

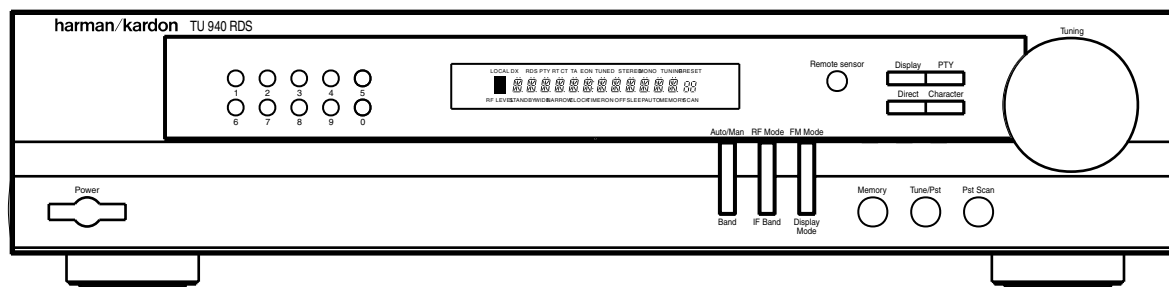
# The Harman Kardon

## Model TU-940

Manual A

### AM/FM STEREO DIGITAL RDS TUNER

# Technical Manual



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## harman/kardon

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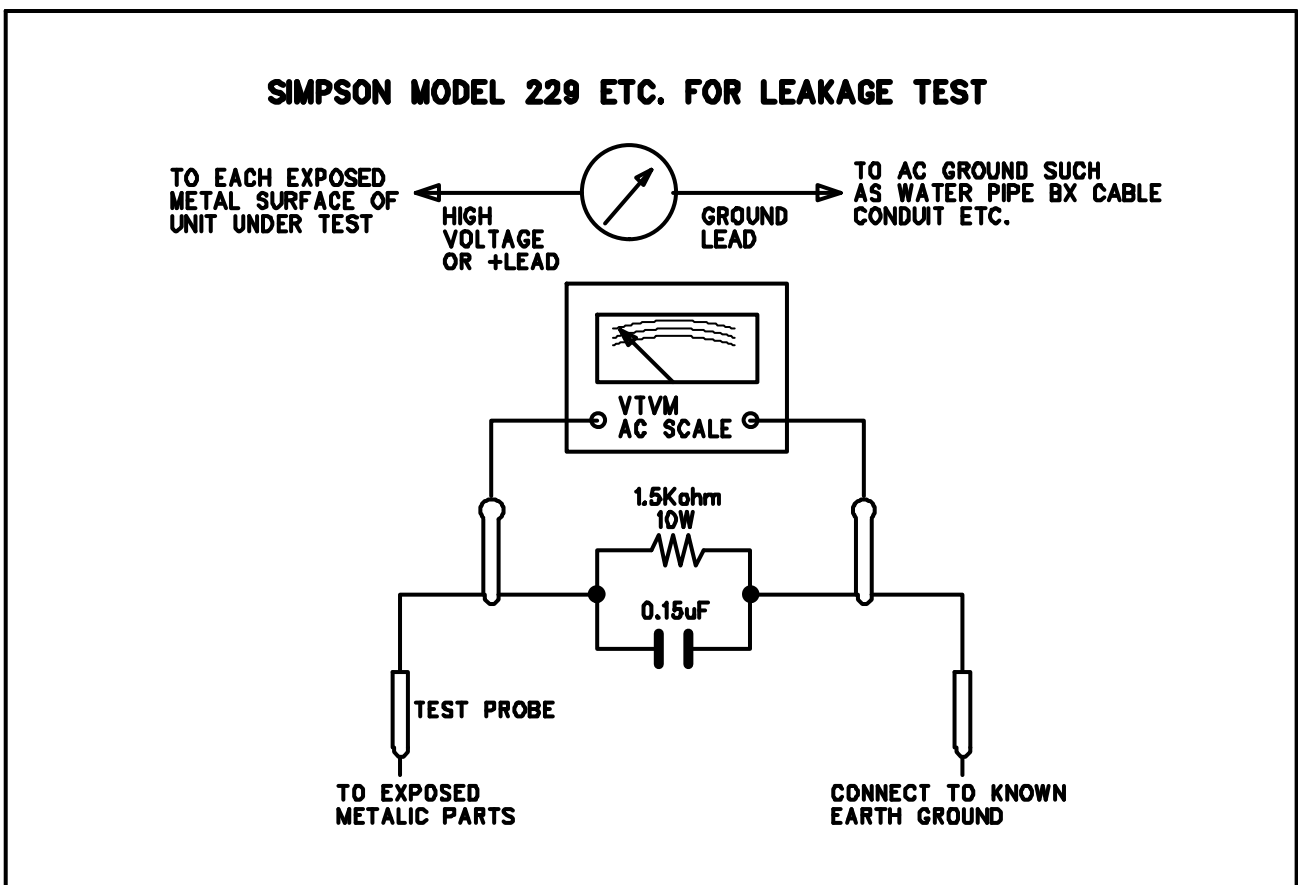
## LEAKAGE TEST

Before returning the unit to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metallic parts in the unit.
2. Be sure that any protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks mechanical insulators, etc. Which were removed for servicing is properly reinstalled.
3. Be sure that no shock hazard exists; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item no. 21641, RCA

model WT 540A or use alternate method as follows: plug the power cord directly into a 230-volt AC receptacle (do not use an isolation transformer for this test.). Using two clip leads, connect a 1500 ohm, 10-watt resistor paralleled by a 0.15  $\mu$ F capacitor, in series with all exposed metal cabinet parts and a known earth ground such as a water pipe or conduit. Use a VTVM or VOM with 1000 ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (This test should be performed with the power switch in both the on and off positions.)

A reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner



## SPECIFICATION

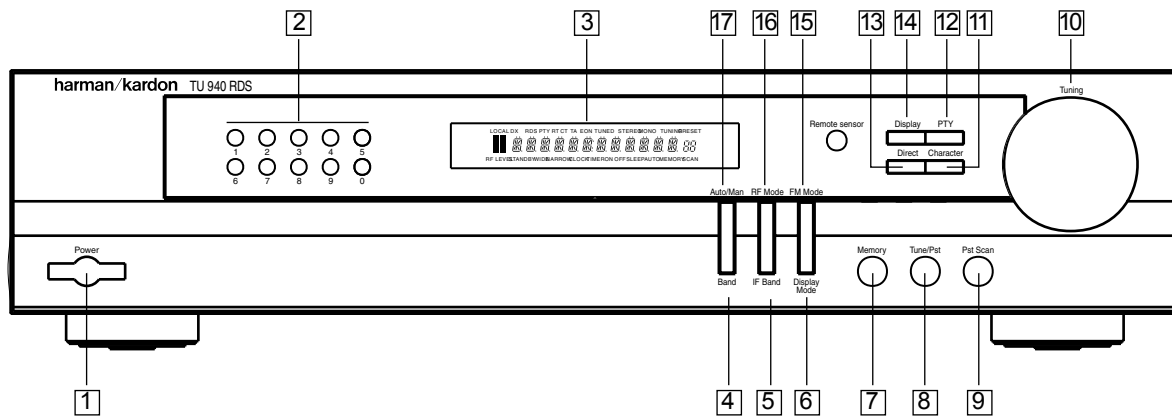
FM SECTION	Nominal	Limit	AM SECTION	Nominal	Limit
Test Condition: 40 kHz DEV., 1kHz Frequency.			Test Condition: 400 Hz, 30% Modulation		
Tuning Range/Step	87.5 MHz –108 MHz/50 kHz		Tuning Range/Step	MW 522 kHz – 1611 kHz/9 kHz	
Usable Sensitivity (-26dB S/N)			Usable Sensitivity (2 20 dB S/N)		
Mono	[ 8.15 dBf	[ 12.25 dBf	MW: 594 kHz, 1404 kHz	[ 500 mV	[ 800 mV
Limiting Sens at –3 dB	[ 7.2 dBf	[ 9.2 dBf	Signal to Noise Ratio (0.1 V INPUT)		
50dB Quieting Sens			MW: 999 kHz	< 55dB	< 48 dB
Mono	[ 16.2 dBf	[ 19.2 dBf	Frequency Response at 2 6 dB		
Stereo	[ 39.2 dBf	[ 42.8 dBf	MW	160 Hz ~ 2.5 kHz	150 Hz ~ 2 kHz
Total Harmonic Distortion			Selectivity at 6 9 kHz		
Mono	[ 0.1%	[ 0.25%	MW: 999 kHz	< 35dB	< 30 dB
Stereo	[ 0.15%	[ 0.35%	A.G.C. Figure of merit at 999 kHz		
Signal to Noise Ratio (1mV RF INPUT)				< 50 dB	< 45 dB
Mono	< 80 dB	< 75dB	Image Rejection		
Stereo	< 75 dB	< 70 dB	MW: 1404 kHz	< 40 dB	< 35 dB
Stereo Separation at 98 MHz ( NORMAL)			Total Harmonic Distortion ( 0.1 V INPUT)		
1kHz	< 50 dB	< 40 dB	MW: 999 kHz	[ 0.7%	[ 1.2 %
10kHz	< 40 dB	< 35 dB	Tuned Level		
Muting and Automatic Tereshold at 98 MHz			MW: 999 kHz	800 mV 6 3 dB	800 mV 6 5 dB
	31.2 6 2 dBf	31.2 6 4 dBf	Output Voltage ( 5mV INPUT)		
Auto Stop Level	31.2 6 2 dBf	31.2 6 4 dBf		165 6 30 mV	165 6 40 mV
Selectivity NORMAL/NARROW 6 300 kHz					
	< 50/70 dB	< 34/60 dB			
Auto Scan Error	6 15 kHz	6 20 kHz			
Frequency Response at 30 Hz –15 kHz					
	6 0.5 dB	+ 1/22.5 dB			
Image Rejection at 106 MHz	< 80 dB	< 65dB			
AM Suppression	< 60 dB	< 50 dB			
RDS Sensitivity	31.2 6 2 dBf	31.2 6 4 dBf			
Output Voltage					
Mono	5006100mV	5006150mV			
<b>DIMENSIOS (W×H×D)</b>	442 · 92 · 350				
<b>WEIGHT</b>	3.9 Kg				
<b>POWER SUPPLIES</b>	AC 230 V, 5-Hz				
<b>POWER CONSUMPTION</b>	15W				

These specifications are service target specs.

Specifications and components are subject to change without notice.

Overall performance will be maintained or improved.

# CONTROL AND FUNCTIONS



## 1. POWER

Press to turn the unit on. The ring around the button will glow green. Press again to turn the unit off. The ring will glow red and the word "STANDBY" will appear in the display.

## 2. NUMERIC KEYS

Use to select the preset number of a station that has been entered into the preset memories or to store a station in the memory in conjunction with MEMORY **7**.

To recall a previously programmed station, press the appropriate numeric button(s). For single digit numbers (1-9), press the number and the station will be tuned at once or in a few seconds. To recall preset locations 10 through 30, press the desired buttons in order and the station will be tuned at once.

To use the buttons to enter a station to the preset memory, see page 10.

## 3. FLUORESCENT DISPLAY

The display panel contains a large display for station frequency information and RDS data, as well as status indicators for various tuner functions and 5-step RF level indicator bars.

## 4. BAND

Press to change between FM and AM frequency bands..

## 5. IF BAND (FM TUNING ONLY)

Press to change the passband of the intermediate frequency to compensate for interference from adjacent station.

NARROE: When reception is disturbed by interference from other stations, press until NARROW is lit. This improves reception.

NORMAL: For normal reception, press until NORMAL is lit.

## 6. DISPLAY MODE

Press to change between bright and dim display lighting or display off.

## 7. MEMORY

Use to enter station into the preset memory or to start the Auto Preset Memory function. The memory indicator blinks when the button is pressed. See page 10 for instructions on using the memory system.

## 8. TUNE/P.SET

Press to light PRESET indicator. When the indicator is lit, the TUNING knob **10** can be used to step through the preset stations in ascending or descending order. When the PRESET indicator is not lit, normal tuning (auto or manual) is activated.

## 9. P.SET SCAN

Press to automatically step through each of the stations that has been preset into the memory. Each programmed station will play for approximately five seconds. To stop at a desired station, press again, while the station is playing.

## 10. TUNING

This knob has a number of functions, although it's primary use is to select stations. In normal use, turn the knob in either direction to move through the selected band to find a station. When the TUNED indicator lights, the station is properly locked in.

A number of automated tuning methods are also available:

In the FM mode, when AUTO/MAN **17** is pressed so that the AUTO indicator is lit, turning the tuning knob clockwise will cause the tuner to scan higher frequencies. When turned counterclockwise, lower frequencies will be scanned. The tuner will stop at the first station that has acceptable signal strength. Turn the knob again in the same direction to tune to the next available station.

When TUNE/P.SET **8** is pressed so that the PRESET indicator is lit, turning the TUNING knob **10** will move the tuner up or down through the stations programmed into the unit's memory. The Tuning Knob also functions as a selector for PTY **12** and Character **11** functions. See descriptions of these functions on page 13 and below.

## 11. CHARACTER

Permits you to enter or modify the name of any station, which is not broadcasting in RDS.

To enter a name, press CHARACTER once. A line will flash under the first space in the display. Turn the tuning knob until the desired character (letter, number or symbol) appears.

Press again to move to the next space. Repeat this procedure until the name is spelled out, using the tuning knob to select a character and the Character button to move to the next space. When the last character has been programmed, press MEMORY **7**, and then select memory location (1-30) using the NUMBER keys **2**.

The name may be called up at any time by pressing DISPLAY **14**.

## 12. PTY

Press to select a particular PTY (Program Type) according to the information transmitted by an RDS station. After pressing PTY, turn the TUNING knob **10** to select the program type for which you wish to search.

For detailed RDS information, see page 12.

### **13. DIRECT**

Pressing this button will start the sequence for direct entry of a station's frequency. After pressing the button simply press the proper Numeric Keys **2** to tune the station. For more information see next page.

### **14. DISPLAY**

Press to display current frequency, station name or RDS information. Press again to move to the next item in the following order:

If a non-RDS-station is tuned:

Frequency, station name (if a name is entered manually). If an RDS station is tuned: Station Name, Band and Frequency, Program Type (PTY), Radio Text, Time.

If an RDS station is tuned (only FM) indicators for available RDS information will be shown next to the red RDS indicator in the display: PTY (Program Type), RT (Radio Text) or CT (Clock Time) will light up, if the station is broadcasting this information. The RDS information available will vary.

### **15. FM MODE**

Press to change mode of FM reception.

Press so that the MONO indicator is not lit and all stations received with a signal strength high enough for acceptable audio performance will be heard, either in stereo (the red stereo indicator is lit) or in mono, just as they are transmitted. The sound of all weaker stations will be muted.

Press so that the MONO indicator is lit and all stations, including all stereo transmissions, will be heard in mono.

**NOTE:** When experiencing weak or noisy reception of a stereo broadcast, reception quality may be improved by pressing FM MODE to switch to mono.

### **16. RF MODE (FM TUNING ONLY)**

Press to compensate for RF intermodulation noise caused by interference from other strong stations in your area.

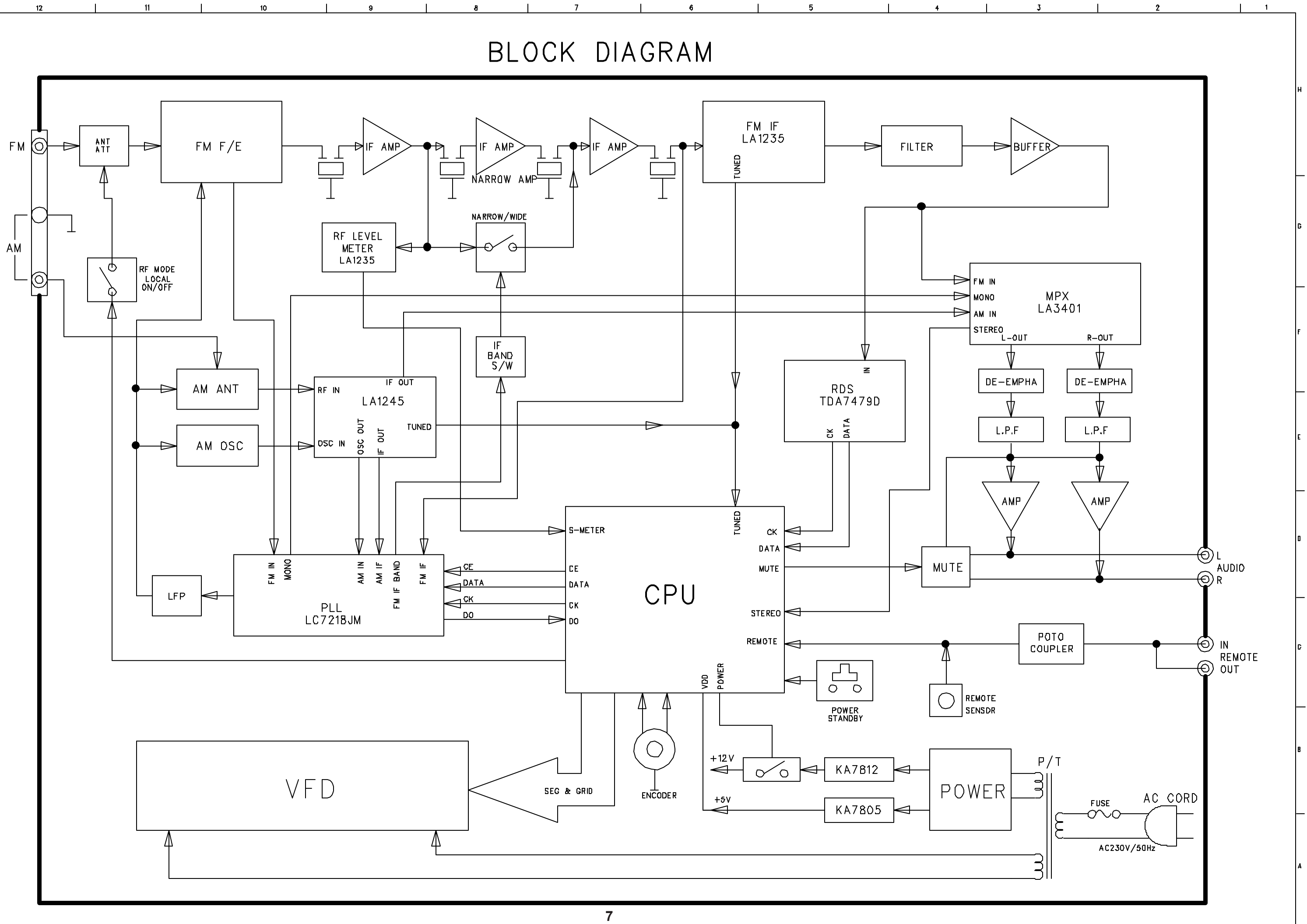
In urban areas or with cable systems where reception is strong and there are many stations, press until LOCAL indicator is lit. This will attenuate the signal strength of all stations received (RF LEVEL indicator bars in the display will show lower signal strength) and thus may reduce intermodulation noise and provide better sound quality.

