

JVC

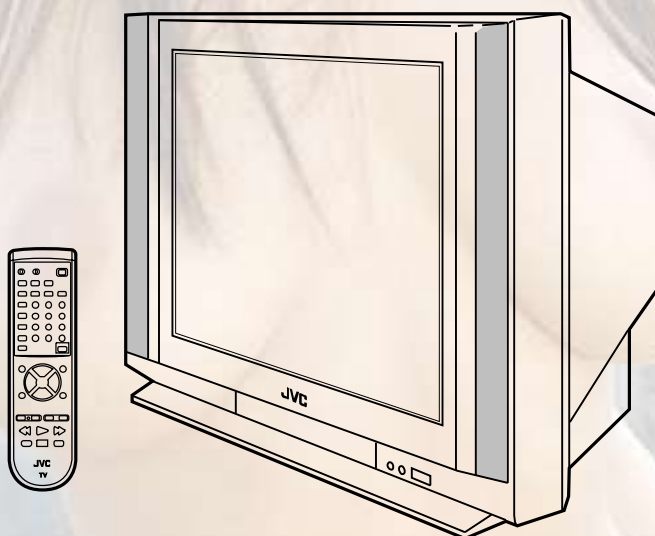
SERVICE MANUAL

COLOR TELEVISION

BASIC CHASSIS

AC

AV-27F802



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SPECIFICATIONS

Items	Contents
Dimensions (W × H × D)	29-7/8" × 23-3/8" × 19-3/4" / 75.8cm × 59.3cm × 50.0cm
Mass	101.2 lbs / 46 kg
TV RF System	CCIR(M)
Color Sound System	NTSC, BTSC System (Multi Channel Sound)
TV Receiving Channels and Frequency	
VL Band	(02~06) 54MHz~88MHz
VH Band	(07~13) 174MHz~216MHz
UHF Band	(14~69) 470MHz~806MHz
CATV Receiving Channels and Frequency	
Low Band	(02~06, A-8) by (02~06&01)
High Band	(07~13) by (07~13)
Mid Band	(A~1) by (14~22)
Super Band	(J~W) by (23~36)
Hyper Band	(W+1~W+28) by (37~64)
Ultra Band	(W+29~W+84) by (65~125)
Sub Mid Band	(A8, A4~A1) by (01, 96~99)
TV/CATV Total Channel	180 Channels
Intermediate Frequency	
Video IF Carrier	45.75MHz
Sound IF Carrier	41.25MHz (4.5MHz)
Color Sub Carrier	3.58MHz
Power Input	120V AC, 60Hz
Power Consumption	140W / 2.0A
Picture Tube	27" (68cm) Measured Diagonally
High Voltage	30kV±1kV (at zero beam current)
Speaker	2" × 4-3/4" / 5 × 12cm Oval type × 2
Audio Power Output	5W × 2
Video / Audio Input (1 / 2 / 3 / 4)	Video(1,3,4) : 1Vp-p, 75Ω (RCA pin jack) Audio(1,2,3,4) : 500mVrms (-4dBs), High Impedance (RCA pin jack) S-Video (Input 1 / 3 / 4 Over) Y : 1Vp-p Positive (negative sync provided, when terminated with 75Ω) C : 0.286Vp-p (burst signal, when terminated with 75Ω) Component Input (Input 2 / 4) Y : 1Vp-p positive (negative sync provided, when terminated with 75Ω) P _B /P _R : 0.7Vp-p 75 Ω
Audio Output (Variable / Fix : Selectable)	Variable : More then 0~1550mVrms (+6dBs) Low impedance (400Hz when modulated 100%) (RCA pin jack) Fix : 500mVrms(-4dBs) Low impedance (400Hz when modulated 100%) (RCA pin jack)
AV Compu link EX Input	3.5mm mini jack
Antenna terminal	75Ω(VHF/UHF) Terminal, F-Type Connector
Remote Control Unit	RM-C301G-1A (AA/R6/UM-3 battery × 2)

Design & specifications are subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ($\perp$) side GND, the ISOLATED(NEUTRAL) : (π) side GND and EARTH : ($\oplus$) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a $10k\Omega$ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

10. Isolation Check

(Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/ audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100VAC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

(2) Leakage Current Check

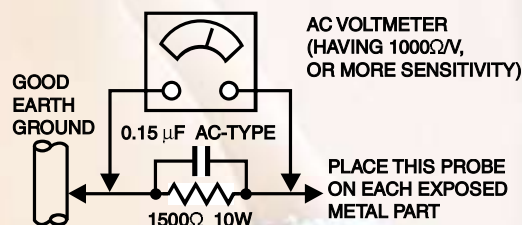
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a $0.15\mu F$ AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



11. High voltage hold down circuit check.

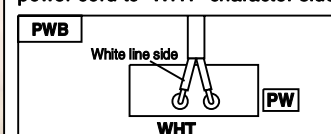
After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.

See item "How to check the high voltage hold down circuit".

This mark shows a fast operating fuse, the letters indicated below show the rating.



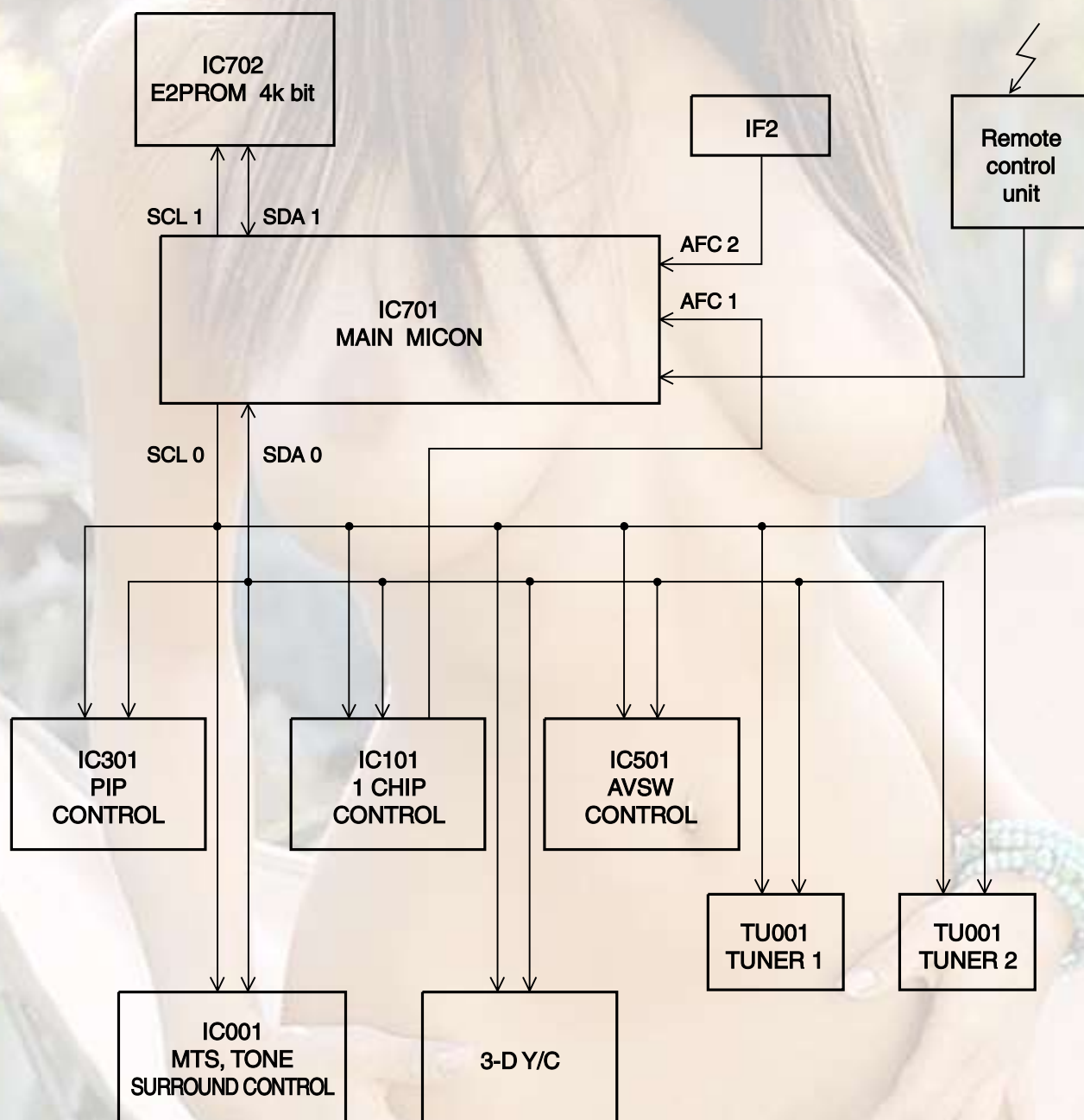
POWER CORD REPLACEMENT WARNING
Connecting the white line side of power cord to "WHT" character side.



FEATURES

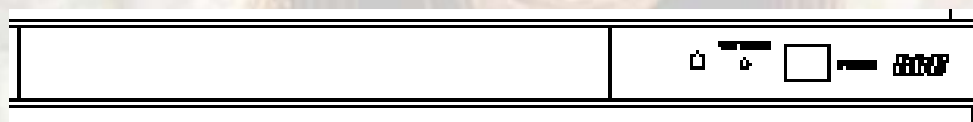
- Full-flat CRT (cathode ray tube) reproduces fine textured picture in every detail.
- I²C bus control utilizes single chip ICs.
- Built in Twin Tuner system.
- Built-in V-CHIP system.
- Built-in HYPER-SURROUND system.
- Built-in BBE.
- Adoption of the Picture-In-Picture (PIP) function.
- 3 LINE Digital Y/C Separation circuit improved picture quality.
- Component input terminal for taking best advantage of Component Video Signal.
- Audio Video input terminal. (S-input ×2, V-input ×2)
- Variable/Fix audio output terminal.
- Closed-caption broadcasts can be viewed.
- With AV COMPU LINK EX terminal.

■ SYSTEM BLOCK DIAGRAM



FUNCTIONS

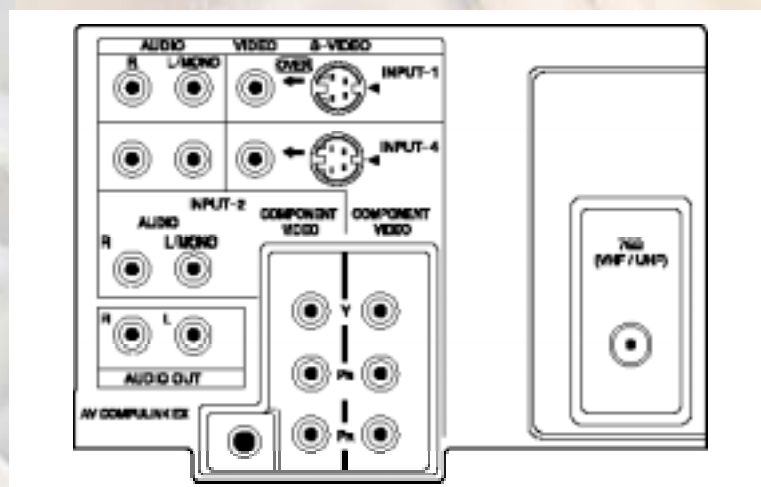
■ FRONT PANEL



■ FRONT PANEL DOOR OPENED



■ REAR PANEL



■ REMOTE CONTROL UNIT (RM-C301G-1A)



SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the 12 screws marked **(A)** as shown in Fig.1.
3. Withdraw the REAR COVER toward you.

[CAUTION]

- When reinstalling the rear cover, carefully push it inward after inserting the MAIN PWB into the rear cover groove.

REMOVING THE CHASSIS

- After removing the rear cover.
1. Slightly raise the both sides of the chassis by hand and remove the 3 claws marked **(B)** under the chassis from the front cabinet as shown in Fig.1.
 2. Withdraw the chassis backward along the rail in the arrow direction marked **(C)** as shown in Fig.1.

(If necessary, take off the wire clamp, connector's etc.)

* When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

REMOVING THE TERMINAL BOARD

- After removing the rear cover.
1. Remove the 6 screws marked **(D)** as shown in Fig.1.
 2. When you pull out the TERMINAL BOARD in the direction of arrow marked **E** as shown in Fig.1, it can be removed.

REMOVING THE FRONT AND POWER SW PW BOARDS

- After removing the rear cover and chassis.
1. Remove the 6 screws marked **(F)** as shown in Fig.1.
 2. Then remove the FRONT PWB and POWER SW PWB.
- (If necessary, take off the wire, connector's etc.)

REMOVING THE LF PW BOARD

- After removing the rear cover and chassis.
1. Lift the left side of the LF PWB while pressing the 2 PWB stoppers marked **(G)** in the arrow direction marked **(H)** as shown in Fig.1.
 2. Then remove the LF PWB.
- (If necessary, take off the wire, connector's etc.)

REMOVING THE DAF PW BOARD

- After removing the rear cover and chassis.
1. Lift the right side of the DAF PWB while pressing the PWB stopper marked **(J)** and claw marked **(K)** in the arrow direction marked **(L)** as shown in Fig.1.
 2. Then remove the DAF PWB.
- (If necessary, take off the wire, connector's etc.)

REMOVING THE SPEAKER

- After removing the rear cover.
1. Remove the 2 screws marked **(M)** as shown in Fig.1.
 2. Withdraw the speaker backward.
 3. Follow the same steps when removing the other hand speaker.

CHECKING THE MAIN PW BOARD

1. To check the back side of the MAIN PW Board.
 - 1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
 - 2) Erect the chassis vertically so that you can easily check the back side of the MAIN PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

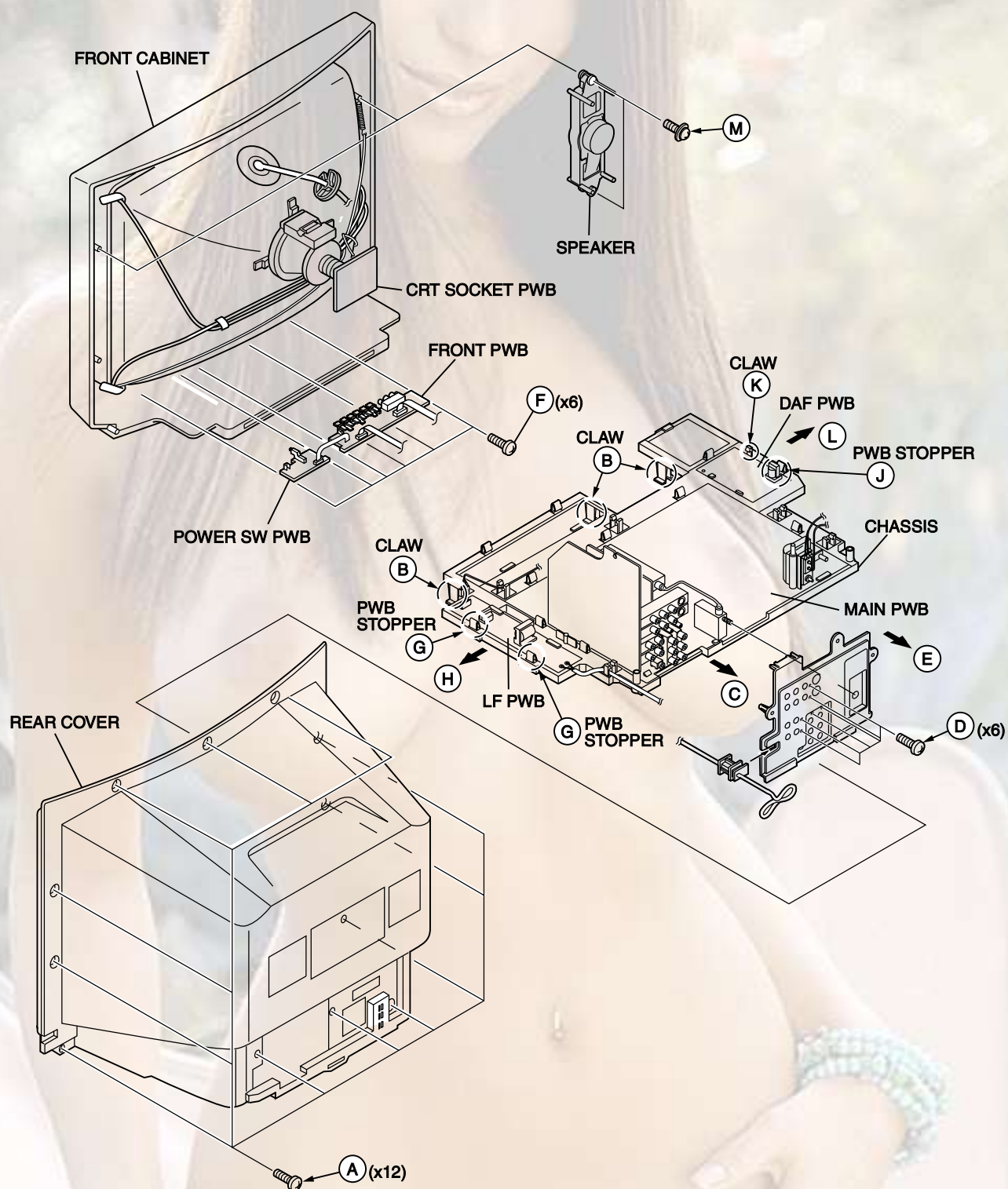


Fig.1

MEMORY IC REPLACEMENT

1. Memory IC

This model use a memory IC.

This memory IC stores data for proper operation of the video and deflection circuits.

When replacing, be sure to use an IC containing this (initial value) data.

2. Memory IC replacement procedure

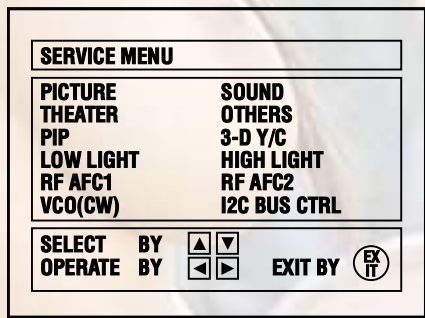
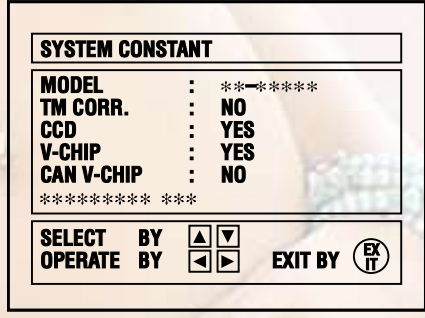
Procedure	Screen display
(1) Power off Switch off the power and disconnect the power cord from the outlet.	
(2) Replace the memory IC Initial value must be entered into the new IC.	
(3) Power on Connect the power cord to the outlet and switch on the power.	
(4) System constant check and setting 1) Press SLEEP TIMER key and, while the indication of "SLEEP TIMER 0 MIN." is being displayed, press DISPLAY key and VIDEO STATUS key on the remote control unit simultaneously. 2) The SERVICE MENU screen of Fig.1 is displayed. 3) While the SERVICE MENU is displayed, again simultaneously press the DISPLAY and VIDEO STATUS keys to display the Fig.2 SYSTEM CONSTANT screen. 4) Refer to the SYSTEM CONSTANT table and check the setting items. Where these differ, select the setting item with the MENU UP/DOWN key and adjust the setting with the MENU LEFT/RIGHT keys. (The letters of the selected item are displayed in yellow.) 5) After adjusting, release the MENU LEFT/RIGHT key to store the setting value. 6) Press the EXIT key twice to return the normal screen.	 The SERVICE MENU screen displays two columns of settings. The left column includes PICTURE, THEATER, PIP, LOW LIGHT, RF AFC1, and VCO(CW). The right column includes SOUND, OTHERS, 3-D Y/C, HIGH LIGHT, RF AFC2, and I2C BUS CTRL. At the bottom, there are controls for SELECT BY (up/down arrows), OPERATE BY (left/right arrows), and EXIT BY (EXIT key icon).
(5) Receive channel setting Refer to the OPERATING INSTRUCTIONS(USER'S GUIDE) and set the receive channels (Channels Preset) as described.	
(6) User settings Check the user setting items according to Table 2. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.	 The SYSTEM CONSTANT screen displays a list of settings with their current values. MODEL is set to *****. TM CORR. is NO. CCD is YES. V-CHIP is YES. CAN V-CHIP is NO. At the bottom, there are controls for SELECT BY (up/down arrows), OPERATE BY (left/right arrows), and EXIT BY (EXIT key icon).
(7) SERVICE MENU setting Verify what to set in the SERVICE MENU, and set whatever is necessary.(Fig.1) Refer to the SERVICE ADJUSTMENT for setting.	

TABLE 1 (System Constant setting)

Setting item	Setting content	Setting value
MODEL		AV-27F802
TM CORR.	☐ → YES → NO ☐	NO
CCD	☐ → YES → NO ☐	YES
V-CHIP	☐ → YES → NO ☐	YES
CAN V-CHIP	☐ → YES → NO ☐	NO

TABLE 2 (User setting value)

Setting item	Setting value
1. Use remote controller keys	
POWER	OFF
CHANNEL	CH-02
VOLUME	5
INPUT	TV
HYPER SURROUND	OFF
BBE	ON
DISPLAY	OFF
SLEEP TIMER	0
VIDEO STATUS	STANDARD
PIP SOURCE	CH-04
PIP ON (PIP POSITION)	LEFT LOWR SIDE
2. Setting of MENU	
PICTURE ADJUST	
TINT	CENTER
COLOR	CENTER
PICTURE	CENTER
BRIGHT	CENTER
DETAIL	CENTER
NOISE MUTING	ON
SET VIDEO STATUS	ALL CENTER
SOUND ADJUST	
BASS	CENTER
TREBLE	CENTER
BALANCE	CENTER
MTS	STEREO
CLOCK/TIMERS	
SET CLOCK	Unnecessary to set
ON/OFF TIMER	NO
INITIAL SETUP	
TV SPEAKER	ON
AUDIO OUT	FIX
V4 COMPONENT-IN	NO
LANGUAGE	ENG
CLOSED CAPTION	OFF
AUTO TUNER SETUP	TUNER MODE : AIR
CHANNEL SUMMARY	Unnecessary to set
V-CHIP	OFF
SET LOCK CODE	Unnecessary to set

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

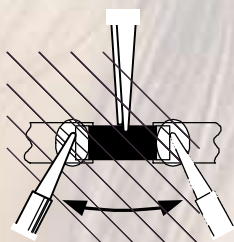
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

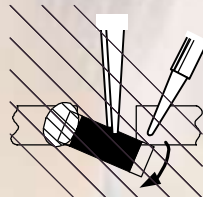
1. How to remove Chip parts

◆ Resistors, capacitors, etc.

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



- (2) Shift with tweezers and remove the chip part.

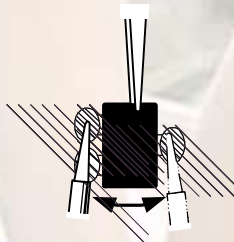


◆ Transistors, diodes, variable resistors, etc.

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

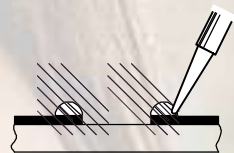


Note : After removing the part, remove remaining solder from the pattern.

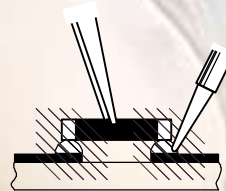
2. How to install Chip parts

◆ Resistors, capacitors, etc.

- (1) Apply solder to the pattern as indicated in the figure.

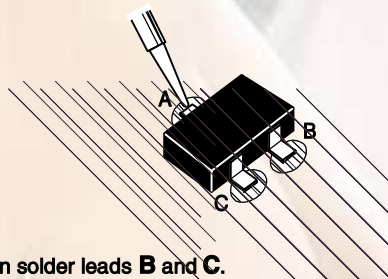


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

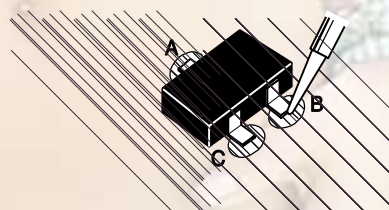


◆ Transistors, diodes, variable resistors, etc.

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead A as indicated in the figure.



- (4) Then solder leads B and C.



SERVICE ADJUSTMENTS

ADJUSTMENT PREPARATION:

1. You can make the necessary adjustments for this unit with either the remote control unit or with the adjustment equipment and parts as given below.
2. Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
3. Make sure that AC power is turned on correctly.
4. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts, which are not specified in the list for this adjustment-variable resistors, transformers, capacitors, etc.
7. Presetting before adjustment.

Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.

- User mode setting position

VIDEO STATUS	STANDARD
HYPER SURROUND	OFF
BASS, TREBLE, BALANCE	CENTER
TINT, COLOR, PICTURE, BRIGHT, DETAIL	CENTER

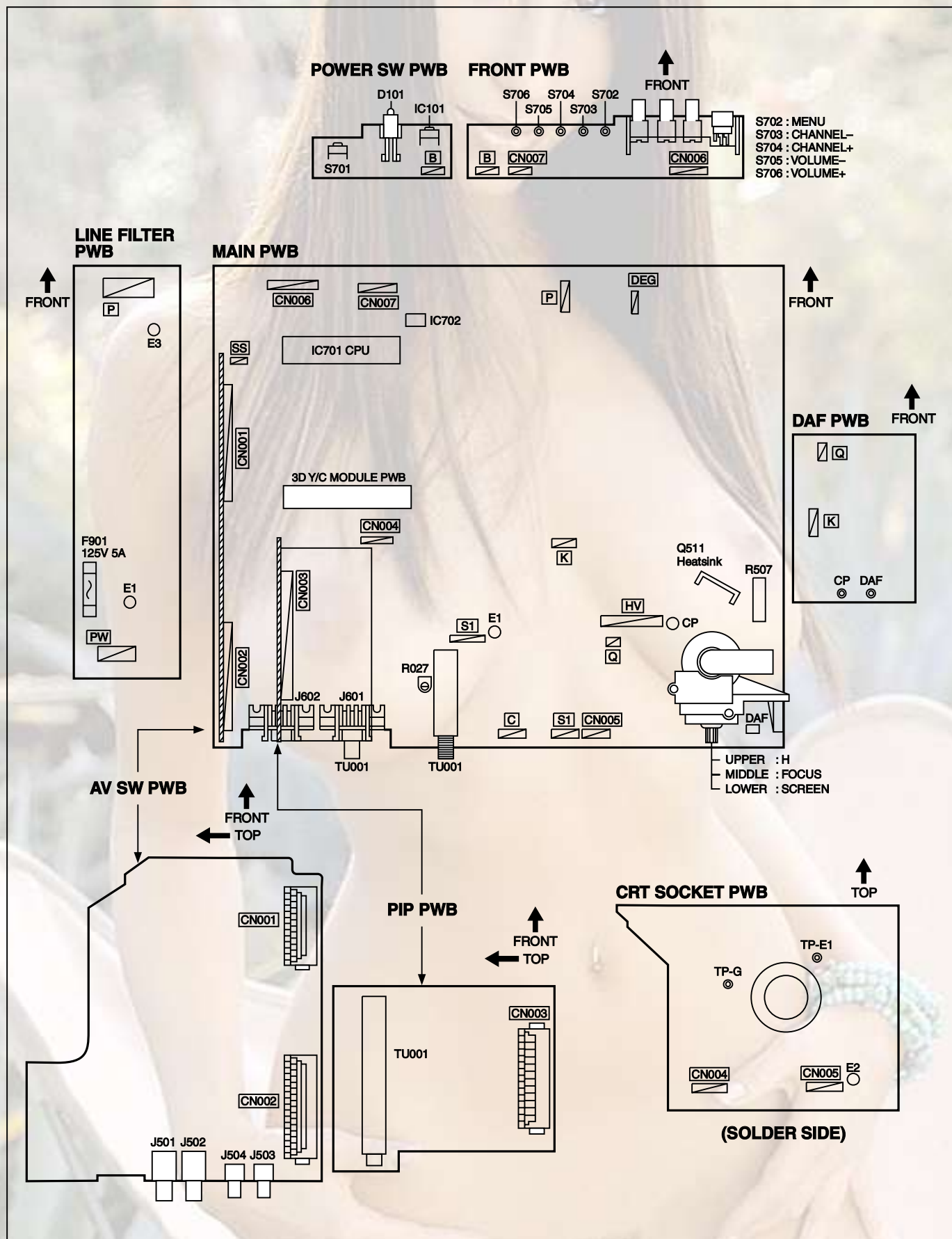
MEASURING INSTRUMENT

1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [NTSC]
4. Remote control unit
5. TV audio multiplex signal generator
6. Frequency counter
7. Resistor (1M Ω)

ADJUSTMENT ITEMS

- Check of B1 POWER SUPPLY
- RF AGC adjustment
- FOCUS adjustment
- DEFLECTION adjustment
 - V.CENTER and TRAPEZIUM adjustment
 - V-SIZE and V-LINEARITY adjustment
 - H SIZE and H POSITION adjustment
 - SIDE PIN and CORNER PIN adjustment
 - PIP DISPLAY POSITION adjustment
- VIDEO / CHROMA adjustment
 - WHITE BALANCE (Low Light) adjustment
 - WHITE BALANCE (High Light) adjustment
 - SUB BRIGHT adjustment
 - SUB CONTRAST adjustment
 - SUB COLOR adjustment
 - SUB TINT adjustment
 - PIP HIGH LIGHT WHITE BALANCE Adjustment
- MTS circuit adjustment
 - INPUT LEVEL check
 - STEREO VCO adjustment
 - SAP VCO adjustment
 - FILTER check
 - SEPARATION adjustment

ADJUSTMENT LOCATIONS



BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

In general, basic setting (adjustments) items or verifications are performed in the SERVICE MENU.

- PICTURE This sets the setting values (adjustment values) of the VIDEO/CHROMA and DEFLECTION circuits.
- SOUND This sets the setting values (adjustment values) of the AUDIO circuit.
- THEATER This is used when the THEATER MODE is adjusted.
- OTHERS This is used when the OTHERS MODE is adjustment.
- PIP This sets the setting values (adjustment values) of the PIP circuit.
- 3-D Y/C This sets the setting values (adjustment values) of the 3-D Y/C circuit.
- LOW LIGHT This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- HIGH LIGHT This sets the setting values (adjustment values) of the WHITE BALANCE circuit.
- RF AFC1 This is used when the RF AFC1 MODE is verified. [Do not adjust]
- RF AFC2 This is used when the RF AFC2 MODE is verified. [Do not adjust]
- VCO (CW) This is not used for AV-27F802.
- I2C BUS CTRL This is used when ON/OFF of the I2C BUS CTRL is set. [Fixed ON]

3. Basic Operations of the SERVICE MENU

(1) How to enter the SERVICE MENU.

Press **SLEEP TIMER** key and, while the indication of “**SLEEP TIMER 0 MIN.**” is being displayed, press **DISPLAY** key and **VIDEO STATUS** key on the remote control unit simultaneously to enter the **SERVICE MENU** screen ① shown in the next figure page.

(2) SERVICE MENU screen selection

Press the UP / DOWN key of the MENU to select any of the following items.

(The letters of the selected items are displayed in yellow.)

- | | |
|-------------|----------------|
| ● PICTURE | ● SOUND |
| ● THEATER | ● OTHERS |
| ● PIP | ● 3-D Y/C |
| ● LOW LIGHT | ● HIGH LIGHT |
| ● RF AFC1 | ● RF AFC2 |
| ● VCO(CW) | ● I2C BUS CTRL |

(3) Enter the any setting (adjustment) mode

● PICTURE, SOUND, OTHERS and 3-D Y/C mode

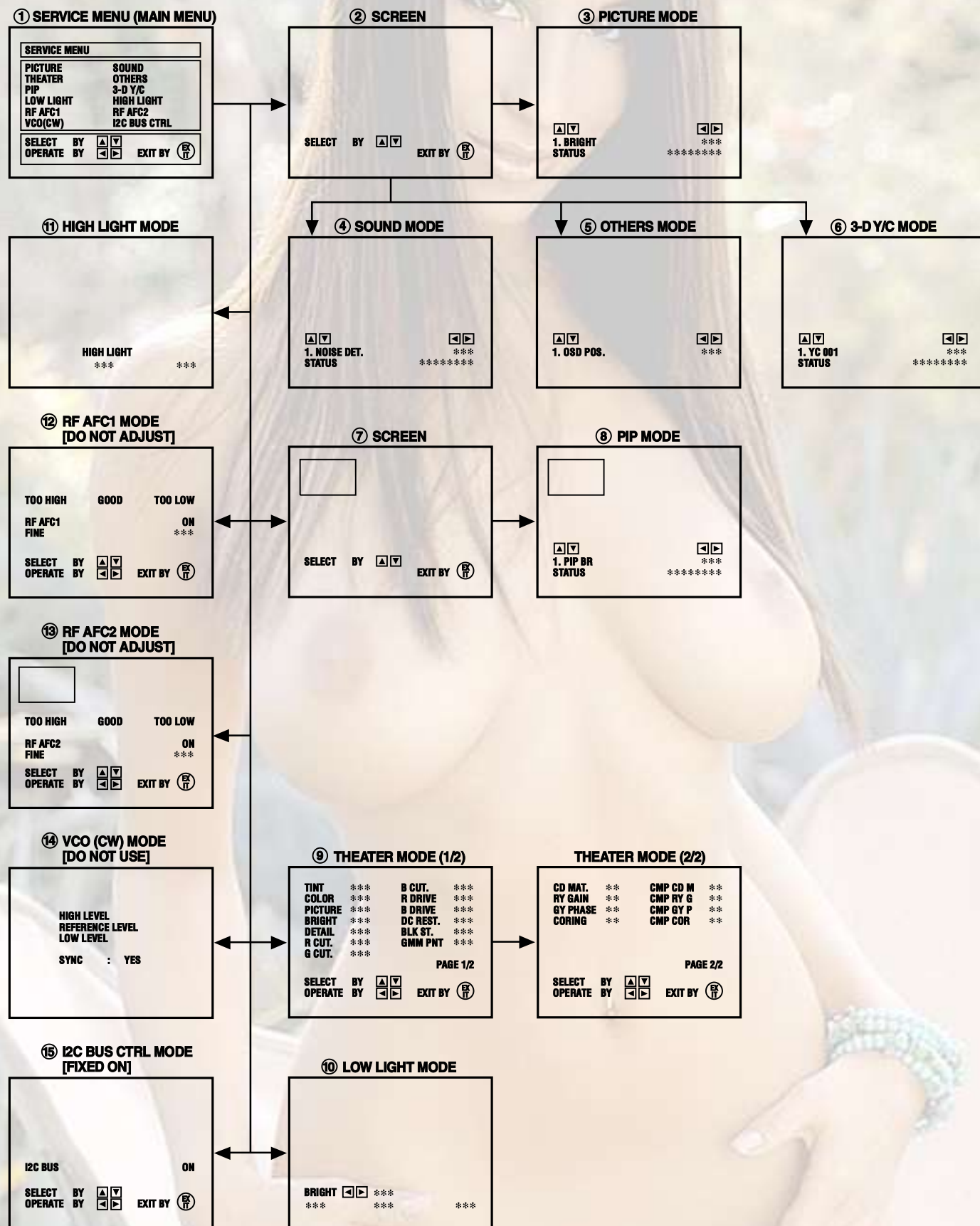
- 1) If select any of PICTURE, SOUND, OTHERS or 3-D Y/C items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ② will be displayed as shown in figure page later.
- 2) Then the UP / DOWN key is pressed, the PICTURE mode screen ③ or the SOUND mode screen ④ or the OTHER mode screen ⑤ or the 3-D Y/C mode screen ⑥ is displayed, and the PICTURE, SOUND, OTHERS or 3-D Y/C setting can be performed.

