	H-3	IC502	D-19
D302	H-3	IC503	F-11
D303	G-6	IC504	H-18
D304	H-3	IC601	H-23
D305	G-6		
D306	G-6	Q1	D-14
D307	G-5	Q2	D-14
D308	G-5	Q3	E-14
D309	F-5	Q4	E-14
D310	F-8	Q21	G-14
D311	H-3	Q22	G-13
D313	F-9	Q23	E-14
D314	F-8	Q24	E-14
D315	H-2	Q81	E-14
D316	G-2	Q82	E-14
D317	F-9	Q83	C-15
D318	F-11	Q84	B-15
D319	H-1	Q301	F-9
D320	H-8	Q302	F-10
D321	H-8	Q303	H-1
D322	G-8	Q305	G-3
D324	H-8	Q451	B-22
D325	H-8	Q452	B-22
D331	G-6	Q501	G-18
D332	E-7	Q502	F-18
D451	B-22	Q503	F-18
D501	H-18	Q504	F-17
D502	H-18	Q505	J-18
D503	F-17	Q551	G-18
D504	F-17	Q552	G-18
D601	E-22	Q553	E-18
D602	J-21	Q601	E-21
D603	I-21	Q602	F-21
D651	G-21	Q603	G-21
D801	D-21	Q604	G-21
D805	J-22	Q605	J-21
D806	I-20	Q651	G-22
D807	G-19	Q801	I-20
D808	G-19	Q802	G-19
D809	I-10	Q803	B-21
D810	B-21	Q804	C-21
D811	B-21	Q805	B-21
D812	C-21	Q806	C-21
D813	D-22	Q807	C-21
D903	B-24	Q808	J-19
D912	B-24	Q911	B-25
D913	B-25		
IC21	F-13		
IC81	D-15		
IC301	G-4		
IC302	G-2		
IC303	F-10		
IC501	C-17		

Note:
 ○ : parts extracted from the component side.
 ● : parts mounted on the conductor side.
 ● : indicates side identified with part number.
 * A, * B : See Page 5 for Note on Ceramic Filter (CF1, 2 and 3) Replacement.
 ● WG: West Germany