When tuning distant stations, press so that the local indicator is not lit. This improves the tuner's ability to receive weak signals with lower noise, and – when needed – press the FM MODE button **15** until the MONO indicator is lit to make weak station audible.

### **17. AUTO/MANUAL**

Press so that the AUTO indicator is lit to engage the automatic tuning system. When in the AUTO mode, turning the TUNING knob **10** cause the tuner to scan for the next available station with sufficient signal strength and stop. Turn the Tuning knob again to continue through the frequency band to the next station.

# BLOCK DIAGRAM



# DISASSEMBLY PROCEDURES

## 1 COVER TOP REMOVAL

1. Remove screws ① to ⑨ in Fig. 1, and then remove the cover by sliding it to its rear a little

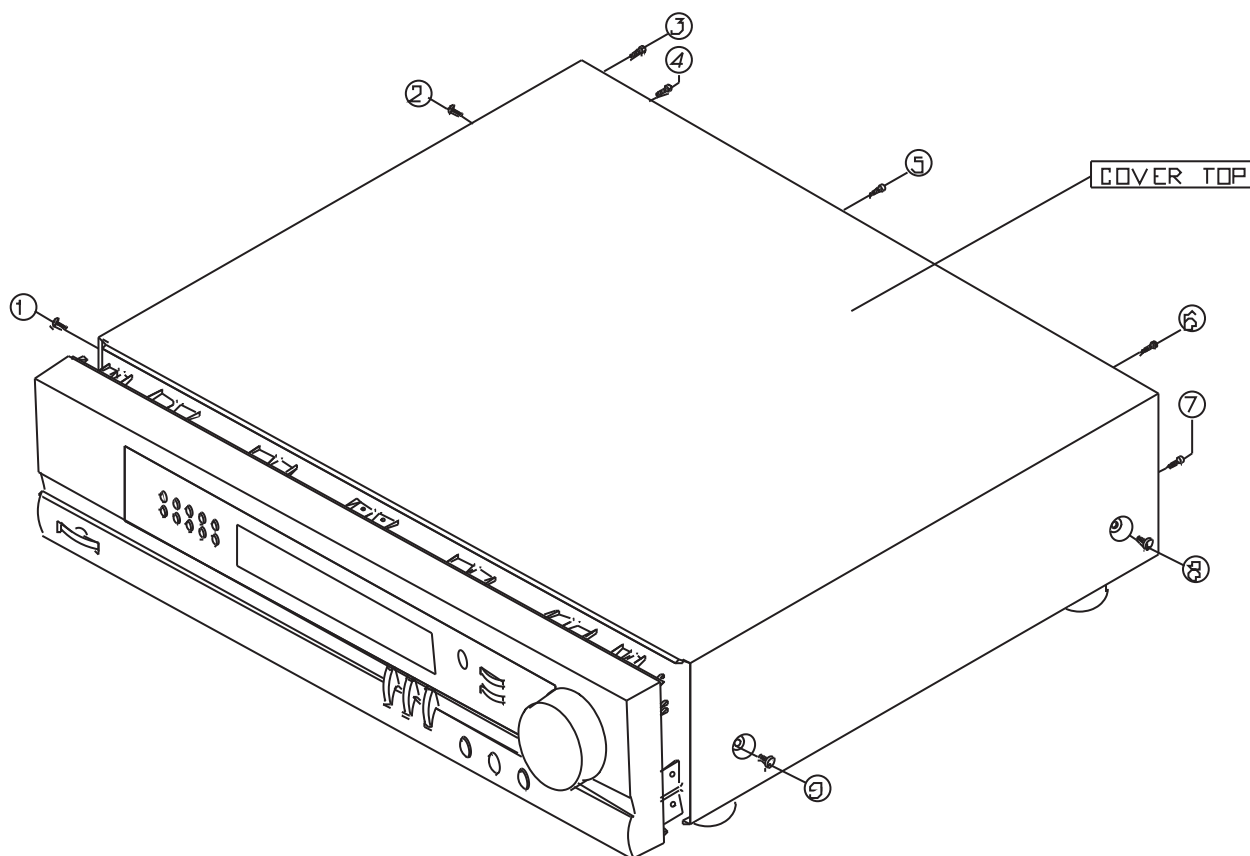


Fig.1



## 2 FRONT PANEL ASSEMBLY REMOVAL

1. Remove the cover top. (Refer to step 1 )
2. Remove screws ① to ⑨ in Fig.2.
3. Detach the connectors CW102 and CW103 from the PCB1.
4. Remove the front panel assembly by pressing the hooks of both sides and pulling it toward you gently

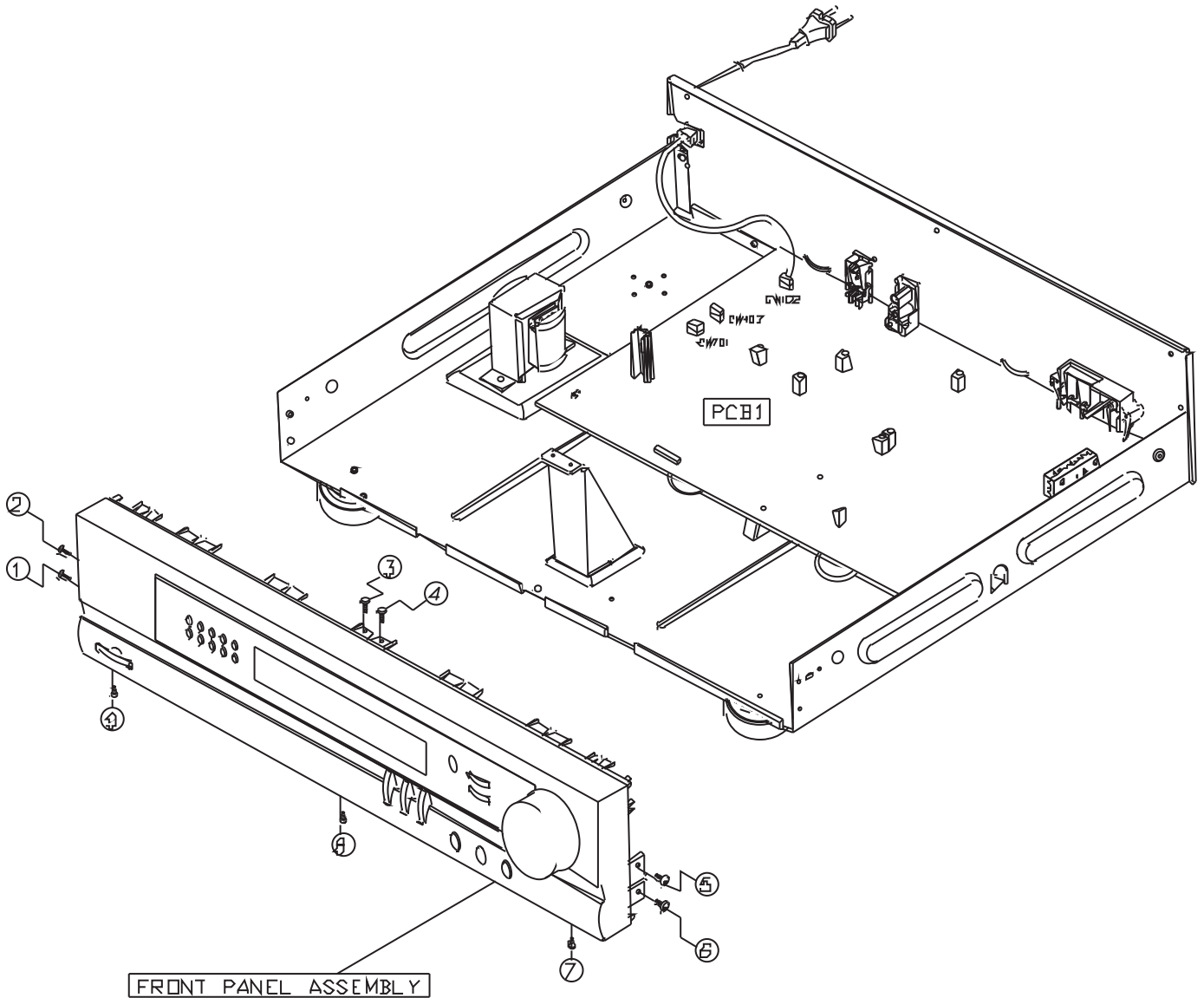


Fig.2

### ③ PCB2(FRONT)REMOVAL

1. Remove the front panel assembly. (Refer to step ② )
2. Pull out the knob (Tuning) in Fig.3
3. Remove the hex nut (tuning) in Fig. 3.
4. Remove screws ①to ⑩in Fig.3 and remove PCB2 by Pressing the hooks around it outward.

### ④ PCB3(POWER) REMOVAL

1. Remove the front panel assembly. (Refer to step ② )
2. Remove PCB3 by pressing the hooks around it outward.
3. Unsolder the lead wires which are connected to PCB3

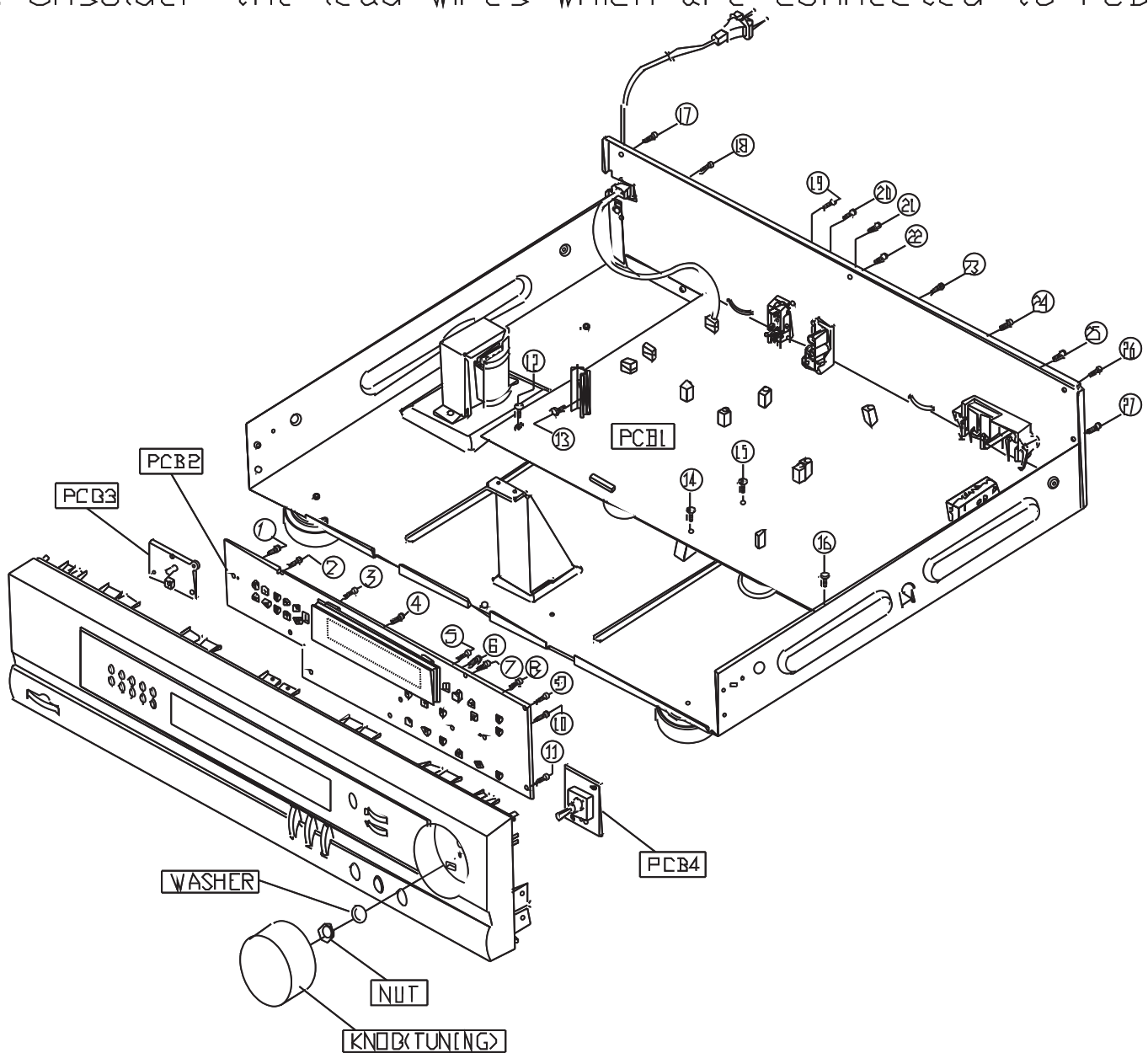


Fig.3

## 5 PCB1<MAIN>REMOVAL

1. Remove the cover top (Refer to step 1)
2. Detach the connectors CW103, CW101, CW601 front the PCB1.
3. Remove screws ⑫ to ⑯ in Fig.3 and remove PCB1.