● PIP mode

- 1) If select the PIP item, and the LEFT/RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screen ⑦ will be displayed as shown in figure page later.
- 2) Then the UP/DOWN key is pressed, the PIP mode screen ⑧ is displayed, and the PIP setting can be performed.

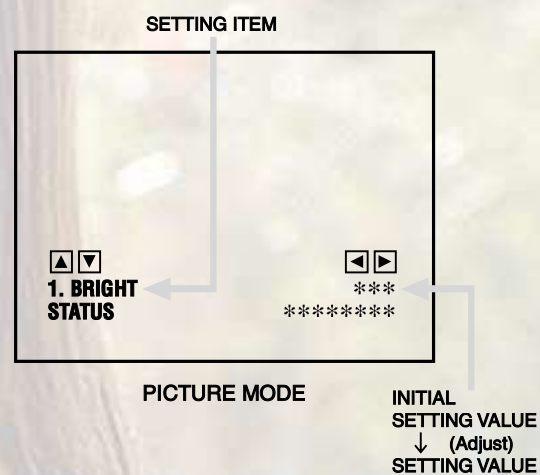
● THEATER, LOW LIGHT, HIGH LIGHT, RF AFC1, RF AFC2, VCO(CW) and I2C BUS CTRL mode

- 1) If select any of THEATER / LOW LIGHT / HIGH LIGHT / RF AFC1 / RF AFC2 / VCO (CW) / I2C BUS CTRL items, and the LEFT / RIGHT key is pressed from SERVICE MENU (MAIN MENU), the screens ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ will be displayed as shown in figure page later.
- 2) Then the settings or verifications can be performed.



(4) Setting method

- 1) UP / DOWN key of the MENU
Select the SETTING ITEM.
- 2) LEFT / RIGHT key of the MENU
Setting (adjust) the SETTING VALUE of the SETTING ITEM.
When the key is released the SETTING VALUE will be stored (memorized).
- 3) EXIT key
Returns to the previous screen.

**(5) Releasing SERVICE MENU**

- 1) After returning to the SERVICE MENU upon completion of the setting (adjustment) work, press the EXIT key again.

★ The settings for LOW LIGHT and HIGH LIGHT are described in the WHITE BALANCE page of ADJUSTMENT.

INITIAL SETTING VALUE OF SERVICE MENU

1. Adjustment of the SERVICE MENU is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.
2. Do not change the initial setting values of the setting (Adjustment) items not listed in "ADJUSTMENT".

● PICTURE MODE

- ☆ The four setting items in the video mode No.6 EXT BRI., No.7 EXT PIC., No.8 EXT COL. and No.9 EXT TINT are linked to the items in the TV MODE No.1 BRIGHT, No.2 PICTURE, No.3 COLOR and No.4 TINT, respectively. When the setting items in the TV mode are adjusted, the values in the setting items in the video mode are revised automatically to the same values in the TV mode.(The initial setting values given in () are off-set values.)
- ☆ When the four items (No.6, 7, 8 and 9) are adjusted in the video mode, the setting values in each item are revised independently.

No.	Setting (Adjustment) item	Variable range	Initial setting value
1	BRIGHT	000 ~ 127	063
2	PICTURE	000 ~ 127	060
3	COLOR	000 ~ 127	072
4	TINT	000 ~ 127	059
5	TV DETAIL	000 ~ 063	050
6	EXT BRIGHT	±025	(-001)
7	EXT PICT.	±025	(±000)
8	EXT COLOR	±025	(±000)
9	EXT TINT	±025	(-007)
10	EXT DETAIL	000 ~ 063	050
11	CMP BRIGHT	±025	+003
12	CMP PICT.	±025	±000
13	CMP COLOR	000 ~ 127	088
14	CMP TINT	000 ~ 127	053
15	CMP DETAIL	000 ~ 063	050
16	CMP R CUT	±025	±000
17	CMP G CUT	±025	±000
18	CMP B CUT	±025	±000
19	CMP R DRV	±025	±000
20	CMP B DRV	±025	±000
21	WPL	000 / 001	001
22	B. B. SW	000 / 001	000
23	C TRAP	000 / 001	000
24	CORING	000 / 001	000
25	CMP CORING	000 / 001	001
26	TV SHARPF	000 / 001	001
27	EXT SHARPF	000 / 001	001
28	CMP SHARPF	000 / 001	001
29	RGB CONT	000 ~ 063	028
30	TV ID SEN S	000 / 001	000
31	EXT ID SEN	000 / 001	000
32	F ID	000 / 001	000
33	Y MUTE	000 / 001	000
34	AUDIO ATT	000 ~ 127	127
35	SUB CONT	000 ~ 015	008

No.	Setting (Adjustment) Item	Variable range	Initial setting value
36	R Y GAIN	000 / 001	001
37	CMP R Y GA	000 / 001	001
38	G Y PHASE	000 / 001	001
39	CMP G Y PH	000 / 001	000
40	CD MATRIX	000 ~ 003	002
41	CMP CD MAT	000 ~ 003	003
42	BLACK ST	000 ~ 003	001
43	DC REST	000 ~ 003	001
44	COLOR GMM	000 / 001	000
45	UV/CBCR	000 / 001	000
46	AT FLESH	000 / 001	000
47	ABL GAIN	000 ~ 003	000
48	ABL ST PNT	000 ~ 003	003
49	RGB ABCL	000 / 001	001
50	TV BPF TOF	000 / 001	001
51	EXT BPF TOF	000 / 001	001
52	GMM PNT	000 ~ 003	003
53	SVM GAIN	000 ~ 003	002
54	CMP SVM GA	000 ~ 003	002
55	SVM PHASE	000 / 001	000
56	AUDIO SW	000 / 001	000
57	BUZZ	000 / 001	000
58	IF FREQ	000 / 001	000
59	RF AGC	000 ~ 063	045
60	AFT MUTE	000 / 001	000
61	AFT SENS	000 / 001	000
62	R/G DRV SW	000 / 001	001
63	BLK SW	000 / 001	000
64	V S COR	000 ~ 015	012
65	V LIN	000 ~ 015	010
66	V SIZE	000 ~ 127	063
67	V AGC	000 / 001	000
68	V CENTER	000 ~ 063	035
69	TV AFC	000 ~ 003	002
70	EXT AFC	000 ~ 003	002
71	V POSI	000 ~ 007	000
72	H POSI	000 ~ 031	024
73	H SIZE	000 ~ 063	023
74	TV V FREQ	000 ~ 003	000
75	EXT V FREQ	000 ~ 003	000
76	SIDE PIN	000 ~ 063	020
77	STAND BY	000 / 001	000
78	TRAPEZ	000 ~ 063	038
79	V RAMP REF	000 / 001	001
80	V 48HZ	000 / 001	000
81	V EHT	000 ~ 007	000
82	TOP PIN	000 ~ 031	015

No.	Setting (Adjustment) Item	Variable range	Initial setting value
83	H EHT	000 ~ 007	000
84	BTM PIN	000 ~ 031	012
85	V BLK LOW	000 ~ 003	000
86	V BLK UP	000 ~ 003	003
87	CAPTION IN	000 / 001	000
88	H BLK	000 / 001	000
89	SCREEN	000 / 001	000
90	ACB SW	000 / 001	000
91	ACB PULSE	000 ~ 015	007
92	OVER MODU	000 / 001	001
93	CB/CR FIL	000 / 001	001
94	TEST	000 ~ 255	128
95	RF S/N TY	000 ~ 002	000
96	EXT S/N TY	000 ~ 002	000
97	RF SN YC E	000 ~ 255	000
98	RF SN YC F	000 ~ 255	000
99	RF SN YC G	000 ~ 063	000
100	RF SN YC H	000 ~ 255	000
101	EX SN YC E	000 ~ 255	000
102	EX SN YC F	000 ~ 255	000
103	EX SN YC G	000 ~ 063	000
104	EX SN YC H	000 ~ 255	000
105	RF SN VC 1	000 ~ 063	000
106	RF SN VC 2	000 ~ 063	000
107	RF SN VC 3	000 ~ 063	000
108	RF SN VC 4	000 ~ 063	000
109	EX SN VC 1	000 ~ 063	000
110	EX SN VC 2	000 ~ 063	000
111	EX SN VC 3	000 ~ 063	000
112	EX SN VC 4	000 ~ 063	000
113	COR LEVEL	000 ~ 003	000
114	VNR CHK	000 ~ 255	000
115	YC SN TIME	000 ~ 255	000
116	VC SN TIME	000 ~ 255	000
117	VM DATA A	±127	±000
118	VM DATA B	±127	±000
119	VM DATA C	±127	±000
120	VM DATA D	000 / 001	000
121	VC SN STOP	000 ~ 255	000

● SOUND MODE

No.	Setting (Adjustment) Item	Variable range	Initial setting value
1	NOISE DET.	000 / 001	001
2	IN LEVEL	000 ~ 063	025
3	FH MONITOR	000 / 001	000
4	STEREO VCO	000 ~ 063	030
5	PILOT CAN.	000 / 001	000
6	FILTER	000 ~ 063	030
7	LOW SEP.	000 ~ 063	028
8	HI SEP.	000 ~ 063	025
9	5FH MON.	000 / 001	000
10	SAP VCO	000 ~ 063	003
11	IN GAIN	000 / 001	000
12	FIL. OFFSET	±010	±000
13	BBE BASS	±010	-001
14	BBE TRE	±010	-001

● THEATER MODE

Setting (Adjustment) Item	Variable range	Initial setting value
TINT	±20	-06
COLOR	±20	±00
PICTURE	±50	-15
BRIGHT	±20	±00
DETAIL	±20	±00
R CUT.	±20	±00
G CUT.	±20	±00
B CUT.	±20	±00
R DRIVE	±99	+09
B DRIVE	±99	-15
DC REST.	00 ~ 03	01
BLK ST.	00 ~ 03	00
GMM PNT	00 ~ 03	01
CD MATRIX	00 ~ 03	01
RY GAIN	00 / 01	01
GY PHASE	00 / 01	00
CORING	00 / 01	01
CMP CD M	00 ~ 03	00
CMP RY G	00 / 01	00
CMP GY P	00 / 01	01
CMP COR	00 / 01	01

● OTHERS MODE

No.	Setting (Adjustment) Item	Variable range	Initial setting value
1	OSD POS.	000 ~ 007	002
2	CCD POS.	000 ~ 015	003
3	EOSEL	000 / 001	001
4	MENU COLOR	000 ~ -030	-010
5	MENU PICT.	000 ~ -030	-010
6	MENU BRI.	000 ~ -030	-010

● PIP MODE

No.	Setting (Adjustment) Item	Variable range	Initial setting value
1	PIP BR	000 ~ 015	003
2	PIP PICT	000 ~ 075	040
3	PIP TINT	000 ~ 063	035
4	PIP COL	000 ~ 015	009
5	P R CUT	000 ~ 015	003
6	P G CUT	000 ~ 015	000
7	P B CUT	000 ~ 015	002
8	P R DR	000 ~ 255	052
9	P G DR	000 ~ 255	055
10	P B DR	000 ~ 255	060
11	LEFT POS.	000 ~ 255	019
12	RIGHT POS.	000 ~ 255	020
13	UPPER POS.	000 ~ 127	012
14	LOWER POS.	000 ~ 127	011
15	PICT LOCK	000 / 001	001
16	SELDEL	000 ~ 015	000
17	AGCFIX	000 / 001	001
18	AGCADST	000 / 001	000
19	AGC	000 ~ 015	007
20	VSPDEL	000 ~ 031	000
21	VSPISQ	000 / 001	001
22	YCOR	000 / 001	001
23	XFREQF	000 / 001	001
24	WTCHDG	000 / 001	001
25	COLON	000 / 001	000
26	ACQNEW	000 / 001	000
27	DSTDET	000 / 001	001
28	CRIBEOK	000 / 001	000
29	FCBEOK	000 / 001	000
30	NOCRID	000 / 001	000
31	NONSED	000 / 001	000

● 3-DY/C MODE

No.	Setting (Adjustment) Item	Variable range	Initial setting value
1	YC 001	000 ~ 003	001
2	YC 002	000 ~ 003	001
3	YC 003	000 ~ 003	001
4	YC 004	000 ~ 003	000
5	YC 005	000 ~ 003	000
6	YC 006	000 ~ 003	000
7	YC 007	000 ~ 003	003
8	YC 008	000 ~ 003	000
9	YC 009	000 ~ 003	001
10	YC 010	000 ~ 003	000
11	YC 011	000 ~ 007	004
12	YC 012	000 ~ 007	002
13	YC 013	000 ~ 015	002
14	YC 014	000 ~ 015	010
15	YC 015	000 ~ 015	002
16	YC 016	000 ~ 015	004
17	YC 017	000 / 001	000
18	YC 018	000 / 001	000
19	YC 019	000 ~ 003	002
20	YC 020	000 / 001	000
21	YC 021	000 / 001	000
22	YC 022	000 ~ 003	002
23	YC 023	000 / 001	000
24	YC 024	000 / 001	000
25	YC 025	000 / 001	000
26	YC 026	000 ~ 003	000
27	YC 027	000 ~ 003	001
28	YC 028 N/A	000 ~ 003	001
29	YC 029	000 ~ 003	001
30	YC 030	000 ~ 003	001
31	YC 031	000 ~ 003	002
32	YC 032	000 / 001	000
33	YC 033	000 ~ 007	000
34	YC 034	000 ~ 015	000
35	YC 035	000 ~ 007	002
36	YC 036	000 ~ 031	015
37	YC 037	000 ~ 003	000
38	YC 038	000 ~ 015	010
39	YC 039	000 ~ 003	001
40	YC 040	000 ~ 003	001
41	YC 041	000 / 001	000
42	YC 042	000 / 001	000
43	YC 043	000 / 001	000
44	YC 044	000 / 001	001
45	YC 045	000 ~ 015	003
46	YC 046	000 ~ 015	012
47	YC 047	000 ~ 015	008

No.	Setting (Adjustment) Item	Variable range	Initial setting value
48	YC 048	000 ~ 015	004
49	YC 049	000 ~ 015	010
50	YC 050	000 / 001	001
51	YC 051	000 / 001	001
52	YC 052	000 ~ 003	000
53	YC 053	000 / 001	000
54	YC 054	000 / 001	001
55	YC 055	000 / 001	001
56	YC 056	000 / 001	001
57	YC 057	000 ~ 015	000
58	YC 058	000 / 001	000
59	YC 059	000 / 001	001
60	YC 060	000 ~ 003	000
61	YC 061	000 ~ 015	000
62	YC 062 DBL	000 ~ 007	002
63	YC 063 N/A	000 ~ 015	002
64	YC 064 N/A	000 ~ 015	004
65	YC 065 N/A	000 ~ 015	002
66	YC 066 N/A	000 ~ 015	004
67	YC 067	000 / 001	000
68	YC 068	000 / 001	000
69	YC 069	000 / 001	000
70	YC 070 FIX	000 ~ 003	000
71	YC 071	000 / 001	000
72	YC 072	000 / 001	000
73	YC 073	000 / 001	001
74	YC 074 FIX	000 / 001	000
75	YC 075 FIX	000 / 001	000
76	YC 076	000 / 001	001
77	YC 077 FIX	000 / 001	000
78	YC 078 FIX	000 / 001	000
79	YC 079 FIX	000 ~ 007	005
80	YC 080 FIX	000 ~ 015	000
81	YC 081 FIX	000 ~ 015	008
82	YC 082 FIX	000 ~ 015	004
83	YC 083 FIX	000 ~ 015	004
84	YC 084 DBL	000 ~ 255	112
85	YC 085 DBL	000 ~ 255	008
86	YC 086	000 / 001	001
87	YC 087	000 ~ 003	003
88	YC 088	000 / 001	001
89	YC 089	000 / 001	000
90	YC 090	000 / 001	000
91	YC 091	000 / 001	000
92	YC 092 N/A	000 / 001	000
93	YC 093 N/A	000 / 001	000
94	YC 094 DBL	000 ~ 003	001

No.	Setting (Adjustment) Item	Variable range	Initial setting value
95	YC 095 DBL	000 / 001	001
96	YC 096 DBL	000 / 001	001
97	YC 097 DBL	000 / 001	000
98	YC 098 DBL	000 / 001	000
99	YC 099 DBL	000 ~ 003	000
100	YC 100 DBL	000 ~ 003	000
101	YC 101 DBL	000 / 001	000
102	YC 102 DBL	000 / 001	000
103	YC 103 DBL	000 / 001	001
104	YC 104 DBL	000 / 001	000
105	YC 105 DBL	000 / 001	000
106	YC 106 DBL	000 / 001	000
107	YC 107 DBL	000 ~ 007	002
108	3-D Y/C	000 / 001	001

● LOW LIGHT MODE

Setting (Adjustment) Item	Variable range	Initial setting value
R CUTOFF	0 ~ 255	85
G CUTOFF	0 ~ 255	85
B CUTOFF	0 ~ 255	85

● HIGH LIGHT MODE

Setting (Adjustment) Item	Variable range	Initial setting value
R DRIVE	0 ~ 127	60
B DRIVE	0 ~ 127	60

● RF AFC1 MODE

Setting (Adjustment) Item	Variable range	Initial setting value
RF AFC1 FINE	ON / OFF -77 ~ +77	ON $\pm \times \times$ (DO NOT ADJUST)

● RF AFC2 MODE

Setting (Adjustment) Item	Variable range	Initial setting value
RF AFC2 FINE	ON / OFF -77 ~ +77	ON $\pm \times \times$ (DO NOT ADJUST)

● I2C BUS CTRL MODE

Setting (Adjustment) Item	Variable range	Initial setting value
I2C BUS	ON/OFF	[FIXED ON] (DO NOT ADJUST)

ADJUSTMENTS

B1 POWER SUPPLY

Item	Measuring Instrument	Test point	Adjustment part	Description
Check of B1 POWER SUPPLY	DC Voltmeter	R507 C504 side (B1) Q511 heatsink (77)		1. Receive a black-and-white signal. 2. Connect the DC Voltmeter to R507 C504 side (B1) and Q511 heatsink (77). 3. Confirm that the voltage is $DC134V_{+2V}^{-2V}$.

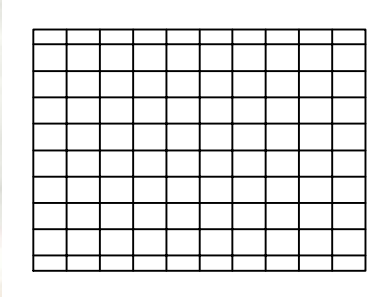
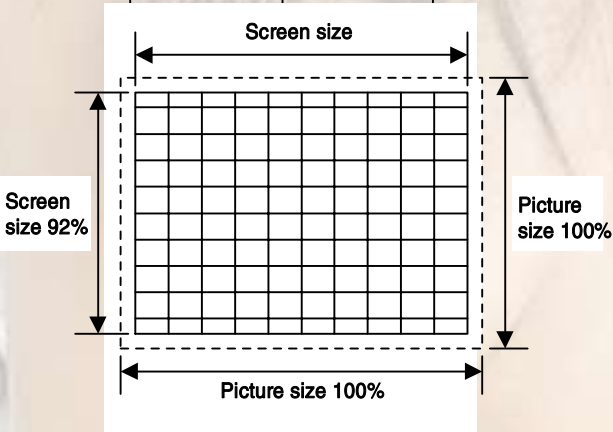
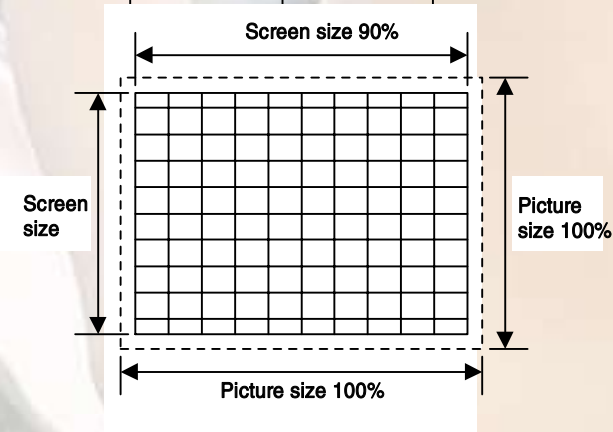
ADJUSTMENT OF RF AGC

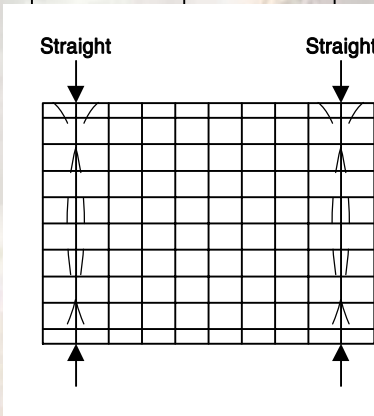
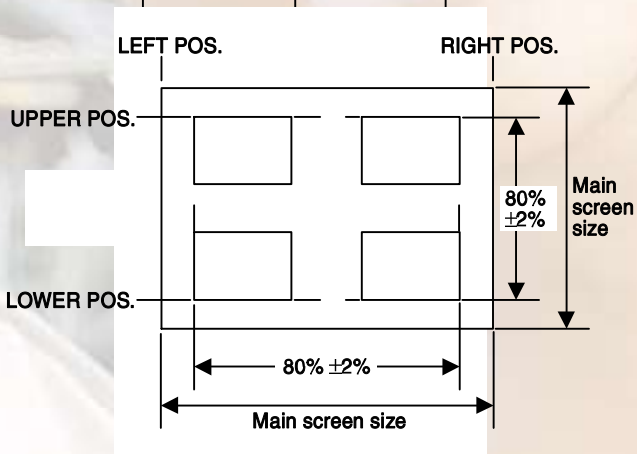
Item	Measuring Instrument	Test point	Adjustment part	Description
RF AGC adjustment			No.59 RF AGC	1. Receive a broadcast. 2. Select the No.19 RF AGC of the PICTURE MODE. 3. Press the MUTE key of the remote control unit and turn off color. 4. With the LEFT key of the remote control unit, get noise in the screen picture. (0 side of setting value) 5. Press the RIGHT key of the remote control unit and stop when noise disappears from the screen. 6. Change to other channels and make sure that there is no irregularity. 7. Press the MUTE key and get color out.

ADJUSTMENT OF FOCUS

Item	Measuring Instrument	Test point	Adjustment part	Description
FOCUS adjustment	Signal generator		FOCUS VR [In HVT] H VR [In HVT]	1. Receive a crosshatch signal. 2. While looking at the screen center, adjust the FOCUS VR so that the horizontal lines will be clear and in fine detail. 3. Adjust the H VR so that the vertical lines will be clear and in fine detail. 4. Make sure that the picture is in focus even when the screen gets darkened. Note: The final adjustment of convergence must be done after the FOCUS adjustment. (Convergence is changed by FOCUS adjustment.)

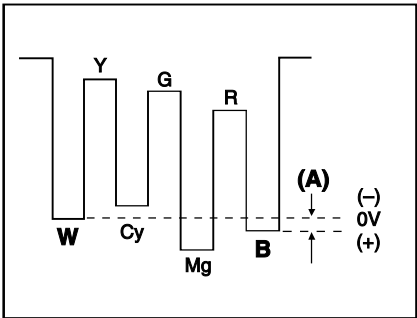
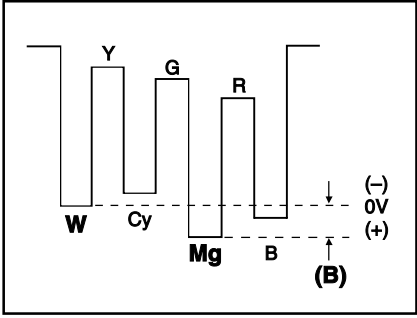
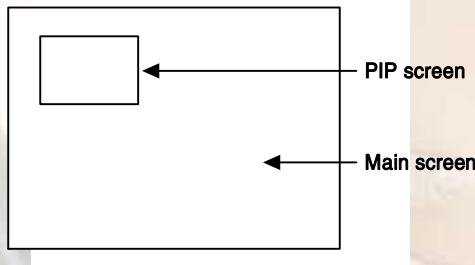
ADJUSTMENT OF DEFLECTION CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
V CENTER and TRAPEZIUM Adjustment	Signal generator		No.68 V CENTER No.78 TRAPEZ	1. Receive a crosshatch signal. 2. Adjust the No.68 V CENTER of the PICTURE MODE to be the same between the CRT vertical center and crosshatch vertical center. 3. Adjust the No.78 TRAPEZ of the PICTUER MODE to be the vertical lines straight. 4. Confirm the vertical lines to be straight. If it is not straight, adjust to be straight at the No.78 TRAPEZ.
				
V-SIZE and V-LINEARITY Adjustment	Signal generator		No.66 V SIZE No.65 V LIN	1. Receive a crosshatch signal. 2. Select the No.66 V SIZE of the PICTURE MODE to squeeze the laster. 3. Adjust the No.65 V LIN of the PICTURE MODE to be symmetrical. 4. Adjust the No.66 V SIZE until the vertical screen size is 92%.
				
H SIZE and H POSITION Adjustment	Signal generator		No.73 H SIZE No.72 H POSI	1. Receive a crosshatch signal. 2. Select the No.73 H SIZE of the PICTURE MODE. 3. Set the initial setting value of the No.73 H SIZE with the LEFT / RIGHT key of the remote control unit. 4. Adjust the No.73 H SIZE until the horizontal screen size is 90%. 5. Adjust the No.72 H POSI until the screen will be horizontally centered.
				

Item	Measuring instrument	Test point	Adjustment part	Description
SIDE PIN and CORNER PIN Adjustment	Signal generator		No.76 SIDE PIN No.82 TOP PIN No.84 BTM PIN	1. Receive a crosshatch signal. 2. Adjust such that vertical 2nd lines from left and right to be straight at the No.76 SIDE PIN of the PICTURE MODE. 3. Adjust the end of vertical 2nd lines from left and right to be straight at the No.82 TOP PIN and the No.84 BTM PIN of the PICTURE MODE.
				
PIP DISPLAY POSITION Adjustment			No.11 LEFT POS. No.12 RIGHT POS. No.13 UPPER POS. No.14 LOWER POS.	1. Receive a broadcast. 2. Select the PIP MODE from the SERVICE MENU. 3. Then adjust the PIP screen size so that it occupies $80\% \pm 2\%$ of the main screen area.
				

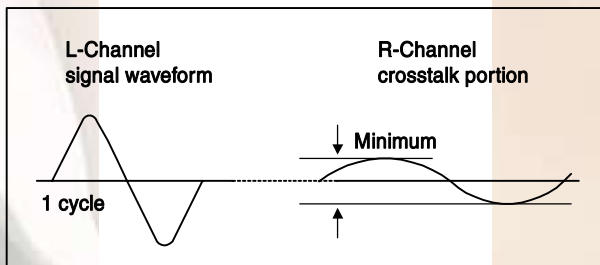
ADJUSTMENT OF VIDEO/CHROMA CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (Low Light) Adjustment	Signal generator		BRIGHT R CUTOFF G CUTOFF B CUTOFF SCREEN VR [In HVT]	1. Receive a black-and-white signal.(Color off) 2. Select the [LOW LIGHT] MODE from the SERVICE MENU. 3. Set the initial setting value of BRIGHT is 063 with the LEFT / RIGHT key of the remote control unit. 4. Set the initial setting value of R CUTOFF, G CUTOFF and B CUTOFF is 085 with the ④ to ⑨ key of the remote control unit. 5. Display a single horizontal line by pressing the ① key of the remote control unit. 6. Turn the screen VR all the way to the left. 7. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears faintly. 8. Adjust the two colors which did not appear until the single horizontal line that is displayed becomes white using the ④ to ⑨ keys of the remote control unit. 9. Turn the screen VR to where the single horizontal line glows faintly. 10. Press the ② key to return to the regular screen. * The ③ EXIT key is the cancel key for the WHITE BALANCE.
WHITE BALANCE (High Light) Adjustment	Signal generator		R DRIVE B DRIVE	1. Receive a black-and-white signal. (Color off) 2. Select the [HIGH LIGHT] MODE from the SERVICE MENU. 3. Set the initial setting value of R DRIVE and B DRIVE is 060 with the ④, ⑥, ⑦ and ⑨ keys of the remote control unit. 4. Adjust the screen until it becomes white using the ④, ⑥, ⑦ and ⑨ keys of the remote control unit. * The ③ (EXIT) key is the cancel key for the WHITE BALANCE.
SUB BRIGHT Adjustment			No.1 BRIGHT	1. Receive a broadcast. 2. Select the No.1 BRIGHT of the PICTURE MODE. 3. Set the initial setting value of the No.1 BRIGHT with the LEFT / RIGHT key of the remote control unit. 4. If the brightness is not best with the initial setting value, make fine adjustment of the No.1 BRIGHT until you get the optimum brightness.

Item	Measuring instrument	Test point	Adjustment part	Description
SUB CONTRAST Adjustment			No.2 PICTURE	1. Receive a broadcast. 2. Select the No.2 PICTURE of the PICTURE MODE. 3. Set the initial setting value of the No.2 PICTURE with the LEFT / RIGHT key of the remote control unit. 4. If the contrast is not best with the initial setting value, make fine adjustment of the No.2 PICTURE until you get the optimum contrast.
SUB COLOR adjustment	Signal generator Oscilloscope Remote control unit	TP-B TP-E1() [CRT SOCKET PWB]	No.3 COLOR	[Method of adjustment without measuring instrument] 1. Receive a broadcast. 2. Select the No.3 COLOR of the PICTURE MODE. 3. Set the initial setting value of the No.3 COLOR with the LEFT/RIGHT key of the remote control unit. 4. If the color is not the best with the Initial setting value, make fine adjustment of the No.3 COLOR until you get the optimum color. [Method of adjustment using measuring instrument] 1. Input the full field color bar signal (75% white). 2. Select the No.3 COLOR of the PICTURE MODE. 3. Set the initial setting value of the No.3. COLOR with the LEFT/RIGHT key of the remote control unit. 4. Connect the oscilloscope between TP-B and TP-E1. 5. Adjust COLOR and bring the value of (A) in the illustration to the voltage -5V (V_{WB}).
				
SUB TINT adjustment	Signal generator Oscilloscope Remote control unit	TP-B TP-E1() [CRT SOCKET PWB]	No.4 TINT	[Method of adjustment without measuring instrument] 1. Receive a broadcast. 2. Select the No.4 TINT of the PICTURE MODE. 3. Set the initial setting value of the No.4 TINT with the LEFT/RIGHT key of the remote control unit. 4. If the tint is not the best with the initial setting value, make fine adjustment of the No.4 TINT until you get the optimum tint. [Method of adjustment using measuring instrument] 1. Input the full field color bar signal (75% white). 2. Select the No.4 TINT of the PICTURE MODE. 3. Set the initial setting value of the No.4 TINT with the LEFT/RIGHT key to the remote control unit. 4. Connect the oscilloscope between TP-B and TP-E1. 5. Adjust TINT and bring the value of (B) in the illustration to the voltage +4V (V_{W-Mg}).
				
PIP HIGH LIGHT WHITE BALANCE	Signal generator		No.8 P R DR No.10 P B DR	1. Receive a black-and-white signal. (Color off) 2. Select the PIP MODE from the SERVICE MENU. 3. Then adjust the white color of the PIP screen using the No. 8 P R DR and the No. 10 P B DR of the PIP MODE so that it is the same brightness as the main screen.
				