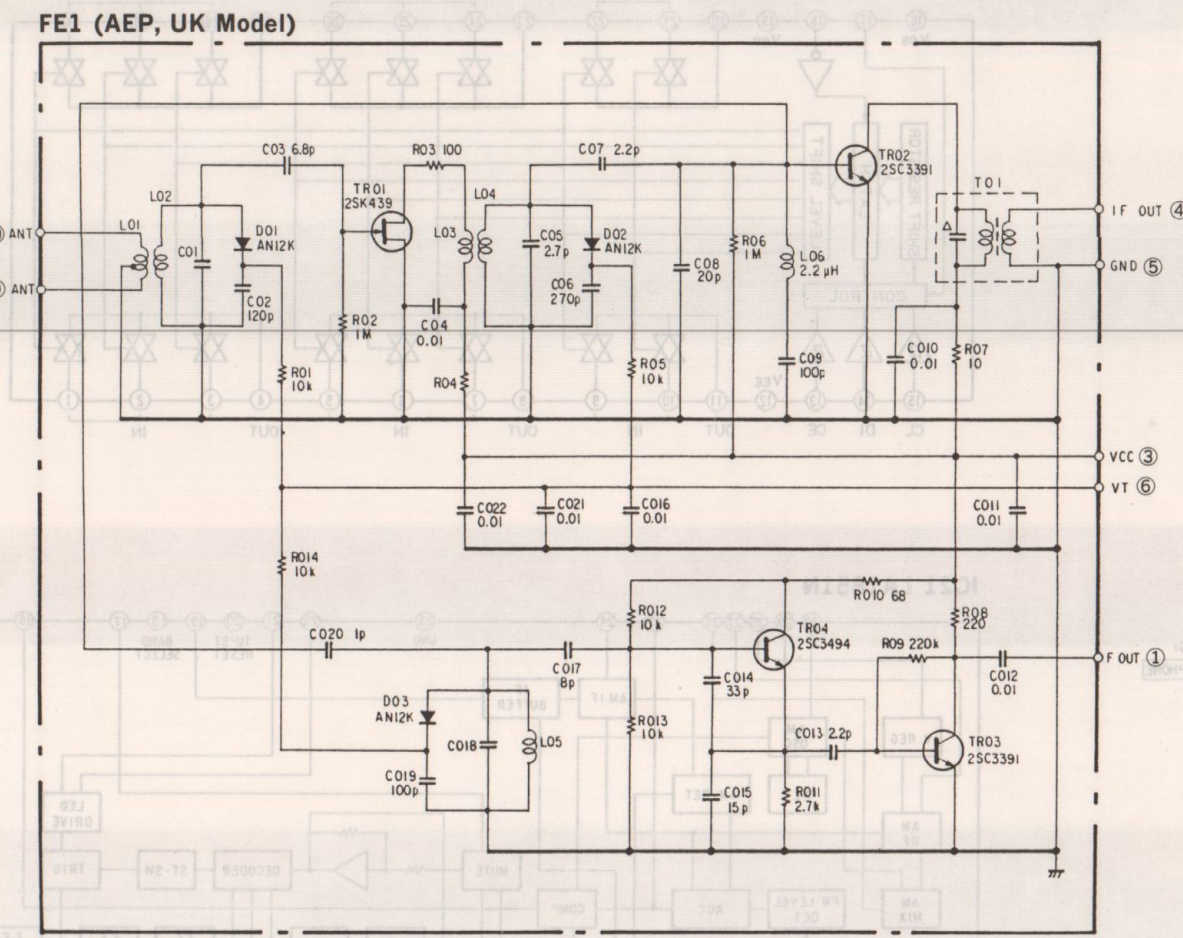
3-3. PRINTED WIRING BOARDS



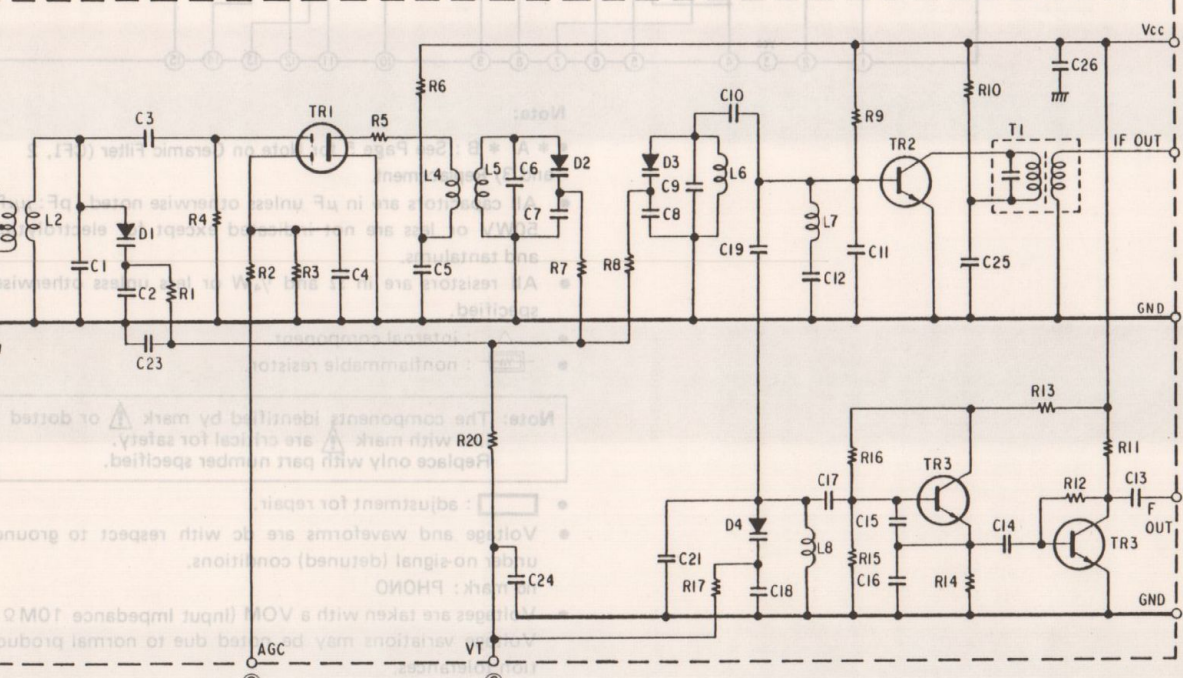


- Note:**
- * A * B : See Page 5 for Note on Ceramic Filter (CF1, 2 and 3) Replacement.
 - All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$ or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
 - \square : nonflammable resistor.
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
- \square : adjustment for repair.
 - Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 - no mark : PHONO.
 - Voltagess are taken with a VOM (Input Impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
 - Signal path.
 - \square : PHONO
 - * WG: West Germany

FRONT END



FE1 (WG Model)



SECTION 4 EXPLODED VIEWS

NOTE: The mechanical parts with no reference number in the exploded views are not supplied. The construction parts of an assembled part are indicated with a collation number in the remark column. Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

