



LG

website:<http://biz.LGservice.com>
e-mail:<http://www.LGEservice.com/techsup.html>

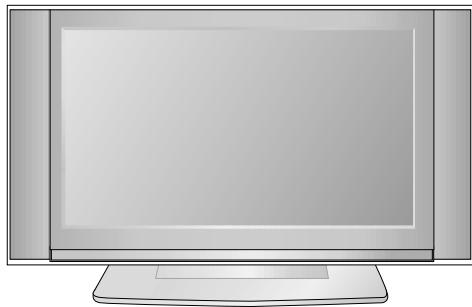
LCD TV **SERVICE MANUAL**

CHASSIS : ML-041A

MODEL : RZ-30LZ50

CAUTION

BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



CONTENTS

CONTENTS	2
PRODUCT SAFETY	3
SPECIFICATION	6
TIMING CHART	10
ADJUSTMENT INSTRUCTION.....	11
TROUBLE SHOOTING	16
BLOCK DIAGRAM.....	21
WIRING DIAGRAM.....	23
EXPLODED VIEW	24
EXPLODED VIEW PARTS LIST	25
REPLACEMENT PARTS LIST	26
SVC. SHEET	

SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by Δ in the Schematic Diagram and Replacement Parts List.

It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.

Do not modify the original design without permission of manufacturer.

General Guidance

An **isolation Transformer** should always be used during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and its components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

X-RAY Radiation

Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the LCD PANEL.

For continued X-RAY RADIATION protection, the replacement panel must be the same type panel as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.

Measure the high voltage.

The meter reading should indicate

$23.5 \pm 1.5\text{KV}$: 14-19 inch, $26 \pm 1.5\text{KV}$: 19-21 inch,

$29.0 \pm 1.5\text{KV}$: 25-29 inch, $30.0 \pm 1.5\text{KV}$: 32 inch

If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.

If the exposed metallic part has a return path to the chassis, the measured resistance should be between $1\text{M}\Omega$ and $5.2\text{M}\Omega$.

When the exposed metal has no return path to the chassis the reading must be infinite.

An other abnormality exists that must be corrected before the receiver is returned to the customer.

Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.

Do not use a line Isolation Transformer during this check.

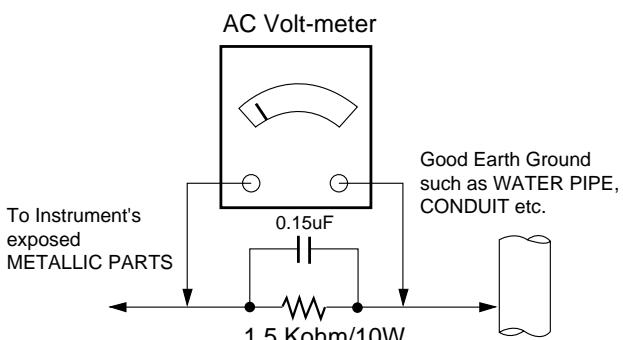
Connect $1.5\text{K}/10\text{watt}$ resistor in parallel with a $0.15\mu\text{F}$ capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.

Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which corresponds to 0.5mA .

In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

Leakage Current Hot Check circuit



SERVICING PRECAUTIONS

CAUTION: Before servicing receivers covered by this service manual and its supplements and addenda, read and follow the **SAFETY PRECAUTIONS** on page 3 of this publication.

NOTE: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions on page 3 of this publication, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions

1. Always unplug the receiver AC power cord from the AC power source before;
 - a. Removing or reinstalling any component, circuit board module or any other receiver assembly.
 - b. Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
 - c. Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.

CAUTION: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Test high voltage only by measuring it with an appropriate high voltage meter or other voltage measuring device (DVM, FETVOM, etc) equipped with a suitable high voltage probe.
Do not test high voltage by "drawing an arc".
3. Do not spray chemicals on or near this receiver or any of its assemblies.
4. Unless specified otherwise in this service manual, clean electrical contacts only by applying the following mixture to the contacts with a pipe cleaner, cotton-tipped stick or comparable non-abrasive applicator; 10% (by volume) Acetone and 90% (by volume) isopropyl alcohol (90%-99% strength)

CAUTION: This is a flammable mixture.

Unless specified otherwise in this service manual, lubrication of contacts is not required.

5. Do not defeat any plug/socket B+ voltage interlocks with which receivers covered by this service manual might be equipped.
6. Do not apply AC power to this instrument and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
7. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead.

Always remove the test receiver ground lead last.

8. *Use with this receiver only the test fixtures specified in this service manual.*

CAUTION: Do not connect the test fixture ground strap to any heat sink in this receiver.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid-state) devices can be damaged easily by static electricity. Such components commonly are called

Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed to prevent potential shock reasons prior to applying power to the

unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
 3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
 4. Use only an anti-static type solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
 5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
 6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
 7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
- CAUTION:** Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

General Soldering Guidelines

1. Use a grounded-tip, low-wattage soldering iron and appropriate tip size and shape that will maintain tip temperature within the range of 500 °F to 600 °F.
2. Use an appropriate gauge of RMA resin-core solder composed of 60 parts tin/40 parts lead.
3. Keep the soldering iron tip clean and well tinned.
4. Thoroughly clean the surfaces to be soldered. Use a small wire-bristle (0.5 inch, or 1.25cm) brush with a metal handle.
Do not use freon-propelled spray-on cleaners.
5. Use the following unsoldering technique
 - a. Allow the soldering iron tip to reach normal temperature.
(500 °F to 600 °F)
 - b. Heat the component lead until the solder melts.
 - c. Quickly draw the melted solder with an anti-static, suction-type solder removal device or with solder braid.
CAUTION: Work quickly to avoid overheating the circuitboard printed foil.
6. Use the following soldering technique.
 - a. Allow the soldering iron tip to reach a normal temperature
(500 °F to 600 °F)
 - b. First, hold the soldering iron tip and solder the strand against the component lead until the solder melts.
 - c. Quickly move the soldering iron tip to the junction of the component lead and the printed circuit foil, and hold it there only until the solder flows onto and around both the component lead and the foil.
 - d. Closely inspect the solder area and remove any excess or splashed solder with a small wire-bristle brush.

IC Remove/Replacement

Some chassis circuit boards have slotted holes (oblong) through which the IC leads are inserted and then bent flat against the circuit foil. When holes are the slotted type, the following technique should be used to remove and replace the IC. When working with boards using the familiar round hole, use the standard technique as outlined in paragraphs 5 and 6 above.

Removal

1. Desolder and straighten each IC lead in one operation by gently prying up on the lead with the soldering iron tip as the solder melts.
2. Draw away the melted solder with an anti-static suction-type solder removal device (or with solder braid) before removing the IC.

Replacement

1. Carefully insert the replacement IC in the circuit board.
2. Carefully bend each IC lead against the circuit foil pad and solder it.
3. Clean the soldered areas with a small wire-bristle brush.
(It is not necessary to reapply acrylic coating to the areas).

"Small-Signal" Discrete Transistor

Removal/Replacement

1. Remove the defective transistor by clipping its leads as close as possible to the component body.
2. Bend into a "U" shape the end of each of three leads remaining on the circuit board.
3. Bend into a "U" shape the replacement transistor leads.
4. Connect the replacement transistor leads to the corresponding leads extending from the circuit board and crimp the "U" with long nose pliers to insure metal to metal contact then solder each connection.

Power Output, Transistor Device

Removal/Replacement

1. Heat and remove all solder from around the transistor leads.
2. Remove the heat sink mounting screw (if so equipped).
3. Carefully remove the transistor from the heat sink of the circuit board.
4. Insert new transistor in the circuit board.
5. Solder each transistor lead, and clip off excess lead.
6. Replace heat sink.

Diode Removal/Replacement

1. Remove defective diode by clipping its leads as close as possible to diode body.
2. Bend the two remaining leads perpendicular y to the circuit board.
3. Observing diode polarity, wrap each lead of the new diode around the corresponding lead on the circuit board.
4. Securely crimp each connection and solder it.
5. Inspect (on the circuit board copper side) the solder joints of the two "original" leads. If they are not shiny, reheat them and if necessary, apply additional solder.

Fuse and Conventional Resistor

Removal/Replacement

1. Clip each fuse or resistor lead at top of the circuit board hollow stake.
2. Securely crimp the leads of replacement component around notch at stake top.
3. Solder the connections.

CAUTION: Maintain original spacing between the replaced component and adjacent components and the circuit board to prevent excessive component temperatures.

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections).

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary).
2. carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin. Solder the IC connection.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

At Other Connections

Use the following technique to repair the defective copper pattern at connections other than IC Pins. This technique involves the installation of a jumper wire on the component side of the circuit board.

1. Remove the defective copper pattern with a sharp knife. Remove at least 1/4 inch of copper, to ensure that a hazardous condition will not exist if the jumper wire opens.
2. Trace along the copper pattern from both sides of the pattern break and locate the nearest component that is directly connected to the affected copper pattern.
3. Connect insulated 20-gauge jumper wire from the lead of the nearest component on one side of the pattern break to the lead of the nearest component on the other side.
Carefully crimp and solder the connections.