ADJUSTMENT OF MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL check			No.2 IN LEVEL	1. Select the No.2 IN LEVEL of the SOUND MODE. 2. Verify that the No.2 IN LEVEL is set at its initial setting value.
MTS STEREO VCO adjustment	Signal generator Frequency counter	[S2] Connector 5 pin AUDIO R 2 pin GND	No.3 FH MONITOR No.4 STEREO VCO	1. Receive a RF signal (nonmodulated sound signal) from the antenna terminal. 2. Select the No.3 FH MONITOR of SOUND MODE, and change the setting value from 0 to 1. 3. Connect the Frequency Counter to pin 5 of [S2] connector and GND (Pin 2 of [S2] connector). 4. Select the No.4 STEREO VCO. 5. Set the initial setting value of the No.4 STEREO VCO with the LEFT/RIGHT key of the remote control unit. 6. Adjust the No.4 STEREO VCO so that the frequency counter will display $15.73\text{kHz} \pm 0.1\text{kHz}$. 7. Select the No.3 FH MONITOR of the SOUND MODE, and reset the setting value from 1 to 0.
MTS SAP VCO adjustment	Signal generator Frequency counter	[S2] Connector 3 pin TP_952.5 2 pin GND 5 pin AUDIO_R	No.9 5FH MON. No.10 SAP VCO	1. Receive a RF signal (non modulated sound signal) from the antenna terminal. 2. Connect between pin 3 of [S2] connector and GND (Pin 2 of [S2] connector) through $1\text{M}\Omega$ Resistor. 3. Select the No.9 5FH MON. of the SOUND MODE, and reset the setting value from 0 to 1. 4. Connect the Frequency Counter to pin 5 of [S2] connector and GND (Pin 2 of [S2] connector) . 5. Select the No.10 SAP VCO. 6. Set the initial setting value of the No.10 SAP VCO with the LEFT/RIGHT key of the remote control unit. 7. Adjust the No.10 SAP VCO so that the frequency counter will display $78.67\text{kHz} \pm 0.5\text{kHz}$. 8. Select the No.9 5FH MON. of the SOUND MODE, and reset the setting value from 1 to 0.
MTS FILTER check			No.6 FILTER	1. Select the No.6 FILTER of the SOUND MODE. 2. Verify that the No.6 FILTER is set at its initial setting value.
MTS SEPARATION adjustment	TV audio multiplex signal generator Oscilloscope	[S2] Connector 4 pin AUDIO_L 5 pin AUDIO_R 2 pin GND	No.7 LOW SEP. No.8 HI SEP.	1. Input a stereo L signal (300Hz) from the TV audio multiplex signal generator to the antenna terminal. 2. Connect an oscilloscope to pin 4 of [S2] connector, and display one cycle portion of the 300Hz signal. 3. Change the connection of the oscilloscope to pin 5 of [S2] connector, and enlarge the voltage axis. 4. Select the No.7 LOW SEP. of the SOUND MODE. 5. Set the initial setting value of the No.7 LOW SEP. with the LEFT/RIGHT key of the remote control unit. 6. Adjust the No.7 LOW SEP. so that the 300Hz signal level will become minimum. 7. Change the signal to 3kHz, and connect an oscilloscope to pin 4 of [S2] connector. 8. Adjust the No.8 HI SEP. so that the 3kHz signal level will become minimum.



HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit shown in Fig. 1.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

- (1) Turn the POWER SW ON.
- (2) As shown in Fig. 1, set the resistor (between [S1] connector [2] & [3]).
- (3) Make sure that the screen picture disappears.
- (4) Temporarily unplug the power cord.
- (5) Remove the resistor (between [S1] connector [2] & [3]).
- (6) Again plug the power cord, make sure that the normal picture is displayed on the screen.

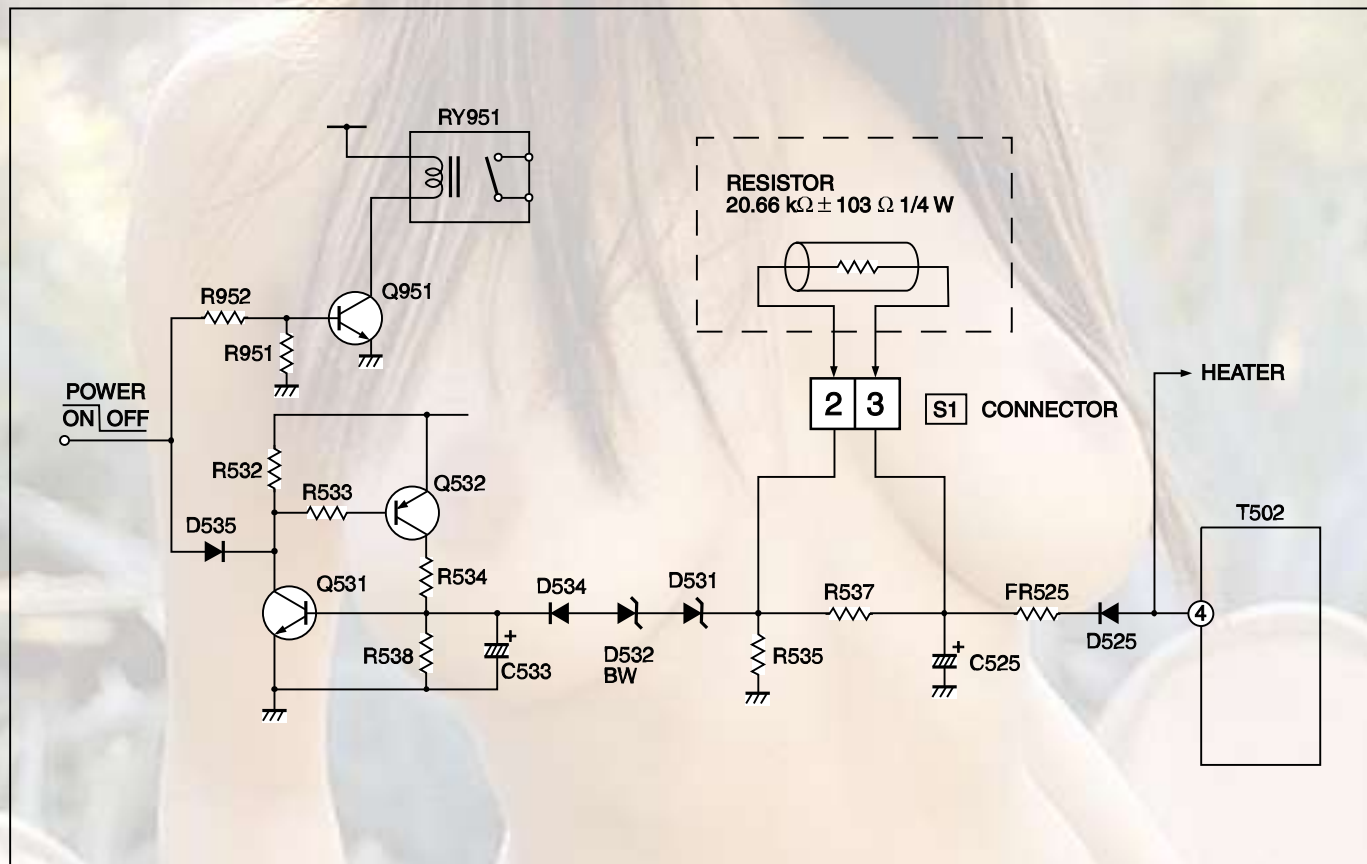


Fig. 1

SELF CHECK FUNCTIONS

1. Outline

This model has self check functions given below. When a malfunction has been detected, the POWER is turned off and the LED flashes to inform of the failure . The malfunction is detected by the signal input state of the control line connected to the microcomputer.

2. Self check Items

Check item	Details of detection	Method of detection	State of malfunction
Over-current protector	Operation of B1 protector circuit.	The microcomputer detects at 1 second intervals. If NG is detected for more than 200 ms, a malfunction is interpreted.	When a malfunction has been detected, the POWER is turned off. While the POWER is being turned off , the power key of the remote controller is not operational until the power code is taken out and put in again.

3. Self check Indicating function

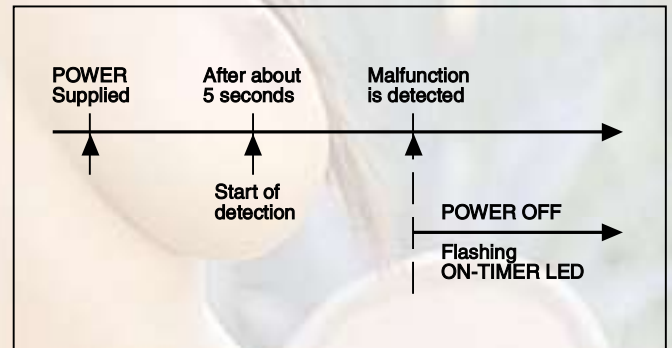
The self-check function begins detection about 5 seconds after power is supplied.

In the event a malfunction is detected, the power is cut off immediately.

At this time, the ON-TIMER LED flashes to inform of the malfunction.

[ON-TIMER LED indication]

The ON-TIMER LED flashes at 0.5 seconds intervals.





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COLOR TELEVISION USER'S GUIDE

I'Art™

**For model:
AV-27F802**



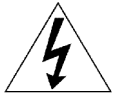
Illustration of AV-27F802 and RM-C301G

IMPORTANT NOTE TO THE CUSTOMER

In the space below, enter the serial number of your television (located at the rear of the television cabinet). Staple your sales receipt or invoice to the inside cover of this guide. Keep this user's guide in a convenient place for future reference. Keep the carton and original packaging for future use.

Serial Number

IMPORTANT SAFETY PRECAUTIONS



CAUTION **RISK OF ELECTRIC SHOCK** **DO NOT OPEN**



CAUTION: To reduce the risk of electric shock.
Do not remove cover (or back).
No user serviceable parts inside.
Refer servicing to qualified service personnel.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS TV SET TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid Improper installation and never position the unit where good ventilation is unattainable.
4. Do not allow objects or liquid into the cabinet openings.
5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

Changes or modifications not approved by JVC could void the warranty.

* When you don't use this TV set for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.

* To prevent electric shock do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

IMPORTANT SAFEGUARDS

CAUTION:

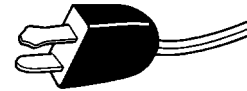
Please read and retain for your safety.

Electrical energy can perform many useful functions. This TV set has been engineered and manufactured to assure your personal safety. But *improper use can result in potential electrical shock or fire hazards*. In order not to defeat the safeguards incorporated in this TV set, observe the following basic rules for its installation, use and servicing. And also follow all warnings and instructions marked on your TV set.

INSTALLATION

- 1 Your TV set is equipped with a polarized AC line plug (one blade of the plug is wider than the other).

(POLARIZED-TYPE)

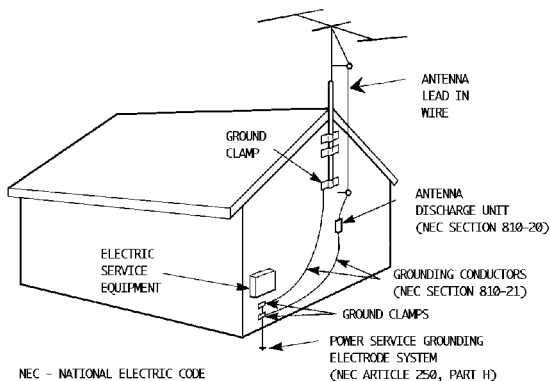


This safety feature allows the plug to fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should it still fail to fit, contact your electrician.

- 2 Operate the TV set only from a power source as indicated on the TV set or refer to the operating instructions for this information. If you are not sure of the type of power supply to your home, consult your TV set dealer or local power company. For battery operation, refer to the operating instructions.
- 3 Overloaded AC outlets and extension cords are dangerous, and so are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.
- 4 Do not allow anything to rest on or roll over the power cord, and do not place the TV set where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.
- 5 Do not use this TV set near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near swimming pool, etc.

- 6 If an outside antenna is connected to the TV set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection requirements for the grounding electrode.
- 7 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE



- 8 TV sets are provided with ventilation openings in the cabinet to allow heat generated during operation to be released. Therefore:
 - Never block the bottom ventilation slots of a portable TV set by placing it on a bed, sofa, rug, etc.
 - Never place a TV set in a "built-in" enclosure unless proper ventilation is provided.
 - Never cover the openings with a cloth or other material.
 - Never place the TV set near or over a radiator or heat register.
- 9 To avoid personal injury:
 - Do not place a TV set on a sloping shelf unless properly secured.
 - Use only a cart or stand recommended by the TV set manufacturer.
 - Do not try to roll a cart with small casters across thresholds or deep pile carpets.
 - Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

USE

- 10 Caution children about dropping or pushing objects into the TV set through cabinet openings. Some internal parts carry hazardous voltages and contact can result in a fire or electrical shock.
- 11 Unplug the TV set from the wall outlet before cleaning. Do not use liquid or an aerosol cleaner.
- 12 Never add accessories to a TV set that has not been designed for this purpose. Such additions may result in a hazard.

- 13 For added protection of the TV set during a lightning storm or when the TV set is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to product due to lightning storms or power line surges.
- 14 A TV set and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the TV set and cart combination to overturn.



SERVICE

- 15 Unplug this TV set from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the TV set.
 - C. If the TV set has been exposed to rain or water.
 - D. If the TV set does not operate normally by following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the TV set to normal operation.
 - E. If the TV set has been dropped or damaged in any way.
 - F. When the TV set exhibits a distinct change in performance — this indicates a need for service.
- 16 Do not attempt to service this TV set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 17 When replacement parts are required, have the service technician verify in writing that the replacement parts he uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.
- 18 Upon completion of any service or repairs to this TV set, please ask the service technician to perform the safety check described in the manufacturer's service literature.
- 19 When a TV set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the TV set.
- 20 Note to CATV system installer.
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

WELCOME!

Congratulations on your new television purchase! We thank you for choosing JVC.

We know you are anxious to start watching your new television, but before you operate it, please read this guide and then keep it handy for future reference. After all you just bought a great TV with a lot of terrific features, you should know what each feature is and how to use it properly!

Again, congratulations and thank you for choosing JVC! Enjoy!

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CONNECTIONS CHECKLIST - READ ME FIRST

The Connections Checklist section of this guide is a list of ideas to keep in mind while you setup your new TV. It is designed to help us not-so-technically-minded individuals make our connections properly. If you read this section and still can't identify the plugs, connectors and components you have, please ask someone for help in making your connections.

- 1) **Always refer to the connection instructions** in the user's guide for your components first. The manufacturer will provide the most detailed information about their products.
- 2) **Know your jacks and plugs** - most are color coded:
 - Yellow plugs are Video connections
 - Red plugs are Right Audio connections
 - White (or black) plugs are Left Audio (or Mono) connections. If your VCR is mono-sound, it will have only a white or black plug, no second red one).
- 3) **Perform one connection at a time.** If you have several accessories to connect, make sure each connection is correct by checking to see that it works properly before trying the next connection.
- 4) **Unplug the power cord** during each connection.
- 5) **Follow the In and Out Concept.** Remember In and Out - the Output jack from one device will go to the Input jack of the other. Read the jack panels, they are all labeled.
- 6) **The AV Compu Link Cable** is supplied with certain JVC devices. If you have a JVC Compu Link VCR or other piece of equipment, but don't have an AV Compu Link cable, contact your local JVC dealer.



A/V Input Plug



RF Connectors

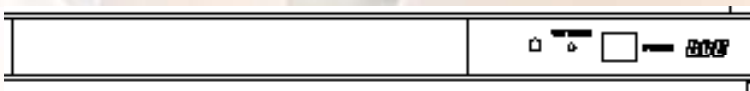


S-Video Plug

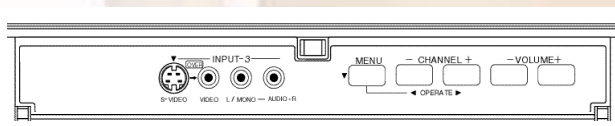


AV Compu Link Cable

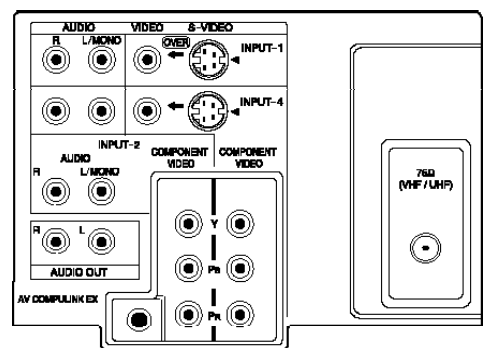
Panel Diagrams



Front Panel



Front Panel Door opened



Rear Panel

6

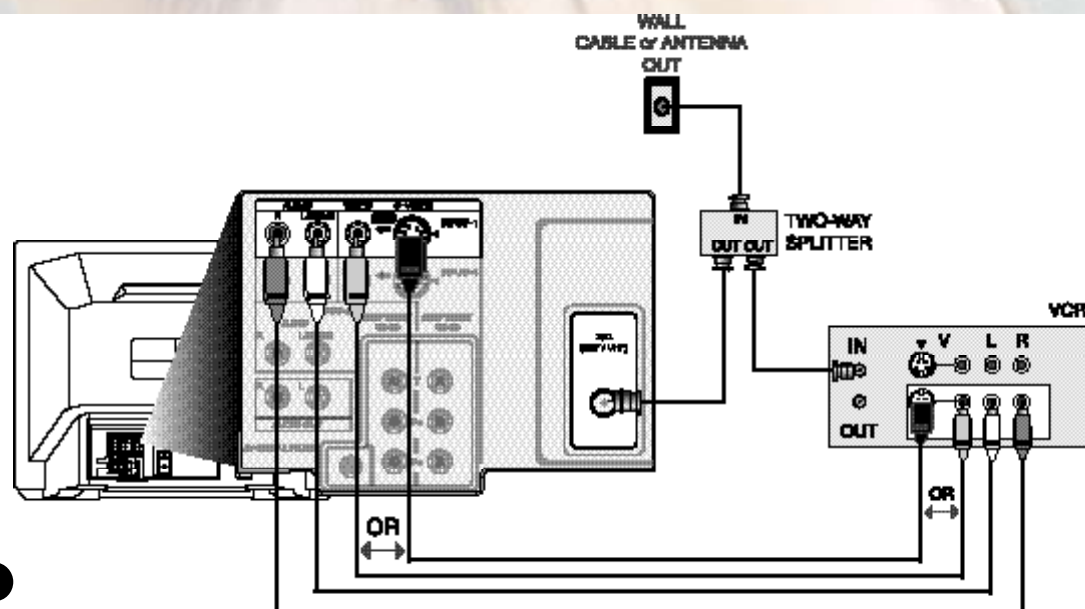
Connections

Cable and VCR Connections

There are three basic types of antenna or cable connections:

- If you have an antenna or have a cable system that does not require you use a cable box to select channels, please refer to **Diagram #1**.
- If you have a cable system that requires the use of a cable box to access **all** the channels, please refer to **Diagram #2**. If you cannot operate your Picture-In-Picture function using Diagram #2, try the connection shown in Diagram #3. It is possible your cable box allows the signal of only one channel at a time to be sent to your television.
- If you have a cable system that requires the use of a cable box to access **certain** premium channels, but not "basic" cable channels, please refer to **Diagram #3**.
- For your convenience, connection to a VCR is also shown in the following diagrams. A VCR is not necessary for operation of the television or Picture-In-Picture (PIP) function. You may omit the VCR from your connections if you wish.
- For instructions on connecting a VCR only, please see the Quick Setup Guide.
- For information on using PIP, please see page 30.

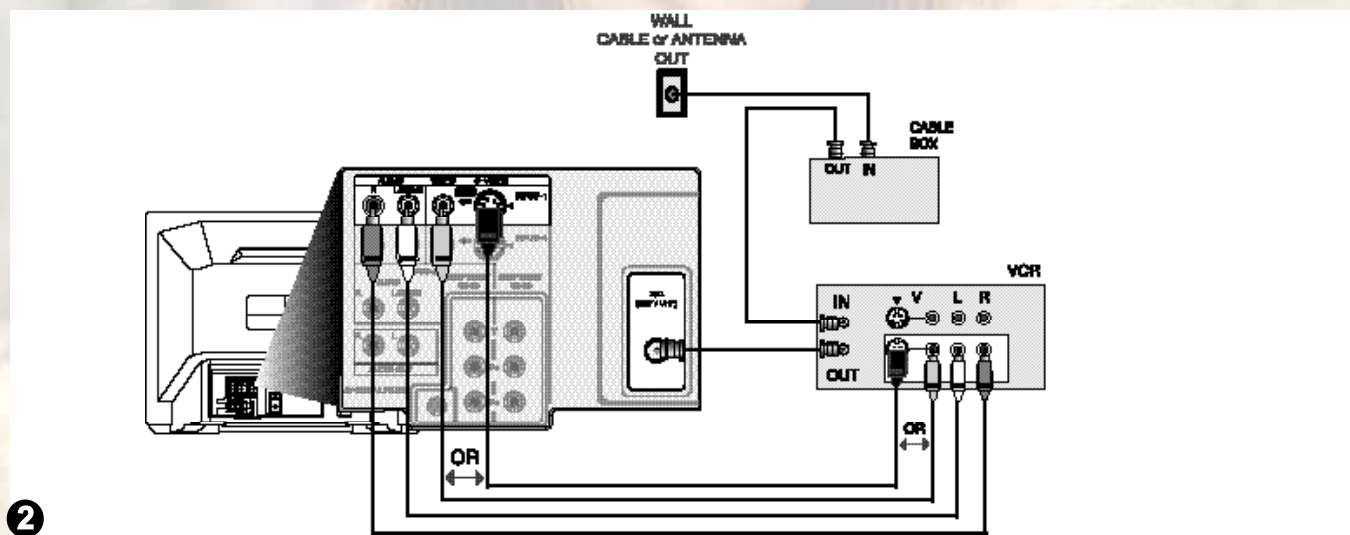
The connection diagrams are intended to show some basic general connections. Some cable companies may require special connections to properly use your television or 2-tuner PIP function. If you follow these diagrams and either the television or PIP does not work properly, contact your local cable operator for more connection information.



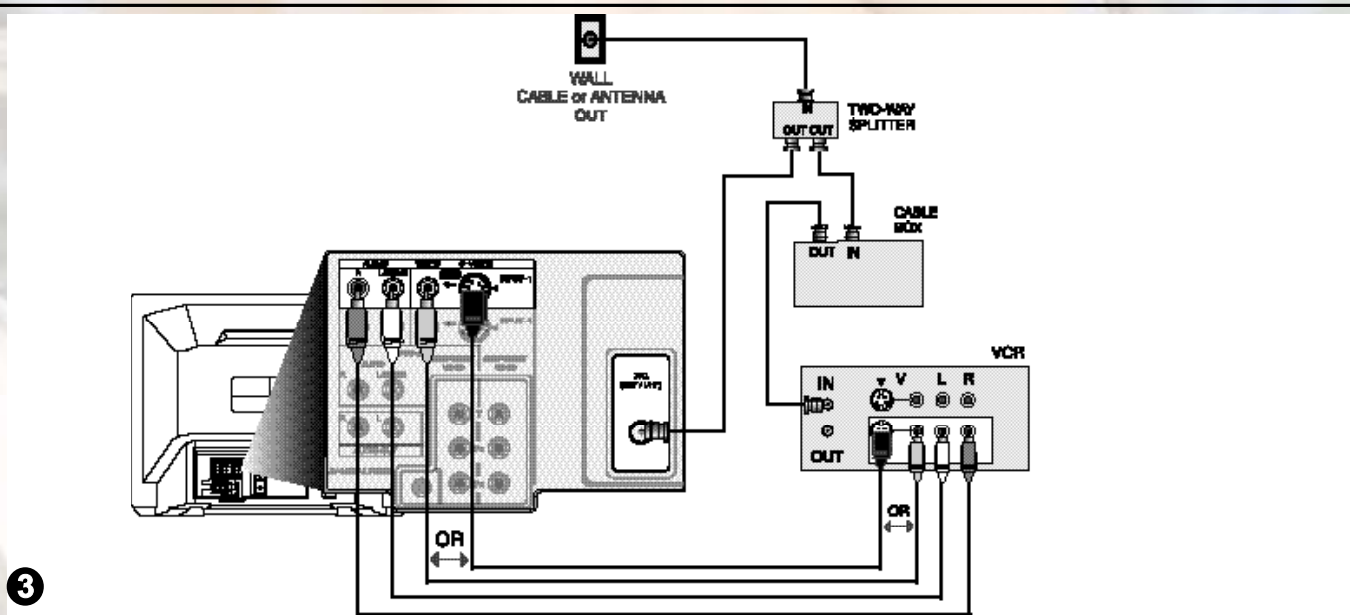
1

- 1) Connect the antenna or cable TV wire from the wall outlet, in to the RF Input of the two-way splitter.
 - 2) Connect an RF cable from the one of the RF Outputs on the splitter, in to the RF Input on the back of the VCR.
 - 3) Connect an RF cable from the other the RF Output on the splitter, in to the RF Input on the back of the TV.
 - 4) Connect the yellow video cable out from the VCR's Video Output, in to the TV's Video Input jack, **OR** connect an S-Video cable from the Camcorder's S-Video output, to the TV's S-Video input.
 - 5) Connect the white audio cable out from the VCR's Left Audio Output, in to the TV's Left Audio Input Jack.
 - 6) Connect the red audio cable out from the VCR's Right Audio Output, in to the TV's Right Audio Input jack.
- If your VCR is a mono sound unit, it will have only one Audio Out jack. Connect it to the TV's Left Audio Input.
 - Please consult your VCR's owner's manual for more information on its operation.

Audio/Video Connections - Continued



- 1) Connect the antenna or cable TV wire from the wall outlet, in to the RF Input of the cable box.
- 2) Connect an RF cable from the cable box RF Output, in to the RF Input on the back of the VCR.
- 3) Connect an RF cable from the RF Output on the VCR, in to the RF Input on the back of the TV.
- 4) Connect the yellow video cable out from the VCR's Video Output, in to the TV's Video Input jack, **OR** connect an S-Video cable from the Camcorder's S-Video output, to the TV's S-Video input.
- 5) Connect the white audio cable out from the VCR's Left Audio Output, in to the TV's Left Audio Input Jack.
- 6) Connect the red audio cable out from the VCR's Right Audio Output, in to the TV's Right Audio Input jack.

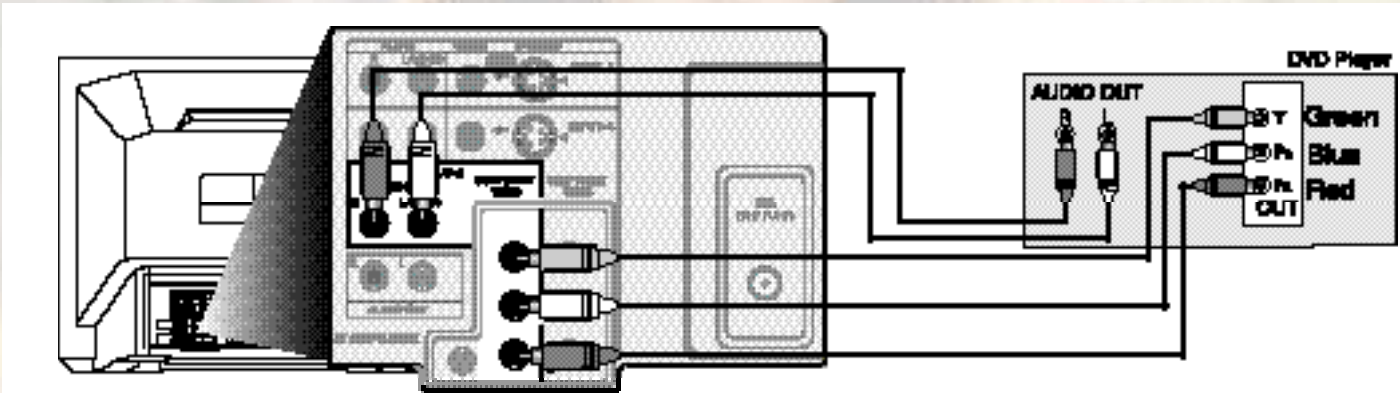


- 1) Connect the antenna or cable TV wire from the wall outlet, in to the RF Input of the two-way splitter.
- 2) Connect an RF cable from the one of the RF Outputs on the splitter, in to the cable box RF Input.
- 3) Connect an RF cable from the Cable Box Output, in to the VCR RF Input.
- 4) Connect an RF cable from the other the RF Output on the splitter, in to the RF Input on the back of the TV.
- 5) Connect the yellow video cable out from the VCR's Video Output, in to the TV's Video Input jack, **OR** connect an S-Video cable from the Camcorder's S-Video output, to the TV's S-Video input.
- 6) Connect the white audio cable out from the VCR's Left Audio Output, in to the TV's Left Audio Input Jack.
- 7) Connect the red audio cable out from the VCR's Right Audio Output, in to the TV's Right Audio Input jack.

8

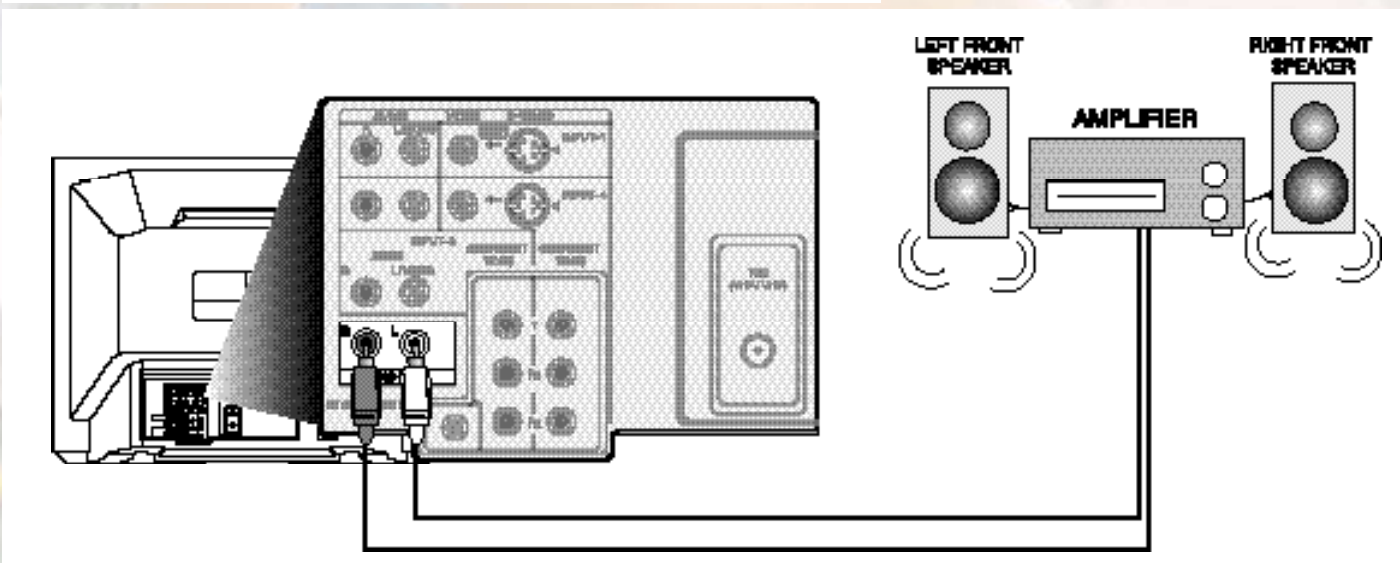
Connections

Connecting to a DVD Player



- 1) Connect Green cable out from DVD player "Y" Video Output, in to TV "Y" Component Input.
 - 2) Connect Blue cable out from DVD player "Pb" Video Output, in to TV "Pb" Component Input.
 - 3) Connect Red cable out from DVD Player "Pr" Video Output, in to TV "Pr" Component Input.
 - 4) Connect White Audio cable out from DVD Left Audio Output, in to TV Left Audio Input 2.
 - 5) Connect Red Audio cable out from DVD Right Audio Output, in to TV Right Audio Input 2.
- Green, blue and red are the most common colors for DVD cables. Some models may vary colors, please consult the user's manual for your DVD Player for more information.
 - Be careful not to confuse the red DVD cable with the red audio cable. It is best to complete one set of connections (DVD or Audio Output) before starting the other to avoid accidentally switching the cables.
 - You may also connect the DVD player to Input 4. If you use Input 4 for the DVD connection, you must set the V4 COMPONENT-IN on the initial Setup Menu to "YES" for proper display of the DVD signal.
 - **NOTE:** Progressive DVD Players (players with an output scan of 31.5 KHz) will not work properly with this television.

Connecting to an External Amplifier

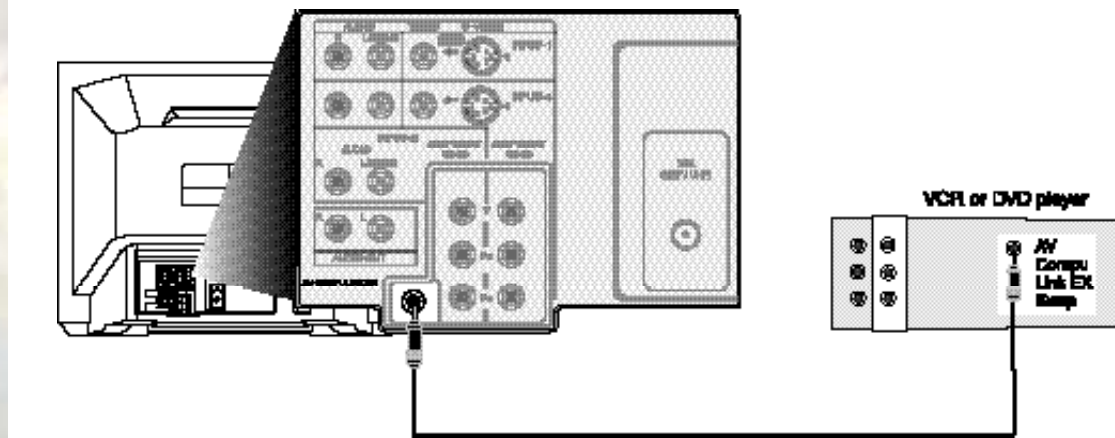


- 1) Connect the white audio cable from the TV's Left Audio Output jack to the Amplifier's Left Audio Input jack.
 - 2) Connect the red audio cable from the TV's Right Audio Output jack to the Amplifier's Right Audio Input jack.
- See also 'TV Speaker' and 'Audio Out' on page 26 for more information on using external speakers.