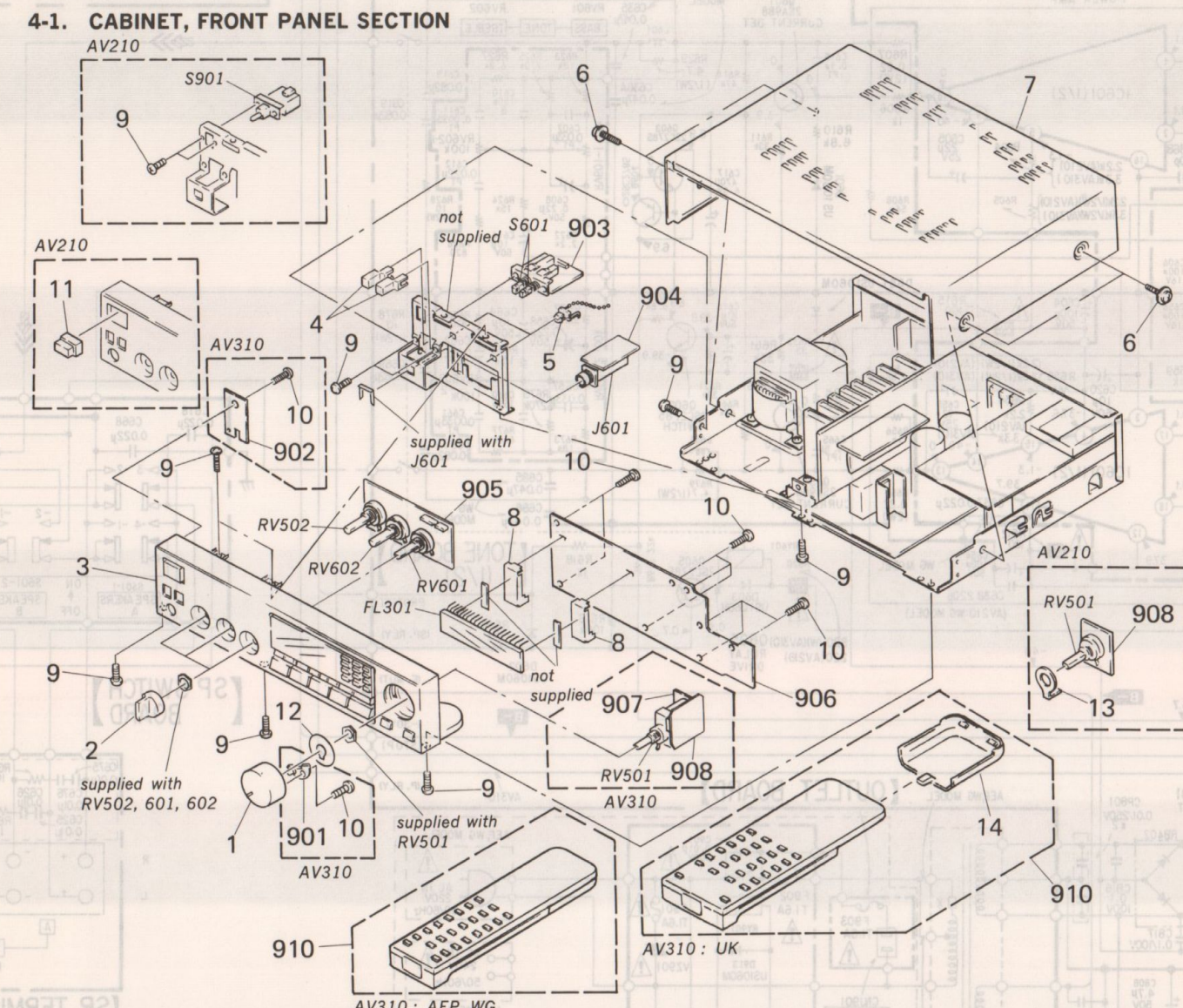