CAUTION: Be sure the insulated jumper wire is dressed so the it does not touch components or sharp edges.

SPECIFICATION

NOTE : Specifications and others are subject to change without notice for improvement.

1. Application range

This specification is applied to ML-041A chassis.

2. Requirement for Test

Testing for standard of each part must be followed in below condition.

- (1) Temperature: $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- (2) Humidity: $65\% \pm 10\%$
- (3) Power: Standard input voltage (AC 100-240V, 50/60Hz)
- (4) Measurement must be performed after heat-run more than 30min.
- (5) Adjusting standard for this chassis is followed a special standard.

3. General Specification(TV)

No.	Item	Specification	Remark
1	Video input applicable system	1)PAL-D/K,B/G,I 2)NTSC-M 3)SECAM NTSC 4.43'	
2	Receivable broadcasting system	1)PAL/SECAM BG 2)PAL/SECAM DK 3)PAL I/I 4)SECAM L/L' 5)NTSC M 6)PAL-N/M 7)NTSC M	EU/Non-EU(RZ/RT) (PAL Market)
3	RF input channel	VHF : E2 ~ E12 UHF : E21 ~ E69 CATV : S1 ~ S20 HYPER : S21 ~ S41 L/L' : B,C,D VHF : 2 ~ 13 UHF : 14 ~ 69 CATV : 1 ~ 125 VHF Low : 1~M10 VHF High : 4~S22 UHF : S23~62	PAL FRANCE NTSC JAPAN
4	Input voltage	AC 100 - 240V/ 50Hz,60HZ	
5	Picture size	750.06 mm	30"
6	Tuning system	FVS 100 program FS	PAL, 200PR.(Option) NTSC
7	Operating environment	1)Temp : 0 ~ 40 deg 2)Humidity : 85%	
8	Storage environment	3)Temp : -20 ~ 60 deg 4)Humidity : 85%	
9	Display	LCD Module	LPL, AUO, CMO

5.General Specification(Monitor)

No.	Item	Specification			Unit	Remark
1	Panel	30" TFT WXGA LCD				
2	Frequency range	H:31 ~ 61KHz, V: 56 ~ 75Hz				DVI-I input
3	Control function	1) Contrast/ Brightness 2) H- Position/ V-Position 3) Tracking : Clock/Phase 4) Auto Configure 5) Reset				
4	Component Jack	1: Y 3: Pb 5: Pr 7: Line1 Ready 9: LINE2 11: LINE3 13: Line3 Ready				Middle east /NTSC Only
	D4 Jack (525i,525p,750p,1125i)	2: Y GND 4: Pb GND 6: Pr GND 8: LINE1 10: Line2 Ready 12: SWITCH GND 14: SWITCH				Japan only
5		H/V-Sync	Video	Power consumption		LED
	Power ON	ON/ON	Active	≤ Max 170	W	Red dimmed
	Stand by	OFF/ON	OFF	≤ 3.0	W	Red
	DPMS Mode	ON/OFF	OFF	≤typ.30	W	Red dimmed
	Power off	-	-	-	W	*.
6	LCD Module	Type Size	LPL AUO CMO	697.8 x 431.8 x 50.9 683.6 x 431.8 x 41.6 683.6 x 433.6 x 43.5	mm	(H) x (V) x (D)
		Pixel Pitch	LPL AUO CMO	0.1675 x 0.5025 x RGB 0.1675 x 0.5025 x RGB 0.16755 x 0.5025 x RGB	mm	
		Pixel Format	1280 horiz. By 768 vert. pixels RGB strip arrangement			
		Coating	Hard coating(3H), Anti-glare treatment of the front polarizer			
		Back Light	LPL AUO CMO	16EEFL 16CCFL 16CCFL		

6.Optical Feature(LCD Module)

No.	Item	Specification				Remark
			LPL	AUO	CMO	
1	Viewing Angle <CR>10>	R/L, U/D	170,170	170,170	170,170	
2	Luminance	Luminance(cd/m ²)	500	600	500	Typical
		Variation	1.3			MAX/MIN
3	Contrast Ratio		350	600	500	ALL white/All back
4	CIE Color Coordinates	WHITE	W _X	Typ.	0.284	0.285
			W _Y	Typ.	0.295	0.293
		RED	W _r	Typ.	0.631	-
			Y _r	Typ.	0.339	0.635
		Green	X _g	Typ.	0.282	-
			Y _g	Typ.	0.597	0.280
		Blue	X _b	Typ.	0.144	-
			Y _b	Typ.	0.076	0.603
						0.147
						0.076

7.Feature and Function

No.	Item	Specification	Remark
1	Teletext	TOP, FLOF, LIST 10 page	Top(option)
2	REMOCON	NEC code	PAL/NTSC
3	AV input	1	Rear(RT/RM)
4	S-AV input	1	Side
5	Component input	2	Side, Rear(RT/RM)
6	PERI TV connector	Half SCART: 1	Rear(RZ)
7	PERI TV connector	Full SCART: 1	Rear(RZ)
8	RGB input	1	DVI
9	RS-232	1	D-Sub 9 pin(RM)
10	Discrete IR	1	(RM)
11	D-sub audio input	1	Stereo
12	2 Carrier stereo	BG,DK	
13	NICAM stereo	BG,I,LL'	
14	2 Carrier dual	BG,DK	
15	NICAM dual	BG,I,LL'	
16	DW(Double Window) mode	X	
17	MW(Multi Window) mode	X	
18	Film mode	O	
19	Noise reduction	X	
20	Progressive scan	O	
21	Motion detection	O	
22	SRS WOW	X	
23	Swivel Speaker	X	
24	EZ-pip	X	
25	Local Key	Pr+/-, vol+/-, ok, menu, tv/av, power	

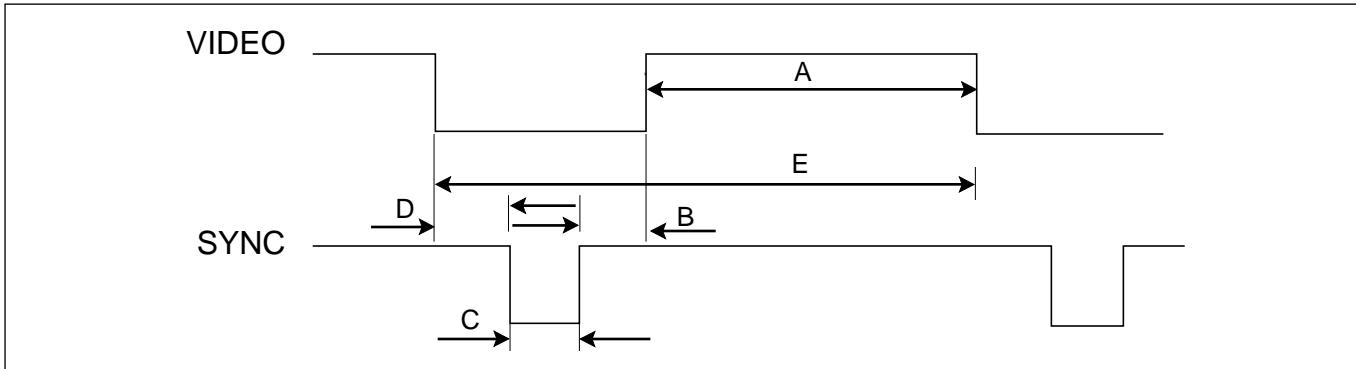
8.Component Video Input(Y, Pb, Pr)

NO	Resoluton	H-freq(kHz)	V-freq(Hz)	Pixel clock	Proposed
1	640 x 480	15.73	60.00	SDTV, DVD 480i	RZ, RT, RM
2	640 x 480	15.63	59.94	SDTV, DVD 480i	RZ, RT, RM
3	704 x 480	31.47	59.94	EDTV 480p	RT, RM
4	720 x 576	15.625	50.00	SDTV, DVD 625 Line	RZ, RT, RM
5	720 x 576	31.25	50.00	HDTV 576p	RT, RM
6	1280 x 720	45.00	60.00	HDTV 720p	RT, RM
7	1280 x 720	44.96	59.94	HDTV 720p	RT, RM
8	1920 x 1080	31.25	50.00	HDTV 1080i 50Hz(For Australia)	RT, RM
9	1920 x 1080	33.75	60.00	HDTV 1080i 60Hz(ATSC)	RT, RM
10	1920 x 1080	33.72	59.94	HDTV 1080i 59.94Hz	RT, RM