Connecting to JVC AV Compu Link Capable Components

JVC's AV Compu Link feature makes playing video tapes or DVDs totally automatic. Simply insert a pre-recorded tape* into your JVC-brand VCR or DVD into your JVC DVD player and the device will automatically turn on and begin playback. At the same time, using the AV Compu Link, the VCR or DVD player sends a signal to the television telling it to turn on and switch to the proper video input

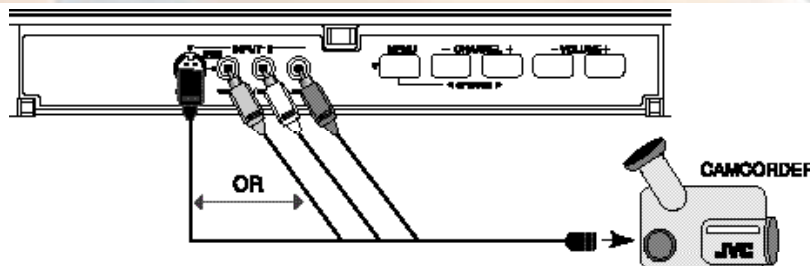
- The AV Compu Link cable may be included with the JVC AV Compu Link accessory you wish to connect. If it is not, contact an authorized JVC Service Center for part # EWP 805-012.
- AV Compu Link can only be used with JVC-brand products.



To Connect: Plug one end of the AV Compu Link cable into the AV Compu Link input on your VCR, DVD, or other Compu Link device. Plug the other end of the AV Compu Link cable into the AV Compu Link input at the rear of the television.

Connecting to a Camcorder

You may connect a camcorder to your television by using the front Input Jacks (Input 3) located under the front panel door. To access, press lightly on the door to open it. You may also connect a game console or other equipment using these jacks. Camcorders may also be connected to the television's rear input jacks.

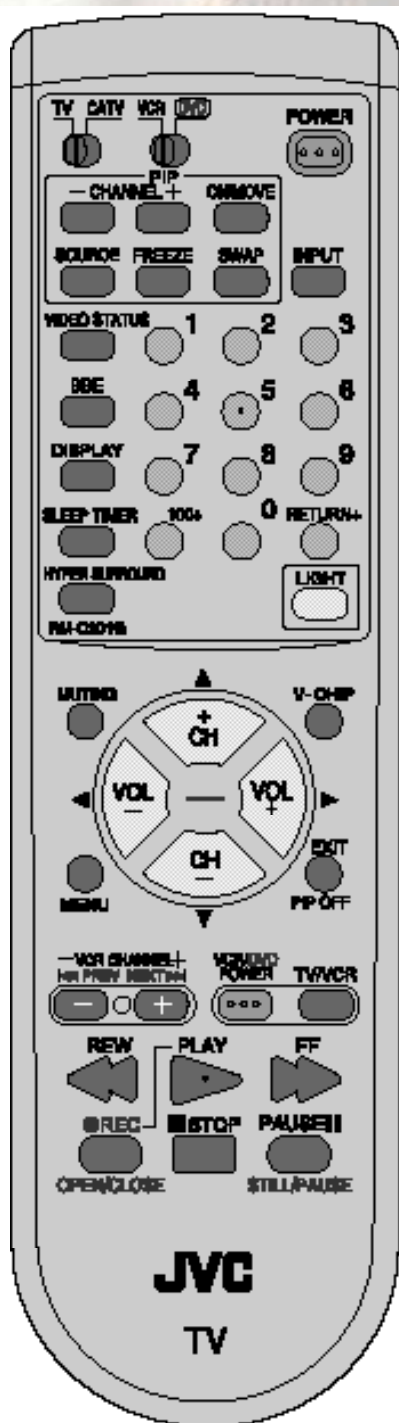


- 1) Connect the yellow video cable out from the Camcorder's Video Output, in to the TV's Video Input jack
OR connect an S-Video cable from the Camcorder's S-Video output, to the TV's S-Video input.
- 2) Connect the white audio cable out from the Camcorder's Left Audio Output, in to the TV's Left Audio Input Jack.
- 3) Connect the red audio cable out from the Camcorder's Right Audio Output, in to the TV's Right Audio Input jack.

- If your Camcorder is a mono sound model it will have only one audio jack. Connect to the TV's Left Audio Jack.

NOTES (For AV Compu Link):

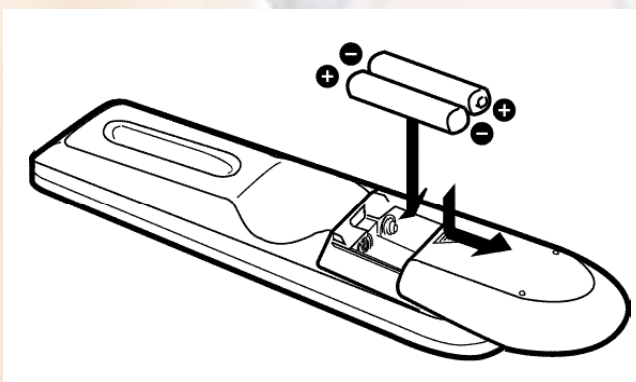
- * In order for the VCR playback to begin automatically, the recording tabs must be removed from the VHS tape. If the tab is in place, automatic switching will occur when you push the VCR's PLAY button.
- The AV Compu Link cable has a male 3.5 mm (mono) plug on each end.
- If your JVC-brand VCR has "A Code/B Code Remote Control Switching" (see your VCR's instruction book), using VCR A Code will switch the TV to input 1.
- To connect a JVC HiFi receiver or amplifier for a completely automated home theater, see the HiFi's connection instructions for detailed connection information.
- AV COMPU LINK EX is compatible with the following receivers: RX-664V, RX-665V, RX-668VBK, RX-774V, RX-778VBK, RX-884V, RX-888VBK, RX-1024V, RX-1028VBK, and later receiver models.

Remote Control**RM-C301G****Changing the Batteries**

Be sure to use only size AA batteries.

- 1** Push down on the remote's back cover and slide towards the bottom to remove it.
 - 2** Insert two AA batteries (supplied), carefully noting the "+" and "-" markings on the batteries and on the remote control. To avoid a potential short circuit, insert the "-" end first.
 - 3** When batteries are installed, slide the cover back into place (until it clicks into position).
- If the remote control acts erratically, replace the batteries. Typical battery life is six months to one year.
 - We recommend using alkaline batteries for longer battery life.

When you change the batteries, try to complete the task within three minutes. If you take longer than three minutes, the remote control codes for your VCR, DVD, and/or Cable Box may have to be reset (page 12-14).



POWER

- Press the POWER button on the remote control or the front panel of the TV. The On Timer lamp will glow red.
- Make sure the TV/CATV switch on the remote is set to TV. Move the switch to CATV only if you plan to operate a cable box. On the CATV setting the remote will only operate the cable box functions.
- To turn the power off, press the POWER button again. The On Timer lamp will go out.
- The On Timer lamp will glow red when the On/Off Timer is set (page 25), even when the TV power is off.

ADJUSTING VOLUME

To control the volume level, use the VOLUME+/- buttons on the remote control or on the TV's front panel. Use the VOLUME - button to lower the volume. Press the VOLUME+ button to raise the volume.

VOLUME 13



Press the MUTING button to instantly turn the volume to zero. Press MUTING again to return to the previous volume level.

CHANGING CHANNELS

1 10 key direct access

To move directly to a specific channel, press that channel's numbers on the remote's 10 key pad. For single-digit channel numbers, press "0" then the channel number. For channels above 100, press the 100+ button, then the remaining two digits on the 10 key pad.

2 CHANNEL +/- BUTTON

To scan through the channels, press either the CHANNEL + or CHANNEL - button. You will move through the channels in numerical order.

- After you operate the Auto Tuner Setup (page 16), all of the empty channels will be removed from scanning. When you scan you will only receive clear, active channels.

Hyperscan

With JVC's Hyperscan feature you can zip through the channels at a rate of five per second. To use Hyperscan, press and hold either the CHANNEL+ or CHANNEL- buttons. After the first few channels scan at normal speed, the rest will move by at five per second. To scan at normal speed, press and release the CHANNEL+/- button.

3 Regular Return

Press and release the RETURN+ button to return to the previous channel viewed. For example select a channel. Then select another channel using the 10 key pad buttons. You can now flip back and forth between these two channels by pressing RETURN+.

4 RETURN+

With RETURN+ you can program your TV to always return to a specific channel. Press and hold down the RETURN+ button for three seconds. The message, "RETURN CHANNEL PROGRAMMED!" will appear on-screen. Now when you scan through the channels, pressing RETURN+ will bring you back to your programmed channel.

To cancel the RETURN+ channel, press and hold the RETURN+ button for three seconds. The message "RETURN CHANNEL CANCELLED!" will appear on-screen.

- Pressing any number key or turning off the TV will also cancel the RETURN+ channel.

Setting the CATV, VCR and DVD Codes

You can program your remote to operate your cable box, satellite receiver, VCR or DVD player by using the instructions and codes listed below. If the equipment does not respond to any of the codes listed below or to the code search function, use the remote control supplied by the manufacturer.

Cable Box or Satellite setup

The remote control is programmed with CATV and/or Satellite codes for power on, power off, channel up, channel down, and 10 key operation.

- 1) Find the CATV/Satellite brand from the list of codes shown below.
 - 2) Slide the 2-way selector switch to "CATV".
 - 3) Press and hold down the DISPLAY button.
 - 4) With the DISPLAY button held down, enter the first code number listed using the 10 key pad.
 - 5) Release the DISPLAY button.
 - 6) Confirm the operation of the Cable Box/Satellite receiver.
- If your CATV or Satellite box does not respond to the first code, try the others listed. If it does not respond to any code, try the Search Codes Function at the bottom of the page.

Cable Box	CODE#	Cable Box	CODE#	Digital Satellite Systems	CODE#
ABC	024	Pioneer	032	EchoStar	100, 113, 114
Archer	032, 025	RCA	061, 070	Express VU	100, 113
Cableview	051, 032	Realistic	032	G.E.	108
Citizen	022, 081	Regal	058, 084, 040, 041, 042, 045, 068	G.I.	108
Curtis	058, 068	Regency	034	Gradiente	112
Diamond	024, 032, 025	Rambrandt	087, 032, 051, 038	Hitachi	104, 111
Eagle	029	Samsung	051	HNS (Hughes)	104
Eastern	034	Scientific Atlanta	057, 058, 059	Panasonic	105
GC Brand	032, 051	SLMark	051, 047	Philips	102, 103
Gemini	022, 043	Sprucer	051, 066	Primestar	108
General Instrument	058, 024, 025, 026, 027, 020, 021, 022, 057, 023	Stargate	032, 051	Proscan	106, 109, 110
Humlin	040, 041, 042, 045, 058, 084	Telecaption	087	RCA	108, 109, 110
Hitachi	048, 024	Teleview	047, 051	Sony	107
Jerrold	058, 024, 025, 026, 027, 020, 021, 022, 057, 023	Teoscan	044	Star Choice	104, 108
Macom	049, 050, 051, 054	Tocom	035, 036, 088	Toshiba	101
Magnavox	033	Tohiba	060	Uniden	102, 109
Memorex	030	Unika	032, 028		
Movietime	032, 051	Universal	022, 032		
Oak	038, 037, 048	Videoway	062		
Panasonic	055, 068, 080, 071	Viewstar	029, 030		
Paragon	063	Zenith	063, 046		
Philips	028, 029, 030, 052, 053, 031, 069	Zenith/Druke Satellite	046		
Pioneer	047, 082				
Pulsar	051, 032				

Search Codes Function:

- 1) Slide the 2-Way Mode Selector switch to CATV.
- 2) Press the TV POWER and RETURN+ buttons. Hold for at least three seconds and release.
- 3) Press TV POWER, see if the CATV or Satellite box responds.
- 4) If there was a response, press RETURN+. The operating codes are now set. If there was no response, repeat Step 3. If you repeat Step 3 52 times without a response, use the remote control which came with the equipment.
- 5) Press RETURN+ to exit.

VCR setup

The remote control is programmed with VCR codes for power on, power off, play, stop, fast-forward, rewind, pause, record, channel up, and channel down operation.

- 1) Find the VCR brand from the list of codes shown below.
- 2) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "VCR".
- 3) Press and hold down the DISPLAY button.
- 4) With the DISPLAY button held down, enter the first code number listed with the 10 key pad.
- 5) Release the DISPLAY button.
- 6) Confirm the operation of the VCR.
 - If your VCR does not respond to the first code, try the others listed. If it does not respond to any code, try the Search Codes Function at the bottom of the page.
 - Some manufacturer's VCR's may not respond to the TV/VCR button, even if other buttons work properly.
 - To Record, hold down the REC button on the remote and press PLAY.

VCRs	CODES	VCRs	CODES	VCRs	CODES
Admiral	035	Magnavox	031, 023, 024, 088	Samsung	037, 060, 062, 033, 089
Ahta	027, 082, 085	Marantz	009, 004, 005	Semtron	089
Akal	029, 072, 073, 074	Marta	084	Sensul	003, 028, 020, 082
Audio Dynamic	009, 006	Memorex	024, 087	Sanyo	083, 087, 081, 071
Bell & Howell	063, 071	MGA	038, 040, 047, 048, 041, 042	Scott	058, 080, 082, 087, 088, 040, 047, 048, 028, 020
Broksonic	020, 026, 084	Minolta	068, 046, 083	Sears	063, 084, 066, 088, 068, 000, 001
Canon	023, 025	Mitsubishi	038, 040, 047, 048, 041, 042, 078, 080	Shinron	075
CCE	043	Multitech	047, 027, 082	Sharp	035, 038, 060, 068
Citizen	084	NEC	009, 004, 005, 000	Signature 2000	027, 036
Craig	089, 029, 084	Olympic	024, 023	Singer	075
Curtis Mathes	045, 024, 027, 083	Optimus	028, 021, 035, 084	Sony	028, 029, 030, 063, 064, 066
Daewoo	043, 058, 024, 082	Orion	028, 020	SV 2000	027
DBX	003, 004, 005	Panasonic	023, 024, 021, 022	Sylvania	031, 023, 024, 027
Dimensia	045, 083	Penney	024, 058, 045, 083, 003, 004, 005, 083	Symphonic	027, 081
Emerson	043, 028, 077, 081, 025, 042, 020, 078	Pentax	058, 005, 046, 083	Tachiro	084
Fisher	083, 088, 087, 085, 071, 081	Philco	031, 024, 027, 023, 026, 020, 049	Tekung	003, 004, 005
Furai	027, 026, 020, 000	Phillips	031, 023, 024, 088	Teco	003, 004, 027, 005
G.E.	033, 046, 024	Pioneer	023	Technics	021, 022, 023, 024
Go Video	037, 081, 048, 080, 088	Proscan	045, 058, 023, 024, 031, 048, 060, 080, 033, 087, 083	Teknika	024, 027, 070
Goldstar	084	Quasar	021, 022, 023, 024	Toshiba	058, 048, 079
Gradiente	083, 084, 081, 000, 001	Radio Shack	033, 024, 083, 038, 087, 040, 027	Vector Research	006
Hitachi	023, 046, 058, 027, 081, 083	RCA	033, 045, 058, 023, 024, 031, 048, 068, 080, 083, 084, 086, 087, 083	Wards	035, 038, 087, 044, 084
Instant Replay	024, 023	Realistic	024, 083, 038, 087, 040, 027	Yamaha	083, 003, 004, 005
Jensen	003			Zenith	044, 082, 064, 084
JVC	000, 001, 002, 003, 004, 006				
Kenwood	003, 004, 084, 005				
LXI	027, 084, 068, 086, 088, 083, 087				

Search Codes Function:

- 1) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "VCR".
- 2) Press the VCR POWER and RETURN+ buttons. Hold for at least three seconds and release.
- 3) Press VCR POWER, see if the VCR responds.
- 4) If there was a response, press RETURN+. The operating codes are now set. If there was no response, repeat Step 3. If you repeat Step 3 80 times without a response, use the manufacturers remote control which came with the VCR.
- 5) Press RETURN+ to exit.

DVD setup

The remote control is programmed with DVD codes for power on, power off, play, stop, fast-forward, rewind, previous chapter, next chapter, tray open/close, and still/pause operation.

- 1) Find the DVD player brand from the list of codes shown below.
- 2) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "DVD".
- 3) Press and hold down the DISPLAY button.
- 4) With the DISPLAY button held down, enter the first code number listed with the 10 key pad.
- 5) Release the DISPLAY button.
- 6) Confirm the operation of the DVD player.
 - If your DVD player does not respond to the first code, try the others listed. If it does not respond to any code, try the Search Codes Function at the bottom of the page.
 - After you program your remote, some DVD buttons may not work properly. If some buttons do not work properly, use the remote control which came with your DVD player.

DVD Player	CODES
Alwa	043
Apex	040
Denon	020, 037
Hitachi	030, 031
JVC	000
Kerrwood	035
Konka	039
Mitsubishi	025
Onkyo	041
Ortron	044
Panasonic	020
Philips	023, 036
Pioneer	022
Raite	033
RCA	021, 028
Sampo	034
Samsung	030
Sharp	028
Sylvania	038
Sony	024, 045, 046, 047
Technics	020
Toshiba	023
Wave	042
Yamaha	020
Zenith	027, 032

Search Codes Function:

- 1) Slide the first 2-way selector switch to "TV" and the other 2-way selector switch to "DVD".
- 2) Press the DVD POWER and RETURN+ buttons. Hold for at least three seconds and release.
- 3) Press DVD POWER, see if the DVD player responds.
- 4) If there was a response, press RETURN+. The operating codes are now set. If there was no response, repeat Step 3. If you repeat Step 3 30 times without a response, use the manufacturers remote control which came with the DVD player.
- 5) Press RETURN+ to exit.

Using this Guide

Certain symbols are used throughout this guide to help you learn about the features of your new television. The ones you will see most frequently are:

▲▼ Up and Down arrows mean press the CHANNEL UP or CHANNEL DOWN buttons. Pressing the UP or DOWN buttons let you:

- Move vertically in a main menu screen
- Move through a submenu screen
- Move to the next letter, number, or other choice in a submenu
- Back up to correct an error
- Scan through TV channels (when not in a menu screen)

◀▶ Left and right arrows mean press the VOLUME LEFT or VOLUME RIGHT buttons to:

- Select a highlighted menu item
- Select an item in a submenu
- Select numbers in certain menu options
- Turn the volume up or down (when not in a menu screen)



The 'Press Button' icon means you should press the button named on your remote control. (Button names appear in SMALL CAPITAL LETTERS.)



The 'Helping Hand' points to the highlighted or selected item in a menu.

The Onscreen Menus:

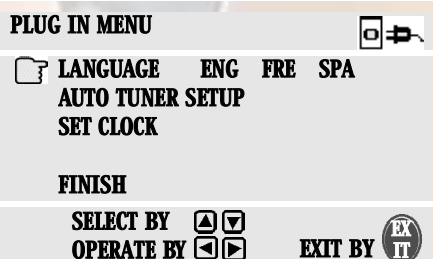
To bring up the onscreen menu, press the MENU button on the remote control. The item that appears in yellow is the one currently selected. If you press the MENU button again, the onscreen display will skip to the next menu screen.

Menu Screen Order → 2 → 4 → 5 → 6 →

The "Plug In Menu" will appear the first time the TV is plugged in.

Notes: Menus shown in this book are illustrations, not exact replications of the television's onscreen displays.

If you use the Menu button on the TV's front panel instead of the remote, an additional menu screen showing channel number and input will appear between menus 1 and 2.



1 Initial Setup Items



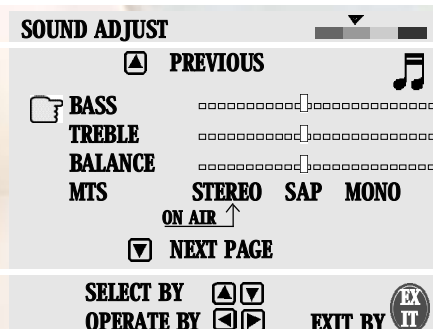
2 Picture Settings



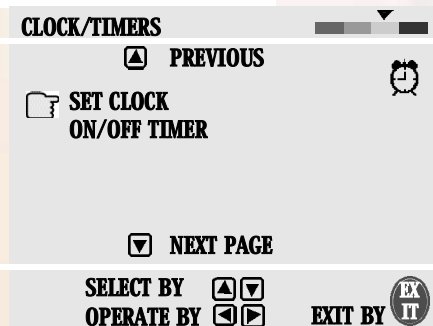
3



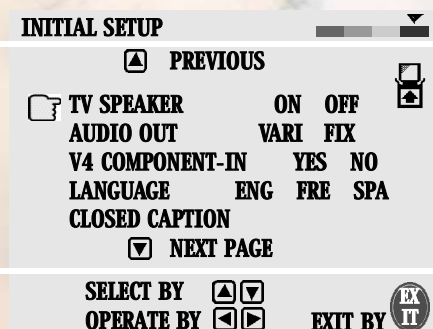
4 Sound Settings



5 General Items



6



16 Plug In Menu

Introduction

The Plug In Menu comes up automatically when you first turn on the TV after plugging it in. The Plug In Menu helps you to get your TV ready to use by letting you set your preferences for:

- The Language in which you want the onscreen menus to appear,
- The Auto Tuner Setup of which channels you wish to receive,
- Setting the TV's clock to the correct time so your timer functions will work properly.

Descriptions of each of the Plug In Menu features appear on this page and the next. We recommend you complete the Plug In Menu setup first so your TV is set up just the way you want, right away.

Language

You can choose to view your onscreen menus in three languages: English, French, or Spanish.



Press the MENU button



To LANGUAGE

LANGUAGE	ENG	FRE	SPA
----------	-----	-----	-----



To choose a language

→ ENGLISH → FRENCH → SPANISH →



EXIT/PIP OFF when finished

Auto Tuner Setup

In Auto Tuner Setup, the TV automatically scans through all available channels, memorizing the active ones and skipping over blank ones or channels with weak signals. This means when you scan (using the CHANNEL +/- buttons) you will receive only clear, active channels.



Press the MENU button



To AUTO TUNER SETUP



To operate

TUNER MODE	:	CABLE	AIR
START			



To choose CABLE or AIR



To move to START



To start Auto Tuner Setup

NOW PROGRAMMING ! ■■■ ■■■ 48

Programming will take approximately 1 to 2 minutes.

PROGRAMMING OVER!

- Noise Muting will not work during Auto Tuner Setup.

NOTE:

• If you exit the Plug In Menu, or wish to change your preferences later, all the Plug In Menu options can be found in the regular onscreen menus.

Set Clock

Before you use any of your TV's timer functions, you must first set the clock. You may precisely set your clock using the XDS time signal broadcast by most Public Broadcasting stations. To set the clock using the XDS signal:



Enter the channel number of your local PBS station.



Press MENU



To Set Clock



To operate



To Auto

MODE	AUTO	MANUAL
TIME ZONE	EASTERN	
D.S.T.	ON	OFF
FINISH		



To Time Zone



To select your time zone

→ ATLANTIC	←→ EASTERN	←→ CENTRAL	←→ MOUNTAIN	←
→ HAWAII ←→ ALASKA ←→ PACIFIC ←				



To move to Daylight Savings Time (D.S.T.)



To turn D.S.T. ON or OFF



To FINISH



To save settings and exit

- If you do not have a PBS station in your local area, you will have to set the clock manually. See 'Set Clock - Manual' at the top of the next column for instructions.

- The Daylight Savings Time feature automatically adjusts your TV's clock for Daylight Savings. The clock will move forward one hour at 2:00 am on the first Sunday in April. The clock will move back one hour at 2:00 am on the last Sunday in October.

Set Clock - Manual

To set your clock manually (without using the XDS signal), choose MANUAL from the Set Clock menu and follow the steps below.

MODE	AUTO	MANUAL
TIME	--:-- --	
START CLOCK		



To move to the hour



To set the hour



To move to minutes



To set the minutes



To move to START CLOCK



To start clock and exit

THANK YOU !!

Finish

Once you have the items in the Plug In Menu set to your personal preferences, move to the Finish option to save your settings.



To FINISH



To save settings and exit

- You can change the preferences you set in the Plug In Menu at any time using the regular JVC onscreen menu system.

NOTES:

- You will have to reset the clock after a power interruption. You must set the clock before operating any timer functions.

Channel Summary

Channel Summary allows you to customize the line-up of channels received by your TV. You can add or delete channels from the line-up or prevent any unauthorized viewers from watching any or all 181 channels.



Press the MENU button



To CHANNEL SUMMARY



To operate

The Channel Summary screen (below) will now be displayed with the channels set to scan marked with an "✓". You can delete channels from the scan by removing the "✓". If any channels were missed during Auto Tuner Setup and you wish to add them, you may by placing an "✓" next to the channel number.

CHNO	SCAN		CHNO	SCAN	
01			06	✓	
02	✓		07		
03	✓		08		
04	✓		09	✓	
05	✓		10	✓	



To the SCAN column



To include or delete from scan



EXIT/PIP OFF when finished

Channel Summary - Lock



To CHANNEL SUMMARY



To operate



To the Lock Column



ZERO to lock or unlock that channel

CHNO	SCAN		CHNO	SCAN	
01	✓		06	✓	
02	✓		07		
03	✓		08		
04	✓		09	✓	
05	✓		10	✓	



EXIT/PIP OFF when finished

Channel Guard Message

When a viewer attempts to watch a guarded channel, the following message appears:

THIS CHANNEL IS LOCKED BY
CHANNEL GUARD.
PLEASE ENTER LOCK CODE BY
10 KEY PAD TO UNLOCK IT.

NO. - - - -

To watch a channel that you have locked, enter the Lock Code using the 10 key pad (see "Set Lock Code" - at the top of the next column).

If the wrong code is entered, this message will flash on the screen:

INVALID LOCK CODE !

The channel cannot be accessed until the correct code is entered.

- Once a channel has been unlocked, it will remain unlocked until the television is turned off.

NOTE:

• Some cable systems experience interference from radio frequencies on cable Channel 95. You may delete this channel from your scan by removing the "✓" next to it on the Channel Summary screen.

V-Chip

Your TV is equipped with V-Chip technology which enables TV Parental Guideline and Movie (MPAA) Guideline controls. V-Chip technology allows you to program your TV to receive, or not to receive, programs based on content according to the guidelines. Programs which exceed the ratings limits you set will be blocked.

When a viewer attempts to watch a blocked channel, this message appears:

THIS PROGRAMMING EXCEEDS
YOUR RATINGS LIMITS.
PLEASE ENTER LOCK CODE BY
10 KEY PAD TO UNLOCK IT.
NO. - - - -

To watch a blocked channel, enter the lock code (page 14) using the 10 key pad.

To set up the TV Parental Guideline Ratings:



Press the MENU button



To V-CHIP



To operate (Lock icon  will appear)



Press ZERO to access the V-Chip menu

V-CHIP ON OFF
SET US TV RATINGS
SET MOVIE RATINGS

UNRATED VIEW BLOCK
FINISH



To turn V-Chip ON or OFF



To move to SET US TV RATINGS



To operate (see page 19 for details)

V/FV	—	—	—	—	—	—
S	—	—	—	—	—	—
L	—	—	—	—	—	—
D	—	—	—	—	—	—
FINISH						

Viewing Guidelines

- V/FV is for VIOLENCE/FANTASY VIOLENCE
- S stands for SEXUAL CONTENT
- L stands for strong LANGUAGE
- D stands for suggestive DIALOG

U.S. PARENTAL RATING SYSTEMS Programs with the following Ratings are appropriate for Children.

☐ TV Y is Appropriate for All Children.

Programs are created for very young viewers and should be suitable for all ages, including children ages 2 - 6.

☐ TV Y7 is for Older Children.

Most parents would find such programs suitable for children 7 and above. They may contain some mild fantasy violence or comedic violence, which children should be able to discern from reality.

Programs with the following Ratings are designed for the entire audience.

☐ TV G stands for General Audience.

Most parents would find these programs suitable for all age groups. They contain little or no violence, no strong language, and little or no sexual dialog or situations.

☐ TV PG Parental Guidance Suggested.

May contain some, but not much, strong language, limited violence, and some suggestive sexual dialog or situations. It is recommended that parents watch these programs first, or with their children.

☐ TV 14 Parents Strongly Cautioned.

Programs contain some material that may be unsuitable for children under the age of 14 including possible intense violence, sexual situations, strong coarse language, or intensely suggestive dialog. Parents are cautioned against unattended viewing by children under 14.

☐ TV MA Mature Audiences Only.

These programs are specifically for adults and may be unsuitable for anyone under 17 years of age. TV MA programs may have extensive V, S, L, or D.

Directions to Block Viewing:

Line up the cursor in the column (TV PG, TV G, etc.) with the content row (V/FV, S, etc.) and press the ▲ or ▼ to move the cursor to the correct location. Press ◀ or ▶ to turn the locking feature on or off. An item is locked if the  icon appears instead of a "—".

For example. To block viewing of all TV 14 shows:

Move the cursor to the top row of that column and add a lock icon. Once you've put a lock on the top row, everything in that column is automatically locked.

▲▼ To the TV 14 Column

◀▶ To turn on the lock

						
V/FV	—		—	—	—	—
S	—		—	—	—	—
L	—		—	—	—	—
D	—		—	—	—	—
FINISH						

▲▼ To FINISH

◀▶ To save settings and exit

- If you want to change the setup, move the cursor to the top column and change the lock icon to "—". You may then select individual categories to block.

Special Note about Ratings

Some programs are not broadcast with a ratings signal. Therefore, even if you setup V-Chip ratings limits, these programs will not be blocked. Parents are cautioned to preview the contents of these programs or movies.

Directions to set up Movie Ratings:

Press the MENU button



To V-CHIP



To operate (Lock icon  appears)



Press ZERO to access V-Chip setup options



To SET MOVIE RATINGS



To enter movies menu

X	TV-17	R	PG-13	PG	G	NR
—	—	—	—	—	—	—

FINISH

☐ **NR - Not Rated.**

This is a film which has no rating. In many cases these films were imported from countries which do not use the MPAA ratings system. Other NR films may be from amateur producers who didn't intend to have their film widely released.

NR (Not Rated) Programming may contain all types of programming including children's programming, foreign programs, or adult material.

☐ **G – General Audience.**

In the opinion of the review board, these films contain nothing in the way of sexual content, violence, or language that would be unsuitable for audiences of any age.

☐ **PG – Parental Guidance.**

Parental Guidance means the movie may contain some contents such as mild violence, some brief nudity, and strong language. The contents are not deemed intense.

☐ **PG-13 – Parents Strongly Cautioned.**

Parents with children under 13 are cautioned that the content of movies with this rating may include more explicit sexual, language, and violence content than movies rated PG.

NOTE (For Canadian Viewers):

- V-Chip function is based on specifications for the United States and therefore may not work properly in Canada.

- ❑ **R Restricted.**
These films contain material that is explicit in nature and is not recommended for unsupervised children under the age of 17.
- ❑ **NC-17 No One Under 17.**
These movies contain content which most parents would feel is too adult for their children to view. Content can consist of strong language, nudity, violence, and suggestive or explicit subject matter.
- ❑ **X No One under 18.**
Inappropriate material for anyone under 18.

Directions to Block Movie Viewing:

To block viewers from any or all of these ratings categories, press the ▲ or ▼ to move the cursor to the correct location. Press the ◀ or ▶ buttons to turn the locking feature on or off. An item is blocked if the  icon appears instead of a "—".

For example, to block viewing of X and NC-17 rated from shows:

- ▲▼ To the X Column
- ◀▶ To turn on the lock

X	NC-17	R	PG-13	PG	G	NR
	—	—	—	—	—	—
FINISH						

- ▲▼ To the NC-17 Column
- ◀▶ To turn on the lock

X	NC-17	R	PG-13	PG	G	NR
		—	—	—	—	—
FINISH						

- ▲▼ To FINISH
- ◀▶ To save settings and exit

Notes About Unrated Programs:

Unrated programming refers to any programming which does not contain a rating signal. Programming on television stations which do not broadcast rating signals will be placed in the "Unrated Programming" category.

Examples of Unrated programs:

Emergency Bulletins
Locally Originated Programming
News
Political Programs
Public Service Announcements
Religious Programs
Sports
Weather
Some Commercials

- TV programs or movies that do not have rating signals will be blocked if the Unrated Category is set to LOCK.

Directions to Block Unrated Programs:

You can block programs that are not rated.

-  Press the MENU button
 - ▲▼ To V-CHIP
 - ◀▶ To operate (The lock icon  appears)
 -  Press ZERO to access V-Chip setup options
 - ▲▼ To UNRATED
- | | | |
|---------|------|-------|
| UNRATED | VIEW | BLOCK |
|---------|------|-------|
- ◀▶ To View or Block
 -  Press EXIT/PIP OFF when done

NOTES:

- In order for V-Chip settings to take effect, **V-Chip settings must be turned ON in the V-Chip menu (page 19).**
- You can automatically unblock all of your restrictions by turning V-Chip settings OFF in the V-Chip menu (page 19).
- You can always unblock a restriction by re-entering the V-Chip menu and removing the lock icon.