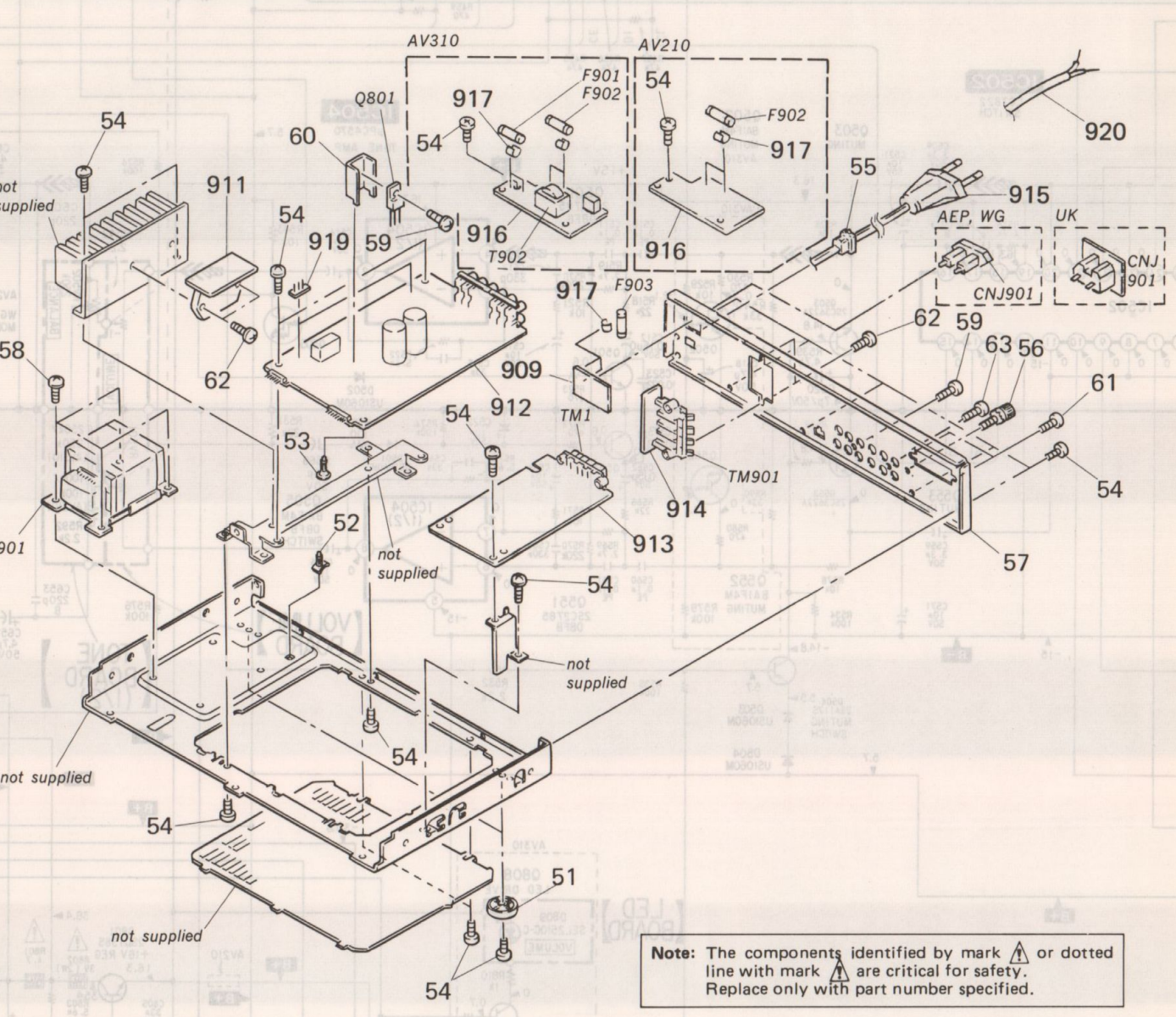