## 6 REAR PANEL REMOVAL

1. Remove the cover top (Refer to step 1)
2. Remove screws ⑰ to ⑳ in Fig.3

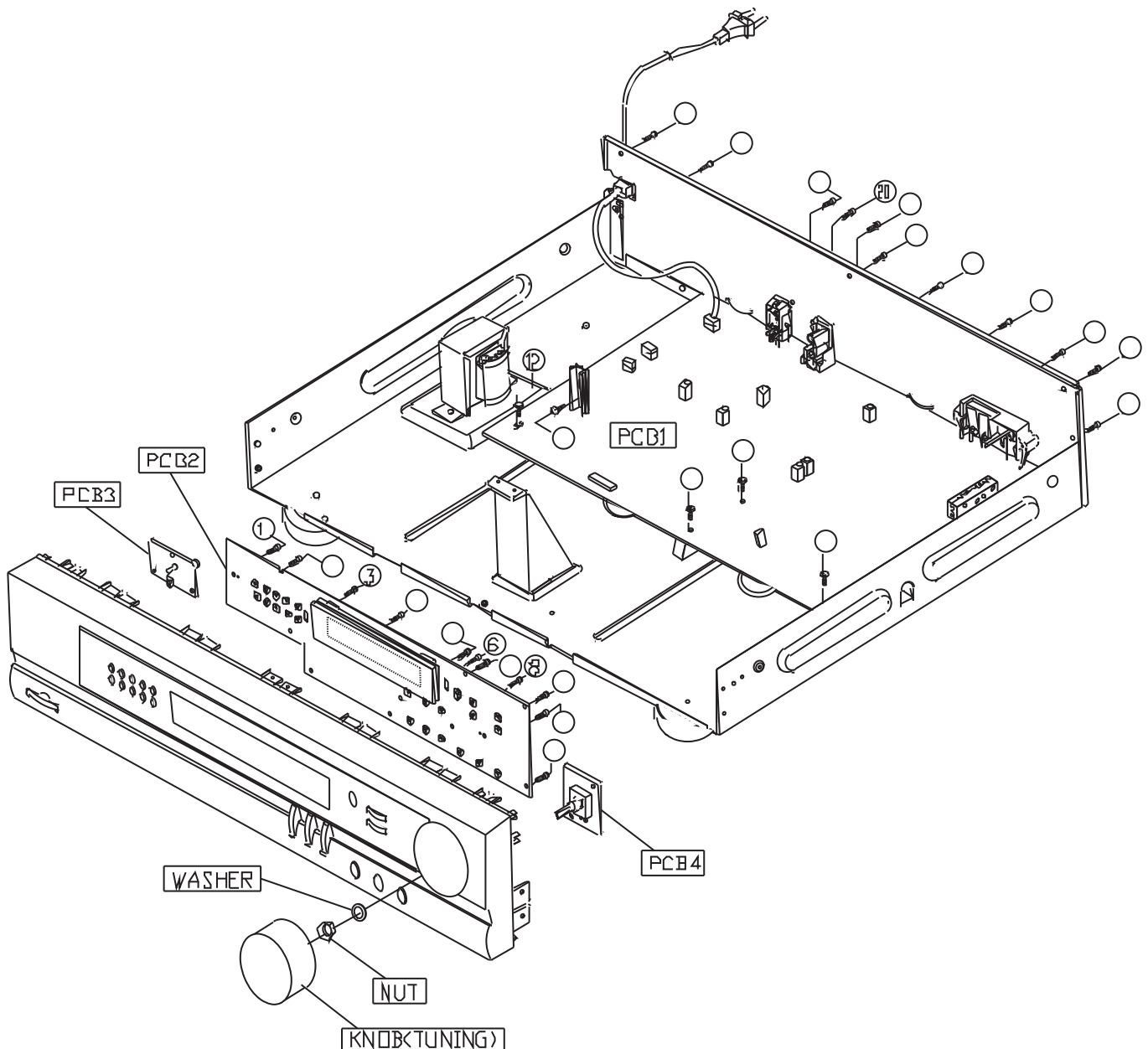
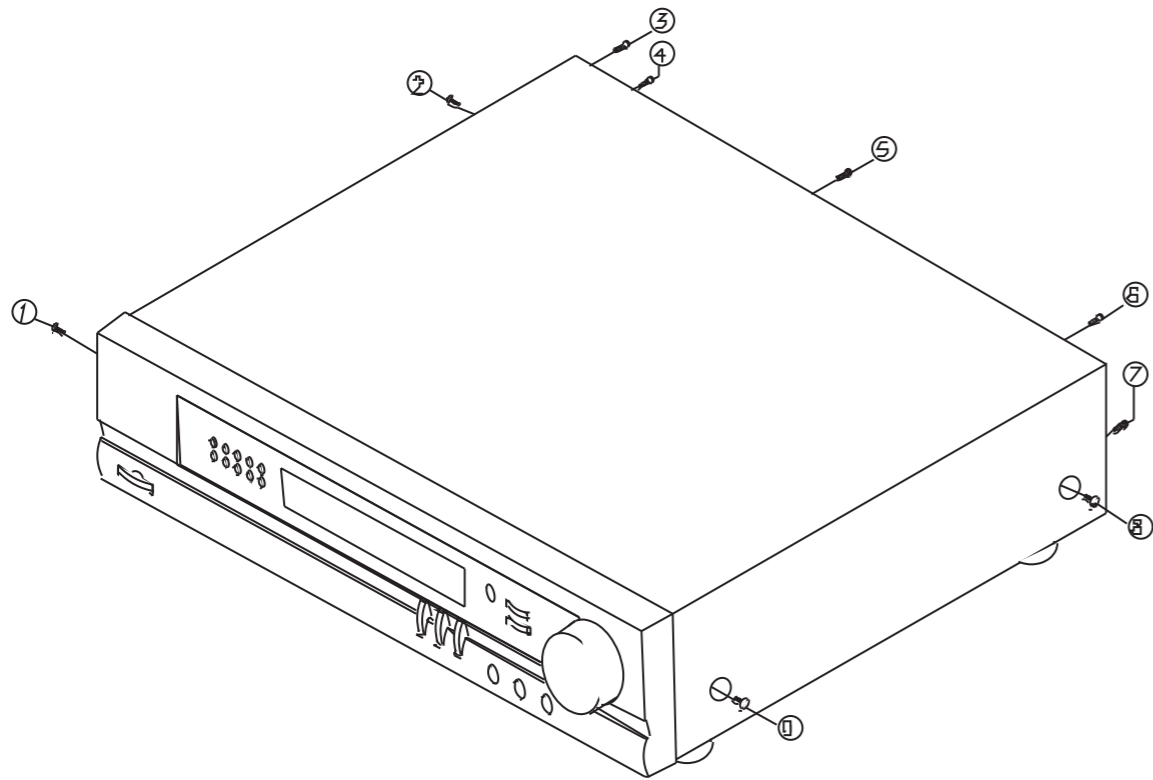
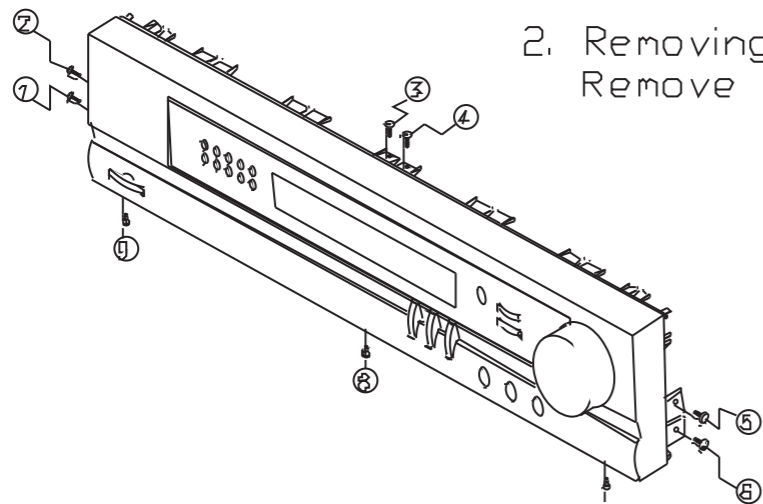


Fig.3

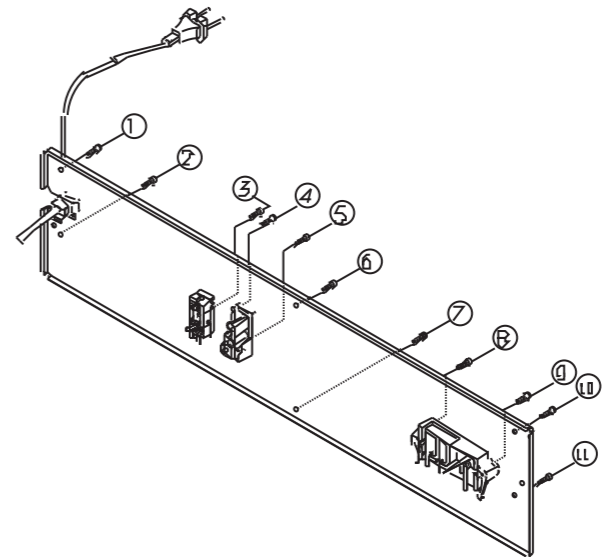
1. Removing the Chassis Top  
Remove the screws ①-⑩



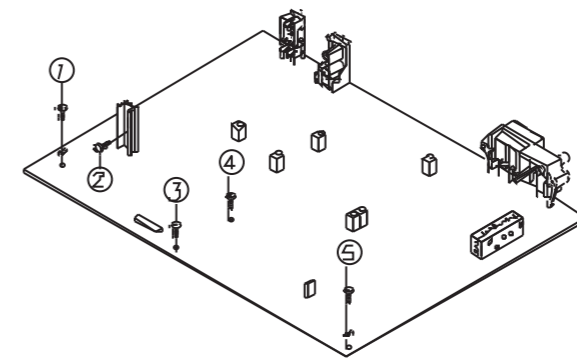
2. Removing the Front Panel  
Remove the screws ①-⑤



3. Removing the rear panel  
Remove the screws ①-⑩

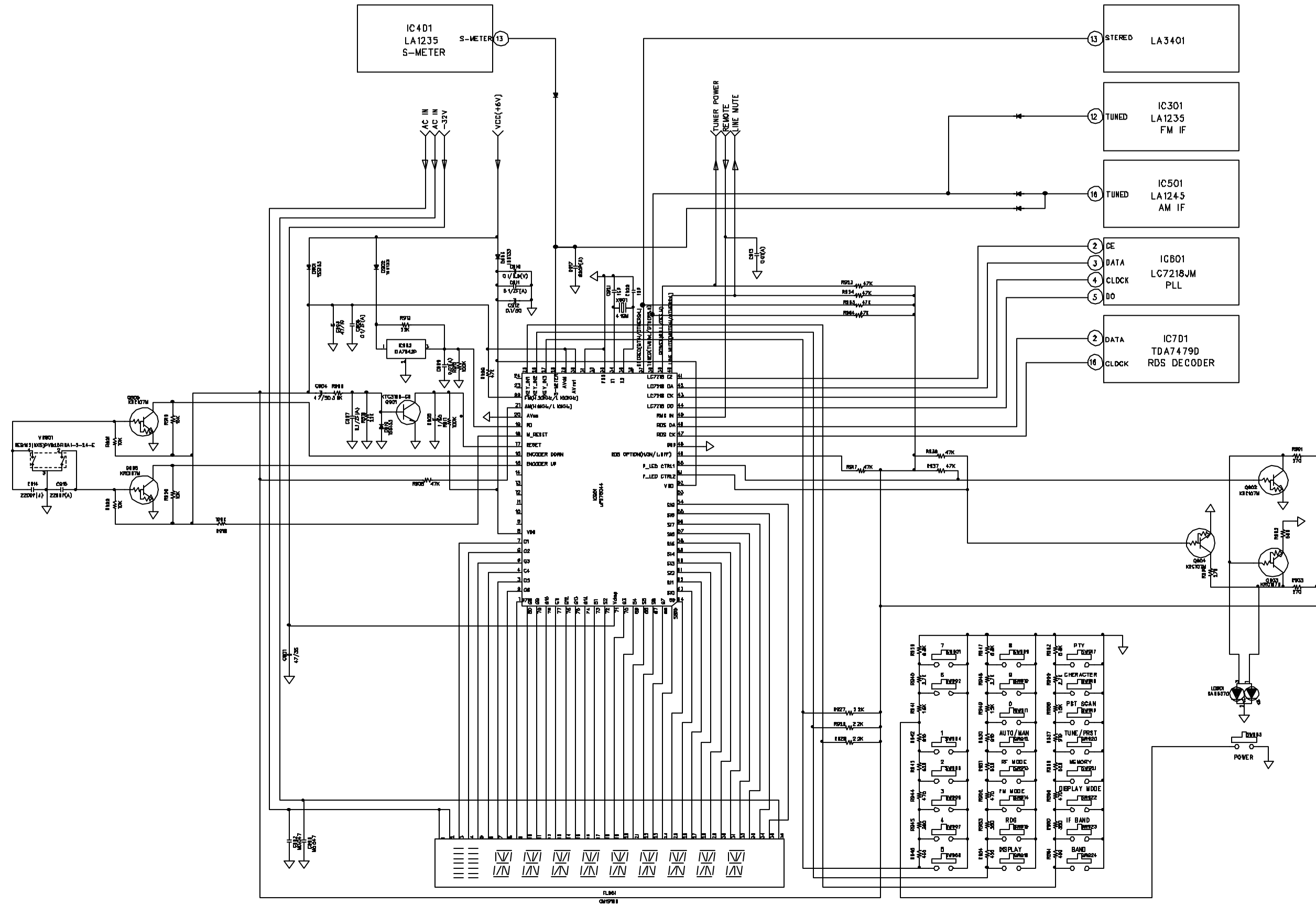


4. Removing the main PCB Block  
Remove the screws ①-⑤

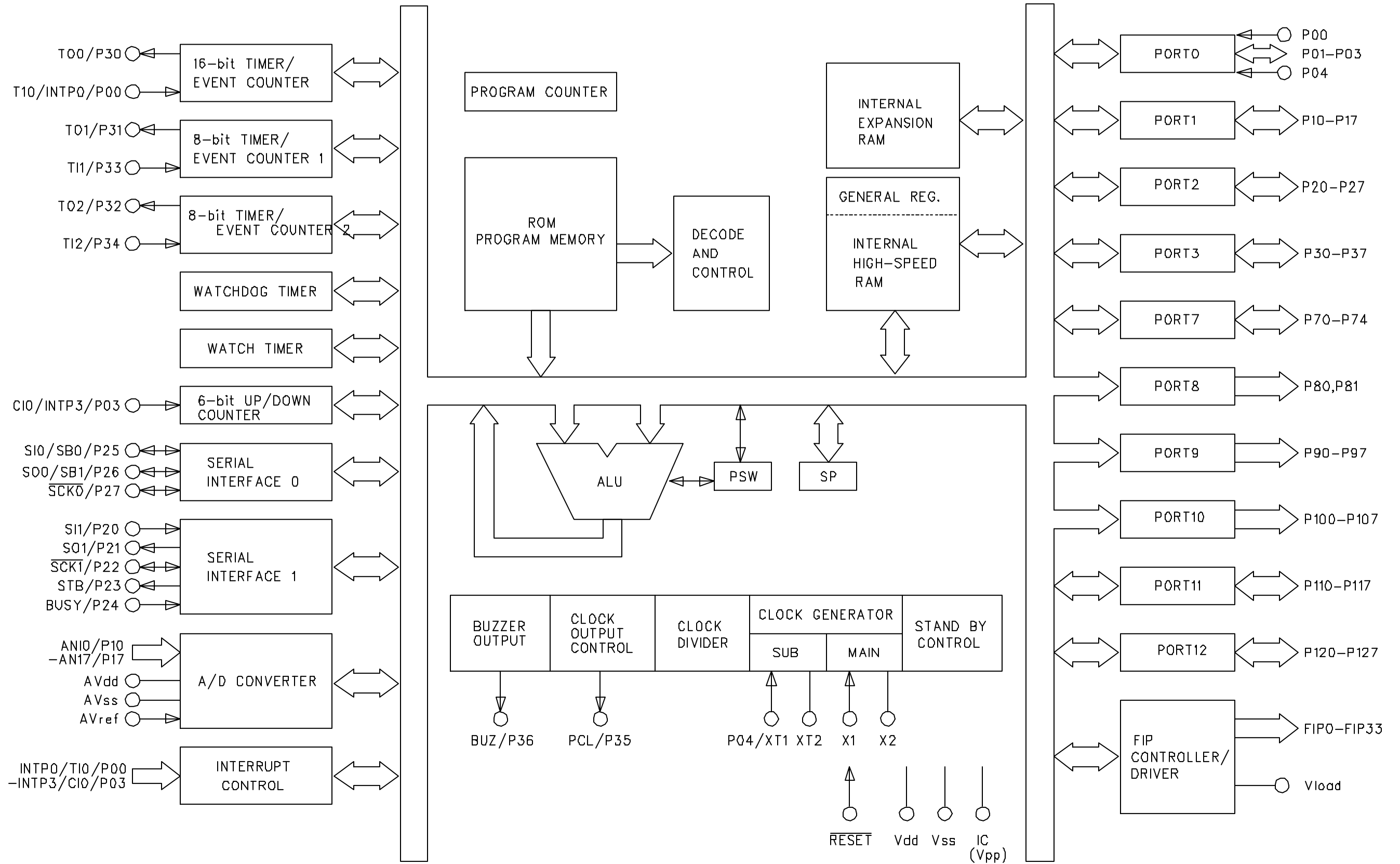


# CIRCUIT DESCRIPTION

## 1. uPD78044 CPU Pin Configuration



## 2. CPU BLOCK DIAGRAM



### 3.Pin Functions

Pin No.	Configuration	Symbol	Description
1j- 7	FIP1j- FIP7	G1j- G7	Grid signal output for FIP.
8	VDD	VDD	+5V Power supply.
9j- 14	P22j- P27	N.C.	Not used!
15	P21	E. UP	Input to detect encoder UP signal.
16	P20	E. DOWN	Input to detect encoder DOWN signal.
17	RESET	RESET	Input to reset CPU.(At "L", it is active)
18	P74	N.C.	Not used!
19	P73	PD	Input to detect power down.(At "L", it is active)
20	A.Vss	A.Vss	Ground
21	P17	AM	Input to select step for AM tuning.(H:9KHz,L:10KHz)
22	P16	FM	Input to select step for FM tuning.(H:50KHz,L:100KHz)
23/24	P15/P14	N.C.	Not used!
25j- 27	P11j- P13	KEY IN	Data input for key scan.
28	P10	S_METER	Input to detect the receiving signal level.
29	A.Vdd	A.Vdd	+5V Power supply.
30	A.Vref	A.Vref	Reference voltage for A/D converter.(Connected to 5V,not VDD)
31	P04	N.C.	Not used!(Connected to ground)
32	XT2	N.C.	Not used!
33	Vss	Vss	Ground
34/35	X1/X2	X1/X2	Input and output for 4.19MHz crystal.
36	P37	N.C.	Not used!
37	P36	STEREO	Input to light "STEREO" indicator.(At "H",it is active)
38	P35	TUNED	Input to detect station during tuning. If "L" is inputed during tuning, tuning stop at that frequency.
39	P34	POWER	When power is on, control data output is "L". When power is off, control data output is "H" and last memory function is activated.
40	P33	MUTE	Output for mute.(At "H",it is active)
41	P32	CE	Chip enable output for LC7218JM.
42/43	P31/P30	DA/CK	Data/Clock output for LC7218JM.
44	P03	DO	Data input for LC7218JM.
45	P02	RMC IN	Input to receive remote control data from amplifier.
46/47	P01/P00	RDS DA/CK	Input to receive RDS clock/data from TDA7479D.
48	IC(Vpp)	GND	Ground
49	P72	RDS	Input to select RDS function for europe. (At "H",RDS function is selected)
50/51	P71/P70	P_LED CTRL1/2	Output for power LED.Standby(1:L,2:H) or power on(1:H,2:L)
52	VDD	VDD	+5V Power supply.
53	FIP33	N.C.	Not used!
54j- 70	FIP16j- FIP32	S3j- S19	Segment signal output for FIP.
71	Vload	Vload	Power supply for FIP Controller.
72/73	FIP15/FIP14	S1/S2	Segment signal output for FIP.
74j- 80	FIP7j- FIP13	G8j- G14	Grid signal output for FIP.