Accessing V-Chip Information:

To access Rating information about a certain program, press the V-CHIP button while viewing that program. A display like this will appear:



PROGRAM IS RATED :
TV-PG - V

If you decide you want to block this category of viewing, press "0" while the above screen is visible, and all programs from that category will be blocked.

Example 1:

If you want to set your V-Chip settings to block *all* programming above TV PG:



Press ZERO when TV-PG is displayed

	TV	TV	TV	TV	TV	TV
V/FV	—	—	—	—	—	—
S	—	—	—	—	—	—
L	—	—	—	—	—	—
D	—	—	—	—	—	—

All Programming above TV PG will be blocked.

Example 2:

If you want to set your V-Chip settings to block all programming above a current setting such as TV PG-V (with violence):



Press ZERO when TV-PG - V is displayed

	TV	TV	TV	TV	TV	TV
V/FV	—	—	—	—	—	—
S	—	—	—	—	—	—
L	—	—	—	—	—	—
D	—	—	—	—	—	—

All Programming above TV PG with Violence will be blocked!

- For Children's programming you can block TV-Y and Y programs by Pressing "0" when Y is displayed during a program. Programming for audiences other than children's audiences will not be affected.

Set Lock Code

Channel Guard and V-Chip settings are protected by a four-digit Lock Code. Your TV comes pre-set with a Lock Code of "0000". You may change the code to any four-digit number you wish. To change the Lock Code, follow the steps below.



Press the MENU button



To SET LOCK CODE



To operate



The padlock icon appears



Press ZERO to access the Lock Code

LOCK CODE	0000
FINISH	

The first digit will be highlighted



To select the number



To move to the next digit

Continue to follow these directions for all four numbers



To FINISH



To save settings and exit

Your Lock Code is now set.

NOTES:

- After a power interruption you must reset the Lock Code.
- Write your Lock Code number down and keep it hidden from potential viewers.
- If you forget the Lock Code, a new code may be set using the steps listed above.

Tint

Tint allows you to adjust the levels of red and green in your TV picture.

- ▲▼ To TINT
- ▶ To increase the levels of green
- ◀ To increase the levels of red
- ▲▼ To move to the next setting

Color

The color function lets you make all the colors in the TV picture appear either more vivid or subtle.

- ▲▼ To COLOR
- ▶ To make the colors more vivid
- ◀ To make the colors more subdued
- ▲▼ To move to the next setting

Picture

Picture allows you to adjust the levels of black and white on the TV screen, giving you a darker or brighter picture overall.

- ▲▼ To PICTURE
- ▶ To increase the level of contrast
- ◀ To decrease the level of contrast
- ▲▼ To move to the next setting

Bright

You can adjust the overall brightness of the TV picture with the Bright control.

- ▲▼ To BRIGHT
- ▶ To lighten the picture
- ◀ To darken the picture
- ▲▼ To move to the next setting

Detail

The Detail feature adjusts the level of fine detail displayed in the picture.

- ▲▼ To DETAIL
- ▶ To make the picture sharper (more details)
- ◀ To make the picture smoother (less detail)
- ▲▼ To move to the next setting

Noise Muting

This feature inserts a blank blue screen over channels which are not broadcasting or are too weak to be received clearly.



Press the MENU button



To NOISE MUTING



To turn Noise Muting ON or OFF

- Noise Muting will not work during Auto Tuner Setup or when you operate Channel Summary.

Set Video Status

With Set Video Status, you can save your own set of picture quality adjustments as "Choice" and have access to them at the touch of a button.



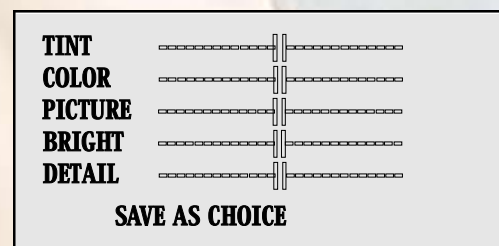
Press the MENU button



To SET VIDEO STATUS



To operate



To set the TINT levels



To move to the next option

Repeat these steps until all levels are set.



To SAVE AS CHOICE



To save settings and exit

- You must use SAVE AS CHOICE to exit the Set Video Status menu, otherwise your preferences will not be saved.

- You can access your "Choice" settings at any time by pressing the VIDEO STATUS button on the remote control.

NOTE:

- The setting screen will disappear if you do not make any adjustments or move to the next setting in approximately three seconds. Any changes you have made to picture settings up to that point will be stored. You can exit the Picture Settings menu at any time by pressing the EXIT/PIP OFF button on the remote control.

Bass

You can increase or decrease the level of low-frequency sound in the TV's audio with the Bass adjustment.



Press the MENU button



To BASS



To increase the bass



To decrease the bass



To move to the next setting

Treble

Use Treble to adjust the level of high-frequency sound in your TV's audio.



Press the MENU button



To TREBLE



To increase the treble



To decrease the treble



To move to the next setting

Balance

Adjust the level of sound between the TV's two speakers with the Balance setting.



Press the MENU button



To BALANCE



To shift the balance towards the right speaker



To shift the balance towards the left speaker



To move to the next setting

MTS (Multi-Channel Television Sound)

MTS technology allows several audio signals to be broadcast at once, giving you a choice in what you wish to hear with a TV program. In addition to mono or stereo sound, an MTS broadcast may also include a Second Audio Program (SAP).



Press the MENU button



To MTS



Select the mode

(The ON AIR arrow tells you if a broadcast is in Stereo and/or contains an SAP).

- Keep the TV in STEREO mode to get the best sound quality. The sound will work in STEREO mode even if a certain broadcast is in MONO sound only.
- Choose the MONO setting to reduce excessive noise on a certain channel or broadcast.
- Selecting SAP will allow you to hear an alternative soundtrack, if one is available.

Some Sound Advice

You can tell if a program is broadcast in stereo by the position of the ON AIR arrow in the MTS menu screen. Unfortunately, while many programs are originally broadcast in stereo, some cable companies may "squash" the transmission to mono sound because they have only mono equipment. If you are connected to a cable system, the sound quality is determined by the cable company. If they broadcast only in mono, you will receive only mono sound, even if the program was aired in stereo.

Fortunately, most stereo programs are broadcast by the major television networks. If you connect an antenna to your TV instead of cable and set the tuner mode in Auto Tuner Setup to "Air" instead of "Cable" you will be able to pick up stereo broadcasts in their original stereo format

NOTE:

- You can leave the Sound Settings menu at any time by pressing the EXIT/PIP OFF button on the remote control.

On/Off Timer

The On/Off timer lets you program your television to turn itself on or off. You can use it as an alarm to wake up, to help you remember important programs, or as a decoy when you're not home.



Press the MENU button



To ON/OFF TIMER



To operate (begins with ON TIME)

ON TIME	7:00 PM
OFF TIME	10:00 PM
CHANNEL	02
MODE	ONCE EVERYDAY
ON/OFF TIMER	YES NO
FINISH	



To set the hour (AM/PM) you want the TV to turn on



To move to minutes



To set the minutes



To accept ON TIME and move to OFF TIME (the time the TV will turn off). Set the OFF TIME the same way as ON TIME



To accept OFF TIME and move to CHANNEL



To select channel



To move to MODE



Choose ONCE or EVERYDAY



To ON/OFF TIMER



Choose YES to accept the timer setting, choose NO if you don't wish to accept



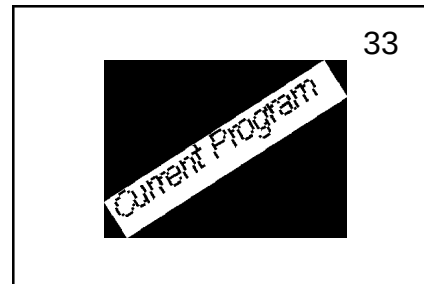
To FINISH



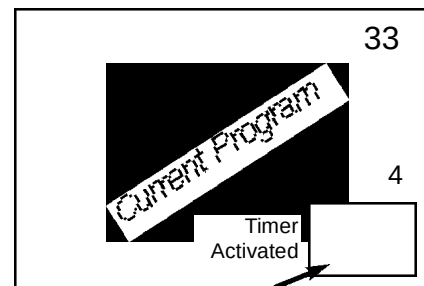
To save settings

Timer Note:

If the television is on when a timed event is about to start a Timer Preview window will appear. The Timer Preview window will appear in the lower right corner of the screen seven seconds before the timer is programmed to begin. When the timer activates, the Preview picture will become the main picture.

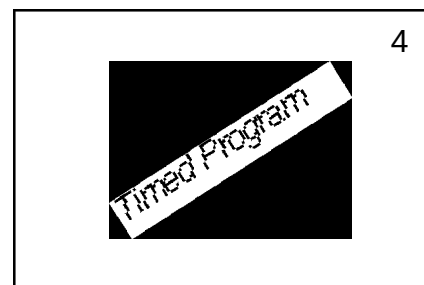


Seven seconds before Timer Activates....



(Preview of ON/OFF Timed Program)

Seven seconds later...



Timer Activates

NOTE:

• **On/Off Timer** cannot be set to locked or guarded channels. In order for the On/Off Timer to work, the clock must be set. After a power interruption Timer settings must be reset.

TV Speaker

If your TV is connected to a stereo system, you can turn off the TV speakers and listen to the audio through your stereo.



Press the MENU button



To TV SPEAKER

TV SPEAKER	ON	OFF
------------	----	-----



To turn the TV's speakers ON or OFF



EXIT/PIP OFF when finished

- Before you turn the TV Speaker setting from OFF to ON, **make sure that the TV volume level is low!** If the TV volume is set too high, the sound level will be extremely loud.
- After a power interruption, the TV Speaker settings will return to "ON".

Audio Out

If your television is connected to an external speaker source, Audio Out gives you the option of controlling the volume level with your TV's remote control.



Press the MENU button



To AUDIO OUT

AUDIO OUT	VARI	FIX
-----------	------	-----



To VARI or FIX



EXIT/PIP OFF when finished

VARI: Lets you adjust the volume of the external speakers using the VOLUME +/- buttons on your TV's remote control.

FIX: The volume of the external speakers is adjusted using the audio device's remote control.

V4 Component-In

Get the best quality video from your DVD player by using this setting and the DVD inputs at the rear of the television. Set either to YES for component input (for DVD) or to NO for composite video input (for a regular VCR).



Press the MENU button



To V4 COMPONENT-IN

V4 COMPONENT-IN	YES	NO
-----------------	-----	----



To turn the input ON or OFF



EXIT/PIP OFF when finished

- This option should be used with DVD players only. For information on connecting VCR's see page 6. For more information on connecting a DVD player, see page 8.

Closed Caption

Use this function to display the Closed Captioning text onscreen (when included in a broadcast).



Press the MENU button



To CLOSED CAPTION



To operate

MODE	:	CAPTION
CAPTION	:	CC1 CC2 CC3 CC4
TEXT	:	T1 T2 T3 T4
FINISH		



To select CAPTION, TEXT, or OFF



To CAPTION or TEXT



To select a caption (CC1 to CC4) or text channel (T1 to T4)



To accept that selection and move to FINISH



To save settings and exit

NOTES:

- **Closed Captions** subtitles are usually found on caption channel CC1. Some programs may include additional text information which is usually found on text channel T1. The other channels are available for future use.
- Closed captioning may not work correctly if the signal being received is weak or if you are playing a video tape.
- Most broadcasts containing Closed Captioning will display a notice at the start of the program.
- **External Speakers:** When using external speakers or amplifiers, shut off the TV Speakers (see 'TV Speakers') above.

Menu

The **MENU** button allows you to access JVC's onscreen menu system. Press **MENU** to activate the onscreen menu system.

- See individual topics (like "Sound Settings) for specific information on using menus.

Exit/PIP Off

Press the **EXIT/PIP OFF** button to leave a menu screen or to turn off the PIP feature (page 30).

Display

The **Display** screen shows the current status of timers and inputs.



Press the **DISPLAY** button

07	
NOW	12:20 PM
SLEEP TIMER	OFF
ON/OFF TIMER	EVERYDAY
ON TIME	7:00 PM
OFF TIME	10:00 PM

- The channel or AV input (Channel 07)
- The current time (12:20 pm)
- Sleep Timer status/minutes remaining (The Sleep Timer is off)
- On/Off Timer status (Set to turn on everyday at 7:00 PM, off at 10:00 PM)
- Each Press of the **DISPLAY** button changes the display mode:



Display - Full screen shown above

Time - Shows the current time only

Channel - Shows the current channel

Off - Turns Display off

- You may also turn off the Display at any step by pressing **EXIT/PIP OFF**.

Video Status

The **VIDEO STATUS** button gives you a choice of three TV picture display settings, including a display of your own preferences.

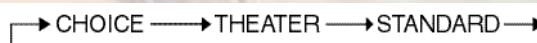
Standard - Resets the picture display to the factory settings.

Choice - Displays the setting levels you specified on the "Set Video Status" Menu (see page 23).

Theater - Gives a rich, film-like look to video.



Press the **VIDEO STATUS** button



Sleep Timer

The **Sleep Timer** can turn the TV off for you after you fall asleep. Program it to work in intervals of 15 minutes, for a total time of up to 180 minutes.



Press the **SLEEP TIMER** button



Sleep Timer Message

20 seconds before the automatic shutoff, this message will appear:

GOOD NIGHT!!
PUSH SLEEP TIMER BUTTON
TO EXTEND.

You then have 20 seconds to press the Sleep Timer button to delay the shutoff for another 15 minutes.

NOTE:

- Please note that if the Clock, Sleep Timer or On/Off Timer are not set, the Display screen will show: "Clock Not Set", "Sleep Timer OFF", and "On/Off Timer Off" respectively.

BBE

BBE high definition audio adds natural, clear and extraordinary sound quality to any program. Turn BBE On or Off using the BBE button.

BBE ON OFF

Hyper Surround

Creates a deep, three-dimensional sound effect by channeling the audio through the TV's front-firing speakers. Press the HYPER SURROUND button to turn the effect on or off.

HYPER SURROUND ON OFF

Muting

The MUTING button instantly turns the volume down completely when you press it.



MUTING

The volume level will instantly go to zero.

- To restore the volume to its previous level, press MUTING again.

Number Buttons - 10 Key Pad

To move directly to a specific channel, enter the channel number with the number buttons on the remote. For example, to move to Channel 7:



0 (zero)



7 (seven)

100+ Button

Use the 100+ button to directly access channels above Channel 99. For example to move to channel 124:



100+



2 (two)



4 (four)

Return+

The RETURN+ button has two functions:

Return - Returns to the channel viewed just before the channel currently onscreen.

Return+ - Lets you program a specific channel to return to while scanning through the channels.



RETURN+ and hold for three seconds

RETURN CHANNEL
PROGRAMMED !

Scan using the Channel+/- buttons



RETURN+

You will return to your programmed channel.

- To cancel your Return+ channel, press and hold the RETURN+ button for three seconds. The message "RETURN CHANNEL CANCELLED!" will appear.
- Return+ works only with CHANNEL+/- . Pressing any number key will cancel Return+.
- Return+ does not effect the PIP channel.
- For more information on Return and Return+, please see page 11.

NOTE:

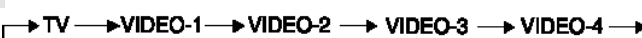
• BBE is a registered trademark of BBE Sound, Inc. For U.S., licensed from BBE Sound, Inc. under USP 4638258, 4482866 and 5510572. For Canada, licensed from BBE Sound, Inc. BBE is a registered trademark of BBE Sound, Inc.

Input

Selects the signal input source for the television: TV (for Antenna or Cable) or Video1, 2, 3, or 4 for video devices like VCR's, DVD players, or camcorders.



INPUT



VCR Buttons

You can use this remote control to operate the basic functions of your VCR. These functions include: play, record, rewind, fast-forward, stop, pause, channel scan, TV / VCR, power on, and power off.

Move the selector switch to VCR to operate.

- The remote is preset with the code 000 to control JVC-brand VCR's. For any other manufacturer's brand VCR, please see the code chart and instructions on page 13.

DVD Buttons

You can also use this remote control to operate the basic functions of your DVD player. These functions include: play, rewind, fast-forward, stop, still/pause, previous/next, tray open/close, power on, and power off.

Move the selector switch to DVD to operate.

- The remote is preset with the code 000 to control JVC-brand DVD players. For any other manufacturer's brand DVD player, please see the code chart and instructions on page 14.

TV/CATV Switch

Use either the television's own tuner or a cable box to select channels. Set this switch to TV to operate the television's built-in tuner. Move the switch to CATV to operate a cable box.

- See page 12 for information on programming your remote for cable box operation.

VCR/DVD Switch

You can control a VCR or DVD player with the buttons on the lower part of the remote control. Use the VCR/DVD selector switch to choose either VCR or DVD operation.

- See pages 13 and 14 for information on programming your remote with VCR and DVD operating codes.

Light

The RM-301G remote includes illuminated buttons for key features like CHANNEL +/- and VOLUME +/- . Press the LIGHT button to turn the illumination on.



LIGHT

PIP (Picture-In-Picture)

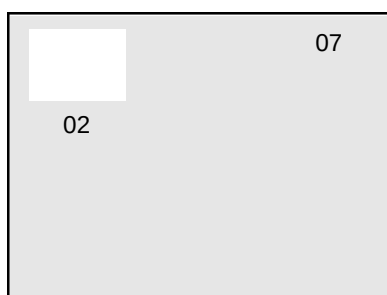
PIP displays two separate pictures on screen. Your television has 2-Tuner PIP, meaning you can view pictures from two *different* channels simultaneously. A special set of PIP control buttons are located on the upper part of the remote control. Descriptions of each button appear on this page.

ON/MOVE

Turn PIP on by pressing the ON/MOVE button.



(PIP) ON/MOVE

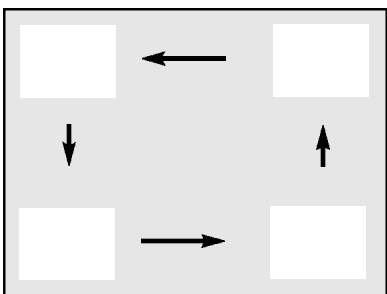


EXIT/PIP OFF to turn PIP off

Once PIP is turned on, you can move the PIP window to any of the TV's main picture's four corners with the ON/MOVE button.



ON/MOVE



- Each press of ON/Move will shift the PIP window to a different corner.

FREEZE

Use the FREEZE button to lock a single, still image onto the PIP window.



FREEZE

- If PIP is off when FREEZE is pressed, a snapshot of the main screen is taken and placed in the PIP window.
- If PIP is on when FREEZE is pressed, the image in the window when the button was pressed is held.

SWAP

You can exchange the channel displayed on the main screen for the one shown in the PIP window by pressing SWAP.



SWAP

CHANNEL +/- For PIP

Like the main CHANNEL +/- buttons, CHANNEL +/- for PIP lets you scan through the channels in the PIP window.



CHANNEL +/-

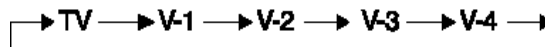
- Direct channel selection with the 10 key pad for PIP is not possible.

SOURCE

You can select the signal source for the PIP window image.



SOURCE



- If the PIP does not have a signal, the window will be blue.
- If you connect a DVD to Video-2 or Video-4, the PIP window will be blue.

NOTES:

- The PIP window is $\frac{1}{9}$ the size of the full screen.
- PIP will not display blocked channels or programs. A blue screen will display instead.

PROBLEMS	CHECK
There is no power	• See if the power cord became unplugged. • Check for a blown fuse or circuit breaker or a power outage.
There is no picture or sound	• The antenna could be disconnected. • The Input mode (TV / Video) could be set improperly. See page 23. • The tuner (Auto Tuner Setup) could be set improperly. See page 18. • The TV station may be having difficulties. Check to see if other stations are working.
Remote control is not operating properly or at all	• Check to see that the batteries are still working and properly installed. • Make sure the remote has a clear sight path to the TV. • Check that the TV/CATV switch is in the proper position.
You cannot select a certain channel	• You may be too far from the TV. You must be within 23 feet (7 meters). • Make sure the channels have been programmed. See "Channel Summary", page 18. • Check to see if the channel is locked. See "Channel Summary - Lock" page 18.
The power turns off by itself	• Make sure the set did not become unplugged. • Perhaps the On/Off Timer is set. See page 25. • Check to see if the Sleep Timer was set. See page 27.
The clock is wrong	• The power was interrupted and the clock was not reset. See page 17.
The On Timer is blinking	• There is a problem with the TV. Unplug the set and call for service.
The color quality is poor	• Tint and Color may be improperly adjusted. See page 23. • The Video Status mode may be turned to the wrong setting. See page 27.
There are lines across the picture	• There could be interference from another electrical appliance, such as a computer, another TV or VCR. Move any such appliances further away from the TV.
The picture is spotted	• There could be interference from a high-wattage appliance, like a hairdryer or vacuum, operating nearby. Move the antenna away from the appliance or change to a coaxial cable connection which is less prone to interference.
There are double pictures (ghosts)	• A building or passing airplane can reflect the original signal and produce a second, slightly delayed one. Adjust your antenna position.
Picture is snowy (image noise)	• Your antenna may be damaged, disconnected or turned. Check the antenna connection page 8 and in your Quick Setup Guide. If the antenna is damaged, replace it.
Screen is 83% black	• The Closed Caption Text mode is on. Turn it off in the Closed Caption Menu, page 26.
Stereo or bilingual programs can't be heard	• Make sure the MTS settings are correct. See "MTS" on page 24.
There is no sound from the TV's speakers	• The TV Speaker option may be turned off. See page 28.
Static electricity	• It is normal to feel static electricity if you brush or touch the screen.
You hear occasional crackling sounds	• It is normal for the TV to make crackling sounds when first turned on or off. Unless the sound or picture becomes abnormal, this is fine.

For Canadian model televisions, see separate sheets for Warranty/Garantie and JVC Authorized Service Centers in Canada.

JVC COMPANY OF AMERICA warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL PURCHASER AT RETAIL to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original retail purchase for the period shown below (the "Warranty Period") (PICTURE TUBE is covered for Two (2) years.)

Parts	Labor
1 YEAR	1 YEAR

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during regular business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of this Warranty Period. All products and parts thereof may be brought to a JVC authorized service center on a carry-in basis. Televisions with a screen size of 25 inches and larger may be covered on an in-home basis where such service is available.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

To determine if in-home service is available in your area, either contact the selling dealer (retailer) or call 1-800-537-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website <http://www.jvcservice.com>. In-home service, if available, will require clear access to the Television by the service representatives. If in-home service is not available, carry in service will be provided.

If service is not locally available, box the product carefully, preferably in its original carton, and ship, insured, with a copy of your bill of sale plus a letter of explanation of the problem to the nearest JVC Factory Service Center, the name and location which will be given to you by the toll free number.

If you have any questions concerning your JVC Product, please contact our Customer Relations Department.

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

- 1) Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
- 2) Initial installation, installation and removal from "built-in" entertainment centers and other mounting systems;
- 3) Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
- 4) Damage that occurs in shipment, due to an act of God, and cosmetic damage;
- 5) Signal reception problems and failures due to line power surge;
- 6) Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase;
- 7) Accessories;
- 8) Batteries (except that Rechargeable Batteries are covered for 90 days from date of purchase.)

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR THE LOSS OF USE OF THE PRODUCT, INCONVENIENCE, OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long the warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary state to state.

JVC COMPANY OF AMERICA
DIVISION OF JVC AMERICAS CORP.

1700 Valley Road
Wayne, New Jersey 07470

<http://www.jvcservice.com>

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY. THIS WARRANTY DOES NOT APPLY FOR DETAILS OF REFURBISHED PRODUCT WARRANTY. PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:

Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet.
Retain this information for future reference.

Model No.: _____ Serial No.: _____
Purchase Date: _____ Name Of Dealer: _____

Authorized Service Centers

33

QUALITY



SERVICE

HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE: 1 (800) 537-5722

<http://www.jvcservice.com>

Dear Customer;

In order to receive the most satisfaction from your purchase, read the instruction booklet before operating the unit. In the event that repair is necessary, or for the address nearest your location, please refer to the factory service center list below or within the Continental United States, call 1-800-537-5722 for your authorized servicer. Remember to retain your Bill of Sale for Warranty Service.

— JVC

JVC SERVICE & ENGINEERING COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP.

FACTORY SERVICE CENTER LOCATIONS

Dear customer;

In order to receive the most satisfaction from your purchase, read this guide before operating the unit, and before calling for service make sure you check the Troubleshooting pages at the end of this book. In the event that repair is necessary, or for the address nearest you, please refer to the factory service center list below, or within the continental United States, call the toll free number above for an authorized service center. Remember to retain your bill of sale for warranty service.

10 New Maple Avenue
Pine Brook, NJ 07058-9641
(973) 396-1000

1500 Lakes Parkway
Lawrenceville, GA 30243-5857
(770) 339-2582

705 Enterprise Street
Aurora, IL 60504-8149
(630) 851-7855

5665 Corporate Avenue
Cypress, CA 90630-0024
(714) 229-8011

2969 Mapunapuna Place
Honolulu, HI 96819-2040
(808) 833-5828

10700 Hammerly Suite 110
Houston, TX 77043
(713) 935-9331

13 Cummings Park
Woburn, MA 01801
(781) 376-9100

8192 State Road 84
Davie, FL 33324
(954) 472-1960

890 Dubuque Avenue
South San Francisco, CA 94080-1804
(650) 871-2666

Sophisticated electronic products may require occasional service. Just as quality is a keyword in the engineering and production of the wide array of JVC products, service is key to maintaining the high level of performance for which JVC is world famous. The JVC service and engineering organization stands behind our products.

NATIONAL HEADQUARTERS
JVC SERVICE & ENGINEERING COMPANY OF AMERICA
DIVISION OF JVC AMERICAS CORP.
1700 Valley Road
Wayne, New Jersey 07470

IF YOU SHIP THE PRODUCT

Pack your JVC unit in the original carton or one of equivalent size and strength. Enclose, with the unit, a letter stating the problem or symptom that exists and also a copy of the receipt or bill of sale you received when you purchased your JVC unit. Print your home return address on the outside and inside of the carton. Send to the appropriate JVC Factory Service Center as listed above.

Don't service it yourself

CAUTION

To prevent electrical shock, do not open the cabinet. No user serviceable parts inside. Refer to qualified service personnel.

ACCESSORIES

To purchase accessories for your JVC product, you may contact your local JVC Dealer. Or from the 48 Continental United States call toll free : 1 (800) 882-2345





Specifications

MODEL	AV-27F802
Reception Format	NTSC, BTSC System (Multi-Channel Sound)
Reception Range	VHF 2 to 13, UHF 14 to 69 Sub Mid, Mid, Super, Hyper and Ultra bands (181 channel frequency synthesizer system)
Power Consumption	140W / 2.0A
Power Source	AC 120V, 60Hz
Screen Size	27 inch / 68 cm measured diagonally
Speakers	2" x 4 3/4" / 5 x 12 cm oval x 2
Audio Output	6W + 6W
Antenna Terminal	75 ohms (VHF/UHF) (F-type connector)
External Input Jacks	Video: 1 Vp-p, 75 ohms Audio: 500mVrms (-4dBa) high impedance
S-Video Input Jacks	Y: 1Vp-p positive, 75 ohms (negative sync provided) C: 0.288 Vp-p (burst signal), 75 ohms
Component Input Jacks	Y: 1Vp-p positive, 75 ohms (negative sync provided) Pb/Pc: 0.7 Vp-p, 75 ohms
Audio Output Jacks (VARA/FDX)	VARA: More than 0 to 1550 mVrms (+6 dBa), FDX: 500mVrms (-4dBa) Low impedance (400 Hz when modulated 100%)
AV Compu Link EX Jack	3.5 mm mini jack x 1
Dimensions WxdHd (inch/cm)	29 7/8" x 23 1/8" x 19 3/4" / 75.8 x 58.3 x 50.0
Weight (lbs / kg)	101.2 (lbs) / 46 (kg.)
Accessories	Remote control unit / AA batteries x 2

Specifications subject to change without notice.

JVC COMPANY OF AMERICA
Division of JVC Americas Corp.
1700 Valley Road
Wayne, New Jersey, 07470

JVC®

JVC CANADA, INC.
21 Finchdene Square
Scarborough, Ontario
Canada, M1X 1A7

LCT0821-001A-A
0800-TN-JII-JIM

AV-27F802 STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the $\triangle$ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1) Input signal : Color bar signal
- (2) Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3) Internal resistance of tester : DC 20k Ω /V
- (4) Oscilloscope sweeping time : H $\Rightarrow$ 20 μ S/div
: V $\Rightarrow$ 5mS/div
: Others $\Rightarrow$ Sweeping time is specified
- (5) Voltage values : All DC voltage values

*Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 $\rightarrow$ R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1) Resistors

• Resistance value

- No unit : [Ω]
- K : [K Ω]
- M : [M Ω]

• Rated allowable power

- No indication : 1/10 [W]
- Others : As specified

• Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflamable resistor
- FR : Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2) Capacitors

• Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

• Withstand voltage

- No indication : DC50[V]
- AC indicated : AC withstand voltage [V]
- Others : DC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example] : Capacitance value [μ F]/withstand voltage[V]

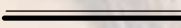
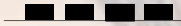
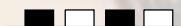
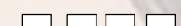
• Type

- No indication : Ceramic capacitor
- MY : Mylar capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3) Coils

- No unit : [μ H]
- Others : As specified

(4) Power Supply

-  : B1
-  : B2(12V)
-  : 9V
-  : 5V

*Respective voltage values are indicated

(5) Test point

-  : Test point
-  : Only test point display

(6) Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7) Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ($\perp$) side GND and the ISOLATED(NEUTRAL) : (⏏) side GND. Therefore, care must be taken for the following points.