Table with 4 columns: Ref.No, Part No., Description, Remark. Lists parts for cabinet front panel section.

4-2. CHASSIS SECTION



Note: The components identified by mark Δ or dotted line with mark A are critical for safety. Replace only with part number specified.

Table with 4 columns: Ref.No, Part No., Description, Remark. Lists parts for chassis section.



SECTION 5 ELECTRICAL PARTS LIST



NOTE: Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set. Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items. If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

Large table listing electrical parts with columns for Ref.No, Part No., Description, and various specifications like capacitance, voltage, and tolerance.

The components identified by mark Δ or dotted line with mark A are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description	Ref.No	Part No.	Description
C503	1-102-106-00	(AEP, UK).... CERAMIC 100PF 10% 50V	C635	1-136-161-00	(WG).... ELECT 0.047MF 10% 50V
C503	1-102-112-00	(WG).... CERAMIC 330PF 10% 50V	C636A	1-136-161-00	(WG).... ELECT 0.047MF 10% 50V
C504	1-124-963-11	ELECT 33MF 20% 16V	C636B	1-102-106-00	(AV210 : WG).... CERAMIC 100PF 10% 50V
C505	1-130-480-00	MYLAR 0.0056MF 5% 50V	C637	1-130-487-00	(WG).... MYLER 0.022MF 5% 50V
C506	1-130-473-00	MYLAR 0.0015MF 5% 50V	C638	1-102-110-00	(WG).... CERAMIC 220PF 10% 50V
C507	1-123-382-00	ELECT 3.3MF 20% 50V	C651	1-124-927-11	ELECT 4.7MF 20% 50V
C508	1-123-382-00	ELECT 3.3MF 20% 50V	C652	1-102-112-00	CERAMIC 330PF 10% 50V
C509	1-123-382-00	ELECT 3.3MF 20% 50V	C653	1-162-286-31	CERAMIC 220PF 10% 50V
C510	1-130-495-00	MYLAR 0.1MF 5% 50V	C654	1-124-122-11	ELECT 100MF 20% 50V
C511	1-130-495-00	MYLAR 0.1MF 5% 50V	C655	1-126-233-11	ELECT 22MF 20% 25V
C512	1-124-250-00	ELECT 0.15MF 20% 50V	C656	1-126-101-11	ELECT 100MF 20% 16V
C513	1-102-112-00	CERAMIC 330PF 10% 50V	C657	1-130-489-00	MAYLAR 0.033MF 5% 50V
C514	1-123-875-11	ELECT 10MF 20% 50V	C658	1-124-464-11	ELECT 0.22MF 20% 50V
C515	1-162-211-31	CERAMIC 33PF 5% 50V	C660	1-102-108-00	CERAMIC 150PF 10% 50V
C516	1-123-875-11	ELECT 10MF 20% 50V	C661	1-130-477-00	MAYLAR 0.0033MF 5% 50V
C518	1-124-927-11	(AV310).... ELECT 4.7MF 20% 50V	C662	1-130-487-00	MAYLAR 0.022MF 5% 50V
C519	1-162-294-31	CERAMIC 0.001MF 10% 50V	C663	1-136-164-00	MAYLAR 0.082MF 10% 50V
C520	1-124-927-11	ELECT 4.7MF 20% 50V	C664	1-124-261-00	ELECT 10MF 20% 50V
C521	1-123-875-11	ELECT 10MF 20% 50V	C665	1-130-495-00	MAYLAR 0.1MF 5% 50V
C522	1-123-875-11	ELECT 10MF 20% 50V	C668	1-161-055-00	CERAMIC 0.022MF 10% 25V
C523	1-161-055-00	CERAMIC 0.022MF 10% 50V	C669	1-136-164-00	MAYLAR 0.082MF 10% 50V
C551	1-102-106-00	CERAMIC 100PF 10% 50V	C673	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V
C552	1-123-382-00	ELECT 3.3MF 20% 50V	C674	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V
C553	1-102-106-00	(AEP, UK).... CERAMIC 100PF 10% 50V	C675	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V
C553	1-102-112-00	(WG).... CERAMIC 330PF 10% 50V	C676	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V
C554	1-124-963-11	ELECT 33MF 20% 16V	C685	1-136-161-00	(WG).... ELECT 0.047MF 10% 50V