# ALIGNMENT PROCEDURES

## 1. Equipment Required

- AM Standard Signal Generator (AM SSG.)
- Oscilloscope
- AC Voltmeter
- FM Standard Signal Generator(FM SSG.)
- Stereo Modulator
- Audio Generator
- Distortion Meter
- DC Voltmeter
- Frequency Counter

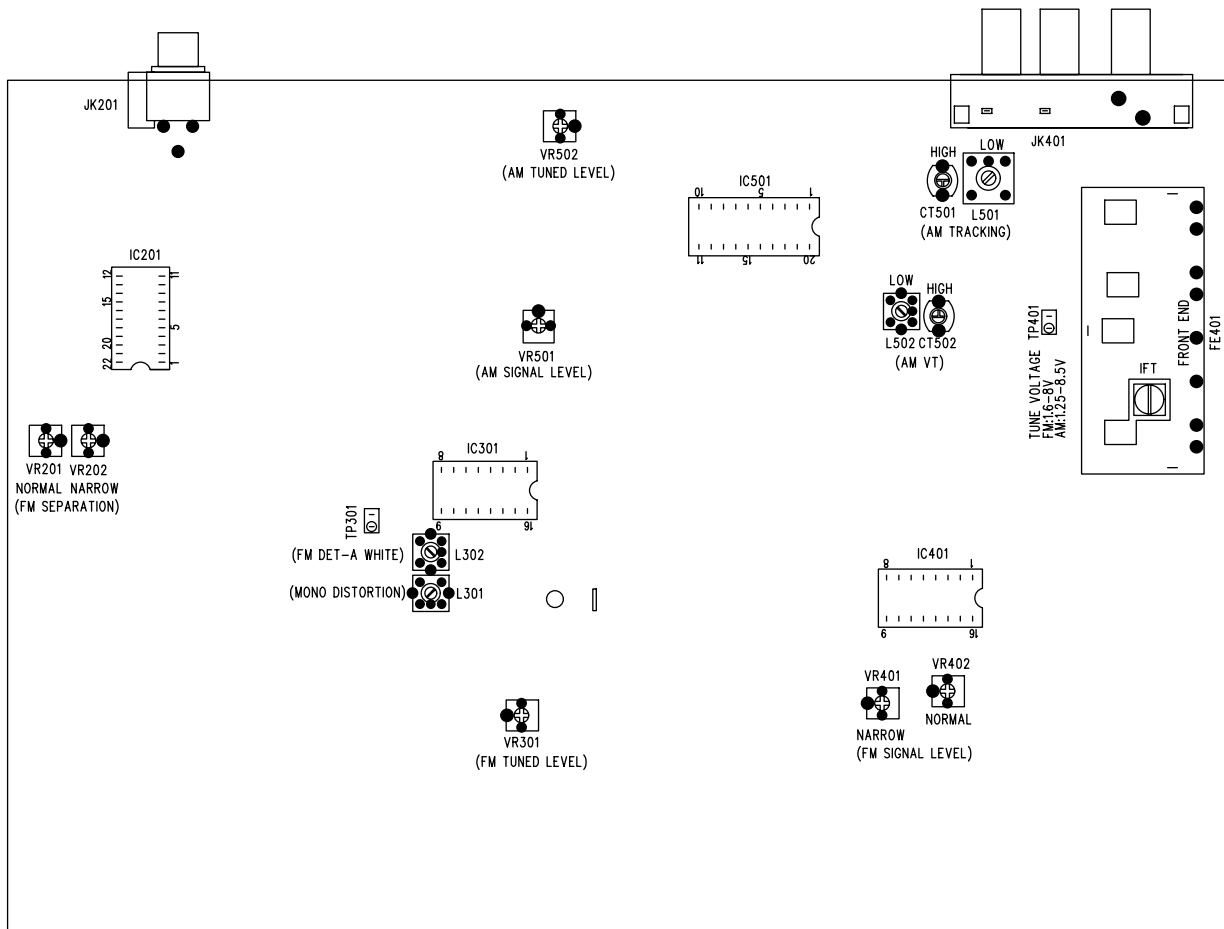
**Note:** Remove FM external antenna from terminal when aligning.

## 2. Alignment and Test Points

• Refer to Adjustment Location on page 12

**Note:** As a front-end (FE 101) is difficult to repair if faulty, replace it with new one.

## Alignment Test Points



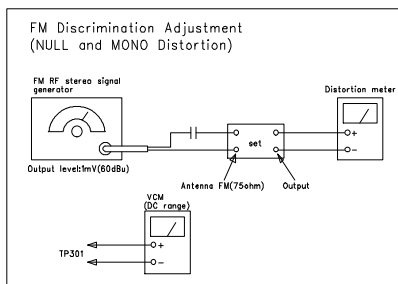


## FM SECTION

- Standard Setting of FM Stereo RF Signal Generator.

STEREO STANDARD SIGNAL	MONAURAL STANDARD SIGNAL
Carrier frequency 98 MHz. Modulation: Audio 1 kHz, 40 kHz deviation. Pilot 19 kHz, 7.5 kHz deviation.	98 MHz. 1 kHz, 40 kHz deviation.

### FM Discriminator Adjustment (NULL and MONO Distortion)

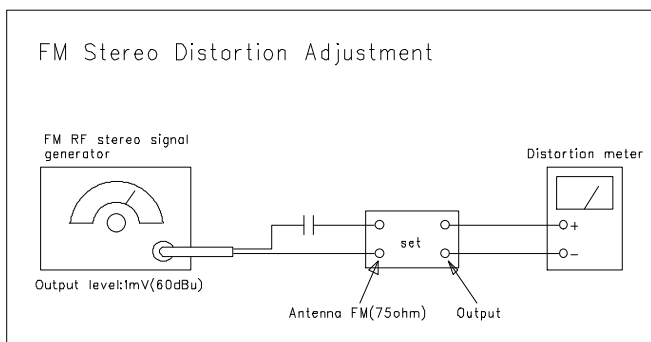


#### Procedure:

1. Tune the set to 98 MHz.
2. Adjust L302 to obtain 0V between TP301 3 reading on the VOM. ....NULL.
3. Adjust L200 for a minimum reading on the distortion meter .....MONO Distortion
4. Repeat adjustments in step 2 and 3 several times until optimum measurements are obtained.

**Note:** When replacing the ceramic filter, perform this alignment

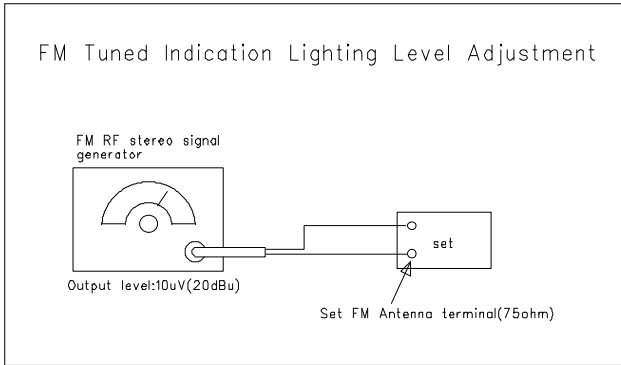
### FM Stereo Distortion Adjustment



#### Procedure:

1. Tune the set to 98MHz. Set FM SSG. output level to 1mV (60dBu).
2. Adjust IFT in FE401 for a minimum reading on the distortion meter.

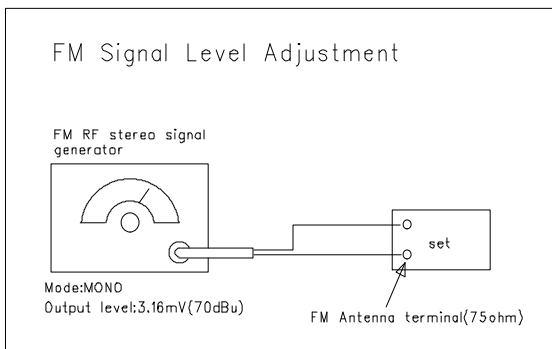
### FM Tuned Indication Lighting Level Adjustment



**Procedure:**

1. Tune the set to 98MHz. Set FM SSG. output level to 20dBμ.
2. Adjust VR301 to the point that the “TUNED” indicator begins to illuminate.

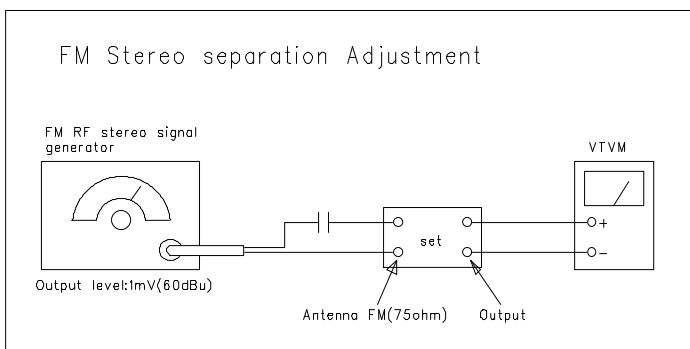
### FM Signal Level Adjustment



**Procedure:**

1. Tune the set to 98MHz.
2. Adjust VR401 and VR402 to light all RF Level Bars on the display.
  - NORMAL: VR402
  - NARROW: VR401

### FM Stereo Separation Adjustment



Procedure:

FM Stereo signal generator output channel	VTVM Connection	VTVM reading (dB)
L-CH.	L-CH.	
R-CH	L-CH.	Adjust VR 102 minimum reading.
R-CH	R-CH	
L-CH.	R-CH	Adjust VR 102 for minimum reading.

L-CH. Stereo separation: -

R-CH Stereo separation: -

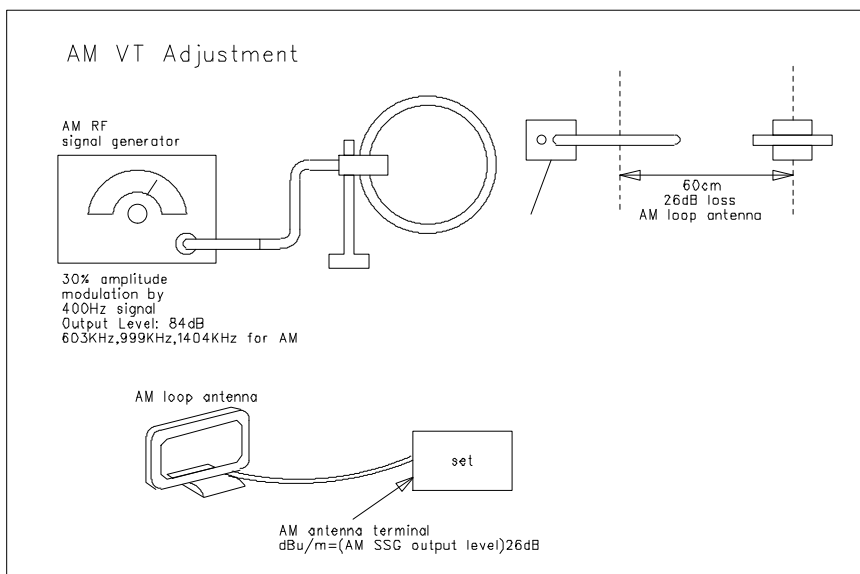
IF BAND Switch

NORMAL: Adjust VR 201

NARROW: Adjust VR 202

The separation of both channels should be equal.

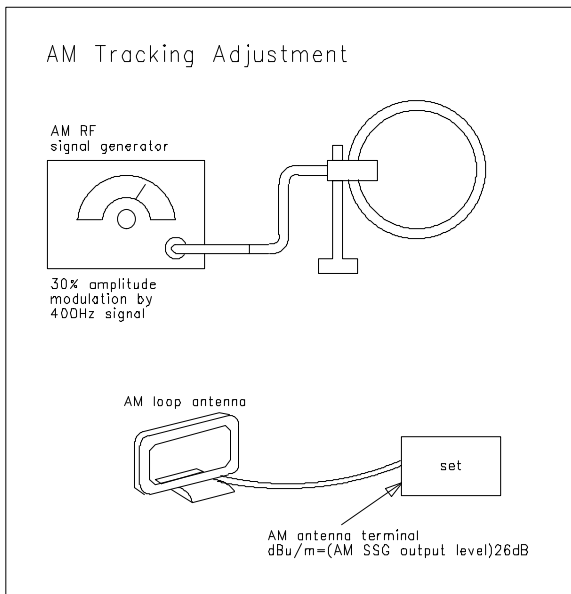
**AM SECTION**



**AM VT Adjustment**

1. Set to AM 522 kHz and adjust L502 so that voltage of TP401 becomes  $1.25V \pm 0.1V$
2. Set to AM 1611 kHz and adjust CT 502 so that voltage of TP 401 becomes  $8.5 \pm 0.1V$
3. Repeat the above adjustments 1 and 2.

## AM Tracking Adjustment



1. Set to AM 603 kHz and adjust L 501 to maximize AUDIO output level.
2. Set to AM 1404 kHz and adjust CT 501 to maximize AUDIO output level.
3. Set to AM 999 kHz and adjust L 503 to maximize AUDIO output level.
4. Repeat the above adjustments 1, 2 and 3.

## AM TUNED Level Adjustment

Procedure:

1. Set AM SSG output level so that antenna input level of the set becomes  $800 \mu\text{V}$  ( $58 \text{ dB}\mu/\text{m}$ )
2. Adjustment VR 502 to the point that the "TUNED" indicator begins to illuminate.

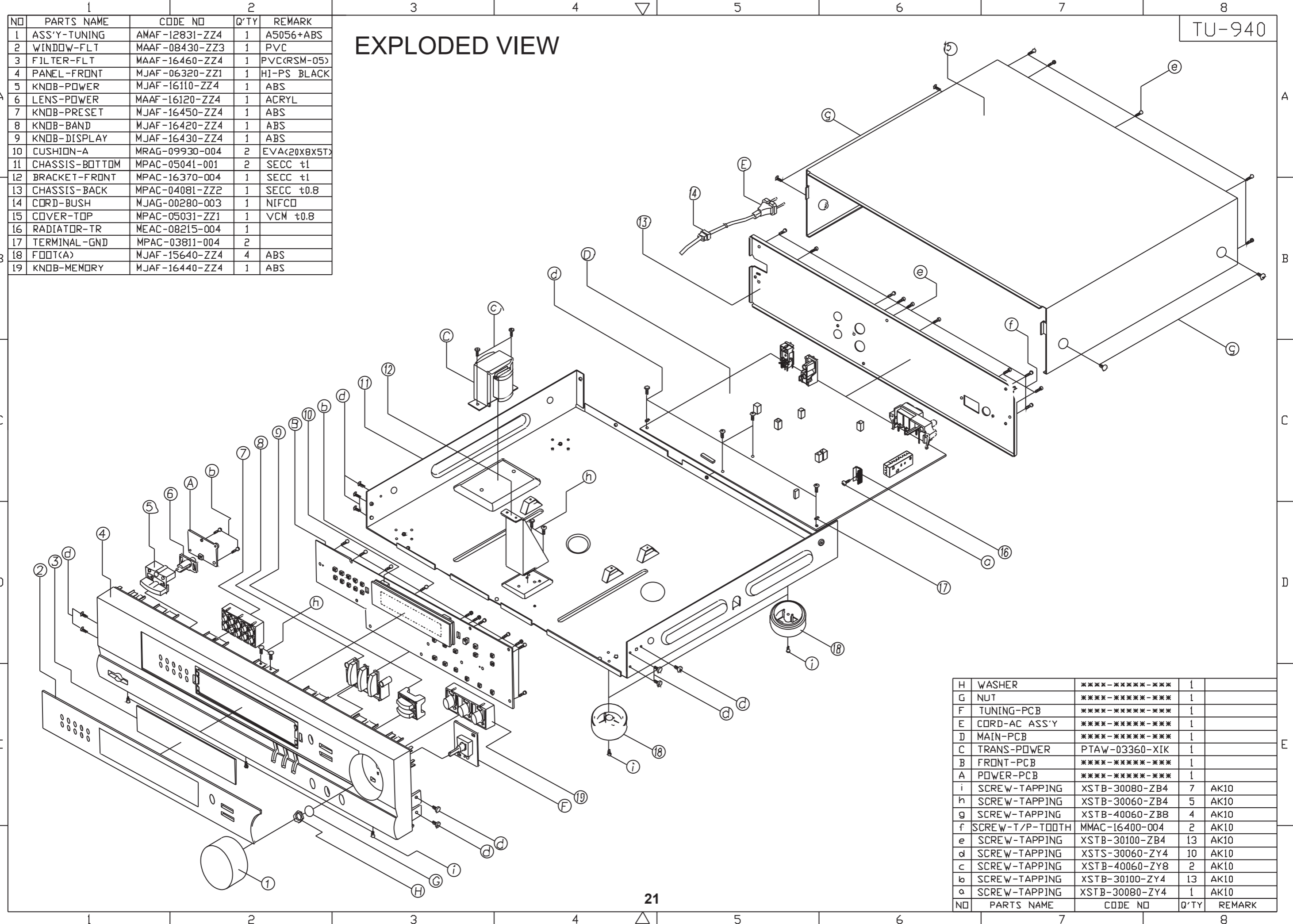
## AM Signal Level Adjustment

Procedure:

1. Set AM SSG. output level so that antenna input level of the set becomes  $0.1\text{V}$  ( $100\text{dB}\mu/\text{m}$ )
2. Adjust VR401 and VR402 to light all RF Level Bars on the display.