9.PC Input Mode

NO	Resoluton	H-freq(kHz)	V-freq(Hz)	Pixel clock(MHz)	Proposed
DVI-PC, Analog RGB					
1	640 x 480	31.469	59.94	25.17	VESA(VGA)
2	640 x 480	35	67	30.24	VESA(VGA)
3	640 x 480	37.500	75.00	31.50	VESA(VGA)
4	800 x 600	35.156	56.25	36.00	VESA(SVGA)
5	800 x 600	37.879	60.31	40.00	VESA(SVGA)
6	800 x 600	48.077	72.18	50.00	VESA(SVGA)
7	800 x 600	46.875	75.00	49.50	VESA(SVGA)
8	1024 x 768	48.363	60.00	65.00	VESA(XGA)
9	1024 x 768	56.476	70.06	75.00	VESA(XGA)
10	1024 x 768	60.023	75.02	78.75	VESA(XGA)
11	1280 x 768	47.693	60.00	80.125	VESA(WXGA)

TIMING CHART



<< Dot Clock (**MHz**), Horizontal Frequency (**kHz**), Vertical Frequency (**Hz**), Horizontal etc... (**μs**), Vertical etc... (**ms**) >>

Mode	H/V Sort	Sync Polarity	Dot Clock	Frequency	Total Period (E)	Video Active Time (A)	Front Porch (B)	Sync Duration (D)	Back Porch (F)	Resolution
1	H	+	25.175	31.469	800	640	16	96	48	640x480
	V	-		59.94	525	480	10	2	33	
2	H	-	30.240	35	864	640	64	64	96	640x480
	V	+		66.667	525	480	3	3	39	
3	H	-	31.5	37.5	840	640	16	64	120	640x480
	V	-		75	500	480	1	3	16	
4	H	-	36	35.156	1024	800	24	72	128	800x600
	V	-		56.25	625	600	1	2	22	
5	H	+	40.0	37.879	1056	800	40	128	88	800x600
	V	+		60.317	628	600	1	4	23	
6	H	+	50.0	48.077	1040	800	56	120	64	800x600
	V	+		72.188	666	600	37	6	23	
7	H	+/-	49.5	46.875	1056	800	16	80	160	800x600
	V	+/-		75.0	625	600	1	3	21	
8	H	-	65.0	48.363	1344	1024	24	136	160	1024x768
	V	-		60.004	806	768	3	6	29	
9	H	+	75	56.476	1328	1024	24	136	144	1024x768
	V	+		70.069	806	768	3	6	29	
10	H	+	78.75	60.023	1312	1024	16	96	176	1024x768
	V	-		75.029	800	768	1	3	28	
11	H	+	79.50	47.776	1664	1280	64	128	192	1280x768
	V	-		59.870	798	768	3	7	20	

ADJUSTMENT INSTRUCTION

1. Application Object

This instruction is for the application to the LCD TV.

2. Adjustment

2.1 Auto Gain/Offset adjustment

2.1.1 Adjustment preparation

- 1) Conduct Heat Run with the White Pattern for more than 30 minutes.
- 2) Connect the signals of Pattern Generator to DVI-I Jack of LCD TV.

2.1.2 Auto Gain/Offset adjustment

- 1) Use the Pattern Generator (801GF, VG819) to authorize XGA (1024 X 768) for resolution and 16 gray scale signals for patterns. Or authorize 16 gray scale (11 gray scale) signals in accordance with VG819.
- 2) Press the IN-START Key to convert to the adjustment mode using the adjustment (SVC) remote controller, and press VOL+ Key at the AutoGain menu.
- 3) Once the adjustment is completed, press the Enter Key to save and finish the adjustment

2.2 EDID (The Extended Display Identification Data) setting

- 1) Connect D-Sub to DVI-I Cable with DVI-I Jack.
- 2) Set the input mode of the Set to PC.
- 3) Select the OPT3 from the OSD menu and set Analog or Digital for DDC data selection.
- 4) Select Analog for analog data, and Digital for digital data.
- 5) Connect the DDC automation equipment and write the DDC data.

2.2.1 EDID DATA

[DDC DATA Analog]

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	
00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	39	75	01	01	01	01	
10	0C	0E	01	03	18	46	2B	78	EE	E8	AA	A1	57	49	9C	25	
20	10	48	4B	AB	8C	00	45	4F	61	4F	81	CF	01	01	01	01	
30	01	01	01	01	01	01	40	1F	00	90	51	00	1B	30	40	88	
40	37	00	BC	AE	21	00	00	1C	00	00	00	00	FD	00	32	4B	1F
50	3C	0A	00	0A	20	20	20	20	20	20	00	00	00	FC	00	52	
60	5A	33	30	4C	5A	35	30	0A	20	20	20	20	00	00	00	FC	
70	00	0A	20	20	20	20	20	20	20	20	20	20	20	20	20	B0	

[DDC DATA Digital]

	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	
00	00	FF	FF	FF	FF	FF	FF	00	1E	6D	3A	75	01	01	01	01	
10	0C	0E	01	03	98	46	2B	96	EE	E8	AA	A1	57	49	9C	25	
20	10	48	4B	BF	EE	00	31	40	3B	CA	45	40	61	40	81	C0	
30	81	CF	01	01	01	01	40	1F	00	90	51	00	1B	30	40	88	
40	37	00	BC	AE	21	00	00	1C	00	00	00	00	FD	00	32	4B	1F
50	3C	0A	00	0A	20	20	20	20	20	20	00	00	00	FC	00	52	
60	5A	33	30	4C	5A	35	30	0A	20	20	20	20	00	00	00	FC	
70	00	0A	20	20	20	20	20	20	20	20	20	20	20	20	20	08	

3. Shipping Conditions

NO	ITEM		CONDITION	REMARK	
1	Power		Off		
2	Volume Level		30		
3	Main Picture Input		TV		
5	Main Last Channel		Pr 01		
8	Mute		Off		
9	ARC		16:9		
10	Station	Auto Program			
		Manual Program			
		Program Edit			
		Favorite Program		None	
11	Picture	PSM		Dynamic	
		Dynamic	Contrast	80	
			Brightness	40	
			Colour	70	
			Sharpness	70	
		Tint		0	
14	Sound	SSM		Flat	
		AVL		Off	
		Balance		0	
15	Special	Input		TV	
		Child Lock		Off	
		Auto sleep		Off	
		Language		English(Area Management)	
16	PC	H-Position		Variable by each mode	
		V-Position			
		Clock			
		Phase			
		Auto Configure			

*Option(PAL)

NO	ITEM	CONDITION	REMARK
Option 1			
1	Side AV	1	0: Side AV Off 1: Side AV On
2	SCART	1	0: SCART Off 1: SCART On
3	PC	1	0: PC Off 1: PC On
4	SideComp	1	0: SideComp Off 1: SideComp On
5	16:9	1	0: Wide Off 1: Wide On
6	200PR	0	0: 100 Program 1: 200 Program
7	Text	1	0: Text Off 1: Text On
8	ACMS	1	0: ACMS On 1: ACMS Off
Option 2			
1	HiDev	0	0: HiDev Off 1: HiDev On
2	Hotel	0	0: Hotel Off 1: Hotel On
3	Top	1	0: Top Off 1: Top On
4	I II SAVE	1	0: Ch. Sound Non Memory 1: Ch. Sound Memory
5	Turbo Vol	0	0: except below area(Off) 1: Middle-east Area Vol On
6	Ch/Aus	0	0: except below area(Off) 1: China, Australia On

NO	ITEM	CONDITION	REMARK
Option 3			
1	Language	1	0: Eng Only 1: EU5 2: 12 nations(Europe) 3: Eng + Chines 4: Eng + Arab + Urdu 5: Eng + FARSI
2	Txt Lang	0	0: WEST EU 1: EAST EU 1 2: TURKY EU 3: EAST EU 2 4: CYRILLIC 1 5: CYRILLIC 2 6: CYRILLIC 3 7: TURKY GRE 1 8: TURKY GRE 2 9: TURKY GRE 3 10: ARAB FRAN 11: ARAB ENG 12: ARAB HEB 1 13: ARAB HEB 2 14: FARSI ENG 15: FARSI FRA 16: FARI ALL
3	Inch opt	0	reserved
4	DDCi	Analog	Analog: Analog Digital: Digital

EDID ADJUSTMENT

Windows EDID V1.0 User Manual

Operating System: MS Windows 98, 2000, XP

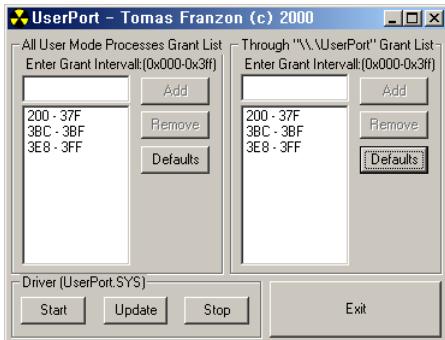
Port Setup: Windows 98 => Don't need setup

Windows 2000, XP => Need to Port Setup.

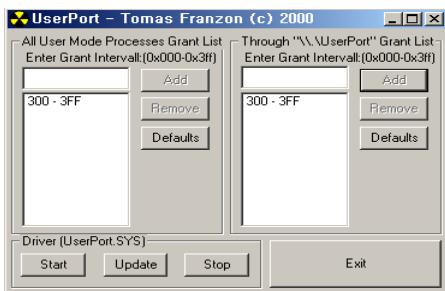
This program is available to LCD Monitor only.