C555	1-130-480-00	MYLAR 0.0056MF 5% 50V	C686	1-136-161-00	(WG).... ELECT 0.047MF 10% 50V
C556	1-130-473-00	MYLAR 0.0015MF 5% 50V	C801	1-126-307-11	ELECT 6800MF 20% 50V
C557	1-123-382-00	ELECT 3.3MF 20% 50V	C802	1-126-307-11	ELECT 6800MF 20% 50V
C558	1-123-382-00	ELECT 3.3MF 20% 50V	C803	1-126-101-11	ELECT 100MF 20% 16V
C559	1-123-382-00	ELECT 3.3MF 20% 50V	C804	1-124-910-11	ELECT 47MF 20% 50V
C560	1-130-495-00	MYLAR 0.1MF 5% 50V	C805	1-124-963-11	ELECT 33MF 20% 16V
C561	1-130-495-00	MYLAR 0.1MF 5% 50V	C806	1-123-875-11	ELECT 10MF 20% 50V
C562	1-124-250-00	ELECT 0.15MF 20% 50V	C807	1-123-875-11	ELECT 10MF 20% 50V
C563	1-102-112-00	CERAMIC 330PF 10% 50V	C808	1-124-927-11	ELECT 4.7MF 20% 50V
C564	1-123-875-11	ELECT 10MF 20% 50V	C810	1-124-499-11	ELECT 1MF 20% 50V
C565	1-162-211-31	CERAMIC 33PF 5% 50V	C811	1-124-477-11	ELECT 47MF 20% 16V
C566	1-123-875-11	ELECT 10MF 20% 50V	C812	1-123-875-11	ELECT 10MF 20% 50V
C568	1-123-875-11	ELECT 10MF 20% 50V	C813	1-124-464-11	ELECT 0.22MF 20% 50V
C571	1-123-875-11	ELECT 10MF 20% 50V	C816	1-130-777-51	FILM 0.1MF 5% 100V
C573	1-161-055-00	CERAMIC 0.022MF 10% 50V	C817	1-130-777-51	FILM 0.1MF 5% 100V
C601	1-124-927-11	ELECT 4.7MF 20% 50V	C818	1-161-055-00	CERAMIC 0.022MF 10% 50V
C602	1-102-112-00	CERAMIC 330PF 10% 50V	C819	1-161-055-00	CERAMIC 0.022MF 10% 50V
C603	1-162-286-31	CERAMIC 220PF 10% 50V	C851	1-123-875-11	ELECT 10MF 20% 50V
C604	1-124-122-11	ELECT 100MF 20% 50V	C852	1-124-464-11	(AV310).... ELECT 0.22MF 20% 50V
C605	1-126-233-11	ELECT 22MF 20% 25V	C853	1-124-464-11	(AV310).... ELECT 0.22MF 20% 50V
C606	1-126-101-11	ELECT 100MF 20% 16V	C901	1-161-744-00	CERAMIC 0.01MF 400V
C607	1-130-489-00	MYLAR 0.033MF 5% 50V	C912	1-124-557-11	(AV310).... ELECT 1000MF 20% 25V
C608	1-124-464-11	ELECT 0.22MF 20% 50V	CC2	1-249-366-11	CARBON MELF 0 5% 1/5W
C610	1-102-108-00	CERAMIC 150PF 10% 50V	CC3	1-249-366-11	CARBON MELF 0 5% 1/5W
C611	1-130-477-00	MYLAR 0.0033MF 5% 50V	CC5	1-249-366-11	CARBON MELF 0 5% 1/5W
C612	1-130-487-00	MYLAR 0.022MF 5% 50V	CF1	1-567-389-11	FILTER, CERAMIC
C613	1-136-164-00	MYLAR 0.082MF 10% 50V	CF2	1-567-389-11	FILTER, CERAMIC
C614	1-124-261-00	ELECT 10MF 20% 50V	CF3	1-567-389-11	(WG).... FILTER, CERAMIC
C615	1-130-495-00	MYLAR 0.1MF 5% 50V	CF21	1-577-075-11	OSCILLATOR, CERAMIC (19KHz)
C616	1-123-875-11	ELECT 10MF 20% 50V	CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)
C617	1-124-472-11	ELECT 470MF 20% 6.3V	CNJ1	*1-568-276-11	SOCKET, CONNECTOR 10P
C618	1-161-055-00	CERAMIC 0.022MF 10% 25V	CNJ2	1-568-269-11	SOCKET, CONNECTOR 3P
C619	1-136-164-00	MYLAR 0.082MF 10% 50V	CNJ4	1-568-307-11	SOCKET, CONNECTOR 3P
C620	1-123-875-11	ELECT 10MF 20% 50V	CNJ501	*1-562-327-00	SOCKET, CONNECTOR 3P
C623	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V	CNJ502	*1-564-777-11	PLUG, CONNECTOR (2.5MM) 2P
C624	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V	CNJ503	1-568-285-11	SOCKET, CONNECTOR 10P
C625	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V	CNJ504	1-568-278-11	SOCKET, CONNECTOR 3P
C626	1-161-051-00	(WG).... CERAMIC 0.01MF 10% 50V			