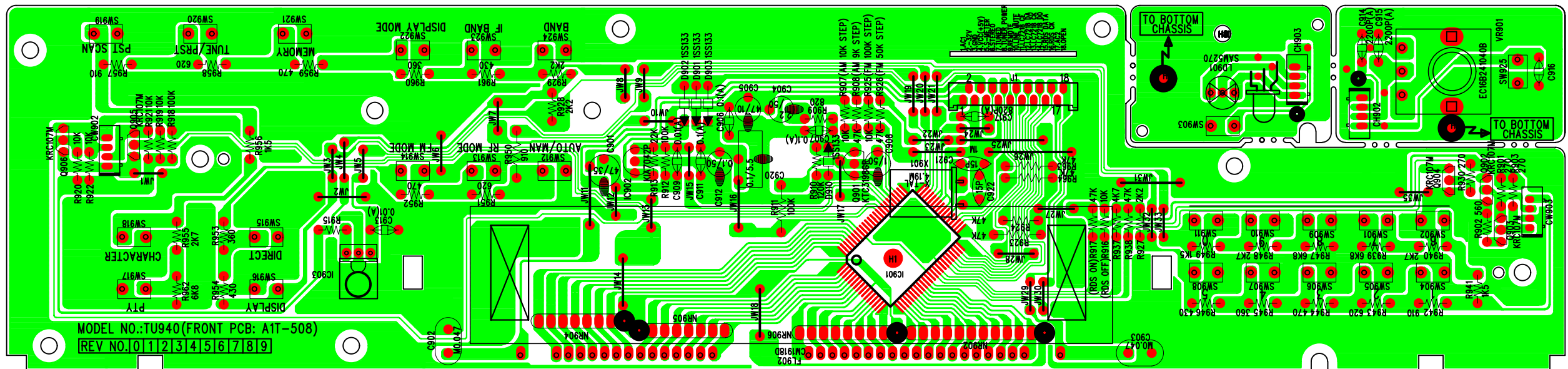
EXPLODED VIEW

NO	PARTS NAME	CODE NO	Q'TY	REMARK
1	ASS'Y-TUNING	AMAF-12831-ZZ4	1	A5056+ABS
2	WINDOW-FLT	MAAF-08430-ZZ3	1	PVC
3	FILTER-FLT	MAAF-16460-ZZ4	1	PVC(RSM-05)
4	PANEL-FRONT	MJAF-06320-ZZ1	1	HI-PS BLACK
5	KNOB-POWER	MJAF-16110-ZZ4	1	ABS
6	LENS-POWER	MAAF-16120-ZZ4	1	ACRYL
7	KNOB-PRESET	MJAF-16450-ZZ4	1	ABS
8	KNOB-BAND	MJAF-16420-ZZ4	1	ABS
9	KNOB-DISPLAY	MJAF-16430-ZZ4	1	ABS
10	CUSHION-A	MRAG-09930-004	2	EVA(20X8X5T)
11	CHASSIS-BOTTOM	MPAC-05041-001	2	SECC t1
12	BRACKET-FRONT	MPAC-16370-004	1	SECC t1
13	CHASSIS-BACK	MPAC-04081-ZZ2	1	SECC t0.8
14	CORD-BUSH	MJAG-00280-003	1	NIFCO
15	COVER-TOP	MPAC-05031-ZZ1	VCM t0.8	
16	RADIATOR-TR	MEAC-08215-004	1	
17	TERMINAL-GND	MPAC-03811-004	2	
18	FOOT(A)	MJAF-15640-ZZ4	4	ABS
19	KNOB-MEMORY	MJAF-16440-ZZ4	1	ABS

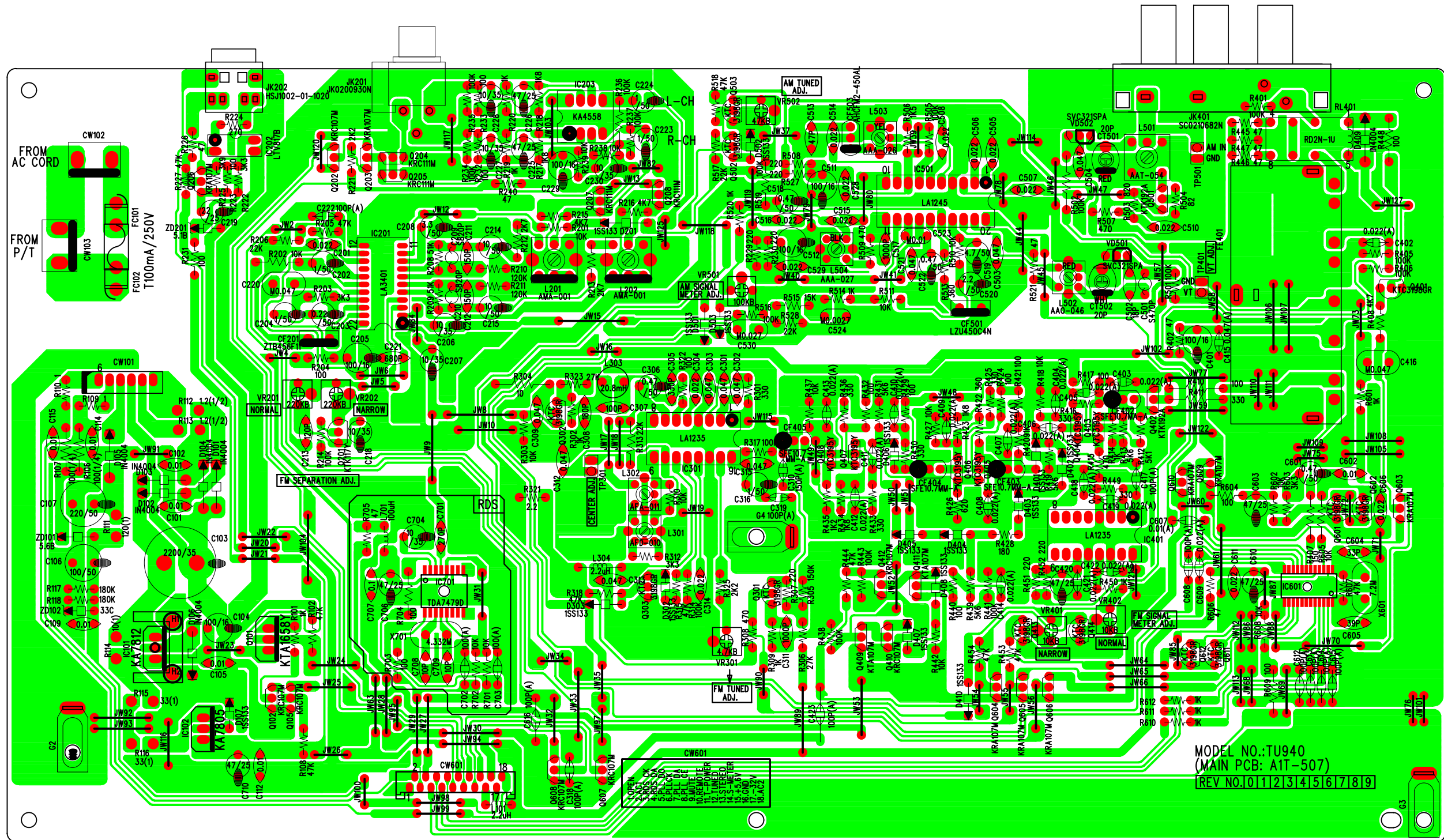


H	WASHER	****-*****-***	1	
G	NUT	****-*****-***	1	
F	TUNING-PCB	****-*****-***	1	
E	CORD-AC ASS'Y	****-*****-***	1	
D	MAIN-PCB	****-*****-***	1	
C	TRANS-POWER	PTAW-03360-XIK	1	
B	FRONT-PCB	****-*****-***	1	
A	POWER-PCB	****-*****-***	1	
i	SCREW-TAPPING	XSTB-30080-ZB4	7	AK10
h	SCREW-TAPPING	XSTB-30060-ZB4	5	AK10
g	SCREW-TAPPING	XSTB-40060-ZB8	4	AK10
f	SCREW-T/P-TOOTH	MMAC-16400-004	2	AK10
e	SCREW-TAPPING	XSTB-30100-ZB4	13	AK10
d	SCREW-TAPPING	XSTS-30060-ZY4	10	AK10
c	SCREW-TAPPING	XSTB-40060-ZY8	2	AK10
b	SCREW-TAPPING	XSTB-30100-ZY4	13	AK10
a	SCREW-TAPPING	XSTB-30080-ZY4	1	AK10
NO	PARTS NAME	CODE NO	Q'TY	REMARK

# PRINTED CIRCUIT BOARD (FRONT)



# PRINTED CIRCUIT BOARD (MAIN)



## ELECTRICAL PARTS LIST

Ref. No.	PART NO.	DESCRIPTION	
<b>ASSEMBLY P.C BOARD MAIN</b>			
<b>FILTERS</b>			
CF402	BTCE-00361-107	FILTER-CERAMIC	SFE 10.7MM-A-TF21
CF403	BTCE-00361-107	FILTER-CERAMIC	SFE 10.7MM-A-TF21
CF404	BTCE-00361-107	FILTER-CERAMIC	SFE 10.7MM-A-TF21
CF405	BTCE-00361-107	FILTER-CERAMIC	SFE 10.7MM-A-TF21
CF501	BTCE-00510-045	FILTER-CERAMIC	LZU450C4N
CF503	BTCE-00450-045	FILTER-CERAMIC	AHCFM2-450AL
<b>CAPACITORS</b>			
C101	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C102	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C103	CEEM-G222M-LR1	CAPACITOR E/ALUMINUM	2200uF M 35V 16x31.5 U M
C104	CEET-E101M-DI0	CAPACITOR E/ALUMINUM	100uF M 16V 6.3x11 T
C105	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C106	CEET-J101M-FI0	CAPACITOR E/ALUMINUM	100uF M 50V 8x11.5 T
C107	CEET-J221M-HL1	CAPACITOR E/ALUMINUM	220uF M 50V 10x16 U T
C109	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C112	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C114	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C115	CCCT-J103Z-ODF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C201	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C202	CEET-J1R0M-CI0	CAPACITOR E/ALUMINUM	1.0uF M 50V 5x11 T
C203	CEET-JR22M-CI0	CAPACITOR E/ALUMINUM	0.22uF M 50V 5x11 T
C204	CEET-J1R0M-CI0	CAPACITOR E/ALUMINUM	1.0uF M 50V 5x11 T
C205	CEET-E101M-DI0	CAPACITOR E/ALUMINUM	100uF M 16V 6.3x11 T
C206	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C207	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C208	CEET-J3R3M-CI0	CAPACITOR E/ALUMINUM	3.3uF M 50V 5x11 T
C209	CFST-O821J-CJ0	CAPACITOR F/STYROL	820PF J 125V 5.5x12 T
C210	CFST-O821J-CJ0	CAPACITOR F/STYROL	820PF J 125V 5.5x12 T
C211	CCTT-J151J-ODZ	CAPACITOR CERAMIC	150PF J 50V SL T
C212	CCTT-J151J-ODZ	CAPACITOR CERAMIC	150PF J 50V SL T
C213	CCTT-J121J-OCZ	CAPACITOR CERAMIC	120PF J 50V SL T
C214	CEET-J100M-CI0	CAPACITOR E/ALUMINUM	10uF M 50V 5x11 T
C215	CEET-J100M-CI0	CAPACITOR E/ALUMINUM	10uF M 50V 5x11 T
C218	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C219	CEET-F220M-CI0	CAPACITOR E/ALUMINUM	22uF M 25V 5x11 T
C220	CFMT-N473J-GK0	CAPACITOR F/POLYESTR	0.047uF J 100V 8.9x13. T
C221	CCCT-J681K-0BB	CAPACITOR CERAMIC	680PF K 50V B T
C222	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C223	CEET-J1R0M-CI0	CAPACITOR E/ALUMINUM	1.0uF M 50V 5x11 T
C224	CEET-J1R0M-CI0	CAPACITOR E/ALUMINUM	1.0uF M 50V 5x11 T
C225	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
C226	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
C227	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C228	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C229	CEET-E101M-DI0	CAPACITOR E/ALUMINUM	100uF M 16V 6.3x11 T
C230	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C301	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C302	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C303	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C304	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C305	CCTT-J331J-OFZ	CAPACITOR CERAMIC	330PF J 50V SL T
C306	CEET-JR47M-CI0	CAPACITOR E/ALUMINUM	0.47uF M 50V 5x11 T
C307	CCTT-J101J-OCZ	CAPACITOR CERAMIC	100PF J 50V SL T
C308	CCTT-J181J-ODZ	CAPACITOR CERAMIC	180PF J 50V SL T
C309	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C310	CCAT-J151K-AAB	CAPACITOR CERAMIC	150PF K 50V B T
C311	CCCT-J102K-0BB	CAPACITOR CERAMIC	1000PF K 50V B T
C312	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C313	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C314	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C315	CCCT-J473Z-OJF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C316	CEET-J1R0M-CI0	CAPACITOR E/ALUMINUM	1.0uF M 50V 5x11 T
C318	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C319	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C401	CEET-E101M-DI0	CAPACITOR E/ALUMINUM	100uF M 16V 6.3x11 T
C402	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C403	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C404	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C405	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C406	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C407	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C408	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C409	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C410	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C411	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C412	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T



Ref. No.	PART NO.	DESCRIPTION	
	<b>CAPACITORS</b>		
C413	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C414	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C415	CCAT-J473Z-AAF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C416	CFMT-N473J-GK0	CAPACITOR F/POLYESTR	0.047uF J 100V 8.9x13. T
C417	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C418	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C419	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C420	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
C421	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C422	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C423	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C501	CFST-O471J-CJ0	CAPACITOR F/STYROL	470PF J 125V 5.5x12 T
C502	CCTT-J180J-0BC	CAPACITOR CERAMIC	18PF J 50V CH T
C503	CCCT-J473Z-0JF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C504	CCCT-J473Z-0JF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C505	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C506	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C507	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C508	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C510	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C511	CEET-E101M-DI0	CAPACITOR E/ALUMINUM	100uF M 16V 6.3x11 T
C512	CEET-E101M-DI0	CAPACITOR E/ALUMINUM	100uF M 16V 6.3x11 T
C513	CCTT-J470J-0DC	CAPACITOR CERAMIC	47PF J 50V CH T
C514	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C515	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C516	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C517	CCCT-J102K-0BB	CAPACITOR CERAMIC	1000PF K 50V B T
C518	CEET-JR47M-CI0	CAPACITOR E/ALUMINUM	0.47uF M 50V 5x11 T
C519	CEET-J4R7M-CI0	CAPACITOR E/ALUMINUM	4.7uF M 50V 5x11 T
C520	CEET-J2R2M-CI0	CAPACITOR E/ALUMINUM	2.2uF M 50V 5x11 T
C521	CCCT-J473Z-0JF	CAPACITOR CERAMIC	0.047uF Z 50V F T
C522	CEET-JR47M-CI0	CAPACITOR E/ALUMINUM	0.47uF M 50V 5x11 T
C523	CFMT-N103J-DE0	CAPACITOR F/POLYESTR	0.01uF J 100V 6x7 T
C524	CFMT-N272J-DJ0	CAPACITOR F/POLYESTR	0.0027uF J 100V 5.7x12 T
C528	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C529	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C530	CFMT-N273J-FK0	CAPACITOR F/POLYESTR	0.027uF J 100V 7.8x13 T
C601	CEET-JR47M-CI0	CAPACITOR E/ALUMINUM	0.47uF M 50V 5x11 T
C602	CCCT-J103Z-0DF	CAPACITOR CERAMIC	0.01uF Z 50V F T
C603	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
C604	CCTT-J330J-0DC	CAPACITOR CERAMIC	33PF J 50V CH T
C605	CCTT-J390J-0DC	CAPACITOR CERAMIC	39PF J 50V CH T
C606	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C607	CCAT-F103Z-AAF	CAPACITOR CERAMIC	0.01uF Z 25V F T
C608	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C609	CCAT-F223Z-AAF	CAPACITOR CERAMIC	0.022uF Z 25V F T
C610	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
C611	CCCT-J223Z-OFF	CAPACITOR CERAMIC	0.022uF Z 50V F T
C612	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C613	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C614	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C615	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C616	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C701	CCTT-J271J-0FZ	CAPACITOR CERAMIC	270PF J 50V SL T
C702	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C703	CCAT-J101K-AAB	CAPACITOR CERAMIC	100PF K 50V B T
C704	CEET-G100M-CI0	CAPACITOR E/ALUMINUM	10uF M 35V 5x11 T
C706	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
C707	CCCT-J104Z-OFF	CAPACITOR CERAMIC	0.1uF Z 50V F T
C708	CCTT-J100D-0BC	CAPACITOR CERAMIC	10PF D 50V CH T
C709	CCTT-J100D-0BC	CAPACITOR CERAMIC	10PF D 50V CH T
C710	CEET-F470M-CI0	CAPACITOR E/ALUMINUM	47uF M 25V 5x11 T
CT501	VCTC-00022-200	TRIMMER	CVCN06C200
CT502	VCTC-00022-200	TRIMMER	CVCN06C200
	<b>DIODES</b>		
VD501	DDSV-00120-S10	DIODE-VVC	SVC321SPA-C2 AM8V DO40S
VD502	DDSV-00120-S10	DIODE-VVC	SVC321SPA-C2 AM8V DO40S
D101	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D102	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D103	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D104	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D105	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D106	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D107	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D201	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D302	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D303	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D401	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D402	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D403	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D404	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T