1. Port Setup

- Copy "UserPort.sys" file to
"c:\WINNT\system32\drivers" folder
- Run Userport.exe



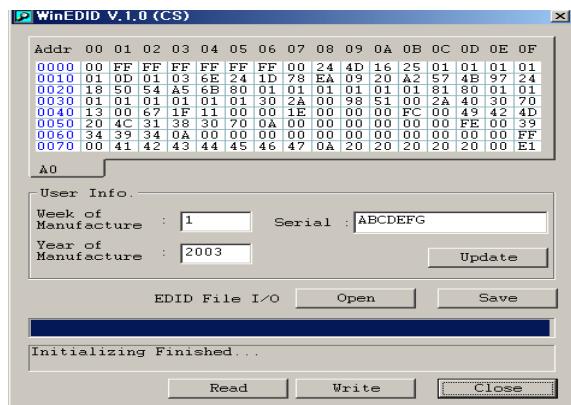
- Remove all default number
- Add 300-3FF



- Click Start button.
- Click Exit button.

2. EDID Read & Write

1) Run WinEDID.exe



2) Edit Week of Manufacture, Year of Manufacture, Serial Number

- Input User Info Data
- Click "Update" button
- Click "Write" button

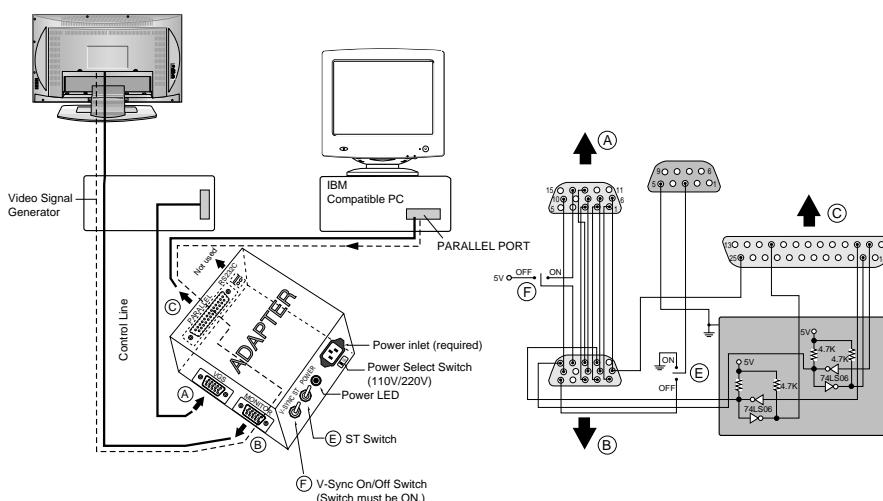
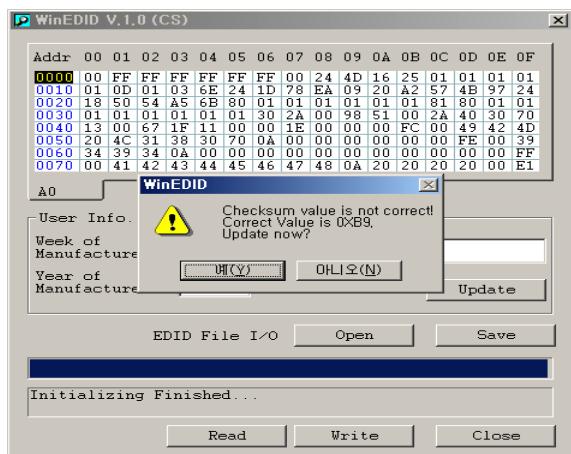
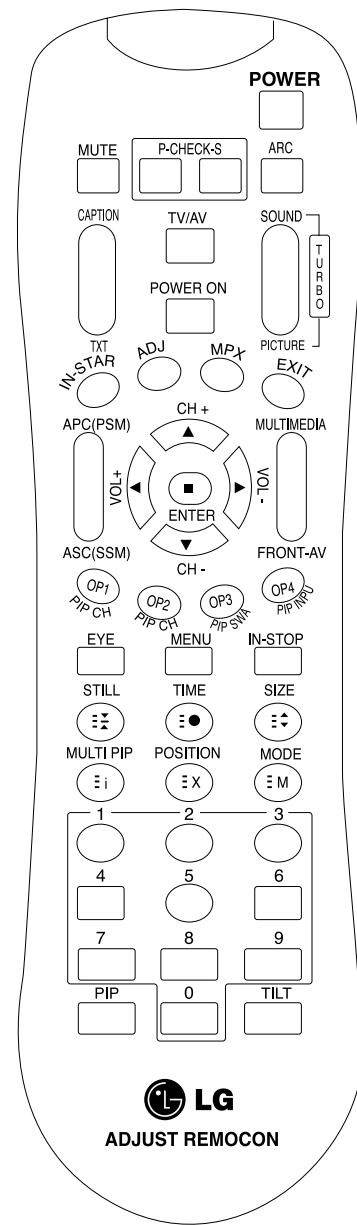