- (1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2) Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

• Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

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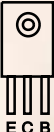
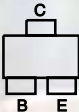
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 AV SW, CRT SOCKET, DAF, FRONT, POWER SW, LF PWB PATTERN2-23

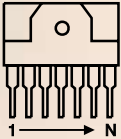
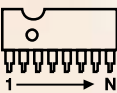
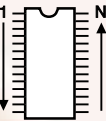
 PIP PWB PATTERN2-25

SEMICONDUCTOR SHAPES

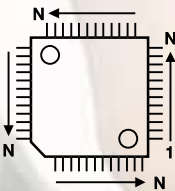
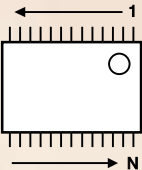
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					

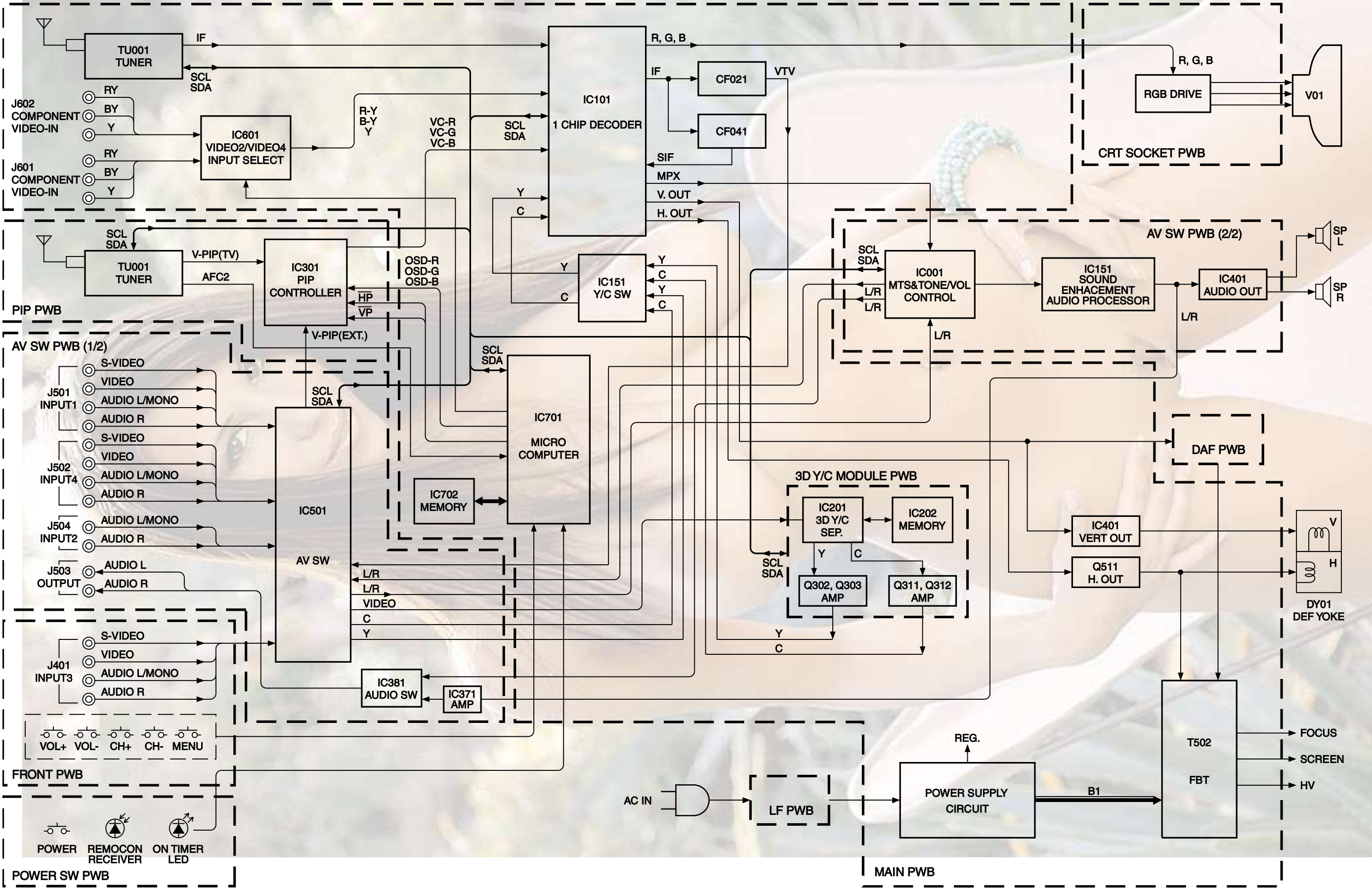
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

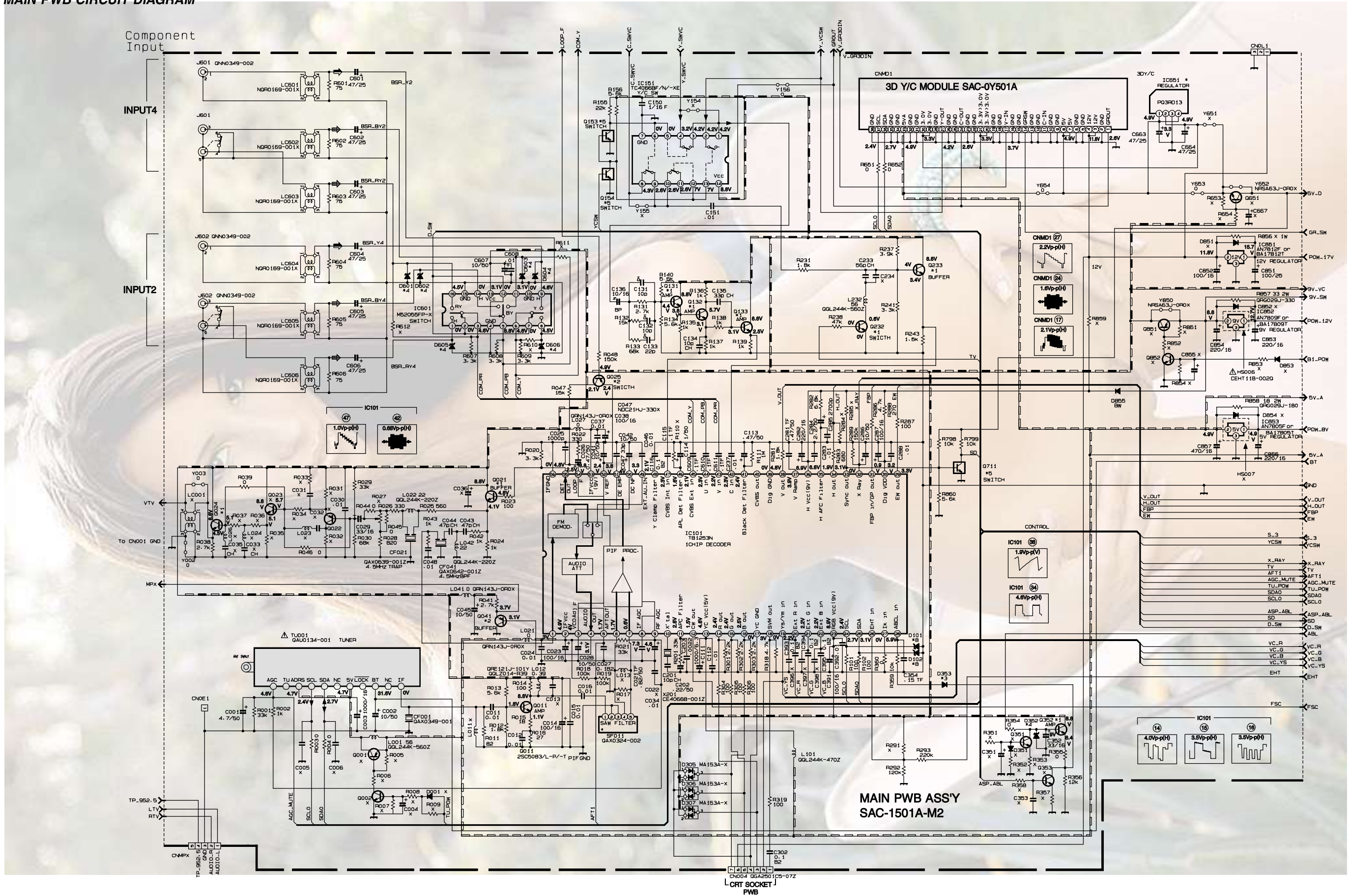
CHIP IC

TOP VIEW	
	

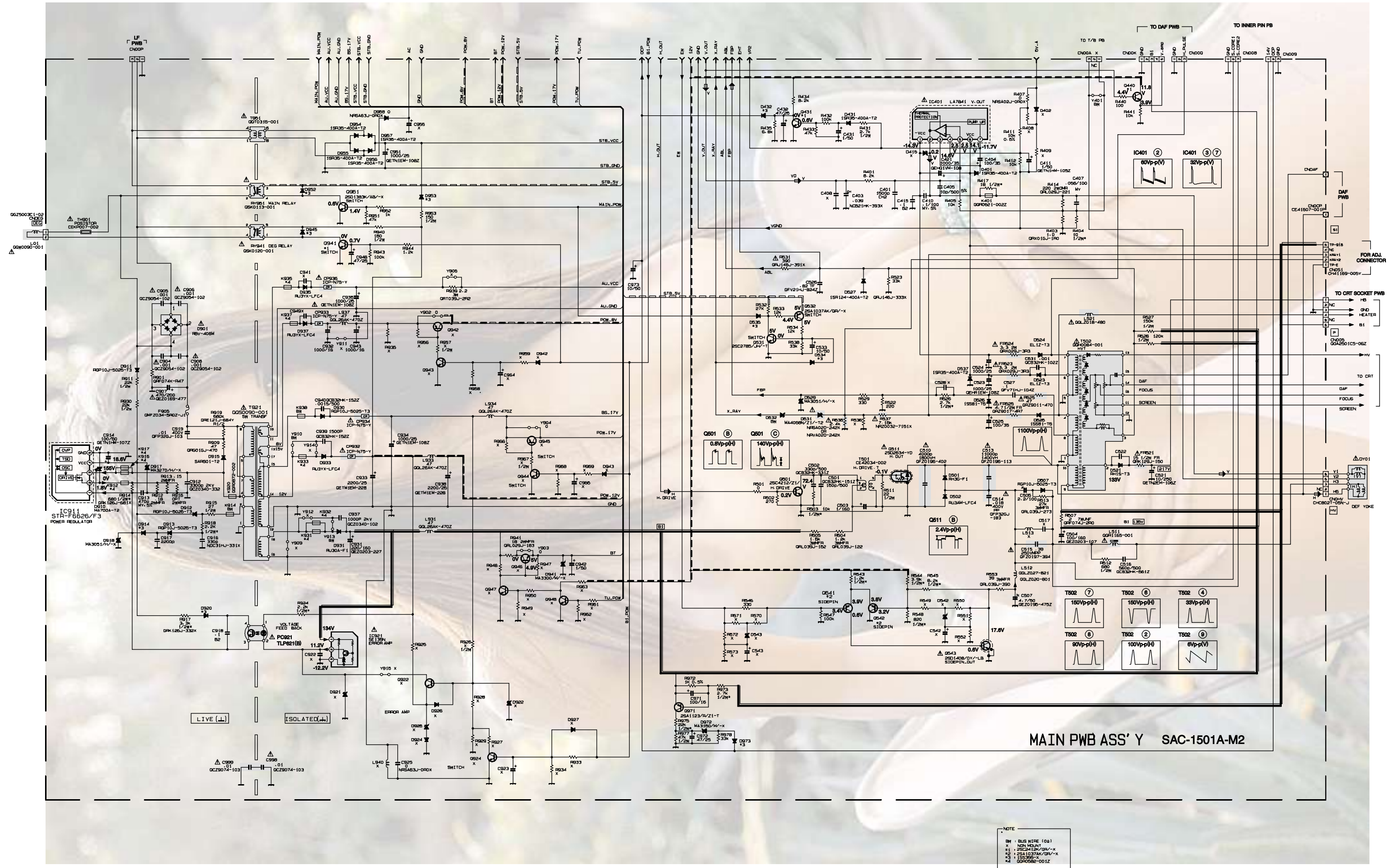
BLOCK DIAGRAM
AV-27F802 BLOCK DIAGRAM



CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM



MAIN PWB CIRCUIT DIAGRAM

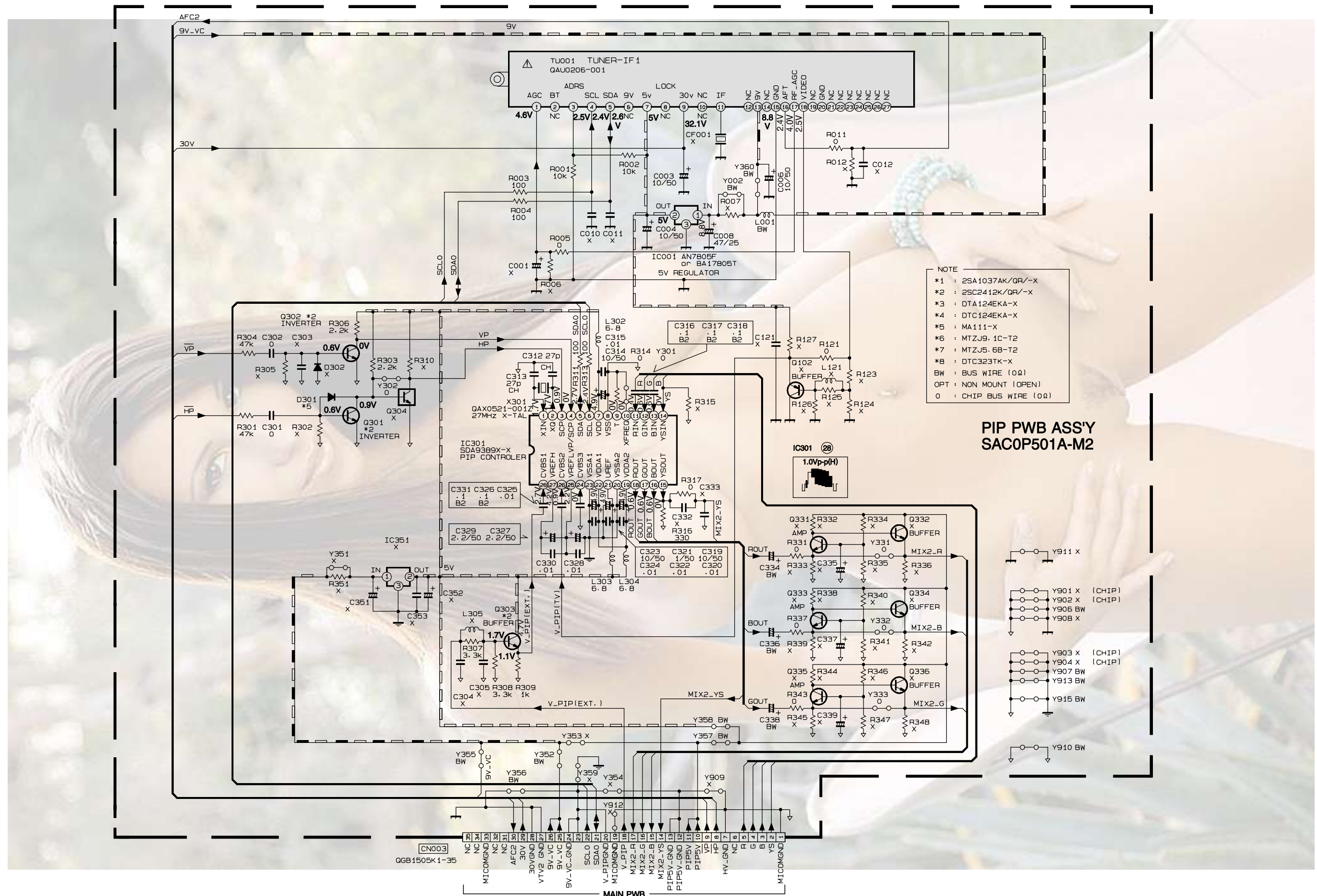


The schematic diagram illustrates the electrical architecture of a car stereo system, divided into three main sections:

- MAIN PWB ASS'Y SAC-1501A-M2:** This central board contains the main processing ICs, including the IC701 (MN1876478J) and IC703 (MM1437AF-X). It features a complex network of resistors (R1 through R1000), capacitors (C1 through C1000), and various connectors (CN001 through CN008). Key components include a 12V input, a 5V regulator, and a 1.5V regulator. The board also includes a 1CHIP-AVSW and GR3D-AVSW section.
- FRONT PWB ASS'Y SAC-8501A-M2:** This board handles the front panel controls and displays. It includes a PIC-281435Y REMCON RECEIVER (IC101) and a PIC-281435Y REMCON RECEIVER (IC102). It features a 12V input, a 5V regulator, and a 1.5V regulator. The board also includes a 1CHIP-AVSW and GR3D-AVSW section.
- POWER SW PWB ASS'Y SAC-8601A-M2:** This board manages the power switching and regulation. It includes a PIC-281435Y REMCON RECEIVER (IC101) and a PIC-281435Y REMCON RECEIVER (IC102). It features a 12V input, a 5V regulator, and a 1.5V regulator. The board also includes a 1CHIP-AVSW and GR3D-AVSW section.

The diagram shows the interconnections between these boards, including power lines, signal lines, and ground connections. Various components are labeled with their part numbers and values, such as resistors (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100) and capacitors (C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100).

PIP PWB CIRCUIT DIAGRAM



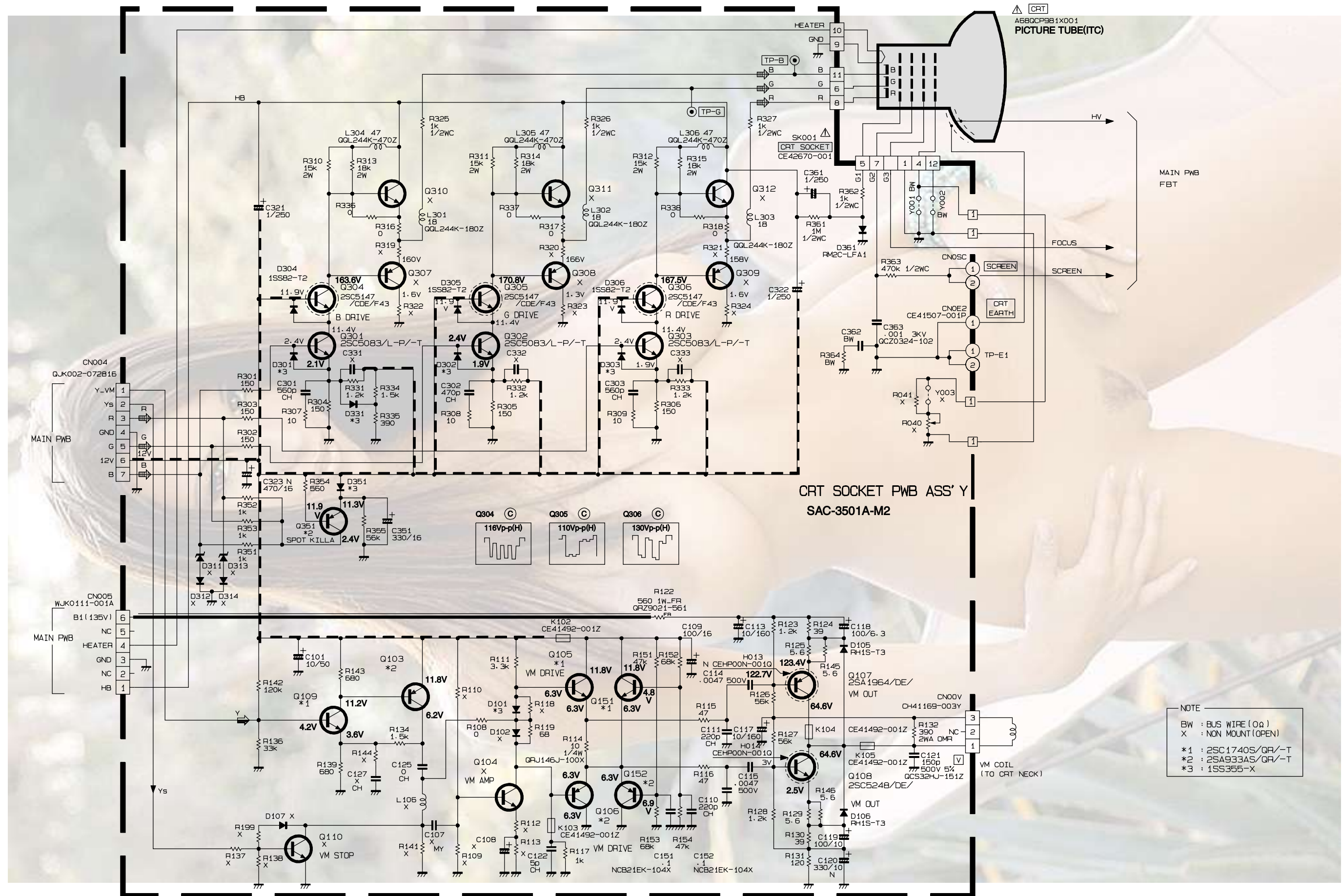
The schematic diagram illustrates the internal circuitry of the AV SW PWB ASSY (SAC0501A-M2). It is divided into several functional blocks:

- Video Inputs:** Video1, Video4, and Video2 sections, each with its own input connector and associated signal processing components.
- Audio Out:** A section for audio output, featuring a switch and various passive components.
- Digital Comb Filter:** A complex section for video signal processing, including a phase detector, SAP demodulation, and various control lines.
- AV SW PWB ASSY:** The central switching and processing unit, containing ICs like IC381, IC371, and IC401.
- Pinout Table:** A detailed table at the bottom of the page listing the pin numbers and their corresponding functions for the main PWB.

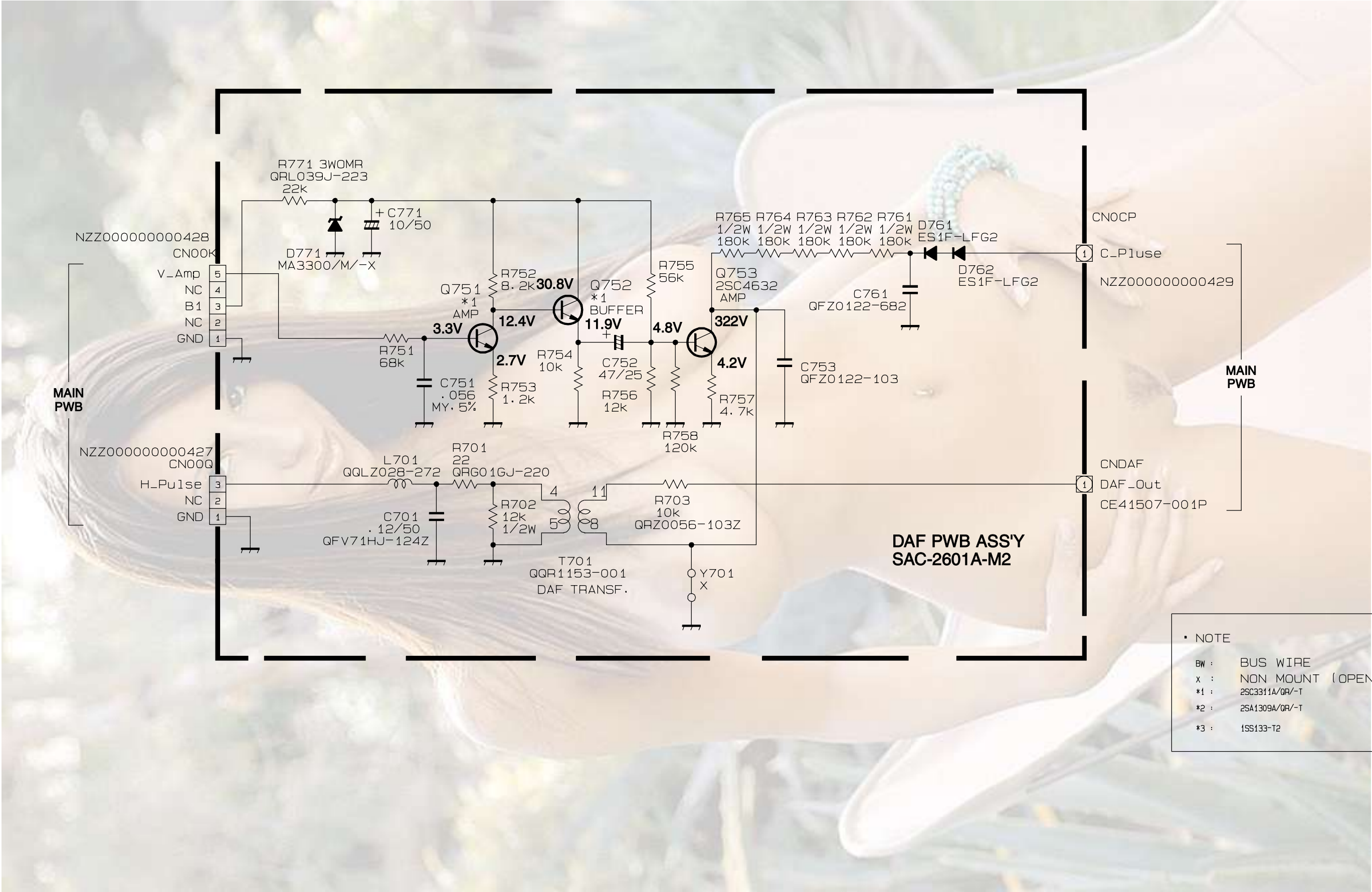
The pinout table is organized as follows:

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	RV3	11	Y-CCD	21	9V-VC	31	9V-VC	41	9V-VC
2	LV3	12	Y-CCD	22	9V-VC	32	9V-VC	42	9V-VC
3	V3	13	Y-CCD	23	9V-VC	33	9V-VC	43	9V-VC
4	S-3	14	Y-CCD	24	9V-VC	34	9V-VC	44	9V-VC
5	V3	15	Y-CCD	25	9V-VC	35	9V-VC	45	9V-VC
6	S-3	16	Y-CCD	26	9V-VC	36	9V-VC	46	9V-VC
7	V3	17	Y-CCD	27	9V-VC	37	9V-VC	47	9V-VC
8	S-3	18	Y-CCD	28	9V-VC	38	9V-VC	48	9V-VC
9	V3	19	Y-CCD	29	9V-VC	39	9V-VC	49	9V-VC
10	S-3	20	Y-CCD	30	9V-VC	40	9V-VC	50	9V-VC

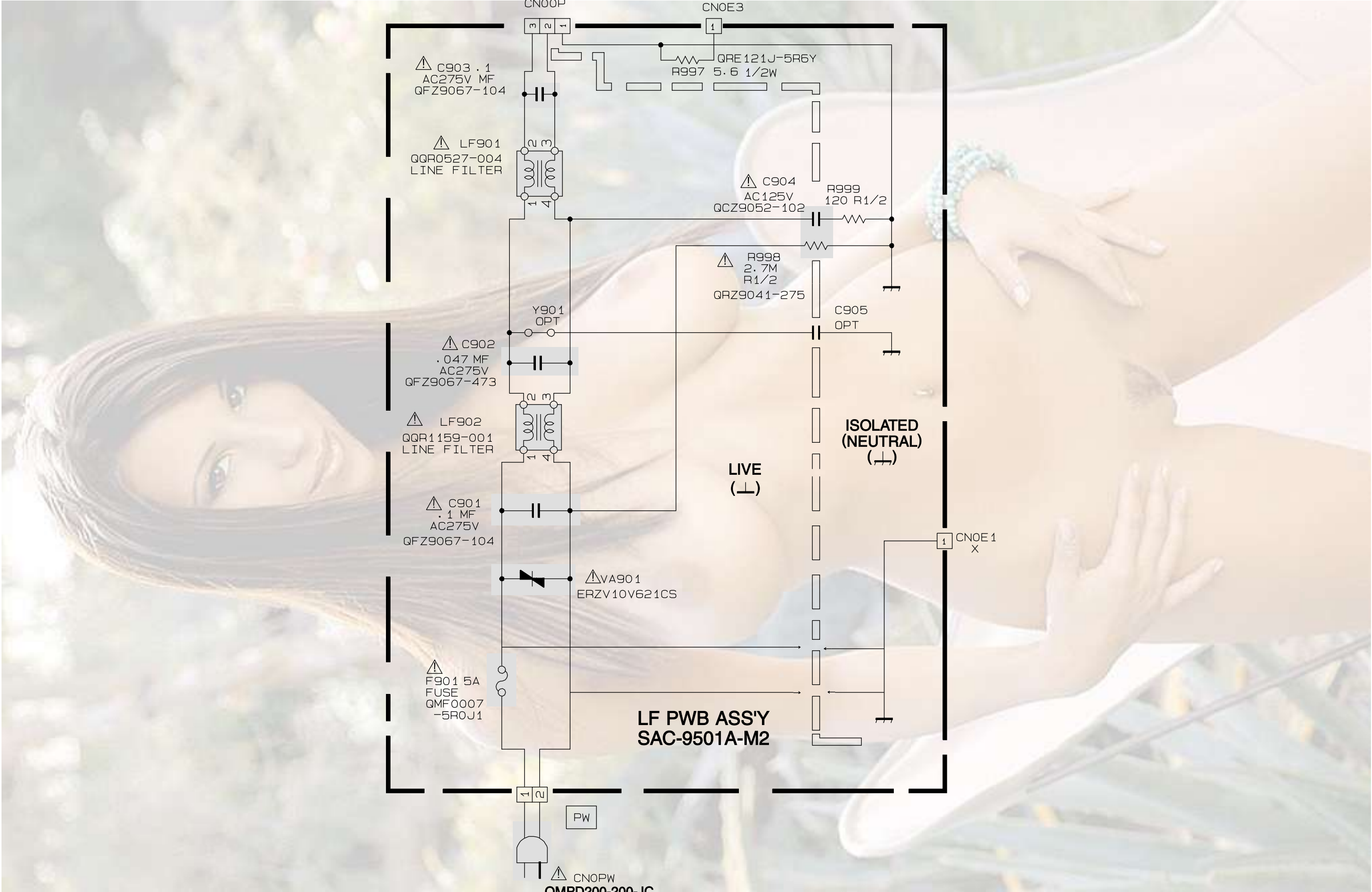
CRT SOCKET PWB CIRCUIT DIAGRAM



DAF PWB CIRCUIT DIAGRAM



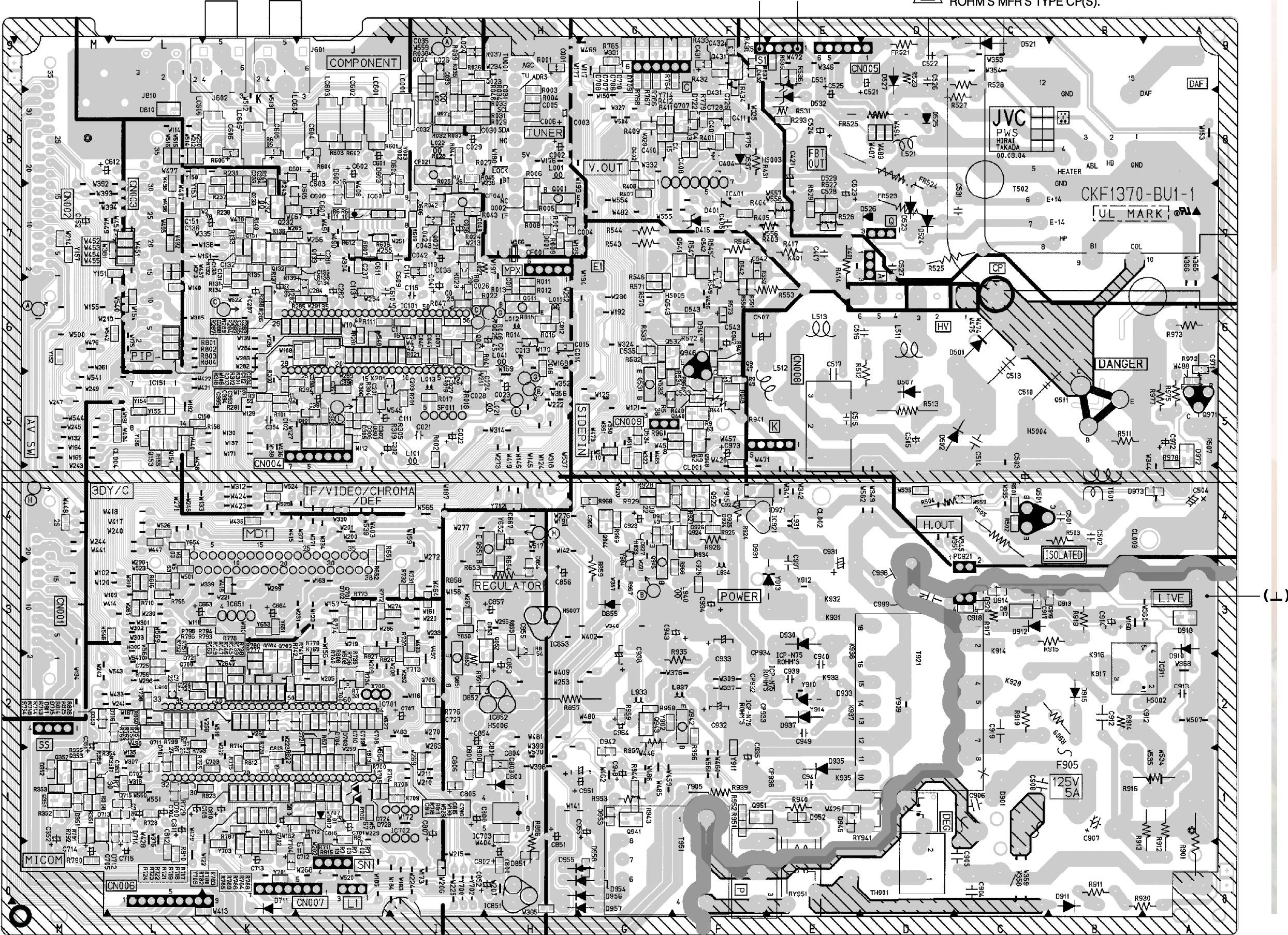
LF PWB CIRCUIT DIAGRAM



PATTERN DIAGRAMS

[MAIN PWB PATTERN]

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATED FUSE(S) AND ROHM'S MFR'S TYPE CP(S).