Ref. No.	PART NO.	DESCRIPTION	
<b>DIODES</b>			
D405	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D406	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D407	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D408	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D409	DDTR-00040-T10	DIODE-RECTIFIER	1N4004S(400V 1A 0.6mm) T
D410	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D501	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D502	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D503	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
ZD101	DDTZ-G056B-SOS	DIODE ZENER	MTZJ5.6B 5.45-5.73 DO34 T
ZD102	DDTZ-G330C-SO0	DIODE ZENER	MTZ33C 30.90-32.50 DO40 T
ZD201	DDTZ-G051B-SOS	DIODE ZENER	MTZJ5.1B 4.94-5.20 DO34 T
<b>RELAY</b>			
RL401	ESRY-00350-121	RELAY	V23105-A5003-A201
<b>FUSE</b>			
	FGFB-S1001-137	FUSE GLASS	100mA 250V FST0034.3107 T
<b>INTEGRATED CIRCUITS</b>			
IC101	ICRG-00218-SE0	IC REGULATOR	KA7812 12V 3A TO-220
IC102	ICRG-00043-SE0	IC REGULATOR	KA7805 5V 3mm TO-220
IC201	ICLN-03610-S10	IC PLL FM MPX	LA3401 DIP22
IC202	ICPC-00010-TB0	IC PHOTOCOUPLER	LTV817B DIP4
IC203	ICOP-00131-SE0	IC DUAL OP AMP	KA4558C DIP8
IC301	ICLN-00180-S10	IC FM IF	LA1235 DIP16
IC401	ICLN-00180-S10	IC FM IF	LA1235 DIP16
IC501	ICLN-00160-S10	IC AM TUNER	LA1245 DIP20S
IC601	ICLN-03680-S10	IC PLL	LC7218JM SOP-24
IC701	ICLN-03630-SR0	IC RDS DEMODULATOR	TDA7479D SOP16
<b>COILS</b>			
L101	KI0T-42R2K-003	COIL-INDUCTOR	2.2uH M LA 50 T L 02
L201	KIML-A0010-E20	COIL-FM MPX FILTER	AMA001 19KHz 10mm-CAN
L202	KIML-A0010-E20	COIL-FM MPX FILTER	AMA001 19KHz 10mm-CAN
L301	IFFD-00100-E20	IFT-FM DET	AFD010 7mm-CAN
L302	IFFA-00110-E20	IFT-FM	AFA011 7mm-CAN
L303	KIFK-00080-E20	COIL-FM CHOKE	AFK016 A187LY-K5006 20.8mH
L304	KI0T-42R2K-003	COIL-INDUCTOR	2.2uH M LA 50 T L 02
L501	KIAT-00540-E20	COIL-AM ANT	AAT-054
L502	KIAO-00460-E20	COIL-AM OSC	AAO046 MW 7mm - CAN
L503	KIAA-00260-E20	COIL-AM IFT	AAA-026 7MC-K502713N4-KR
L504	KIAA-00270-E20	COIL-AM IFT B	AAA-027
L701	KI0T-4101K-003	COIL-INDUCTOR	100uH K LA 40 T L 02
CW101	KNCW-00140-6TM	CONNECTOR-WAFER	5267-06A 2.5mm MILK
CW102	KNCW-00990-2T9	CONNECTOR-WAFER	JE202A-1T-02
CW103	KNCW-00990-2T9	CONNECTOR-WAFER	JE202A-1T-02
CW601	KNCW-00760-IT0	CONNECTOR-WAFER	8370-181 1.25mm TOP 18P
TP301	KNCW-01490-2T9	CONNECTOR-WAFER	JE115-AT-02P
TP401	KNCW-01490-2T9	CONNECTOR-WAFER	JE115-AT-02P
TP501	KNCW-01490-2T9	CONNECTOR-WAFER	JE115-AT-02P
<b>RESONATORS</b>			
X601	KTAL-00041-072	CRYSTAL	HC-49/U 7.200000MHZ
X701	KTAL-00321-433	CRYSTAL	HC-49/U 4.332MHZ
CF201	KTRE-00300-288	RESONATOR	ZTB456F11
<b>PCB</b>			
PCB1	PCST-05070-11B	PCB-SINGLE	A1T-507 330x197x1.6t
<b>RESISTORS</b>			
R101	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R102	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R106	RCFT-F101J-010	RESISTOR-CARBON FILM	100ohm 1/4W 5% T
R107	RCFT-F101J-010	RESISTOR-CARBON FILM	100ohm 1/4W 5% T
R108	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R109	RCFT-E1R0J-000	RESISTOR-CARBON FILM	1ohm 1/5W 5% T
R110	RCFT-E1R0J-000	RESISTOR-CARBON FILM	1ohm 1/5W 5% T
R111	RMOE-H121J-020	RESISTOR-METAL OXIDE	1W ERG(X)1SJ121E 120ohm T
R112	RMOR-G1R2J-0C0	RESISTOR-METAL OXIDE	ERX-12SJ1R2E 5% 1.2ohm
R113	RMOR-G1R2J-0C0	RESISTOR-METAL OXIDE	ERX-12SJ1R2E 5% 1.2ohm
R114	RMOR-H100J-0C0	RESISTOR-METAL OXIDE	10ohm 1W 5% ERG(X)1SJ100E
R115	RMOH-H330J-100	RESISTOR-METAL OXIDE	PR01 1W 33ohm 5% R-SHAPE T
R116	RMOH-H330J-100	RESISTOR-METAL OXIDE	PR01 1W 33ohm 5% R-SHAPE T
R117	RCFT-E184J-000	RESISTOR-CARBON FILM	180Kohm 1/5W 5% T
R118	RCFT-E184J-000	RESISTOR-CARBON FILM	180Kohm 1/5W 5% T
R201	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R202	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R203	RCFT-E332J-000	RESISTOR-CARBON FILM	3.3Kohm 1/5W 5% T
R204	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R205	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T

<i>Ref. No.</i>	<i>PART NO.</i>	<i>DESCRIPTION</i>	
	<b>RESISTORS</b>		
R206	RCFT-E223J-000	RESISTOR-CARBON FILM	22Kohm 1/5W 5% T
R208	RCFT-E513J-000	RESISTOR-CARBON FILM	51Kohm 1/5W 5% T
R209	RCFT-E513J-000	RESISTOR-CARBON FILM	51Kohm 1/5W 5% T
R210	RCFT-E124J-000	RESISTOR-CARBON FILM	120Kohm 1/5W 5% T
R211	RCFT-E124J-000	RESISTOR-CARBON FILM	120Kohm 1/5W 5% T
R212	RCFT-E272J-000	RESISTOR-CARBON FILM	2.7Kohm 1/5W 5% T
R213	RCFT-E272J-000	RESISTOR-CARBON FILM	2.7Kohm 1/5W 5% T
R214	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R215	RCFT-E472J-000	RESISTOR-CARBON FILM	4.7Kohm 1/5W 5% T
R216	RCFT-E472J-000	RESISTOR-CARBON FILM	4.7Kohm 1/5W 5% T
R217	RCFT-E182J-000	RESISTOR-CARBON FILM	1.8Kohm 1/5W 5% T
R218	RCFT-E182J-000	RESISTOR-CARBON FILM	1.8Kohm 1/5W 5% T
R219	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R220	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R221	RCFT-E222J-000	RESISTOR-CARBON FILM	2.2Kohm 1/5W 5% T
R222	RCFT-E332J-000	RESISTOR-CARBON FILM	3.3Kohm 1/5W 5% T
R223	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R224	RCFT-E271J-000	RESISTOR-CARBON FILM	270ohm 1/5W 5% T
R225	RCFT-E392J-000	RESISTOR-CARBON FILM	3.9Kohm 1/5W 5% T
R226	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R227	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R229	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R230	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R231	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R232	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R233	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R234	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R235	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R236	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R237	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R238	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R239	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R240	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R301	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R302	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R303	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R304	RCFT-E100J-000	RESISTOR-CARBON FILM	10ohm 1/5W 5% T
R305	RCFT-E154J-000	RESISTOR-CARBON FILM	150Kohm 1/5W 5% T
R306	RCFT-E273J-000	RESISTOR-CARBON FILM	27Kohm 1/5W 5% T
R307	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R308	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R309	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R310	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R312	RCFT-E332J-000	RESISTOR-CARBON FILM	3.3Kohm 1/5W 5% T
R313	RCFT-E223J-000	RESISTOR-CARBON FILM	22Kohm 1/5W 5% T
R314	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R315	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R317	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R318	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R321	RCFT-E2R2J-000	RESISTOR-CARBON FILM	2.2ohm 1/5W 5% T
R322	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R323	RCFT-E273J-000	RESISTOR-CARBON FILM	27Kohm 1/5W 5% T
R325	RCFT-E222J-000	RESISTOR-CARBON FILM	2.2Kohm 1/5W 5% T
R401	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R402	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R405	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R406	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R407	RCFT-E151J-000	RESISTOR-CARBON FILM	150ohm 1/5W 5% T
R408	RCFT-E472J-000	RESISTOR-CARBON FILM	4.7Kohm 1/5W 5% T
R410	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R411	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R412	RCFT-E512J-000	RESISTOR-CARBON FILM	5.1Kohm 1/5W 5% T
R413	RCFT-E562J-000	RESISTOR-CARBON FILM	5.6Kohm 1/5W 5% T
R414	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R415	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R416	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R417	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R418	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R419	RCFT-E562J-000	RESISTOR-CARBON FILM	5.6Kohm 1/5W 5% T
R420	RCFT-E913J-000	RESISTOR-CARBON FILM	91Kohm 1/5W 5% T
R421	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R422	RCFT-E361J-000	RESISTOR-CARBON FILM	360ohm 1/5W 5% T
R423	RCFT-E182J-000	RESISTOR-CARBON FILM	1.8Kohm 1/5W 5% T
R424	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R425	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R426	RCFT-E621J-000	RESISTOR-CARBON FILM	620ohm 1/5W 5% T
R427	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R428	RCFT-E181J-000	RESISTOR-CARBON FILM	180ohm 1/5W 5% T
R429	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R430	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R431	RCFT-E562J-000	RESISTOR-CARBON FILM	5.6Kohm 1/5W 5% T
R432	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T

<b>Ref. No.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	
<b>RESISTORS</b>			
R433	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R434	RCFT-E182J-000	RESISTOR-CARBON FILM	1.8Kohm 1/5W 5% T
R435	RCFT-E122J-000	RESISTOR-CARBON FILM	1.2Kohm 1/5W 5% T
R436	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R437	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R438	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R439	RCFT-E562J-000	RESISTOR-CARBON FILM	5.6Kohm 1/5W 5% T
R440	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R441	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R442	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R443	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R444	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R445	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R446	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R447	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R448	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R449	RCFT-E331J-000	RESISTOR-CARBON FILM	330ohm 1/5W 5% T
R450	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R451	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R452	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R453	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R454	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R501	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R502	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R503	RCFT-E821J-000	RESISTOR-CARBON FILM	820ohm 1/5W 5% T
R504	RCFT-E820J-000	RESISTOR-CARBON FILM	82ohm 1/5W 5% T
R505	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R506	RCFT-E152J-000	RESISTOR-CARBON FILM	1.5Kohm 1/5W 5% T
R507	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R508	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R509	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R510	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R511	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R513	RCFT-E361J-000	RESISTOR-CARBON FILM	360ohm 1/5W 5% T
R514	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R515	RCFT-E153J-000	RESISTOR-CARBON FILM	15Kohm 1/5W 5% T
R516	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R517	RCFT-E223J-000	RESISTOR-CARBON FILM	22Kohm 1/5W 5% T
R518	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R519	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R520	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R521	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R527	RCFT-E221J-000	RESISTOR-CARBON FILM	220ohm 1/5W 5% T
R528	RCFT-E223J-000	RESISTOR-CARBON FILM	22Kohm 1/5W 5% T
R601	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R602	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R603	RCFT-E332J-000	RESISTOR-CARBON FILM	3.3Kohm 1/5W 5% T
R604	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R605	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R606	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
R607	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R608	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R609	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R610	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R611	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R612	RCFT-E102J-000	RESISTOR-CARBON FILM	1Kohm 1/5W 5% T
R701	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R702	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R703	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R704	RCFT-E101J-000	RESISTOR-CARBON FILM	100ohm 1/5W 5% T
R705	RCFT-E470J-000	RESISTOR-CARBON FILM	47ohm 1/5W 5% T
<b>JACKS</b>			
JK201	SKRC-00780-020	SOCKET-RCA	JK0200930N 2P
JK202	SKPH-00520-360	MINIATURE JACK	HSJ1002-01-1020
JK401	TEAT-00141-02S	TERMINAL ANTENNA	SC0210682N
<b>TRANSISTORS</b>			
Q101	TRSA-0023Y-SD0	TRANSISTOR P-H FREQ	KTA1658-Y TO220IS
Q102	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q105	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q201	TRTK-0021G-SD0	FET N-CHANNEL	KTK117GR/BL TO92
Q202	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q203	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q204	TRTC-01720-SD0	TRANSISTOR N-H FREQ	KRC111M W/RESIST TO92M
Q205	TRTC-01720-SD0	TRANSISTOR N-H FREQ	KRC111M W/RESIST TO92M
Q206	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q207	TRTC-01720-SD0	TRANSISTOR N-H FREQ	KRC111M W/RESIST TO92M
Q208	TRTC-01720-SD0	TRANSISTOR N-H FREQ	KRC111M W/RESIST TO92M
Q301	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q302	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q303	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92

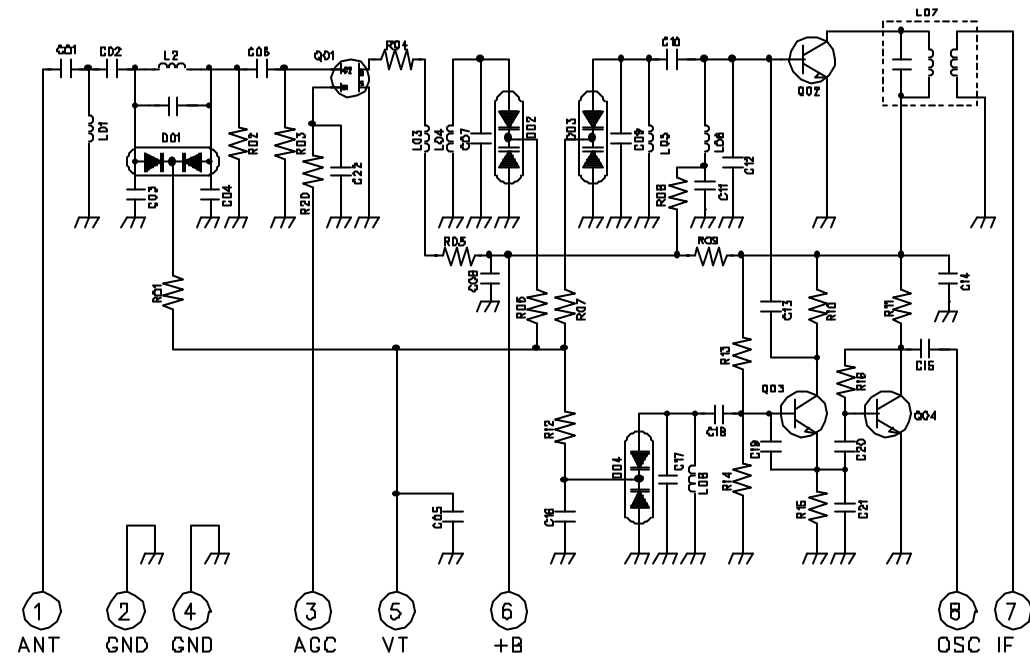
Ref. No.	PART NO.	DESCRIPTION	
<b>TRANSISTORS</b>			
Q401	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q402	TRSK-0008Y-SD0	FET N-CHANNEL	KTK192A-Y TO92M
Q403	TRTC-0106Y-SD0	TRANSISTOR N-H FREQ	KTC3195Y
Q404	TRTC-0106Y-SD0	TRANSISTOR N-H FREQ	KTC3195Y
Q405	TRTC-0106Y-SD0	TRANSISTOR N-H FREQ	KTC3195Y
Q406	TRTC-0106Y-SD0	TRANSISTOR N-H FREQ	KTC3195Y
Q407	TRTC-0106Y-SD0	TRANSISTOR N-H FREQ	KTC3195Y
Q408	TRTC-0106Y-SD0	TRANSISTOR N-H FREQ	KTC3195Y
Q409	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q410	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q411	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q412	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q413	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q414	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q501	TRSK-0008Y-SD0	FET N-CHANNEL	KTK192A-Y TO92M
Q502	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q503	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q601	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q602	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q603	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q604	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q605	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q606	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q607	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q608	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q609	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q610	TRTA-00940-SD0	TRANSISTOR P-H FREQ	KRA107M W/RESIST TO92M
Q611	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q612	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
<b>FRONT END</b>			
FE101	TUFF-00320-00K	FRONT-END	KCF214AH
<b>SEMI FIXED RESISTORS</b>			
VR201	VFEB-A022C-224	RESISTOR-SEMI FIXED	RH063MCJ5R 220Kohm
VR202	VFEB-A022C-224	RESISTOR-SEMI FIXED	RH063MCJ5R 220Kohm
VR301	VFEB-A022C-472	RESISTOR-SEMI FIXED	RH063MCS3R 4.7Kohm
VR401	VFEB-A022C-103	RESISTOR-SEMI FIXED	RH063MC14R 10Kohm
VR402	VFEB-A022C-103	RESISTOR-SEMI FIXED	RH063MC14R 10Kohm
VR501	VFEB-A022C-104	RESISTOR-SEMI FIXED	RH063MC15R 100Kohm
VR502	VFEB-A022C-473	RESISTOR-SEMI FIXED	RH063MCS4R 47Kohm
<b>MISCELLANEOUS</b>			
	ANTL-00090-E50	ANTENNA-LOOP	632-218F-T
	ANNT-00090-075	ANTENNA-T TYPE	75ohm AFN009 3480 W/SOCKET
	KDAC-0560F-AA0	CORD-AC	KKJ1004A,KJ0201 2.13M TUBE
	KDPH-0065B-MM0	CORD-PHONE	MONO R3.5-1M-R3.5
	KDRC-0009B-AA0	CORD-RCA	2P-1000-2P HP-202-100-8812
	LLA3-18251-E10	CARD CABLE	KF2B 18/250 P7 S9 B9
	PTAE-03610-Y3V	TRANSFORMER-POWER	A48-361Y-V
	MEAC-08215-004	RADIATOR-TR	
G2	MPAC-03811-004	TERMINAL-GND	
G3	MPAC-03811-004	TERMINAL-GND	
G4	MPAC-03811-004	TERMINAL-GND	
FC101	MPAC-11620-004	FUSE CLIP	5.2Pi TAPPING TYPE
FC102	MPAC-11620-004	FUSE CLIP	5.2Pi TAPPING TYPE
<b>ASSEMBLY P.C BOARD FRONT</b>			
<b>CAPACITORS</b>			
C901	CEET-G470M-DI0	CAPACITOR E/ALUMINUM	47uF M 35V 6.3x11 T
C902	CFMT-N473J-GK0	CAPACITOR F/POLYESTR	0.047uF J 100V 8.9x13. T
C903	CFMT-N473J-GK0	CAPACITOR F/POLYESTR	0.047uF J 100V 8.9x13. T
C904	CEET-J2R2M-BE0	CAPACITOR E/ALUMINUM	2.2uF M 50V 4x7 T
C905	CEET-D470M-DE0	CAPACITOR E/ALUMINUM	47uF M 10V 6.3x7 T
C906	CCAT-J104Z-AAF	CAPACITOR CERAMIC	0.1uF Z 50V F T
C907	CCAT-J104Z-AAF	CAPACITOR CERAMIC	0.1uF Z 50V F T
C908	CEET-J1R0M-AC0	CAPACITOR E/ALUMINUM	1uF M 50V 3x5 T
C909	CCAT-F103Z-AAF	CAPACITOR CERAMIC	0.01uF Z 25V F T
C910	CEGS-B104Z-BK0	CAPACITOR E/DO LAYER	0.1F Z 5.5V EECS0HD104V
C911	CCAT-J104Z-AAF	CAPACITOR CERAMIC	0.1uF Z 50V F T
C912	CEET-JR10M-BE0	CAPACITOR E/ALUMINUM	0.1uF M 50V 4x7 T
C913	CCAT-F103Z-AAF	CAPACITOR CERAMIC	0.01uF Z 25V F T
C914	CCAT-E222M-AAY	CAPACITOR CERAMIC	2200PF M 16V Y5R T
C915	CCAT-E222M-AAY	CAPACITOR CERAMIC	2200PF M 16V Y5R T
C917	CCAT-J821K-AAB	CAPACITOR CERAMIC	820PF K 50V B T
C921	CCTT-J150J-0BC	CAPACITOR CERAMIC	15PF J 50V CH T
C922	CCTT-J150J-0BC	CAPACITOR CERAMIC	15PF J 50V CH T
<b>DIODES</b>			
D901	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D902	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
D903	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T