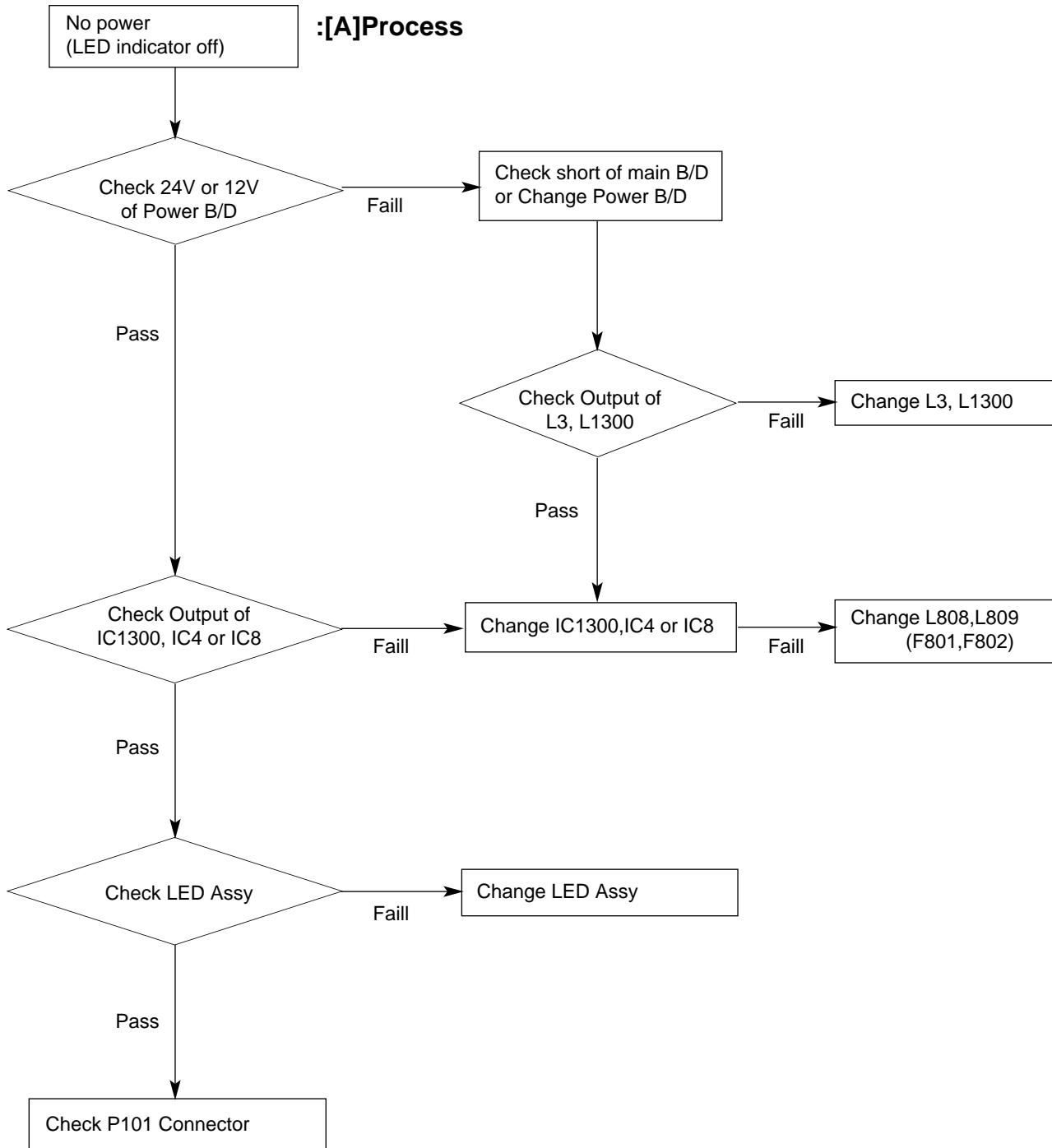
Figure 1. Cable Connection

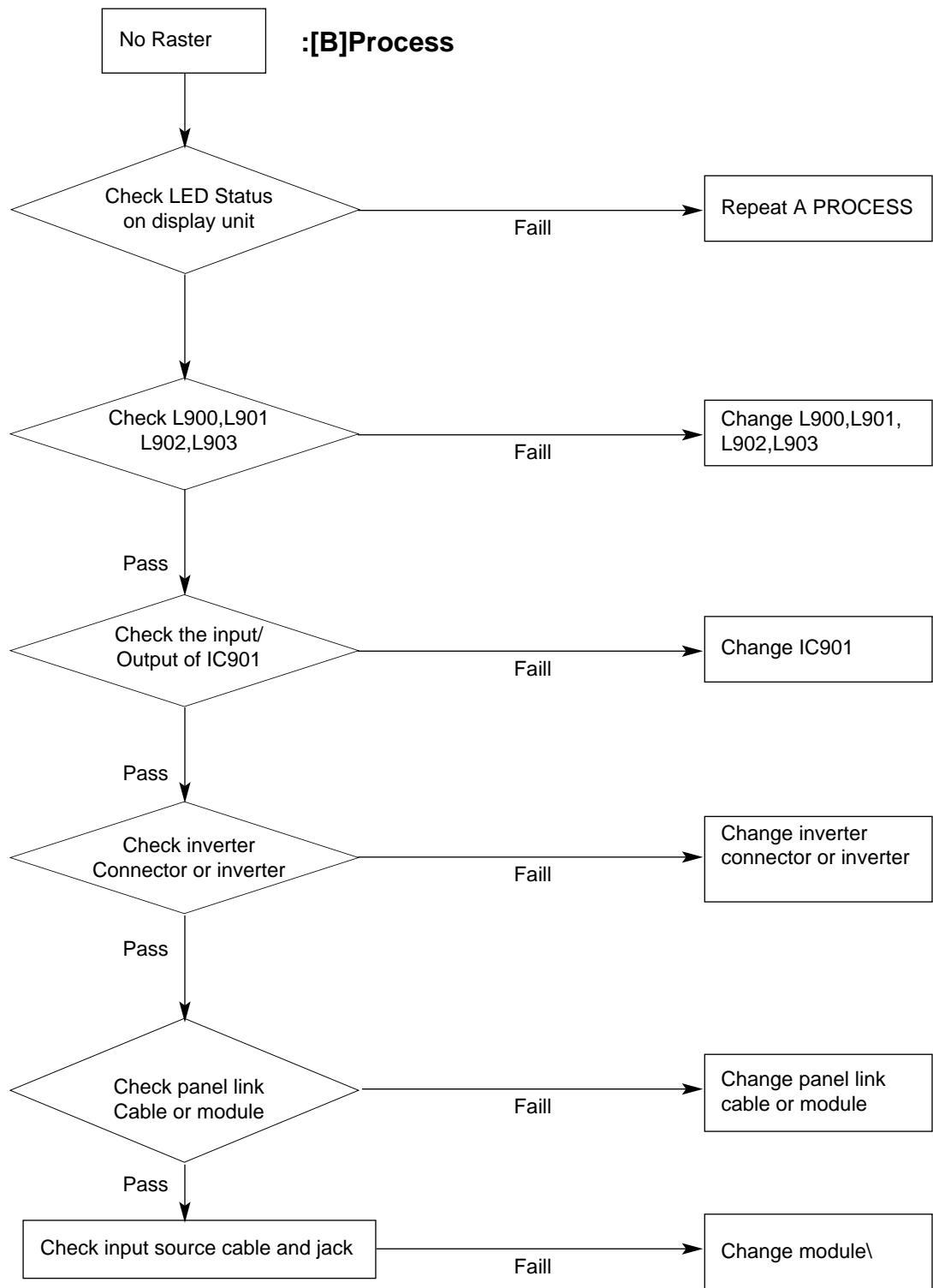
SVC REMOCON

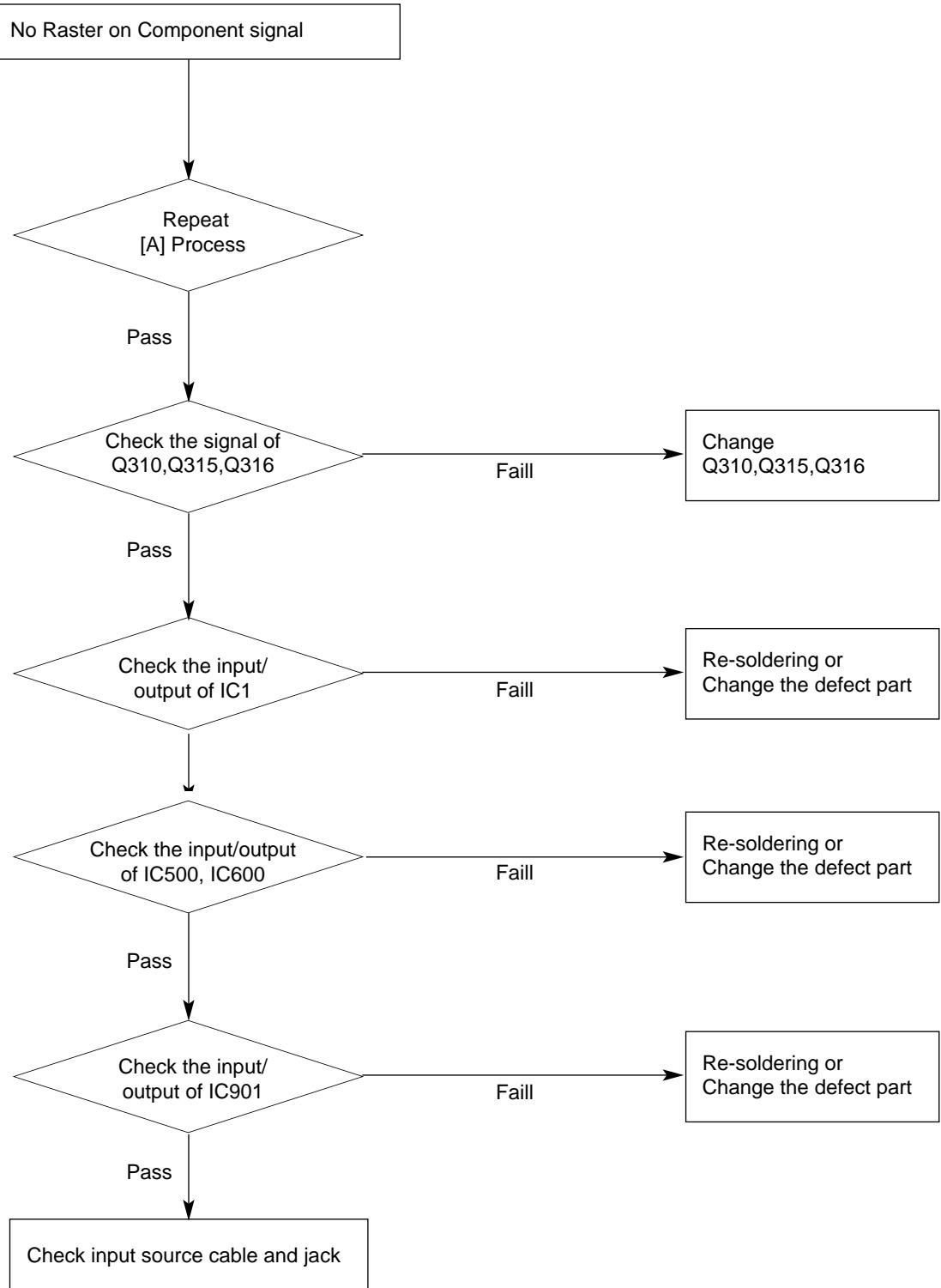
NO	KEY	FUNTION	REMARK
1	POWER	To turn the TV on or off	
2	POWER ON	To turn the TV on automatically if the power is supplied to the TV. (Use the POWER key to deactivate): It should be deactivated when delivered.	
3	MUTE	To activate the mute function.	
4	P-CHECK	To check TV screen image easily.	Shortcut keys
5	S-CHECK	To check TV screen sound easily	Shortcut keys
6	ARC	To select size of the main screen (Normal, Spectacle, Wide or Zoom)	Shortcut keys
7	CAPTION	Switch to closed caption broadcasting	
8	TXT	To toggle on/off the teletext mode	
9	TV/AV	To select an external input for the TV screen	
10	TURBO SOUND	To start turbo sound	
11	TURBO PICTURE	To start turbo picture	
12	IN-START	To enter adjustment mode when manufacturing the TV sets. To adjust the screen voltage (automatic): In-start → mute → Adjust → AV(Enter into W/B adjustment mode) W/B adjustment (automatic): After adjusting the screen → W/B adjustment → Exit two times (Adjustment completed)	Use the AV key to enter the screen W/B adjustment mode. Use the AV key to enter the screen W/B adjustment mode.
13	ADJ	To enter into the adjustment mode. To adjust horizontal line and sub-brightness.	
14	MPX	To select the multiple sound mode (Mono, Stereo or Foreign language)	
15	EXIT	To release the adjustment mode	
16	APC(PSM)	To easily adjust the screen according to surrounding brightness	
17	ASC(SSM)	To easily adjust sound according to the program type	
18	MULTIMIDIA	To check component input	Shortcut keys
19	FRONT-AV	To check the front AV	Shortcut keys
20	CH ±	To move channel up/down or to select a function displayed on the screen.	
21	VOL ±	To adjust the volume or accurately control a specific function.	
22	ENTER	To set a specific function or complete setting.	
23	EYE	To set a function that will automatically adjust screen status to match the surrounding brightness so natural color can be displayed.	
24	MENU	To select the functions such as video, voice, function or channel.	
25	IN-STOP	To set the delivery condition status after manufacturing the TV set.	
26	TIME	Displays the teletext time in the normal mode. Enables to select the sub code in the teletext mode	
27	MODE	Used as Mode in the teletext mode	
28	0~9	To manually select the channel.	