Note: The component identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

ACCESSORY & PACKING MATERIAL

Part No.	Description	Ref No	Part No	Description	Ref No	Part No	Description
1-501-369-11	(AEP, UK)...ANTENNA	RV21	1-538-013-11	(AEP, UK)...ANTENNA	RV21	1-538-013-11	(AEP, UK)...ANTENNA
1-501-374-11	ANTENNA, LOOP	RV24	1-538-017-11	(AEP, UK)...ANTENNA, LOOP	RV24	1-538-017-11	(AEP, UK)...ANTENNA, LOOP
3-701-630-00	BAG, POLYETHYLENE	RV24	1-538-019-11	(WG)...BAG, POLYETHYLENE	RV24	1-538-019-11	(WG)...BAG, POLYETHYLENE
3-750-264-11	(AEP, WG)...MANUAL, INSTRUCTION (ENGLISH, GERMAN)	RV21	1-538-013-11	(AEP, UK)...MANUAL, INSTRUCTION (ENGLISH, GERMAN)	RV21	1-538-013-11	(AEP, UK)...MANUAL, INSTRUCTION (ENGLISH, GERMAN)
3-750-264-41	(UK)...MANUAL, INSTRUCTION (ENGLISH)	RV21	1-538-013-11	(UK)...MANUAL, INSTRUCTION (ENGLISH)	RV21	1-538-013-11	(UK)...MANUAL, INSTRUCTION (ENGLISH)
3-750-264-51	(AEP)...MANUAL, INSTRUCTION (FRENCH, PORTUGUESE, DUTCH, SWEDISH)	RV21	1-538-013-11	(AEP)...MANUAL, INSTRUCTION (FRENCH, PORTUGUESE, DUTCH, SWEDISH)	RV21	1-538-013-11	(AEP)...MANUAL, INSTRUCTION (FRENCH, PORTUGUESE, DUTCH, SWEDISH)
*4-931-010-01	CUSHION (BOTTOM)	RV21	1-538-013-11	CUSHION (BOTTOM)	RV21	1-538-013-11	CUSHION (BOTTOM)
*4-931-011-01	CUSHION (TOP)	RV21	1-538-013-11	CUSHION (TOP)	RV21	1-538-013-11	CUSHION (TOP)
RY001	RELAY	RY001	1-512-333-11	RELAY	RY001	1-512-333-11	RELAY
RY001	RELAY	RY001	1-512-333-11	RELAY	RY001	1-512-333-11	RELAY
3301	SWITCH, KEY BOARD (TUNING DIRECT)	3301	1-524-303-51	SWITCH, KEY BOARD (TUNING DIRECT)	3301	1-524-303-51	SWITCH, KEY BOARD (TUNING DIRECT)
3302	SWITCH, KEY BOARD (PRESET -)	3302	1-524-303-51	SWITCH, KEY BOARD (PRESET -)	3302	1-524-303-51	SWITCH, KEY BOARD (PRESET -)
3303	SWITCH, KEY BOARD (TUNING -)	3303	1-524-303-51	SWITCH, KEY BOARD (TUNING -)	3303	1-524-303-51	SWITCH, KEY BOARD (TUNING -)
3304	SWITCH, KEY BOARD (BAND FM)	3304	1-524-303-51	SWITCH, KEY BOARD (BAND FM)	3304	1-524-303-51	SWITCH, KEY BOARD (BAND FM)
3305	SWITCH, KEY BOARD (FM MODE)	3305	1-524-303-51	SWITCH, KEY BOARD (FM MODE)	3305	1-524-303-51	SWITCH, KEY BOARD (FM MODE)
3306	SWITCH, KEY BOARD (PRESET +)	3306	1-524-303-51	SWITCH, KEY BOARD (PRESET +)	3306	1-524-303-51	SWITCH, KEY BOARD (PRESET +)
3307	SWITCH, KEY BOARD (TUNING +)	3307	1-524-303-51	SWITCH, KEY BOARD (TUNING +)	3307	1-524-303-51	SWITCH, KEY BOARD (TUNING +)
3308	SWITCH, KEY BOARD (BAND FM)	3308	1-524-303-51	SWITCH, KEY BOARD (BAND FM)	3308	1-524-303-51	SWITCH, KEY BOARD (BAND FM)
3310	SWITCH, KEY BOARD (TAP)	3310	1-524-303-51	SWITCH, KEY BOARD (TAP)	3310	1-524-303-51	SWITCH, KEY BOARD (TAP)
3311	SWITCH, KEY BOARD (VIDEO)	3311	1-524-303-51	SWITCH, KEY BOARD (VIDEO)	3311	1-524-303-51	SWITCH, KEY BOARD (VIDEO)
3312	SWITCH, KEY BOARD (PHONE)	3312	1-524-303-51	SWITCH, KEY BOARD (PHONE)	3312	1-524-303-51	SWITCH, KEY BOARD (PHONE)
3313	SWITCH, KEY BOARD (TUNER)	3313	1-524-303-51	SWITCH, KEY BOARD (TUNER)	3313	1-524-303-51	SWITCH, KEY BOARD (TUNER)
3314	SWITCH, KEY BOARD (CD)	3314	1-524-303-51	SWITCH, KEY BOARD (CD)	3314	1-524-303-51	SWITCH, KEY BOARD (CD)
3315	SWITCH, KEY BOARD (T)	3315	1-524-303-51	SWITCH, KEY BOARD (T)	3315	1-524-303-51	SWITCH, KEY BOARD (T)
3316	SWITCH, KEY BOARD (S)	3316	1-524-303-51	SWITCH, KEY BOARD (S)	3316	1-524-303-51	SWITCH, KEY BOARD (S)
3317	SWITCH, KEY BOARD (R)	3317	1-524-303-51	SWITCH, KEY BOARD (R)	3317	1-524-303-51	SWITCH, KEY BOARD (R)