<b>Ref. No.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	
	<b>DIODES</b>		
D910	DDTS-00070-SO0	DIODE-SI	1SS133 (40V 0.11A) DO-40 T
LD901	DPLE-00280-RG0	DISPLAY-LED	SAM5270 RED/GRN
	<b>VFD</b>		
FL901	DPFL-00710-00T	DISPLAY-FLUORSCENT	CM1918D TUNER
	<b>INTEGRATED CIRCUITS</b>		
IC901	ICMP-03720-S20	IC UCOMPUTER	UPD7804FGF-169-3B9 QFP80
IC902	ICOP-00210-SD0	IC RESET	KIA7042P/F 4.2V TO-92
	<b>CONNECTORS</b>		
CW902	KNCW-00240-4T9	CONNECTOR-WAFER	53014-04 2.0mm WHT
CW903	KNCW-00240-4T9	CONNECTOR-WAFER	53014-04 2.0mm WHT
J1	KNCW-00760-IT0	CONNECTOR-WAFER	8370-181 1.25mm TOP 18P
	<b>RESONATOR</b>		
X901	KTAL-00022-041	CRYSTAL	HC-49/U 4.194304MHz
	<b>PCB</b>		
PCB1	PCST-05080-11B	PCB-SINGLE	A1T-508 330x163x1.6t
	<b>RESISTORS</b>		
R901	RCFT-E271J-000	RESISTOR-CARBON FILM	270ohm 1/5W 5% T
R902	RCFT-E561J-000	RESISTOR-CARBON FILM	560ohm 1/5W 5% T
R903	RCFT-E271J-000	RESISTOR-CARBON FILM	270ohm 1/5W 5% T
R908	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R909	RCFT-E821J-000	RESISTOR-CARBON FILM	820ohm 1/5W 5% T
R910	RCFT-E124J-000	RESISTOR-CARBON FILM	120Kohm 1/5W 5% T
R911	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R912	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R913	RCFT-E223J-000	RESISTOR-CARBON FILM	22Kohm 1/5W 5% T
R917	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R918	RCFT-E104J-000	RESISTOR-CARBON FILM	100Kohm 1/5W 5% T
R919	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R920	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R921	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R922	RCFT-E103J-000	RESISTOR-CARBON FILM	10Kohm 1/5W 5% T
R923	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R924	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R926	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R927	RCFT-E222J-000	RESISTOR-CARBON FILM	2.2Kohm 1/5W 5% T
R928	RCFT-E222J-000	RESISTOR-CARBON FILM	2.2Kohm 1/5W 5% T
R929	RCFT-E222J-000	RESISTOR-CARBON FILM	2.2Kohm 1/5W 5% T
R930	RCFT-E271J-000	RESISTOR-CARBON FILM	270ohm 1/5W 5% T
R937	RCFT-E472J-000	RESISTOR-CARBON FILM	4.7Kohm 1/5W 5% T
R938	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R939	RCFT-E682J-000	RESISTOR-CARBON FILM	6.8Kohm 1/5W 5% T
R940	RCFT-E272J-000	RESISTOR-CARBON FILM	2.7Kohm 1/5W 5% T
R941	RCFT-E152J-000	RESISTOR-CARBON FILM	1.5Kohm 1/5W 5% T
R942	RCFT-E911J-000	RESISTOR-CARBON FILM	910ohm 1/5W 5% T
R943	RCFT-E621J-000	RESISTOR-CARBON FILM	620ohm 1/5W 5% T
R944	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R945	RCFT-E361J-000	RESISTOR-CARBON FILM	360ohm 1/5W 5% T
R946	RCFT-E431J-000	RESISTOR-CARBON FILM	430ohm 1/5W 5% T
R947	RCFT-E682J-000	RESISTOR-CARBON FILM	6.8Kohm 1/5W 5% T
R948	RCFT-E272J-000	RESISTOR-CARBON FILM	2.7Kohm 1/5W 5% T
R949	RCFT-E152J-000	RESISTOR-CARBON FILM	1.5Kohm 1/5W 5% T
R950	RCFT-E911J-000	RESISTOR-CARBON FILM	910ohm 1/5W 5% T
R951	RCFT-E621J-000	RESISTOR-CARBON FILM	620ohm 1/5W 5% T
R952	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R953	RCFT-E361J-000	RESISTOR-CARBON FILM	360ohm 1/5W 5% T
R954	RCFT-E431J-000	RESISTOR-CARBON FILM	430ohm 1/5W 5% T
R955	RCFT-E272J-000	RESISTOR-CARBON FILM	2.7Kohm 1/5W 5% T
R956	RCFT-E152J-000	RESISTOR-CARBON FILM	1.5Kohm 1/5W 5% T
R957	RCFT-E911J-000	RESISTOR-CARBON FILM	910ohm 1/5W 5% T
R958	RCFT-E621J-000	RESISTOR-CARBON FILM	620ohm 1/5W 5% T
R959	RCFT-E471J-000	RESISTOR-CARBON FILM	470ohm 1/5W 5% T
R960	RCFT-E361J-000	RESISTOR-CARBON FILM	360ohm 1/5W 5% T
R961	RCFT-E431J-000	RESISTOR-CARBON FILM	430ohm 1/5W 5% T
R962	RCFT-E682J-000	RESISTOR-CARBON FILM	6.8Kohm 1/5W 5% T
R963	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
R964	RCFT-E473J-000	RESISTOR-CARBON FILM	47Kohm 1/5W 5% T
	<b>SWITCHES</b>		
VR901	SWRT-00260-026	SWITCH-ROTARY	REB162(9x5)PVB20FINA1-2-24
SW901	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW902	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW903	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW904	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW905	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW906	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW907	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA

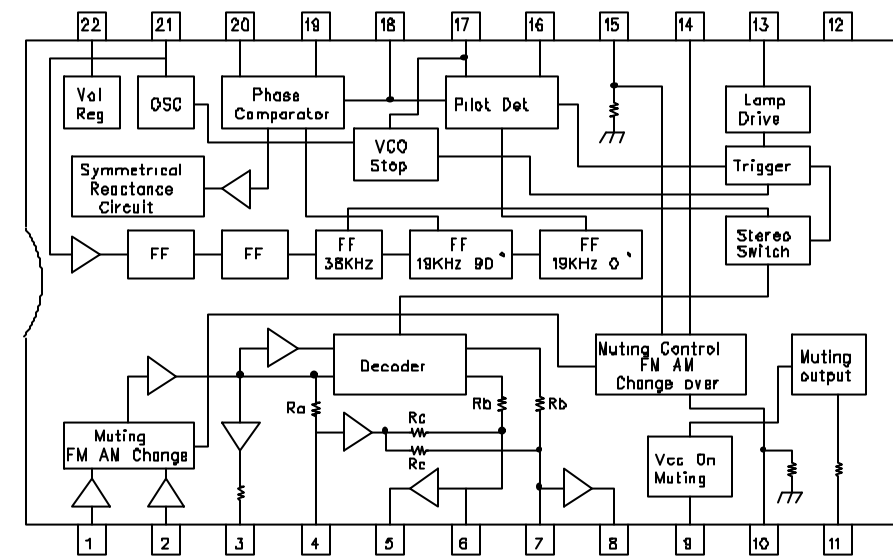
<b>Ref. No.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	
	<b>SWITCHS</b>		
SW908	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW909	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW910	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW911	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW912	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW913	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW914	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW915	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW916	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW917	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW918	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW919	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW920	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW921	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW922	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW923	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
SW924	SWTA-00220-060	SWITCH-TACT	SKHV10910(A) 12V 50mA
	<b>TRANSISTORS</b>		
Q901	TRTC-0016G-SD0	TRANSISTOR N-H FREQ	KTC3198-GR TO92
Q902	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q903	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q904	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q905	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
Q906	TRTC-01700-SD0	TRANSISTOR N-H FREQ	KRC107M W/RESIST TO92M
	<b>MISCELLANEOUS</b>		
	MRAG-09930-004	CUSHION-A	EVA 20x08x5.0 W
	U1T1-01310-T40	WIRE ASS'Y	1007#18 BLK-100 3.2PI RING
CH903	U408-0M708-140	WIRE-ASS'Y	UL1007#26 BLK-80 4P
CH903	U408-0M708-140	WIRE-ASS'Y	UL1007#26 BLK-80 4P

# IC FUNCTIONAL BLOCK DIAGRAM

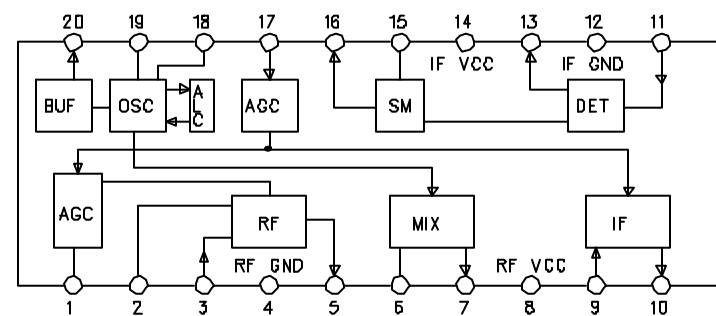
FE601:KCF214AH



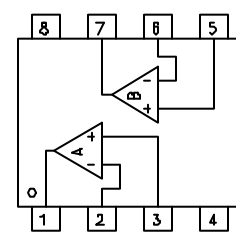
IC201:LA3401



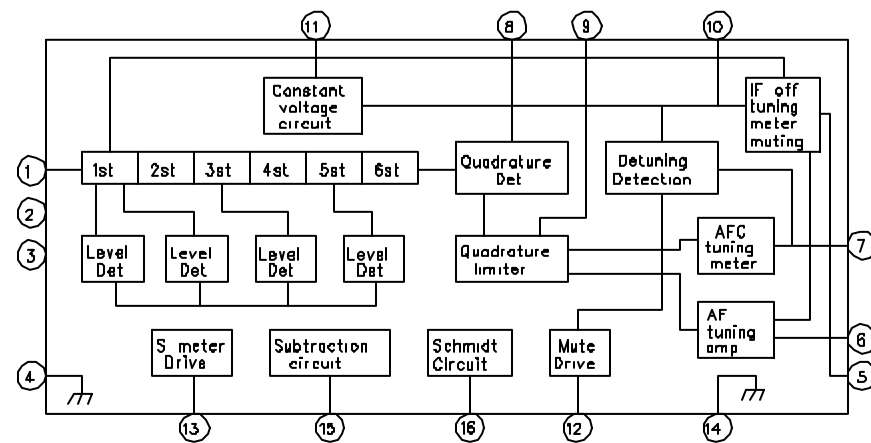
IC501:LA1245



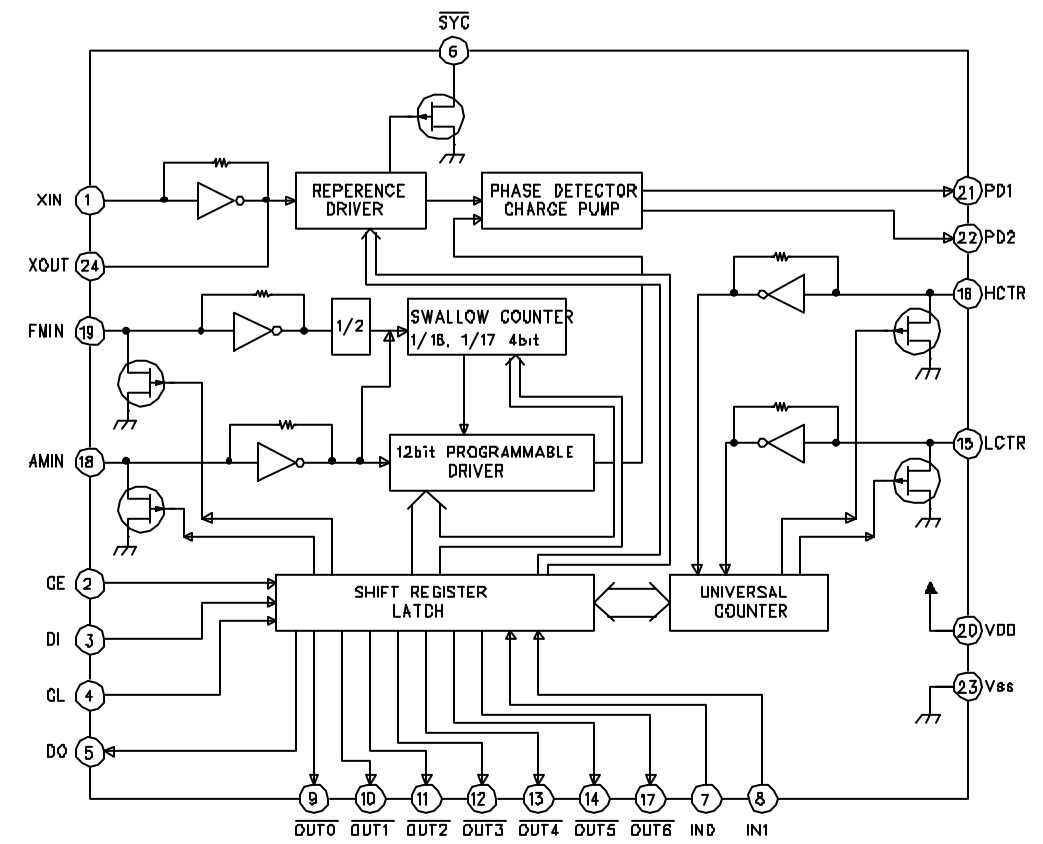
IC203:KA4558



IC301,IC401:LA1235



IC601:LC7218JM





PACKING MATERIAL

TU-940

T-Antenna FM, Stand Type  
(ANTT-00090-075)

Antenna AM Loop, Stand Type  
(ANTL-00090-E50)