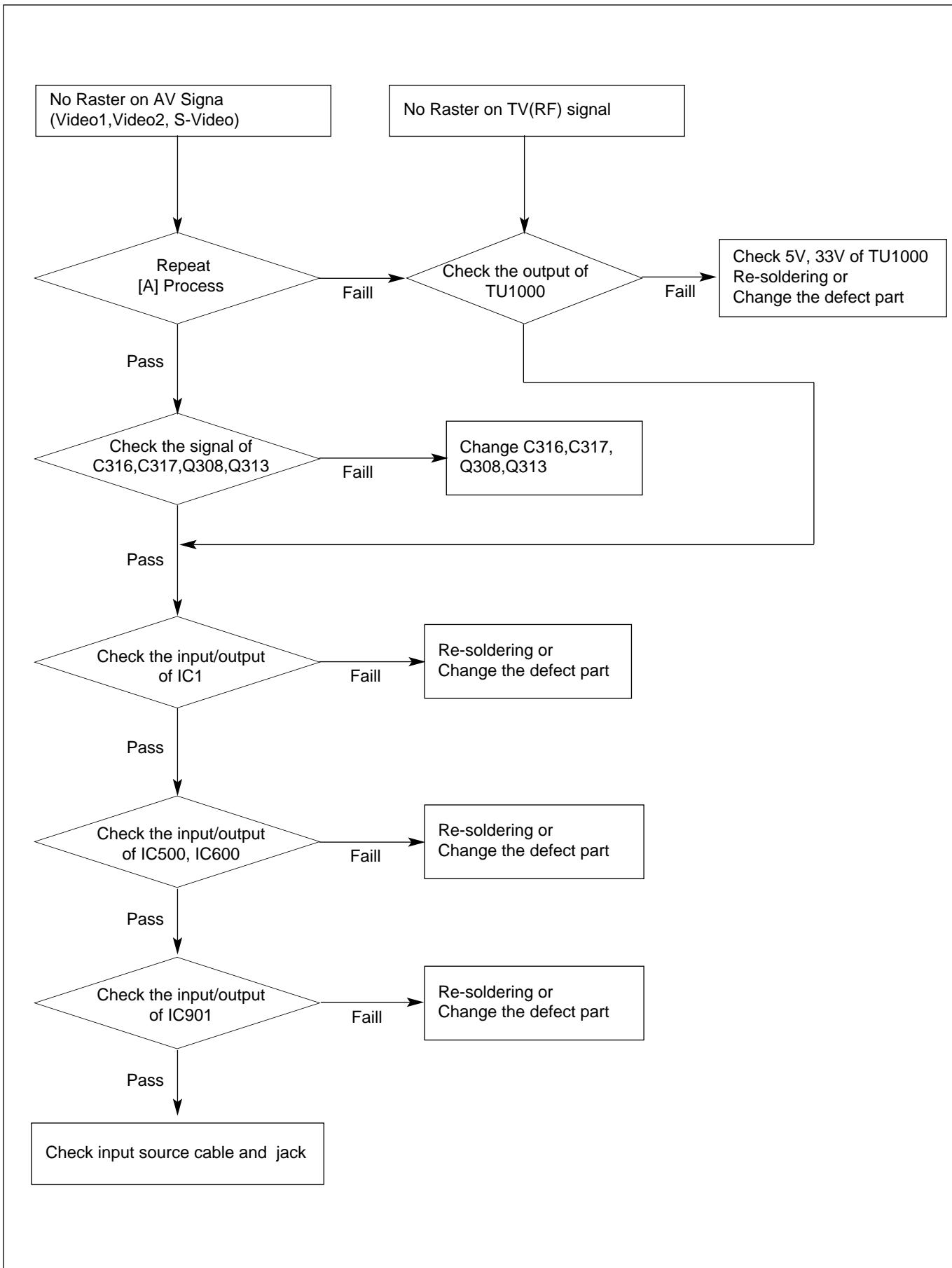


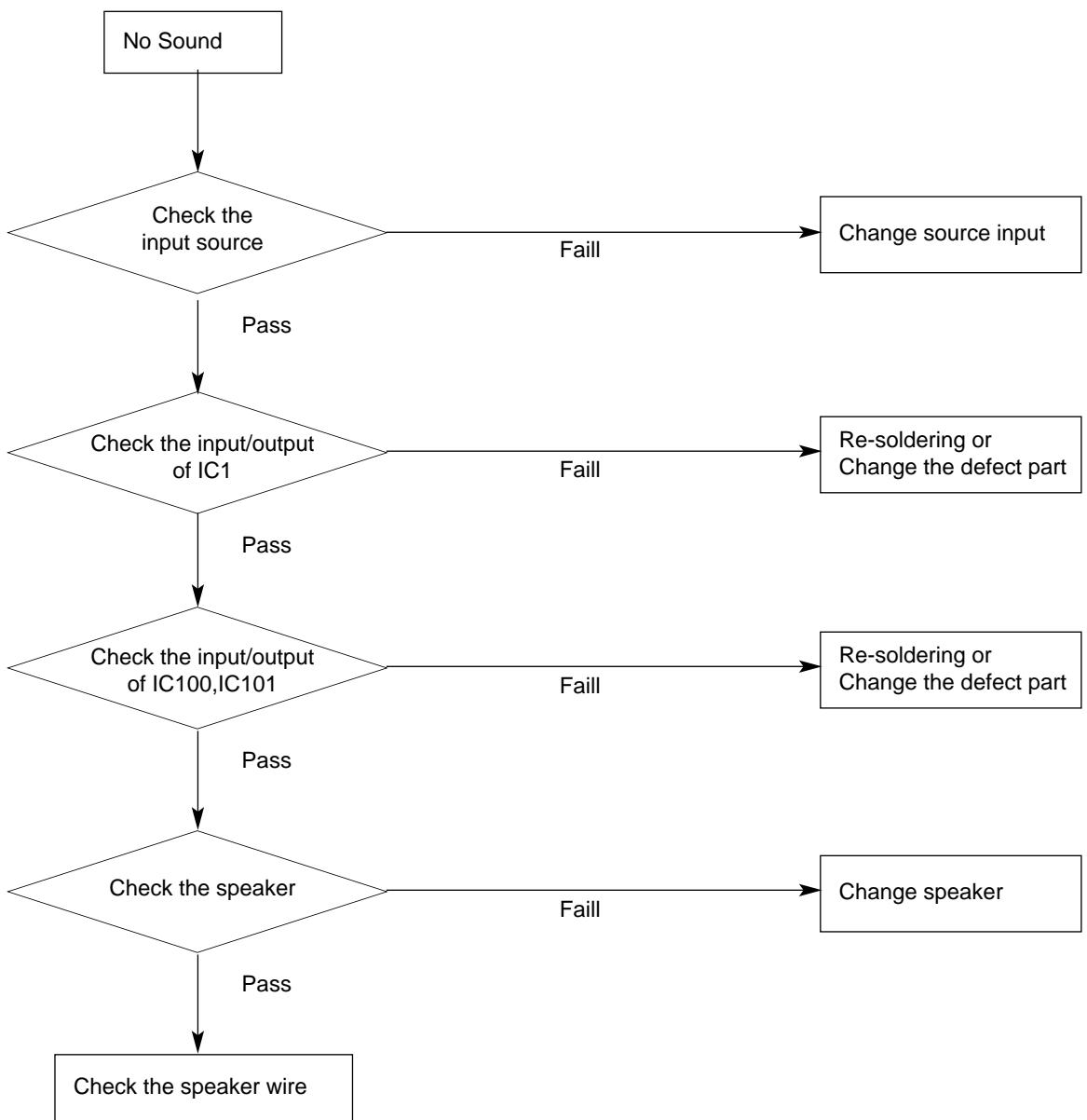
TROUBLESHOOTING



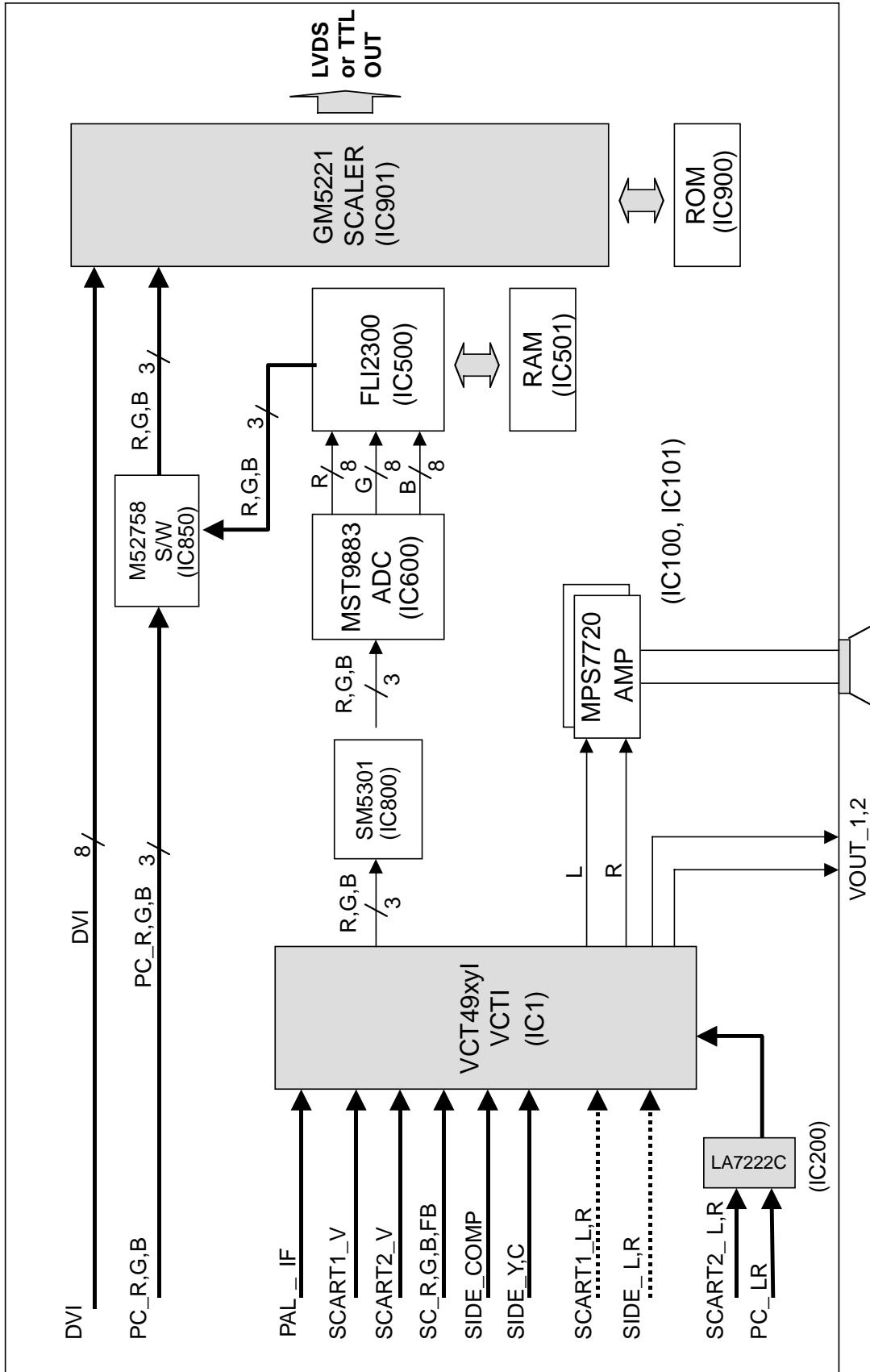








BLOCK DIAGRAM



BLOCK DIAGRAM DESCRIPTION

1. Video controller unit and display data conversion unit

The video controller unit receives the video signal inputted to the tuner, AV port (AV1, AV2, S-Video and component) and converts it to the analog RGB signal through the microcomputer (VCTI) combined with the video decoder that integrates various functions in one chip.

Then, it is inputted to the AD converter (AD9883) and generates the 4:4:4 format digital signal. This digital signal is inputted to the picture enhancer (FLI2300), which processes the video signal and converts the image quality enhanced data to an analog RGB signal again before displaying it.

The image quality enhanced de-interlace signal is inputted to the scaler (GM5221) and converted to the LVDS signal by the integrated LVDS IC before being sent to the LCD module.