[AV SW, CRT SOCKET, DAF, FRONT, POWER SW, LF PWB PATTERN]

FRONT

TOP

TOP

FRONT

DAF PWB

FRONT

FRONT

POWER SW PWB

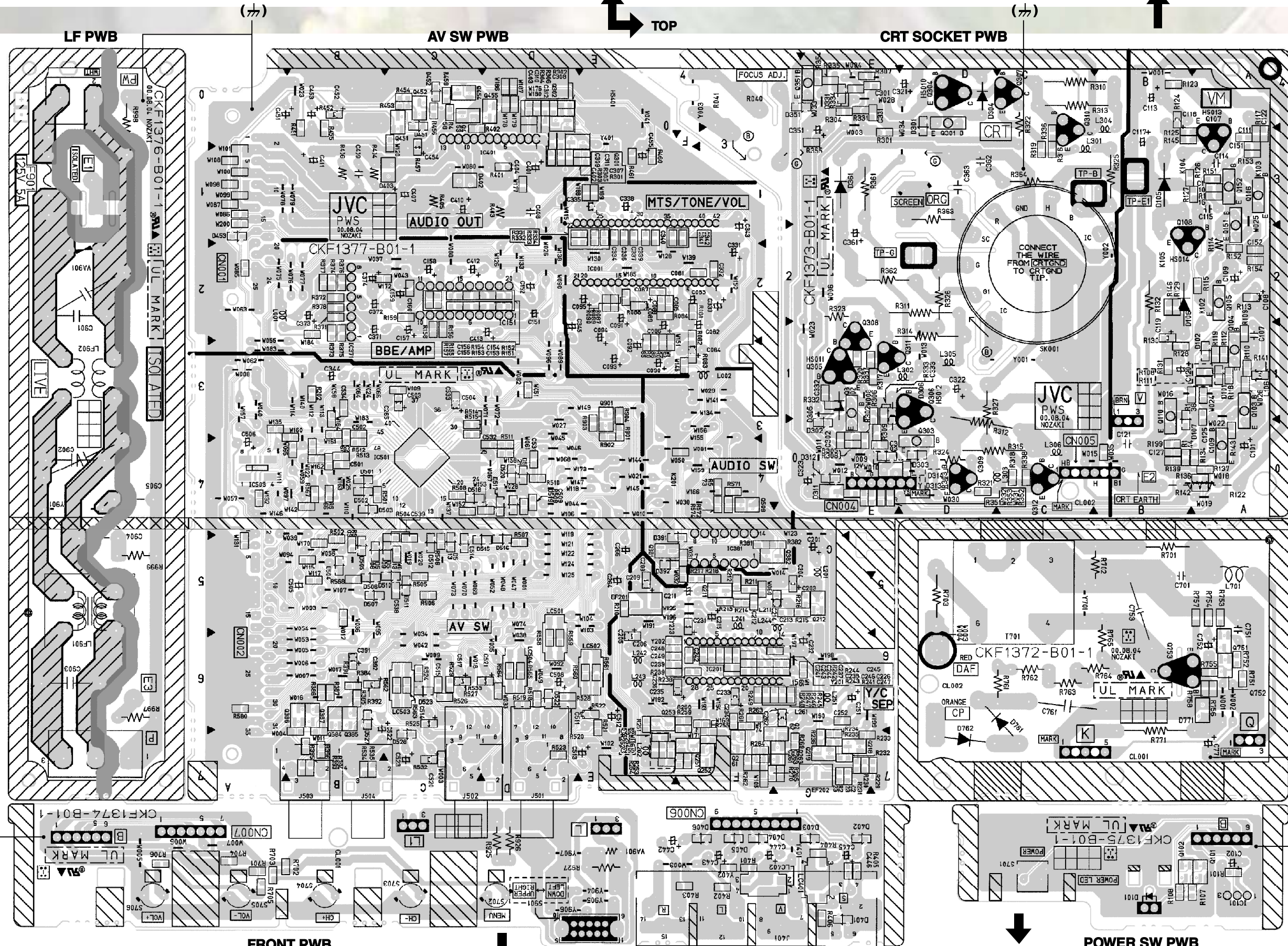
FRONT PWB

No.51757

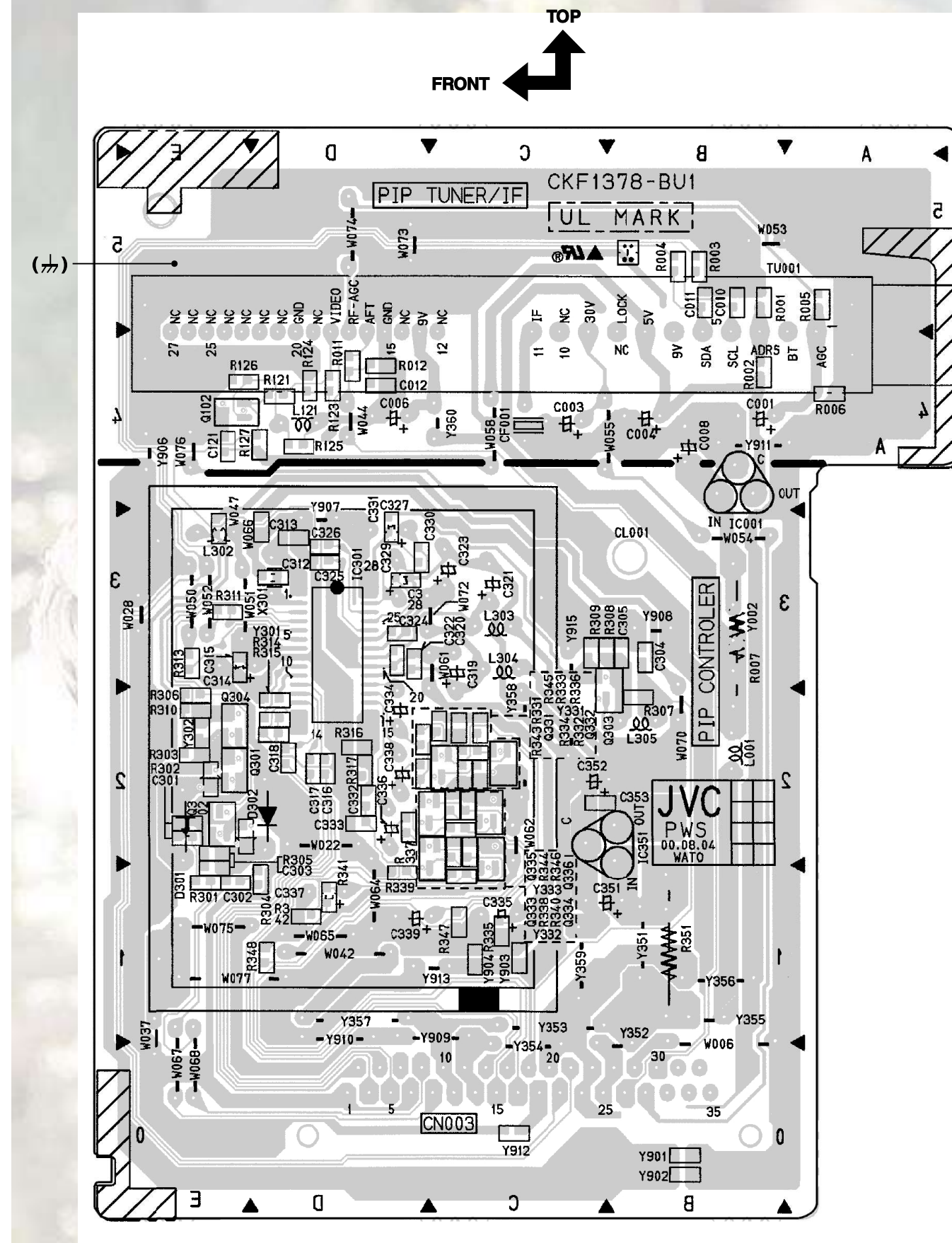
2-23

2-24

No.51757



[PIP PWB PATTERN]



PARTS LIST

CAUTION

- The parts identified by the $\triangle$ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

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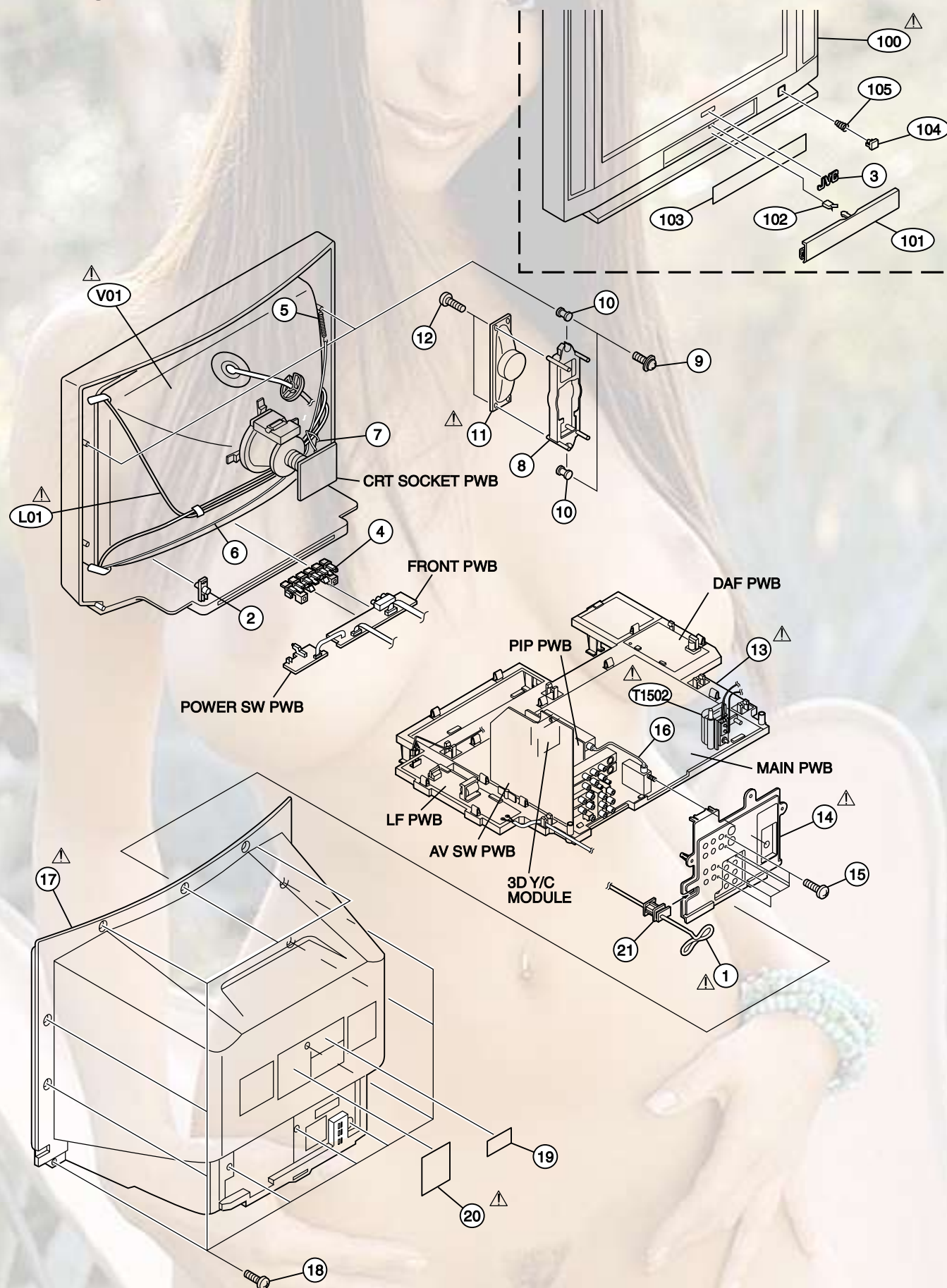
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y	Model	AV-27F802
MAIN PW BOARD		SAC-1501A-M2
DAF PW BOARD		SAC-2601A-M2
CRT SOCKET PW BOARD		SAC-3501A-M2
FRONT PW BOARD		SAC-8501A-M2
POWER SW PW BOARD		SAC-8601A-M2
LF PW BOARD		SAC-9501A-M2
PIP PW BOARD		SAC0P501A-M2
AV SW PW BOARD		SAC0S501A-M2
3D Y/C MODULE PW BOARD		SAC-0Y501A
REMOTE CONTROL UNIT		RM-C301G-1A

EXPLODED VIEW PARTS LIST

△ Ref.No.	Part No.	Part Name	Description	Local
△ L01	QQW0090-001	DEG COIL		
△ T1502	QQH0084-001	FBT	Within MAIN PWB	
△ V01	A68QCP891X001	CRT	Inc. DY	
△ 1	QMPD200-200-JC	POWER CORD	CN90PW Within LF PWB	
2	LC30191-003A-A	REMOCON WINDOW		
3	CM48006-008-C	JVC MARK		
4	LC20217-004A-A	CONTROL KNOB		
5	A48457-4-S	SPRING		
6	WJY0016-001A	BRAIDED WIRE		
7	WJY0013-003A	BRAIDED WIRE		
8	LC20629-001A-A	S.P HOLDER		
9	LC40317-001A	TAPPING SCREW	(x4)	
10	LC40226-001A	SPACER		
△ 11	CEBSS12D-04KJ2	SPEAKER	(x2) SP01, SP02	
12	QYSBSB4012Z	TAPPING SCREW	(x4)	
△ 13	LC10883-001C-A	CHASSIS BASE		
△ 14	LC20626-001C-A	TERMINAL BOARD		
15	QYSBSB3010Z	TAPPING SCREW	(x6)	
16	CHGY0031-0C	ANT CABLE ASSY		
△ 17	LC10880-001C-A	REAR COVER		
18	QYSBSFG4016Z	TAPPING SCREW	(x12)	
19	LC30684-005A-A	BBE LABEL		
△ 20	LC31139-001A-A	RATING LABEL		
21	LC20106-001D-A	CORD CLAMP		
△ 100	LC10878-001A-A	FRONT CABI ASSY	Inc. No. 101-105	
101	LC20628-001A-A	DOOR		
102	CM48229-00A-C	DOOR LATCH		
103	LC31238-001A-A	OPERATION SHEET		
104	LC31237-001A-A	POWER KNOB		
105	CM36481-002A-A	SPRING		

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

MAIN PW BOARD ASS'Y (SAC-1501A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	NRSA63J-333X	MG R	33kΩ 1/16W J	
R1002	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1003-04	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1011	NRSA63J-820X	MG R	82Ω 1/16W J	
R1012	NRSA63J-182X	MG R	1.8kΩ 1/16W J	
R1013	NRSA63J-562X	MG R	5.6kΩ 1/16W J	
R1014	QRE121J-101Y	C R	100Ω 1/2W J	
R1015	NRSA63J-180X	MG R	18Ω 1/16W J	
R1016	NRSA63J-270X	MG R		
R1018-19	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1020	NRSA63J-332X	MG R	3.3kΩ 1/16W J	
R1021	NRSA63J-333X	MG R	33kΩ 1/16W J	
R1022	NRSA63J-331X	MG R	330Ω 1/16W J	
R1023	NRSA63J-101X	MG R	100Ω 1/16W J	
R1024	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1025	NRSA63J-561X	MG R	560Ω 1/16W J	
R1026	NRSA63J-331X	MG R	330Ω 1/16W J	
R1028	NRSA63J-821X	MG R	820Ω 1/16W J	
R1029	NRSA63J-333X	MG R	33kΩ 1/16W J	
R1030	NRSA63J-683X	MG R	68kΩ 1/16W J	
R1038	NRSA63J-272X	MG R	2.7kΩ 1/16W J	
R1039	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1041	NRSA63J-272X	MG R	2.7kΩ 1/16W J	
R1042-43	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1044-46	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1047	NRSA63J-153X	MG R	15kΩ 1/16W J	
R1048	NRSA63J-154X	MG R	150kΩ 1/16W J	
R1101-02	NRSA63J-101X	MG R	100Ω 1/16W J	
R1111	NRSA63J-105X	MG R	1MΩ 1/16W J	
R1131	NRSA63J-272X	MG R	2.7kΩ 1/16W J	
R1132	NRSA63J-153X	MG R	15kΩ 1/16W J	
R1133	NRSA63J-683X	MG R	68kΩ 1/16W J	
R1134	NRSA63J-562X	MG R	5.6kΩ 1/16W J	
R1135-39	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1140	NRSA63J-562X	MG R	5.6kΩ 1/16W J	
R1155	NRSA63J-223X	MG R	22kΩ 1/16W J	
R1156	NRSA63J-562X	MG R	5.6kΩ 1/16W J	
R1201	NRSA63J-333X	MG R	33kΩ 1/16W J	
R1231	NRSA63J-182X	MG R	1.8kΩ 1/16W J	
R1237	NRSA63J-392X	MG R	3.9kΩ 1/16W J	
R1238	NRSA63J-473X	MG R	47kΩ 1/16W J	
R1241	NRSA63J-332X	MG R	3.3kΩ 1/16W J	
R1243	NRSA63J-152X	MG R	1.5kΩ 1/16W J	
R1281	NRSA63J-182X	MG R	1.8kΩ 1/16W J	
R1282	NRSA63J-682X	MG R	6.8kΩ 1/16W J	
R1283	NRSA63J-681X	MG R	680Ω 1/16W J	
R1286	NRSA63J-472X	MG R	4.7kΩ 1/16W J	
R1287	NRSA63J-101X	MG R	100Ω 1/16W J	
R1288	NRSA63J-271X	MG R	270Ω 1/16W J	
R1289	NRSA63J-154X	MG R	150kΩ 1/16W J	
R1292	NRSA63J-124X	MG R	120kΩ 1/16W J	
R1293	NRSA63J-224X	MG R	220kΩ 1/16W J	
R1301-03	NRSA63J-222X	MG R	2.2kΩ 1/16W J	
R1304-06	NRSA63J-101X	MG R	100Ω 1/16W J	
R1318	NRSA63J-472X	MG R	4.7kΩ 1/16W J	
R1319	NRSA63J-101X	MG R	100Ω 1/16W J	
R1354-55	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1356	NRSA63J-123X	MG R	12kΩ 1/16W J	
R1359	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1360	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1401	NRSA63J-822X	MG R	8.2kΩ 1/16W J	
R1403	QRX01GJ-1R0	MF R	1.0Ω 1W J	
R1404	QRE121J-100Y	C R	10Ω 1/2W J	
R1405	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1407	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	
R1411-12	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1414	QRL029J-221	OM R	220Ω 2W J	
R1417	QRE121J-180Y	C R	18Ω 1/2W J	
R1431	QRE121J-272Y	C R	2.7kΩ 1/2W J	
R1432	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1433	NRSA63J-473X	MG R	47kΩ 1/16W J	
R1434	NRSA63J-822X	MG R	8.2kΩ 1/16W J	
R1435	NRSA63J-682X	MG R	6.8kΩ 1/16W J	
R1440	NRSA63J-101X	MG R	100Ω 1/16W J	
R1441	NRSA63J-103X	MG R	10kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1501	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1502	NRSA63J-271X	MG R	270Ω 1/16W J	
R1503	QRE121J-103Y	C R	10kΩ 1/2W J	
R1504	QRL039J-122	OM R	1.2kΩ 3W J	
R1505	QRL039J-152	OM R	1.5kΩ 3W J	
R1507	QRF074J-2R0	UNF R		
R1511	QRE121J-220Y	C R	22Ω 1/2W J	
R1512	QRE121J-681Y	C R	680Ω 1/2W J	
R1513	QRL039J-273	OM R	27kΩ 3W J	
R1522	NRSA63J-221X	MG R	220Ω 1/16W J	
R1523	QRJ146J-333X	C R	33kΩ 1/4W J	
R1525	QRZ9011-470	F R		
R1526	QRE121J-272Y	C R	2.7kΩ 1/2W J	
R1527	QRE121J-154Y	C R	150kΩ 1/2W J	
R1528	QRE121J-124Y	C R	120kΩ 1/2W J	
R1529	NRSA63J-331X	MG R	330Ω 1/16W J	
R1531	QRJ146J-391X	C R	390Ω 1/4W J	
R1532	NRSA63J-273X	MG R	27kΩ 1/16W J	
R1533-34	NRSA63J-123X	MG R	12kΩ 1/16W J	
R1535	NRVA02D-242X	MF R	2.4kΩ 1/10W D	
R1537	NRZ0032-7151X	MF R		
R1538	NRSA63J-333X	MG R	33kΩ 1/16W J	
R1543	QRE121J-122Y	C R	1.2kΩ 1/2W J	
R1544	QRE121J-392Y	C R	3.9kΩ 1/2W J	
R1545	QRE121J-822Y	C R	8.2kΩ 1/2W J	
R1546	NRSA63J-331X	MG R	330Ω 1/16W J	
R1547	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1548	QRE121J-821Y	C R	820Ω 1/2W J	
R1553	QRL039J-390	OM R	39Ω 3W J	
R1601-06	NRSA63J-750X	MG R	75Ω 1/16W J	
R1607-09	NRSA63J-332X	MG R	3.3kΩ 1/16W J	
R1651-52	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1700-02	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1704-05	NRSA63J-472X	MG R	4.7kΩ 1/16W J	
R1706-07	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1708-09	NRSA63J-101X	MG R	100Ω 1/16W J	
R1711	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1714	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1715	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1721-22	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1724-28	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1729	NRSA63J-223X	MG R	22kΩ 1/16W J	
R1731-32	NRSA63J-101X	MG R	100Ω 1/16W J	
R1733-34	NRSA63J-272X	MG R	2.7kΩ 1/16W J	
R1737	NRSA63J-153X	MG R	15kΩ 1/16W J	
R1738	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1739	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1740	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1741	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1742-43	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1744	NRSA63J-333X	MG R	33kΩ 1/16W J	
R1745	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1748	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1749-51	NRSA63J-222X	MG R	2.2kΩ 1/16W J	
R1752	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1753	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1754	NRSA63J-332X	MG R	3.3kΩ 1/16W J	
R1755	NRSA63J-393X	MG R	39kΩ 1/16W J	
R1756	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1762	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1763	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1764-68	NRSA63J-221X	MG R	220Ω 1/16W J	
R1769-70	NRSA63J-682X	MG R	6.8kΩ 1/16W J	
R1772	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1774	NRSA63J-682X	MG R	6.8kΩ 1/16W J	
R1775	NRSA63J-563X	MG R	56kΩ 1/16W J	
R1776	NRSA63J-272X	MG R	2.7kΩ 1/16W J	
R1777	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1778	NRSA63J-682X	MG R	6.8kΩ 1/16W J	
R1790	NRSA63J-273X	MG R	27kΩ 1/16W J	
R1791	NRSA63J-683X	MG R	68kΩ 1/16W J	
R1792	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1793-95	NRSA63J-331X	MG R	330Ω 1/16W J	
R1798-99	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1800	NRSA63J-103X	MG R	10kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1806	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1810	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1811	NRSA63J-473X	MG R	47kΩ 1/16W J	
R1812	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1814	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1815	NRSA63J-154X	MG R	150kΩ 1/16W J	
R1816	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R1817	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1821	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1824	NRSA63J-103X	MG R	10kΩ 1/16W J	
R1827	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1857	QRG029J-330	OM R	33Ω 2W J	
R1858	QRG029J-180	OM R	18Ω 2W J	
R1860	NRSA63J-562X	MG R	5.6kΩ 1/16W J	
R1901	QRF074K-R47	UNF R	0.47Ω 7W K	
R1909	QRG01GJ-470	OM R	47Ω 1W J	
R1911	QRE121J-223Y	C R	22kΩ 1/2W J	
R1912	QRT029J-R18	MF R	0.18Ω 2W J	
R1913	QRT029J-R15	MF R	0.15Ω 2W J	
R1914	QRK126J-681X	C R	680Ω 1/2W J	
R1915	QRE121J-270Y	C R	27Ω 1/2W J	
R1917	QRK126J-332X	C R	3.3kΩ 1/2W J	
R1918	QRE121J-222Y	C R	2.2kΩ 1/2W J	
R1919	QRE121J-684Y	C R	680kΩ 1/2W J	
R1924	QRE121J-222Y	C R	2.2kΩ 1/2W J	
R1930	QRE121J-223Y	C R	22kΩ 1/2W J	
R1939	QRT039J-2R2	MF R	2.2Ω 3W J	
R1940	QRE121J-181Y	C R	180Ω 1/2W J	
R1941	QRL029J-183	OM R	18kΩ 2W J	
R1943	NRSA63J-104X	MG R	100kΩ 1/16W J	
R1944	NRSA63J-122X	MG R	1.2kΩ 1/16W J	
R1951	NRSA63J-473X	MG R	47kΩ 1/16W J	
R1952	NRSA63J-102X	MG R	1kΩ 1/16W J	
R1953	QRE121J-151Y	C R	150Ω 1/2W J	
R1972	NRVA02D-102X	MF R	1kΩ 1/10W D	
R1973	QRE121J-272Y	C R	2.7kΩ 1/2W J	
R1975	QRE121J-223Y	C R	22kΩ 1/2W J	
R1977	QRE121J-473Y	C R	47kΩ 1/2W J	
R1978	NRSA63J-333X	MG R	33kΩ 1/16W J	
CAPACITOR				
C1001	QETN1HM-475Z	E CAP.	4.7μF 50V M	
C1002	QETN1HM-106Z	E CAP.	10μF 50V M	
C1003	QETN1CM-108Z	E CAP.	1000μF 16V M	
C1011-12	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1014	QETN1CM-107Z	E CAP.	100μF 16V M	
C1015-16	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1021	QFV71HJ-824Z	MF CAP.	0.82μF 50V J	
C1023	QETN1CM-107Z	E CAP.	100μF 16V M	
C1024	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1025	NCB31HK-102X	C CAP.	1000pF 50V K	
C1026	QETN1HM-106Z	E CAP.	10μF 50V M	
C1027	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C1028	QETN1HM-106Z	E CAP.	10μF 50V M	
C1029	QETN1CM-336Z	E CAP.	33μF 16V M	
C1030	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1034	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1037	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1038	QETN1CM-107Z	E CAP.	100μF 16V M	
C1041	QETN1HM-474Z	E CAP.	0.47μF 50V M	
C1042	QETN1HM-106Z	E CAP.	10μF 50V M	
C1043-44	NDC31HJ-390X	C CAP.	39pF 50V J	
C1045	QETN1HM-106Z	E CAP.	10μF 50V M	
C1046	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1047	NDC21HJ-330X	C CAP.	33pF 50V J	
C1048	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1111	QETN0JM-108Z	E CAP.	1000μF 6.3V M	
C1112	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1113	QETN1HM-474Z	E CAP.	0.47μF 50V M	
C1114	QETN1HM-105Z	E CAP.	1μF 50V M	
C1115	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
C1116	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C1131-32	NDC31HJ-100X	C CAP.	10pF 50V J	
C1133	NDC31HJ-220X	C CAP.	22pF 50V J	

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1134	NDC31HJ-100X	C CAP.	10pF 50V J	
C1135	NDC31HJ-330X	C CAP.	33pF 50V J	
C1136	QENC1CM-106Z	BP E CAP.	10pF 16V M	
C1150	NCF21CZ-105X	C CAP.	1μF 16V Z	
C1151	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1152	QENC1HM-105Z	BP E CAP.	1μF 50V M	
C1201	NDC31HJ-100X	C CAP.	10pF 50V J	
C1202	QETN1HM-224Z	E CAP.	0.22μF 50V M	
C1203	NCB31HK-222X	CHIP CAP.	2200pF 50V K	
C1233	NDC31HJ-560X	C CAP.	56pF 50V J	
C1237	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1281	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	
C1282	QETN1CM-227Z	E CAP.	220μF 16V M	
C1283	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1284	QETN1HM-225Z	E CAP.	2.2μF 50V M	
C1285	NCB31HK-272X	CHIP CAP.	2700pF 50V K	
C1286	QETN1HM-106Z	E CAP.	10μF 50V M	
C1287	QETN1CM-107Z	E CAP.	100μF 16V M	
C1288	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1302	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C1352	QETN1CM-336Z	E CAP.	33μF 16V M	
C1354	QFV71HJ-154Z	MF CAP.	0.15μF 50V J	
C1391	QETN1CM-107Z	E CAP.	100μF 16V M	
C1392	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1393-95	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C1401	NDC21HJ-152X	C CAP.	1500pF 50V J	
C1403	NCB21HK-393X	C CAP.	0.039μF 50V K	
C1404	QETN1VM-107Z	E CAP.	100μF 35V M	
C1405	QCS32HJ-100Z	C CAP.	10pF 500V J	
C1407	QFLC2AK-563Z	M CAP.	0.056μF 100V K	
C1410	QFLC2AJ-104Z	M CAP.	0.1μF 100V J	
C1411	QETN1HM-105Z	E CAP.	1μF 50V M	
C1415	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C1421	QEHQ1VM-108	E CAP.	1000μF 35V M	
C1431	QETN1HM-105Z	E CAP.	1μF 50V M	
C1432	QETN1EM-476Z	E CAP.	47μF 25V M	
C1501	QCB32HK-151Z	C CAP.	150pF 500V K	
C1502	QCB32HK-331Z	C CAP.	330pF 500V K	
C1503	QETN2CM-105Z	E CAP.	1μF 160V M	
C1504	QEZ0203-107	E CAP.	100μF 160V M	
C1505	QENC2AM-225Z	BP E CAP.	2.2μF 100V M	
C1507	QEZ0195-475Z	E CAP.		
△ C1510	QFZ0196-402	MPP CAP.		
△ C1513	QFZ0196-113	MPP CAP.		
△ C1514	QFP32GJ-183	PP CAP.	0.018μF 400V J	
△ C1515	QFZ0197-394	MPP CAP.		
C1516	QCB32HK-561Z	C CAP.	560pF 500V K	
C1521	QETN2EM-106Z	E CAP.	10μF 250V M	
C1523	QEHR1EM-108Z	E CAP.	1000μF 25V M	
C1524	QETN1EM-108Z	E CAP.	1000μF 25V M	
C1525	QETN1VM-107Z	E CAP.	100μF 35V M	
C1526	QFV21HJ-824Z	MF CAP.	0.82μF 50V J	
C1527	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
C1531	QCB32HK-102Z	C CAP.	1000pF 500V K	
C1533	QETN1HM-106Z	E CAP.	10μF 50V M	
C1601-06	QETN1EM-476Z	E CAP.	47μF 25V M	
C1607	QETN1HM-106Z	E CAP.	10μF 50V M	
C1608	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1609-11	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
C1612	QETN1HM-105Z	E CAP.	1μF 50V M	
C1663-64	QETN1EM-476Z	E CAP.	47μF 25V M	
C1700	NCB31HK-102X	C CAP.	1000pF 50V K	
C1703	NDC31HJ-181X	C CAP.	180pF 50V J	
C1706	QETN1HM-105Z	E CAP.	1μF 50V M	
C1707	QETN1CM-107Z	E CAP.	100μF 16V M	
C1708-09	NDC31HJ-330X	C CAP.	33pF 50V J	
C1710	NCB21EK-683X	C CAP.	0.068μF 25V K	
C1714	QETN1HM-105Z	E CAP.	1μF 50V M	
C1721	NCB31HK-103X	C CAP.	0.01μF 50V K	
C1722-23	NDC31HJ-390X	C CAP.	39pF 50V J	
C1724	NDC31HJ-471X	C CAP.	470pF 50V J	
C1726	NDC21HJ-561X	C CAP.	560pF 50V J	
C1800	QETN1CM-107Z	E CAP.	100μF 16V M	

△ Symbol No.	Part No.	Part Name	Description	Local
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CAPACITOR

C1801	NCB21HK-104X	CHIP CAP.	0.1μF 50V	K
C1802	QETN1CM-107Z	E CAP.	100μF 16V	M
C1803	QETN1HM-106Z	E CAP.	10μF 50V	M
C1804	NDC31HJ-102X	C CAP.	1000pF 50V	J
C1805	NCB31HK-153X	C CAP.	0.015μF 50V	K
C1806-07	QETN1HM-106Z	E CAP.	10μF 50V	M
C1810	QETN1HM-474Z	E CAP.	0.47μF 50V	M
C1811	QETN1HM-105Z	E CAP.	1μF 50V	M
C1813	NCB31HK-102X	C CAP.	1000pF 50V	K
C1816	NCB31HK-153X	C CAP.	0.015μF 50V	K
C1851	QETN1EM-107Z	E CAP.	100μF 25V	M
C1852	QETN1CM-107Z	E CAP.	100μF 16V	M
C1853-54	QETN1CM-227Z	E CAP.	220μF 16V	M
C1856	QETN1CM-227Z	E CAP.	220μF 16V	M
C1857	QETN1CM-477Z	E CAP.	470μF 16V	M
△ C1904	QCZ9054-102	C CAP.	1000pF AC250V	Z
△ C1905	QCZ9054-102	C CAP.	1000pF AC250V	Z
△ C1906	QCZ9054-102	C CAP.	1000pF AC250V	Z
△ C1907	QE20169-477	E CAP.	470μF 200V	M
△ C1908	QCZ9054-102	C CAP.	1000pF AC250V	Z
C1912	QCZ0340-332	C CAP.		
C1913	QFLC1HJ-471Z	M CAP.	470pF 50V	J
C1914	QETN1HM-107Z	E CAP.	100μF 50V	M
C1916	NDC31HJ-331X	C CAP.	330pF 50V	J
C1917	NCB31HK-222X	CHIP CAP.	2200pF 50V	K
C1918	NCB21HK-104X	CHIP CAP.	0.1μF 50V	K
C1919	QFP32GJ-103	PP CAP.	0.01μF 400V	J
C1925	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
C1931	QE20203-227	E CAP.	220μF 160V	M
C1932	QETN1CM-108Z	E CAP.	1000μF 16V	M
C1933	QETM1EM-228	E CAP.	2200μF 25V	M
C1934-35	QETN1EM-108Z	E CAP.	1000μF 25V	M
C1937	QCZ0340-102	C CAP.		
C1938	QETM1EM-228	E CAP.	2200μF 25V	M
C1939-40	QCB32HK-152Z	C CAP.	1500pF 500V	K
C1942	QETN1HM-105Z	E CAP.	1μF 50V	M
C1943	QETN1CM-108Z	E CAP.	1000μF 16V	M
C1948	QETN1EM-476Z	E CAP.	47μF 25V	M
C1951	QETN1EM-108Z	E CAP.	1000μF 25V	M
C1971	QETN1CM-107Z	E CAP.	100μF 16V	M
C1972	QETN1EM-476Z	E CAP.	47μF 25V	M
C1973	QETN1HM-106Z	E CAP.	10μF 50V	M
△ C1998-99	QCZ9074-103	C CAP.	0.01μF 400V	M

TRANSFORMER

T1501	CE42034-002	H.DRIVE TRANSF.		
△ T1502	QQH0084-001	FBT		
△ T1921	QQS0090-001	SW TRANSF.		
△ T1951	QQT0315-001	POWER TRANSF.		