Poly-Bag(I)  
(YVAP-01866-ZZ4)

Manual Instruction  
(YIAT-J1000-01E)

Cord RCA 2P  
(KIRC-0009B-AA0)

Cord REMOTE 2P  
(KDPH-0065B-MM0)

Tailon Sheet(Nami Sheet)  
(YVAP-14800-ZZ4)

Cushion Pad  
(YSAP-15040-004)

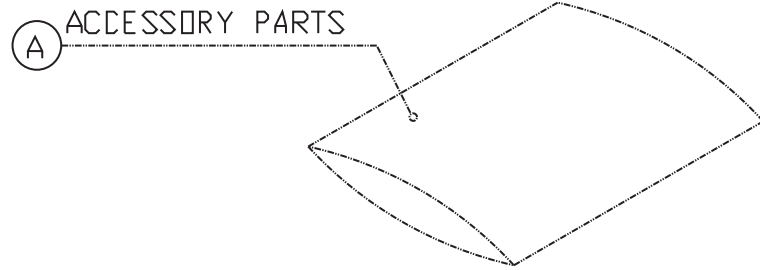
Cushion  
(YSAP-01580-001)

Box Carton  
(YGAP-14790-ZZ4)

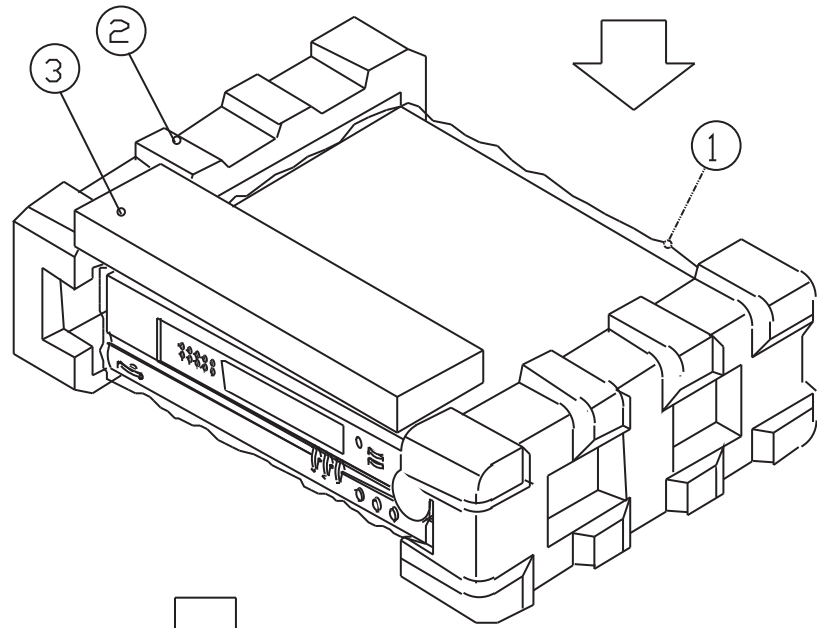
PACKING MATERIAL

TU-940

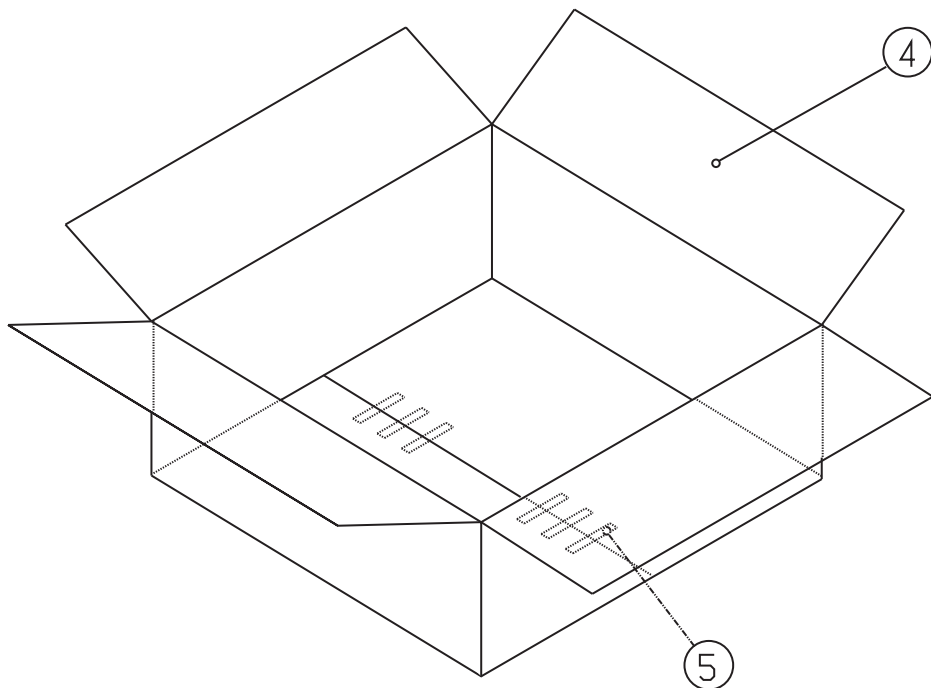
A



B



C



D

E

PACKING MATERIAL

TU-940

A

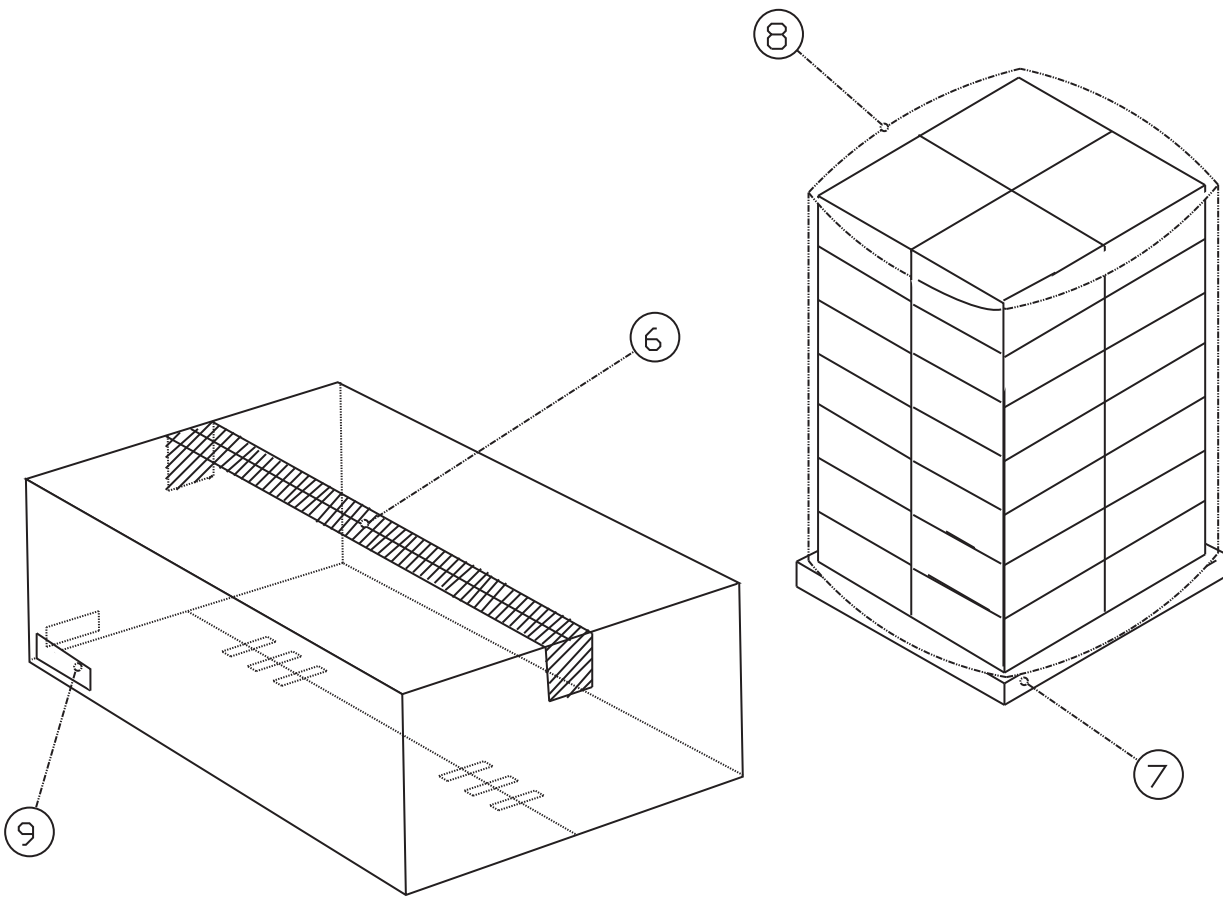
NO	PARTS NAME	PART NO	Q'TY	REMARK
A	POLY-BAG-I	YVAP-01866-ZZ4	1	***
	INST-MANUAL	YIAT-J1000-01E	1	***
	WARRANTY CARD	YWAT-J1000-01E	1	***
	ANTENNA-T TYPE	ANTT-0009D-075	1	***
	ANTENNA-LOOP	ANTL-0009D-E5D	1	***
1	TROLON-SHEET	YVAP-14800-ZZ4	1	***
2	CUSHION-L/R	YSAP-01580-001	2	EPS
3	CUSHION-PAD	YSAP-15040-004	1	EPS
4	BOX-GIFT	YGAP-04790-ZZ4	1	DW2
5	AIR-STAPLES	MMSC-00900-004	6	STEEL
6	TAPE-OPP	ZTOP-00701-50C	*	***
7	PALLETS	MWAW-00960-003	*	***
B	WRAP	7JJG-00212-001	*	***
9	LABEL-BAR CODE	YBAP-144890-ZZ4	1	***

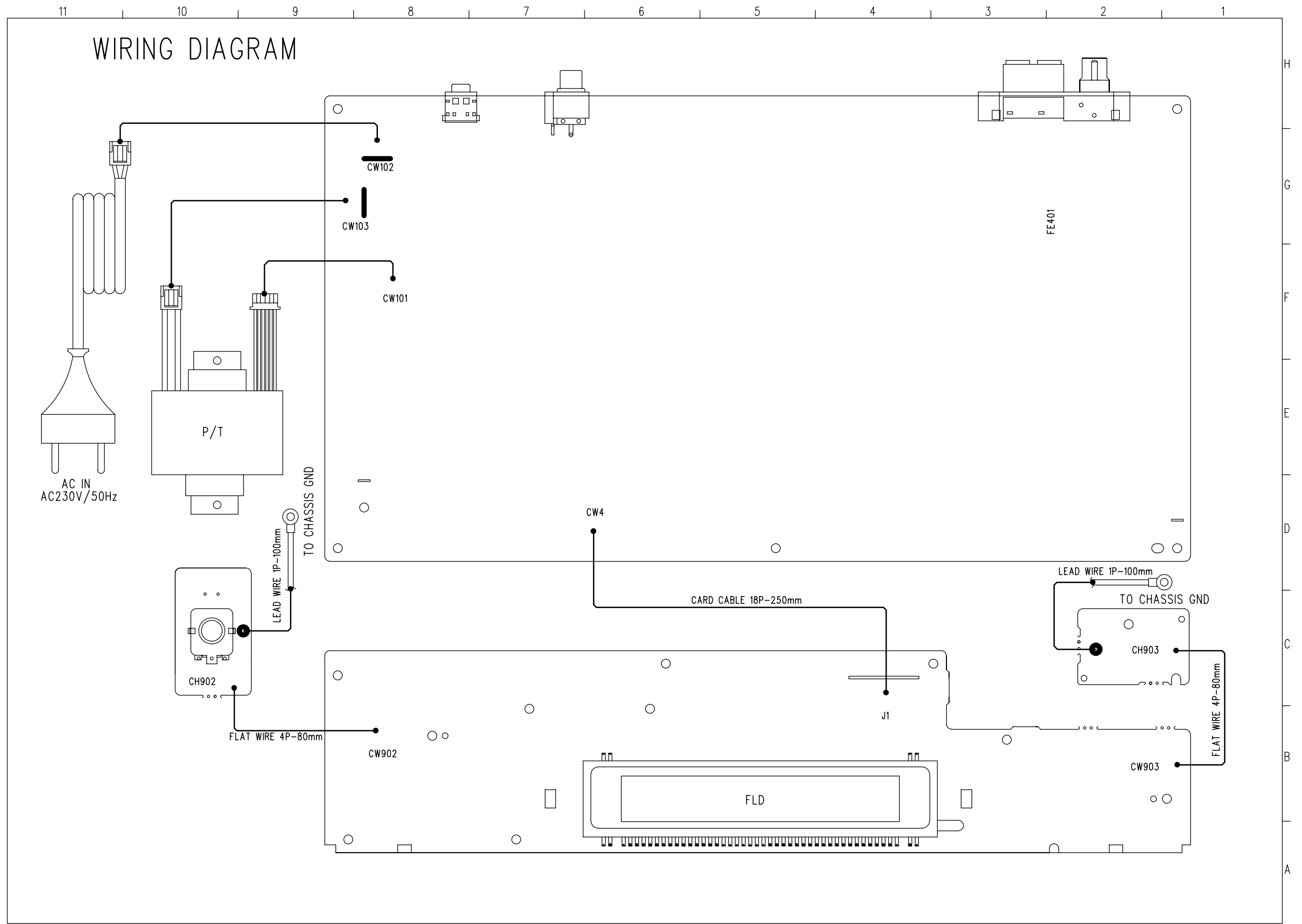
B

C

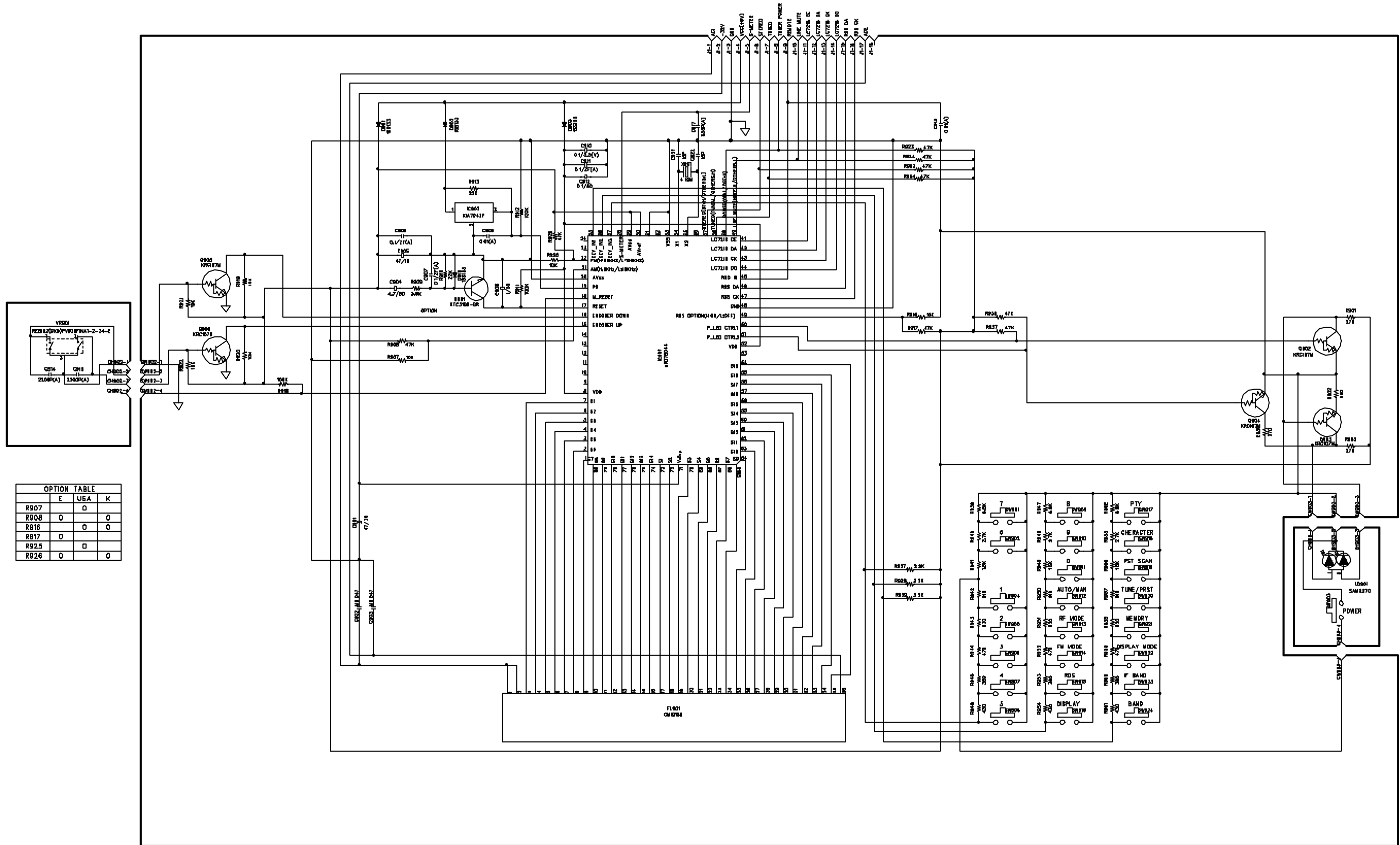
D

E





# SCHEMATIC DIAGRAM (FRONT)



OPTION TABLE

	E	U6A	K
R907		□	□
R908	□	□	□
R916	□	□	□
R917	□	□	□
R925	□	□	□
R926	□	□	□

# SCHEMATIC DIAGRAM (MAIN)