VCTI is the main microcomputer that processes both video signals and sound signals. It also processes the RF signal received from the tuner.

The scaler enables to adjust timing on the LCD panel, as well as an adjustment of the size and position of the input signal.

The graphic controller unit receives the PC (analog RGB) input and the DVI-D (digital signal), and sends the PC input to the scaler analog port and DVI-D input to the digital port.

The scaler receives two inputs and converts them to the LVDS signal before sending to the module.

2. Power unit

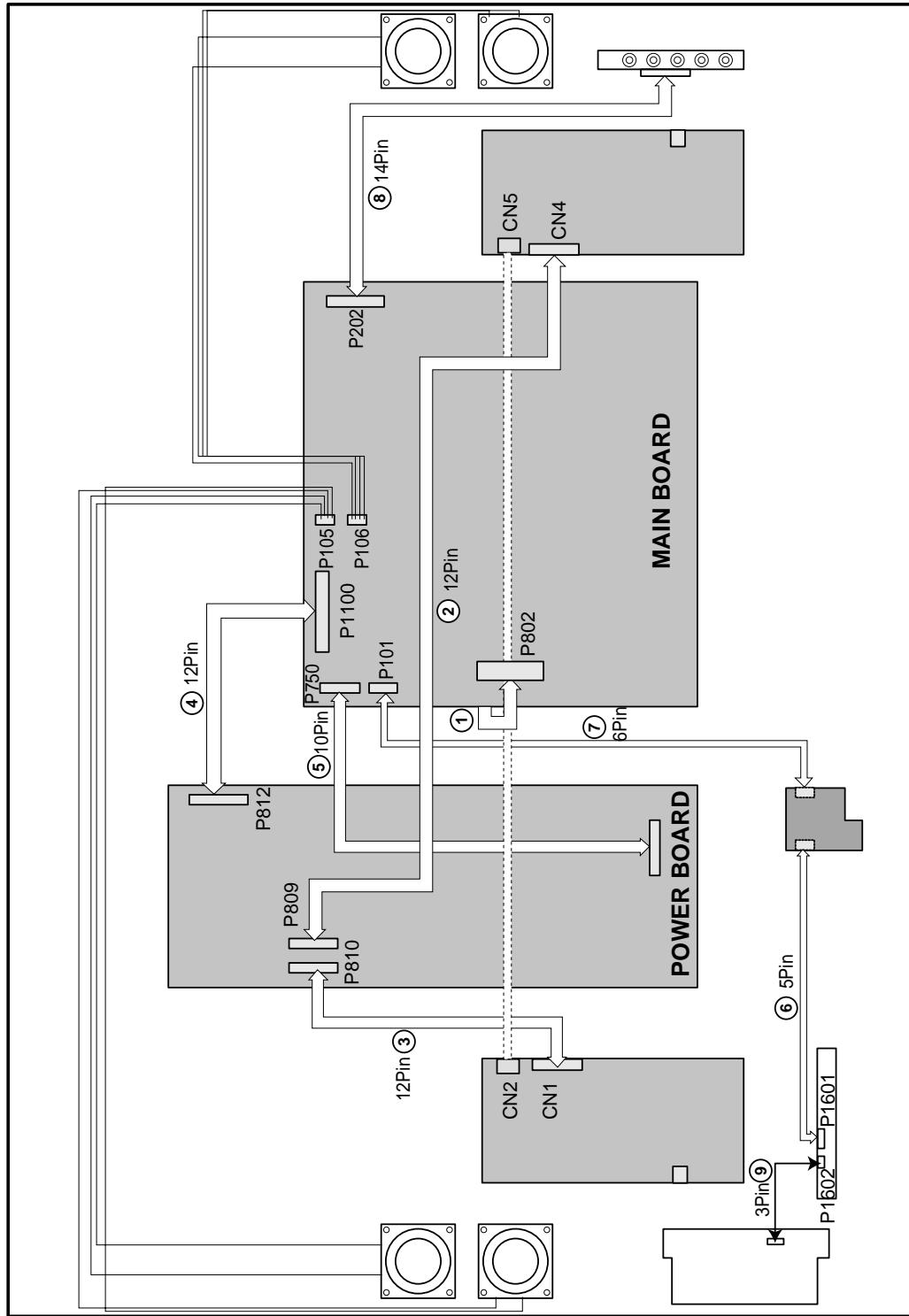
The power unit supplies 33V, 24V and 12V DC power to the main board. 33V DC power is used for the tuner, whereas 24V DC power is directly used by the inverter and the sound amplifier IC. 24V DC power is also used to generate 5V through the regulator. 12V DC power is used for the LCD panel.