3318	SWITCH, KEY BOARD (MEMORY)	3318	1-524-303-51	SWITCH, KEY BOARD (MEMORY)	3318	1-524-303-51	SWITCH, KEY BOARD (MEMORY)
3319	SWITCH, KEY BOARD (A)	3319	1-524-303-51	SWITCH, KEY BOARD (A)	3319	1-524-303-51	SWITCH, KEY BOARD (A)
3320	SWITCH, KEY BOARD (E)	3320	1-524-303-51	SWITCH, KEY BOARD (E)	3320	1-524-303-51	SWITCH, KEY BOARD (E)
3321	SWITCH, KEY BOARD (D)	3321	1-524-303-51	SWITCH, KEY BOARD (D)	3321	1-524-303-51	SWITCH, KEY BOARD (D)
3322	SWITCH, KEY BOARD (I)	3322	1-524-303-51	SWITCH, KEY BOARD (I)	3322	1-524-303-51	SWITCH, KEY BOARD (I)
3323	SWITCH, KEY BOARD (J)	3323	1-524-303-51	SWITCH, KEY BOARD (J)	3323	1-524-303-51	SWITCH, KEY BOARD (J)
3324	SWITCH, KEY BOARD (K)	3324	1-524-303-51	SWITCH, KEY BOARD (K)	3324	1-524-303-51	SWITCH, KEY BOARD (K)
3325	SWITCH, KEY BOARD (L)	3325	1-524-303-51	SWITCH, KEY BOARD (L)	3325	1-524-303-51	SWITCH, KEY BOARD (L)
3326	SWITCH, KEY BOARD (SHIFT)	3326	1-524-303-51	SWITCH, KEY BOARD (SHIFT)	3326	1-524-303-51	SWITCH, KEY BOARD (SHIFT)
3327	SWITCH, KEY BOARD (DORF)	3327	1-524-303-51	SWITCH, KEY BOARD (DORF)	3327	1-524-303-51	SWITCH, KEY BOARD (DORF)
3328	SWITCH, KEY BOARD (MUTING - 50dB)	3328	1-524-303-51	SWITCH, KEY BOARD (MUTING - 50dB)	3328	1-524-303-51	SWITCH, KEY BOARD (MUTING - 50dB)
3330	SWITCH, KEY BOARD (SYSTEM POWER)	3330	1-524-303-51	SWITCH, KEY BOARD (SYSTEM POWER)	3330	1-524-303-51	SWITCH, KEY BOARD (SYSTEM POWER)
3501	SWITCH, PUSH (2 KEYS) (SPEAKERS A/B)	3501	1-521-488-11	SWITCH, PUSH (2 KEYS) (SPEAKERS A/B)	3501	1-521-488-11	SWITCH, PUSH (2 KEYS) (SPEAKERS A/B)
3501	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	3501	1-524-682-11	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	3501	1-524-682-11	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)
T31	TRANSFORMER, DISCRIMINATOR	T31	1-444-807-11	TRANSFORMER, DISCRIMINATOR	T31	1-444-807-11	TRANSFORMER, DISCRIMINATOR
T32	ENCAPSULATED COMPONENT	T32	1-528-483-11	ENCAPSULATED COMPONENT	T32	1-528-483-11	ENCAPSULATED COMPONENT
T001	TRANSFORMER, POWER	T001	1-444-788-11	TRANSFORMER, POWER	T001	1-444-788-11	TRANSFORMER, POWER
T001	TRANSFORMER, POWER	T001	1-444-788-11	TRANSFORMER, POWER	T001	1-444-788-11	TRANSFORMER, POWER
T001	TRANSFORMER, POWER	T001	1-444-788-11	TRANSFORMER, POWER	T001	1-444-788-11	TRANSFORMER, POWER
T002	TRANSFORMER, POWER	T002	1-448-853-11	TRANSFORMER, POWER	T002	1-448-853-11	TRANSFORMER, POWER
T002	TRANSFORMER, POWER	T002	1-448-853-11	TRANSFORMER, POWER	T002	1-448-853-11	TRANSFORMER, POWER
T002	TRANSFORMER, POWER	T002	1-448-853-11	TRANSFORMER, POWER	T002	1-448-853-11	TRANSFORMER, POWER
T001	TERMINAL BOARD (ANT) (ANTENNA)	T001	1-527-138-11	TERMINAL BOARD (ANT) (ANTENNA)	T001	1-527-138-11	TERMINAL BOARD (ANT) (ANTENNA)
T001	TERMINAL BOARD (SP) (SPEAKER)	T001	1-528-708-00	TERMINAL BOARD (SP) (SPEAKER)	T001	1-528-708-00	TERMINAL BOARD (SP) (SPEAKER)
TR1	PIN CONNECTOR	TR1	1-528-080-00	PIN CONNECTOR	TR1	1-528-080-00	PIN CONNECTOR
VZ001	VARIABLE RESISTOR	VZ001	1-807-180-11	VARIABLE RESISTOR	VZ001	1-807-180-11	VARIABLE RESISTOR
X301	OSCILLATOR, CERAMIC (4.194MHz)	X301	1-527-170-00	OSCILLATOR, CERAMIC (4.194MHz)	X301	1-527-170-00	OSCILLATOR, CERAMIC (4.194MHz)
XT01	VIBRATOR, CRYSTAL (3MHz)	XT01	1-527-128-11	VIBRATOR, CRYSTAL (3MHz)	XT01	1-527-128-11	VIBRATOR, CRYSTAL (3MHz)

9-953-782-21

Sony Corporation
Audio Group

English
89F0446-1
Printed in Japan
©1989.6