COIL

△ L1001	QQL244K-560Z	PEAKING COIL		
L1012	QQLZ014-R39	PEAKING COIL		
L1021	QRN143J-0R0X	C R	0.0Ω 1/4W	J
L1022	QQL244K-220Z	PEAKING COIL		
L1024	QQL244K-220Z	PEAKING COIL		
L1027	QRN143J-0R0X	C R	0.0Ω 1/4W	J
L1041	QRN143J-0R0X	C R	0.0Ω 1/10W	J
L1042	QQL244K-220Z	PEAKING COIL		
L1101	QQL244K-470Z	COIL	47μH	K
L1232	QQL244K-560Z	PEAKING COIL		
△ L1511	QQR1165-001	LINEARITY COIL		
L1512	QQLZ027-821	CHOKE COIL		
△ L1521	QQLZ018-480	HEATER CHOKE		
L1700	QQL244K-4R7Z	COIL	4.7μH	K
L1810	QQL244J-100Z	COIL	10μH	J
L1931	QQL26AK-470Z	COIL	47μH	K
L1933-34	QQL26AK-470Z	COIL	47μH	K
L1937	QQL26AK-470Z	COIL	47μH	K

△ Symbol No.	Part No.	Part Name	Description	Local
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DIODE

D1101-02	UDZS8.2B-X	ZENER DIODE		
D1305-07	MA153A-X	SI.DIODE		
D1352	UDZS9.1B-X	ZENER DIODE		
D1353	1SS355-X	SI.DIODE		
D1401	1SR35-400A-T2	SI.DIODE		
D1431	1SR35-400A-T2	SI.DIODE		
D1432	1SS355-X	SI.DIODE		
D1501	RH3G-F1	SI.DIODE		
D1502	RU3AM-LFC4	SI.DIODE		
D1507	RGP10J-5025-T3	SI.DIODE		
D1521	RH1S-T3	SI.DIODE		
D1523-24	EL1Z-T3	SI.DIODE		
D1525-26	1SS81-T5	SI.DIODE		
D1527	1SR124-400A-T2	SI.DIODE		
D1529	MA3051/H-X	ZENER DIODE		
△ D1531	MA4068N/Z1/-T2	ZENER DIODE		
D1534-35	1SS355-X	SI.DIODE		
D1537	1SR35-400A-T2	SI.DIODE		
D1601-06	UDZS9.1B-X	ZENER DIODE		
D1701-02	1SS355-X	SI.DIODE		
D1706-10	MA3082/M/-X	ZENER DIODE		
D1711	1SS81-T2	SI.DIODE		
D1712-15	1SS355-X	SI.DIODE		
D1716	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
D1721-22	1SS355-X	SI.DIODE		
D1723-24	MTZJ5.6B-T2	ZENER DIODE		
D1800	1SS81-T2	SI.DIODE		
D1801	1SS355-X	SI.DIODE		
D1810	MA3082/M/-X	ZENER DIODE		
D1811	1SS355-X	SI.DIODE		
△ D1901	RBV-406M	BRIDGE DIODE		
D1910	MA700A-T2	SI.DIODE		
D1911	RGP10J-5025-T3	SI.DIODE		
D1912	RGP10J-5025-T3	SI.DIODE		
D1913	RGP10J-5025-T3	SI.DIODE		
D1914	1SS355-X	SI.DIODE		
D1915	SARS01-T2	SI.DIODE		
D1917	MA3270/H/-X	ZENER DIODE		
D1918	MA3051/H/-X	ZENER DIODE		
D1920	1SS355-X	SI.DIODE		
D1930	RGP10J-5025-T3	SI.DIODE		
D1931	RU30A-F1	SI.DIODE		
D1933	RU3YX-LFC4	SI.DIODE		
D1935	RU3YX-LFC4	SI.DIODE		
D1937	RU3YX-LFC4	SI.DIODE		
D1941	MA3300/M/-X	CHIP ZENER DIODE		
D1945	1SS355-X	SI.DIODE		
D1952-53	1SS355-X	SI.DIODE		
D1954-57	1SR35-400A-T2	SI.DIODE		
D1958	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
D1972	MA3150/M/-X	ZENER DIODE		
D1973	1SS355-X	SI.DIODE		

TRANSISTOR

Q1011	2SC5083/L-P/-T	SI.TRANSISTOR		
Q1021	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1024	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1025	2SA1037AK/QR/-X	SI.TRANSISTOR		
Q1041	2SA1037AK/QR/-X	SI.TRANSISTOR		
Q1131-33	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1153-54	DTC124EKA-X	DIGI.TRANSISTOR		
Q1232-33	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1352	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1431	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1440	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1501	2SC2412Z1/-	SI.TRANSISTOR		
△ Q1511	2SD2634-YD	SI.TRANSISTOR	H.OUT	
Q1531	2SC2785/JH/-T	SI.TRANSISTOR		
Q1532	2SA1037AK/QR/-X	SI.TRANSISTOR		
Q1541-42	2SA1037AK/QR/-X	SI.TRANSISTOR		
△ Q1543	2SD1408/OY/-LB	SI.TRANSISTOR		
Q1700	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1701	2SA1037AK/QR/-X	SI.TRANSISTOR		
Q1703	2SA1037AK/QR/-X	SI.TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR				
Q1705	2SA1037AK/QR/-X	SI.TRANSISTOR		
Q1706	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1711	DTC124EKA-X	DIGI.TRANSISTOR		
Q1810	DTC144EKA-X	DIGI.TRANSISTOR		
Q1941	2SC2412K/QR/-X	SI.TRANSISTOR		
Q1951	2SD1383K/AB/-X	SI.TRANSISTOR		
Q1971	2SA1123/R/Z1-T	SI.TRANSISTOR		

IC				
IC1101	TB1253N	I.C.(M)		
IC1151	TC4066BF/N/-XE	I.C.(DIGI-MOS)		
△ IC1401	LA7841	I.C.(MONO-ANA)		
IC1601	M52055FP-X	I.C.(MONO-ANA)		
IC1651	PQ3RD13	I.C.(MONO-ANA)		
IC1701	MN1876478JJ	I C		
IC1702	AT24C04-27F802	I.C.(MEMORY-OTH)	(SERVICE)	
IC1703	MM1437AF-X	I.C.(MONO-ANA)		
IC1851	AN7812F	I.C.(MONO-ANA)		
IC1852	AN7809F	I.C.(MONO-ANA)		
IC1853	AN7805F	I.C.(MONO-ANA)		
IC1911	STR-F6626/F3	I C		
△ IC1921	SE135N	I.C.(HYBRID)		

OTHERS				
CF1001	QAX0349-001	CERAMIC FILTER		
CF1021	QAX0639-001Z	CERAMIC FILTER		
CF1041	QAX0642-001Z	CERAMIC FILTER		
CL1004	CM47653-001	P.W.B.HOLDER		
△ CP1932	ICP-N75-Y	I.C.PROTECT		
△ CP1933	ICP-N75-Y	I.C.PROTECT		
△ CP1934	ICP-N75-Y	I.C.PROTECT		
△ CP1936	ICP-N75-Y	I.C.PROTECT		
△ F1905	QMFZ034-5R0Z-J1	FUSE	5A	
△ FR1521	QRK129J-150	C R	15Ω	1/2W J
△ FR1523-24	QRX029J-3R3	MFR	3.3Ω	2W J
△ FR1525	QRZ9017-4R7	F R	4.7Ω	1/2W
J1601-02	QNN0349-002	PIN JACK		
J1810	QNS0001-001	JACK		
K1401	QQR0621-002Z	BEADS CORE		
K1912	QQR0582-001Z	BEADS CORE		
K1916-17	QQR0582-001Z	BEADS CORE		
K1920	QQR0872-002	FERRITE BEADS		
K1931-33	QQR0582-001Z	BEADS CORE		
K1935	QQR0582-001Z	BEADS CORE		
K1937	QQR0582-001Z	BEADS CORE		
LC1601-06	NQR0169-001X	EMIFILTER		
△ PC1921	TLP621(B)	I.C.(PH.COUPLER)		
△ RY1941	QSK0120-001	RELAY		
△ RY1951	QSK0113-001	RELAY		
SF1011	QAX0324-002	SAW FILTER		
△ TH1901	CEKP007-002	P.THERMISTOR		
△ TU1001	QAU0134-001	TUNER		
X1201	CE40668-001Z	CRYSTAL		
X1700	QAX0307-001	CER.RESONATOR		

DAF PW BOARD ASS'Y (SAC-2601A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R2701	QRG01GJ-220	OM R	22Ω	1W J
R2702	QRE121J-123Y	C R	12kΩ	1/2W J
R2703	QRZ0056-103Z	COMP.R	10Ω	
R2751	NRSA63J-683X	MG R	68kΩ	1/16W J

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R2752	NRSA63J-822X	MG R	8.2kΩ	1/16W J
R2753	NRSA63J-122X	MG R	1.2kΩ	1/16W J
R2754	NRSA63J-103X	MG R	10kΩ	1/16W J
R2755	NRSA63J-563X	MG R	56kΩ	1/16W J
R2756	NRSA63J-123X	MG R	12kΩ	1/16W J
R2757	NRSA63J-472X	MG R	4.7kΩ	1/16W J
R2758	NRSA63J-124X	MG R	120kΩ	1/16W J
R2761-65	QRE121J-184Y	C R	180kΩ	1/2W J

R2771	QRL039J-223	OM R	22kΩ	3W J
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CAPACITOR

C2701	QFV71HJ-124Z	MF CAP.	0.12μF	50V J
C2751	QFLC1HJ-563Z	M CAP.	0.056μF	50V J
C2752	QETN1EM-476Z	E CAP.	47μF	25V M
C2753	QFZ0122-103	MPP CAP.		
C2761	QFZ0122-682	M.PP CAPACITOR		
C2771	QETN1HM-106Z	E CAP.	10μF	50V M

TRANSFORMER

T2701	QQR1153-001	DEFTRANSF.		
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COIL

L2701	QQLZ028-272	CHOKE COIL		
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DIODE

D2761-62	ES1F-LFG2	SI.DIODE		
D2771	MA3300/M/-X	CHIP ZENER DIODE		

TRANSISTOR

Q2751-52	2SC2412K/QR/-X	SI.TRANSISTOR		
Q2753	2SC4632	SI.TRANSISTOR		

CRT SOCKET PW BOARD ASS'Y (SAC-3501A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R3108	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R3111	NRSA63J-332X	MG R	3.3kΩ	1/16W J
R3114	QRJ146J-100X	C R	10Ω	1/4W J
R3115-16	NRSA63J-470X	MG R	47Ω	1/16W J
R3117	NRSA63J-102X	MG R	1kΩ	1/16W J
R3119	NRSA63J-680X	MG R	68Ω	1/16W J
R3122	QRZ9021-561	F R		
R3123	NRSA63J-122X	MG R	1.2kΩ	1/16W J
R3124	NRSA63J-390X	MG R		
R3125	NRSA63J-5R6X	MG R		
R3126-27	NRSA63J-563X	MG R	56kΩ	1/16W J
R3128	NRSA63J-122X	MG R	1.2kΩ	1/16W J
R3129	NRSA63J-5R6X	MG R		
R3130	NRSA63J-390X	MG R		
R3131	NRSA63J-121X	MG R	120Ω	1/16W J
R3132	QRL029J-391	OM R	390Ω	2W J
R3134	NRSA63J-152X	MG R	1.5kΩ	1/16W J
R3136	NRSA63J-333X	MG R	33kΩ	1/16W J
R3139	NRSA63J-681X	MG R	680Ω	1/16W J
R3142	NRSA63J-124X	MG R	120kΩ	1/16W J
R3143	NRSA63J-681X	MG R	680Ω	1/16W J
R3145-46	NRSA63J-5R6X	MG R		
R3151	NRSA63J-473X	MG R	47kΩ	1/16W J
R3152-53	NRSA63J-683X	MG R	68kΩ	1/16W J

FRONT PW BOARD ASS'Y (SAC-8501A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R3154	NRSA63J-473X	MG R	47kΩ 1/16W	J
R3301-06	NRSA63J-151X	MG R	150Ω 1/16W	J
R3307-09	NRSA63J-100X	MG R	10Ω 1/16W	J
R3310-12	QRG029J-153	OM R	15kΩ 2W	J
R3313-15	QRG029J-183	OM R	18kΩ 2W	J
R3316-18	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
R3325-27	QRC121K-102Z	COMP.R	1kΩ 1/2W	K
R3331-33	NRSA63J-122X	MG R	1.2kΩ 1/16W	J
R3334	NRSA63J-152X	MG R	1.5kΩ 1/16W	J
R3335	NRSA63J-391X	MG R	390Ω 1/16W	J
R3336-38	NRSA63J-0R0X	MG R	0.0Ω 1/16W	J
R3351-53	NRSA63J-102X	MG R	1kΩ 1/16W	J
R3354	NRSA63J-561X	MG R	560Ω 1/16W	J
R3355	NRSA63J-563X	MG R	56kΩ 1/16W	J
R3361	QRC121K-105Z	COMP.R	1MΩ 1/2W	K
R3362	QRC121K-102Z	COMP.R	1kΩ 1/2W	K
R3363	QRC121K-474Z	COMP.R	470kΩ 1/2W	K

CAPACITOR				
C3101	QETN1HM-106Z	E CAP.	10μF	50V M
C3109	QETN1CM-107Z	E CAP.	100μF	16V M
C3110-11	NDC31HJ-221X	C CAP.	220pF	50V J
C3113	QETN2CM-106Z	E CAP.	10μF	160V M
C3114-15	QCB32HK-472Z	C CAP.	4700pF	500V K
C3117	QETN2CM-106Z	E CAP.	10μF	160V M
C3118	QETN0JM-107Z	E CAP.	100μF	6.3V M
C3119	QETN1AM-107Z	E CAP.	100μF	10V M
C3120	QETN1AM-337Z	E CAP.	330μF	10V M
C3121	QCS32HJ-151Z	C CAP.	150pF	500V J
C3122	NDC31HJ-5R0X	C CAP.	5.0pF	50V J
C3125	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
C3151-52	NCB21EK-104X	C CAP.	0.1μF	25V K
C3301-03	NDC31HJ-471X	C CAP.	470pF	50V J
C3321-22	QETN2EM-105Z	E CAP.	1μF	250V M
C3323	QETN1CM-477Z	E CAP.	470μF	16V M
C3331-33	NDC31HJ-561X	C CAP.	560pF	50V J
C3351	QETN1CM-337Z	E CAP.	330μF	16V M
C3361	QETN2EM-105Z	E CAP.	1μF	250V M
C3363	QCZ0324-102	C CAP.		

COIL				
L3301-03	QQL244K-180Z	COIL	18μH	K
L3304-06	QQL244K-470Z	COIL	47μH	K

DIODE				
D3101	1SS355-X	SI.DIODE		
D3105-06	RH1S-T3	SI.DIODE		
D3301-03	1SS355-X	SI.DIODE		
D3304-06	1SS82-T2	SI.DIODE		
D3331	1SS355-X	SI.DIODE		
D3351	1SS355-X	SI.DIODE		
D3361	RM2C-LFA1	SI.DIODE		

TRANSISTOR				
Q3103	2SA933AS/QR/-T	SI.TRANSISTOR		
Q3105	2SC1740S/QR/-T	SI.TRANSISTOR		
Q3106	2SA933AS/QR/-T	SI.TRANSISTOR		
Q3107	2SA1964/DE/	SI.TRANSISTOR		
Q3108	2SC5248/DE/	SI.TRANSISTOR		
Q3109	2SC1740S/QR/-T	SI.TRANSISTOR		
Q3151	2SC1740S/QR/-T	SI.TRANSISTOR		
Q3152	2SA933AS/QR/-T	SI.TRANSISTOR		
Q3301-03	2SC5083/L-P/-T	SI.TRANSISTOR		
Q3304-06	2SC5147/CDE/F43	SI.TRANSISTOR		
Q3351	2SA933AS/QR/-T	SI.TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
K3102-05	CE41492-001Z	CHOKE COIL		
△ SK3001	CE42670-001	C.R.T.SOCKET		

RESISTOR				
R8401	NRSA63J-750X	MG R	75Ω	1/16W J
R8402-03	NRSA63J-224X	MG R	220kΩ	1/16W J
R8404-05	NRSA63J-750X	MG R	75Ω	1/16W J
R8406	NRSA63J-333X	MG R	33kΩ	1/16W J
R8702	NRSA63J-472X	MG R	4.7kΩ	1/16W J
R8703	NRSA63J-153X	MG R	15kΩ	1/16W J
R8705	NRSA63J-472X	MG R	4.7kΩ	1/16W J
R8706	NRSA63J-153X	MG R	15kΩ	1/16W J

CAPACITOR				
C8442-43	QETN1HM-105Z	E CAP.	1μF	50V M
C8444-45	QETN1HM-474Z	E CAP.	0.47μF	50V M
C8446	NCB31HK-103X	C CAP.	0.01μF	50V K

DIODE				
D8402-06	UDZS10B-X	ZENER DIODE		

OTHERS				
J8401	QNZ0453-001	JACK		
LC8401-02	NQR0169-001X	EMI FILTER		
S8702	QSW0619-003Z	PUSH SWITCH		MENU
S8703	QSW0619-003Z	PUSH SWITCH		CH-
S8704	QSW0619-003Z	PUSH SWITCH		CH+
S8705	QSW0619-003Z	PUSH SWITCH		VOL-
S8706	QSW0619-003Z	PUSH SWITCH		VOL+

POWER SW PW BOARD ASS'Y (SAC-8601A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R8101	NRSA63J-561X	MG R	560Ω	1/16W J
R8107	NRSA63J-332X	MG R	3.3kΩ	1/16W J
R8108	NRSA63J-152X	MG R	1.5kΩ	1/16W J

CAPACITOR				
C8102	QETN1EM-476Z	E CAP.	47μF	25V M

DIODE				
D8101	SLR-342VR3F	L.E.D.		

TRANSISTOR				
Q8101-02	DTA124EKA-X	DIGI.TRANSISTOR		

IC				
IC8101	GP1U281Q	IFR DETECT UNIT		

LF PW BOARD ASS'Y (SAC-9501A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
S8701	LC30190-001B-A QSW0847-001	L.E.D.HOLDER TACT SWITCH	POWER	
RESISTOR				
R9997	QRE121J-5R6Y	C R	5.6Ω	1/2W J
△ R9998	QRZ9041-275	C R		
R9999	QRE121J-121Y	C R	120Ω	1/2W J

CAPACITOR

△ C9901	QFZ9067-104	MM CAP.
△ C9902	QFZ9067-473	MM CAP.
△ C9903	QFZ9067-104	MM CAP.
△ C9904	QCZ9052-102	C CAP.

OTHERS

△ CN90PW	QMPD200-200-JC	POWER CORD		
△ F9901	QMF0007-5R0J1	FUSE	5A	
FC9901	CEMG002-001Z	FUSE CLIP	(x2)	
△ LF9901	QQR0527-004	LINE FILTER		
△ LF9902	QQR1159-001	LINE FILTER		
△ VA9901	ERZV10V621CS	VARISTOR		

PIP PW BOARD ASS'Y (SAC0P501A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0001-02	NRSA63J-103X	MG R	10kΩ	1/16W J
R0003-04	NRSA63J-101X	MG R	100Ω	1/16W J
R0005	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0011	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0121	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0301	NRSA63J-473X	MG R	47kΩ	1/16W J
R0303	NRSA63J-222X	MG R	2.2kΩ	1/16W J
R0304	NRSA63J-473X	MG R	47kΩ	1/16W J
R0306	NRSA63J-222X	MG R	2.2kΩ	1/16W J
R0307-08	NRSA63J-332X	MG R	3.3kΩ	1/16W J
R0309	NRSA63J-102X	MG R	1kΩ	1/16W J
R0311	NRSA63J-101X	MG R	100Ω	1/16W J
R0313	NRSA63J-101X	MG R	100Ω	1/16W J
R0314	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0316	NRSA63J-331X	MG R	330Ω	1/16W J
R0317	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0331	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0337	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0343	NRSA63J-0R0X	MG R	0.0Ω	1/16W J

CAPACITOR

C0003-04	QETN1HM-106Z	E CAP.	10μF	50V M
C0006	QETN1HM-106Z	E CAP.	10μF	50V M
C0008	QETN1EM-476Z	E CAP.	47μF	25V M
C0301-02	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
C0312-13	NDC31HJ-270X	C CAP.	27pF	50V J
C0314	QETN1HM-106Z	E CAP.	10μF	50V M
C0315	NCB31HK-103X	C CAP.	0.01μF	50V K
C0316-18	NCB21HK-104X	CHIP CAP.	0.1μF	50V K
C0319	QETN1HM-106Z	E CAP.	10μF	50V M
C0320	NCB31HK-103X	C CAP.	0.01μF	50V K
C0321	QETN1HM-105Z	E CAP.	1μF	50V M
C0322	NCB31HK-103X	C CAP.	0.01μF	50V K
C0323	QETN1HM-106Z	E CAP.	10μF	50V M
C0324-25	NCB31HK-103X	C CAP.	0.01μF	50V K
C0326	NCB21HK-104X	CHIP CAP.	0.1μF	50V K

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0327	QETN1HM-225Z	E CAP.	2.2μF	50V M
C0328	NCB31HK-103X	C CAP.	0.01μF	50V K
C0329	QETN1HM-225Z	E CAP.	2.2μF	50V M
C0330	NCB31HK-103X	C CAP.	0.01μF	50V K
C0331	NCB21HK-104X	CHIP CAP.	0.1μF	50V K

COIL

L0302-04	QQL244J-6R8Z	COIL	6.8μH	
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DIODE

D0301	1SS133-T2	SI.DIODE		
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TRANSISTOR

Q0301-03	2SC2412K/QR/-X	SI.TRANSISTOR		
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IC

IC0001	AN7805F	I.C.(MONO-ANA)		
IC0301	SDA9389X-X	I.C.(DIGI-MOS)		

OTHERS

△ TU0001	QAU0206-001	TUNER		
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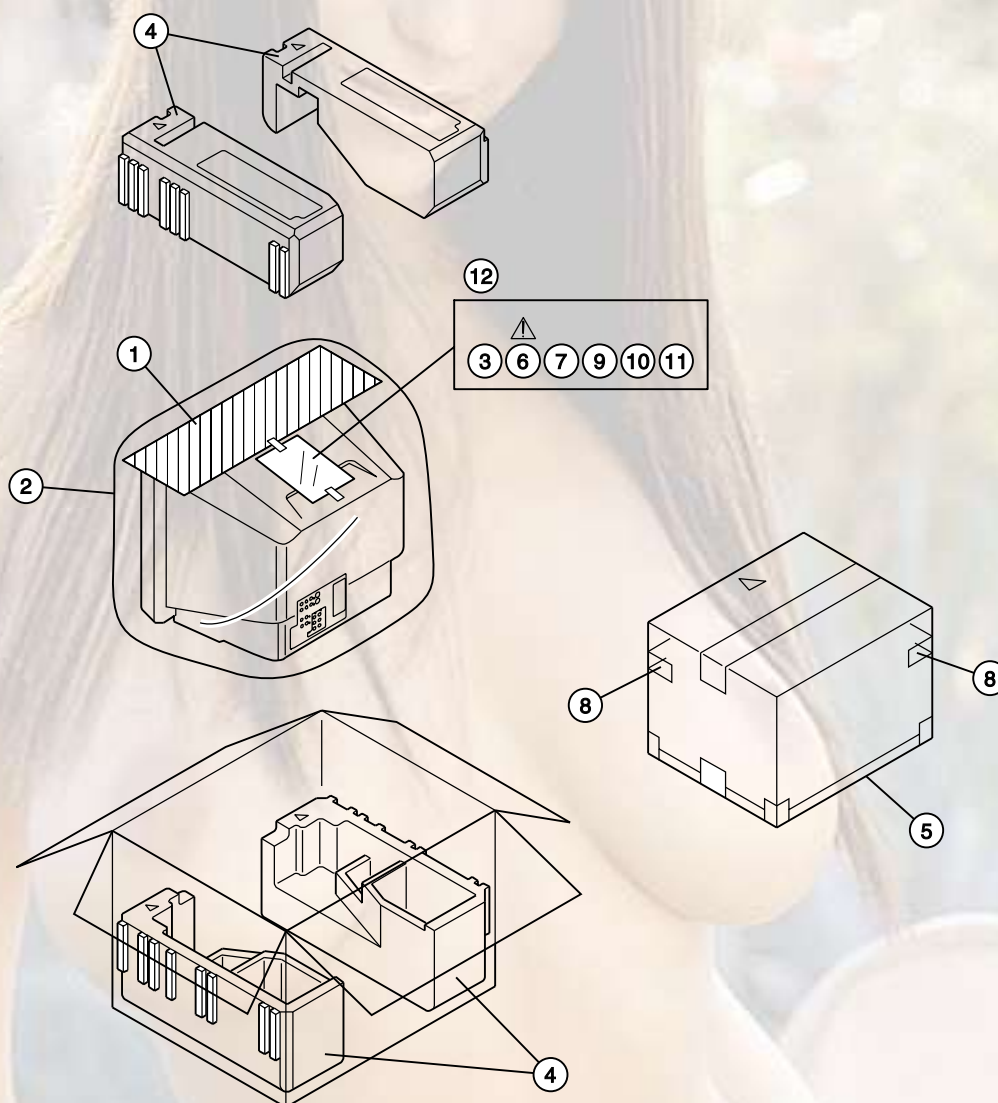
AV SW PW BOARD ASS'Y (SAC0S501A-M2)

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0081	NRSA63J-102X	MG R	1kΩ	1/16W J
R0082	NRSA63J-682X	MG R	6.8kΩ	1/16W J
R0083	NRSA63J-153X	MG R	15kΩ	1/16W J
R0084	NRSA63J-683X	MG R	68kΩ	1/16W J
R0085	NRSA63J-332X	MG R	3.3kΩ	1/16W J
R0086	NRSA63J-333X	MG R	33kΩ	1/16W J
R0087	NRVA02D-153X	MF R	15kΩ	1/10W D
R0088	NRVA02D-152X	MF R	1.5kΩ	1/10W D
R0089	NRSA63J-562X	MG R	5.6kΩ	1/16W J
R0090	NRSA63J-563X	MG R	56kΩ	1/16W J
R0151-54	NRSA63J-223X	MG R	22kΩ	1/16W J
R0155	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0157	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0159	NRSA63J-103X	MG R	10kΩ	1/16W J
R0202	NRSA63J-101X	MG R	100Ω	1/16W J
R0301-02	NRSA63J-222X	MG R	2.2kΩ	1/16W J
R0303-04	NRSA63J-221X	MG R	220Ω	1/16W J
R0305-06	NRSA63J-0R0X	MG R	0.0Ω	1/16W J
R0331-34	NRSA63J-101X	MG R	100Ω	1/16W J
R0371-74	NRSA63J-103X	MG R	10kΩ	1/16W J
R0375-76	NRSA63J-333X	MG R	33kΩ	1/16W J
R0377-78	NRSA63J-472X	MG R	4.7kΩ	1/16W J
R0381	NRSA63J-682X	MG R	6.8kΩ	1/16W J
R0382	NRSA63J-223X	MG R	22kΩ	1/16W J
R0384-87	NRSA63J-223X	MG R	22kΩ	1/16W J
R0391-92	NRSA63J-221X	MG R	220Ω	1/16W J
R0393-94	NRSA63J-823X	MG R	82kΩ	1/16W J
R0395-96	NRSA63J-221X	MG R	220Ω	1/16W J
R0401	NRSA63J-183X	MG R	18kΩ	1/16W J
R0402	NRSA63J-223X	MG R	22kΩ	1/16W J
R0458	NRSA63J-333X	MG R	33kΩ	1/16W J
R0459	NRSA63J-183X	MG R	18kΩ	1/16W J

△ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0501-02	NRSA63J-102X	MG R	1kΩ 1/16W J	
R0503	NRSA63J-221X	MG R	220Ω 1/16W J	
R0504-05	NRSA63J-102X	MG R	1kΩ 1/16W J	
R0507-08	NRSA63J-102X	MG R	1kΩ 1/16W J	
R0509	NRSA63J-221X	MG R	220Ω 1/16W J	
R0510-11	NRSA63J-102X	MG R	1kΩ 1/16W J	
R0518	NRSA63J-333X	MG R	33kΩ 1/16W J	
R0519-21	NRSA63J-750X	MG R	75Ω 1/16W J	
R0522-23	NRSA63J-224X	MG R	220kΩ 1/16W J	
R0527	NRSA63J-750X	MG R	75Ω 1/16W J	
R0528-29	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R0532-35	NRSA63J-224X	MG R	220kΩ 1/16W J	
R0558-61	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R0564-65	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R0566-67	NRSA63J-331X	MG R	330Ω 1/16W J	
R0568	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
R0571	NRSA63J-101X	MG R	100Ω 1/16W J	
R0573	NRSA63J-272X	MG R	2.7kΩ 1/16W J	
R0901	NRSA63J-101X	MG R	100Ω 1/16W J	
R0906	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
CAPACITOR				
C0081	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C0082	QENC1HM-475Z	BP E CAP.	4.7μF 50V M	
C0083	QENC1HM-105Z	BP E CAP.	1μF 50V M	
C0084	QETN1HM-225Z	E CAP.	2.2μF 50V M	
C0085	NCB21HK-473X	C CAP.	0.047μF 50V K	
C0086	QETN1HM-474Z	E CAP.	0.47μF 50V M	
C0087-88	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C0089	QBTC1CK-335Z	TAN.CAP.	3.3μF 16V K	
C0090	QETN1HM-105Z	E CAP.	1μF 50V M	
C0091	QBTC1CK-106Z	TAN.CAP.	10μF 16V K	
C0092-93	QETN1HM-105Z	E CAP.	1μF 50V M	
C0094	QETN1HM-475Z	E CAP.	4.7μF 50V M	
C0095	QETN1HM-105Z	E CAP.	1μF 50V M	
C0151-52	QENC1HM-105Z	BP E CAP.	1μF 50V M	
C0153-54	NCB31HK-332X	CHIP CAP.	3300pF 50V K	
C0155-56	NCB21HK-333X	C CAP.	0.033μF 50V K	
C0157-58	QETN1HM-106Z	E CAP.	10μF 50V M	
C0159	QETN1EM-476Z	E CAP.	47μF 25V M	
C0160	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C0309-10	NCB31HK-102X	C CAP.	1000pF 50V K	
C0311-12	NRSA63J-0R0X	MG R	0.0Ω 1/16W J	
C0331	QETN1CM-107Z	E CAP.	100μF 16V M	
C0332	NCB31HK-103X	C CAP.	0.01μF 50V K	
C0333	QETN1EM-476Z	E CAP.	47μF 25V M	
C0334	NCB21HK-273X	C CAP.	0.027μF 50V K	
C0335	QETN1HM-225Z	E CAP.	2.2μF 50V M	
C0336	NCB31HK-222X	CHIP CAP.	2200pF 50V K	
C0337	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C0338	QETN1HM-225Z	E CAP.	2.2μF 50V M	
C0339	NCB31HK-222X	CHIP CAP.	2200pF 50V K	
C0340	NCB21HK-104X	CHIP CAP.	0.1μF 50V K	
C0343	QETN1HM-105Z	E CAP.	1μF 50V M	
C0344-45	QENC1HM-225Z	BP E CAP.	2.2μF 50V M	
C0371-72	QENC1HM-105Z	BP E CAP.	1μF 50V M	
C0373	QETN1EM-476Z	E CAP.	47μF 25V M	
C0391-92	QETN1HM-474Z	E CAP.	0.47μF 50V M	
C0401	QETN1CM-107Z	E CAP.	100μF 16V M	
C0402-03	NCF21CZ-105X	C CAP.	1μF 16V Z	
C0404	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	
C0407	QETN1EM-108Z	E CAP.	1000μF 25V M	
C0410-11	QETN1EM-108Z	E CAP.	1000μF 25V M	
C0412-13	QETN1HM-105Z	E CAP.	1μF 50V M	
C0501-02	NCB31HK-103X	C CAP.	0.01μF 50V K	
C0503	QETN1HM-226Z	E CAP.	22μF 50V M	
C0504	QETN1EM-476Z	E CAP.	47μF 25V M	
C0505	QENC1HM-474Z	BP E CAP.	0.47μF 50V M	
C0508	QETN1HM-474Z	E CAP.	0.47μF 50V M	
C0509	NCB31HK-103X	C CAP.	0.01μF 50V K	
C0511	QETN1HM-474Z	E CAP.	0.47μF 50V M	
C0512-13	QETN1HM-105Z	E CAP.	1μF 50V M	
C0517	QETN1HM-474Z	E CAP.	0.47μF 50V M	

△ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0520-23	QETN1HM-105Z	E CAP.	1μF 50V M	
C0533-34	NCB31HK-103X	C CAP.	0.01μF 50V K	
C0538-39	NCB31HK-103X	C CAP.	0.01μF 50V K	
COIL				
L0001-02	QRN143J-0R0X	C R	0.0Ω 1/4W J	
DIODE				
D0391-92	UDZS10B-X	ZENER DIODE		
D0501-05	UDZS10B-X	ZENER DIODE		
D0507-09	UDZS10B-X	ZENER DIODE		
D0511	UDZS10B-X	ZENER DIODE		
D0515-19	UDZS10B-X	ZENER DIODE		
D0521	UDZS10B-X	ZENER DIODE		
D0527-28	UDZS10B-X	ZENER DIODE		
TRANSISTOR				
Q0301-02	DTC124EKA-X	DIGI.TRANSISTOR		
Q0381-82	DTC124EKA-X	DIGI.TRANSISTOR		
Q0384-87	DTC323TK-X	DIGI.TRANSISTOR		
Q0453	2SC2412K/QR/-X	SI.TRANSISTOR		
Q0454	DTC124EKA-X	DIGI.TRANSISTOR		
Q0509	2SC2412K/QR/-X	SI.TRANSISTOR		
IC				
IC0001	UPC1851BCU	I.C.(MONO-ANA)		
IC0151	NJM2150AD	I.C.(MONO-ANA)		
IC0371	BA15218N	I.C.(MONO-ANA)		
IC0381	TC4066BP/N/	I.C.(DIGI-MOS)		
IC0401	LA4485	I.C.(MONO-ANA)		
IC0501	CXA2089Q-X	I.C.(MONO-ANA)		
OTHERS				
J0501	QNZ0454-001	PIN JACK		
J0502	QNN0349-001	PIN JACK		
J0503-04	QNN0348-001	PIN JACK		
3DY/C MODULE PW BOARD ASSY (SAC-0Y501A)				
△ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
	SAC-0Y501A	3D Y/C MODULE		
REMOTE CONTROL UNIT PARTS LIST (RM-C301G-1A)				
△ Ref.No.	Part No.	Part Name	Description	Local
	UR52EC1286C	BATTERY COVER		

PACKING



PACKING PARTS LIST

△ Ref.No.	Part No.	Part Name	Description	Local
1	CP30055-001-A	TOP COVER		
2	CP30056-008-A	POLY BAG		
3	RM-C301G-1A	RC HAND UNIT		
4	LC10884-002A-A	CUSHION ASSY	4pcs in 1set	
5	LC10181-025A-A	PACKING CASE		
△ 6	LCT0821-001A-A	INST BOOK	[ENGLISH]	
7	LCT0822-001A-A	SETUP GUIDE		
8	CM36616-001-A	CORNER LABEL	2pcs in 1set	
9	BT-51020-1Q	REGISTER CARD		
10	BT-20071B-Q	SVC CENTER LIST		
11	BT-52004-1Q	WARRANTY CARD		
12	QPA02503505	POLY BAG		