5V DC is converted to 3.3V and 1.8V through the regulator, which supplies the necessary power to various ICs, such as VCTI, scaler, FLI2300 and AD9883.

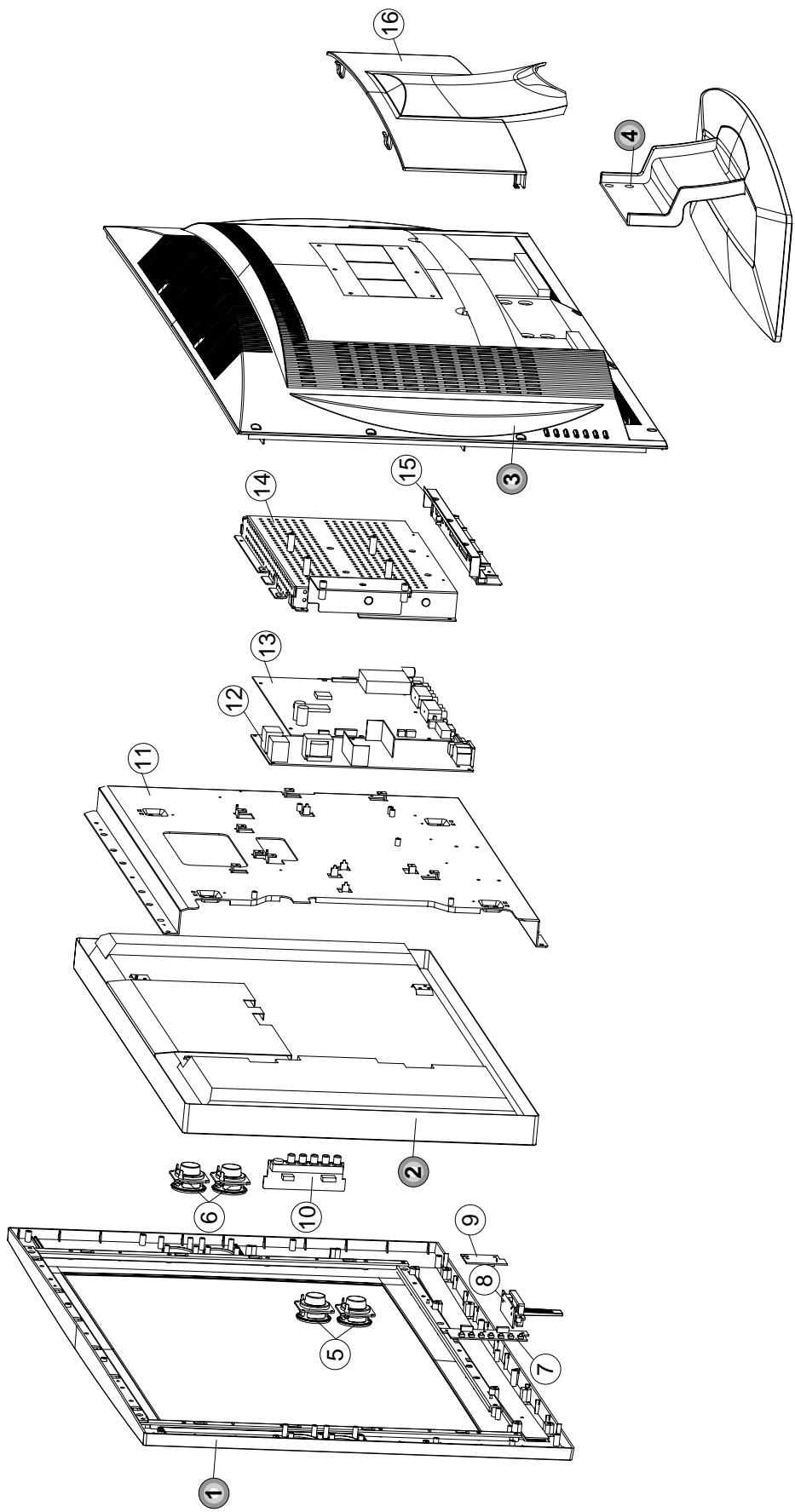
WIRING DIAGRAM

Wiring Part List

No.	Part No.
1	6631T11020C -LPL,AUO
2	6631T11020D -CMO
3	6631T20032B
4	6631T20032C
5	6631T25019K
6	6631T20033C
7	6631T20033A
8	6631T20033E
9	6631T20033D



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

No.	PART NO.	DESCRIPTION
1	3091TKE014A	CABINET ASSEMBLY, RZ-30LZ50 BRAND 3090TKE007A NONE LPL
	3091TKE014C	CABINET ASSEMBLY, RZ-30LZ50 BRAND 3090TKE007 CMO MODULE
	3091TKE014G	CABINET ASSEMBLY, RZ-30LZ50 BRAND 3090TKE007 CMO,C/SKD
	3091TKE014F	CABINET ASSEMBLY, RZ-30LZ50 BRAND 3090TKE007 AUO
	3091TKE014H	CABINET ASSEMBLY, RZ-30LZ50 BRAND 3090TKE007 AUO C/SKD
	3091TKE014B	CABINET ASSEMBLY, RZ-30LZ50 BRAND 3090TKE007A LGEWA C/SKD
2	6304FLP122A	LCD(LIQUID CRYSTAL DISPLAY), LC300W02-A5 LG PHILIPS TFT COLOR EEFL,WXGA,450NITS,LVDS
	6304FCI006A	LCD(LIQUID CRYSTAL DISPLAY) V296W1-L06 CHIMEI TFT COLOR WXGA LVDS
	6304FAU015A	LCD(LIQUID CRYSTAL DISPLAY),T296WX01 AU TFT COLOR XGA LVDS 600NITD 16MS MVA
3	3809TKE014G	BACK COVER ASSEMBLY, RZ-30LZ50 3809TKE006 CIS
	3809TKE014A	BACK COVER ASSEMBLY, RZ-30LZ50 3808TKE006A NONE
	3809TKE014B	BACK COVER ASSEMBLY, RZ-30LZ50 3808TKE006A LGEWA C/SKD
	3809TKE014D	BACK COVER ASSEMBLY, RZ-30LZ50 3808TKE006 C/SKD
	3809TKE014E	BACK COVER ASSEMBLY, RZ-30LZ50 3808TKE006 C/SKD CIS
4	3043TKK172A	TILT SWIVEL ASSEMBLY, RZ-30LZ50 NONE NONE
	3043TKK172B	TILT SWIVEL ASSEMBLY, RZ-30LZ50 LGEWA C/SKD
5	6401TZ042C	SPEAKER ASSEMBLY, RZ-30LZ50 5WX2EA,8OHM,ESTEC(L),5P,UL1185#24,
6	6401TZ042D	SPEAKER ASSEMBLY, RZ-30LZ50 5WX2EA,8OHM,ESTEC(R),4P,UL1185#24
7	6871TST589A	PWB(PCB) ASSEMBLY,SUB, 26LZ50 KEY SUB TOTAL BRAND KEY BOARD
8	6871TST642A	PWB(PCB) ASSEMBLY,SUB, 30LZ50 LED & P/SW TOTAL BRAND .
10	6871TVT370A	PWB(PCB) ASSEMBLY,VIDEO, RZ-30LZ50 SIDE A/V SUB TOTAL BRAND .
11	4951TKS157A	METAL ASSEMBLY, FRAME RZ-30LZ50 LPL
	4951TKS157C	METAL ASSEMBLY, FRAME RZ-30LZ50 AUO
	4951TKS157D	METAL ASSEMBLY, FRAME CMO
	4951TKS157B	METAL ASSEMBLY, FRAME RZ-30LZ50 C/SKD
12	6871TPT275A	PWB(PCB) ASSEMBLY,POWER, RZ-30LZ50 POWER TOTAL BRAND ML-041A, 23",26",27",30",32" AUTOBAN LPL, AUO
	6871TPT275C	PWB(PCB) ASSEMBLY,POWER, RZ-30LZ50 POWER TOTAL BRAND CMO NON D/D
13	3313TP3003A	MAIN TOTAL ASSEMBLY, RZ-30LZ50 LPL BRAND ML-041A
	3313TP3005A	MAIN TOTAL ASSEMBLY, RZ-30LZ50 CMO BRAND ML-041A
	3313TP3004A	MAIN TOTAL ASSEMBLY, RZ-30LZ50 AUO BRAND ML-041A
14	4951TKK169B	METAL ASSEMBLY, REAR RZ-30LZ50
	4951TKK169E	METAL ASSEMBLY, REAR RZ-30LZ50 LGEWA C/SKD
15	3551TKK516A	COVER ASSEMBLY, RZ-30LZ50 REAR NON AV
	3551TKK516B	COVER ASSEMBLY, RZ-30LZ50 REAR NON AV C/SKD
16	3550TKK519A	COVER, RZ-30LZ50 REAR AV
	3550TKK519B	COVER, RZ-30LZ50 REAR C/SKD

REPLACEMENT PARTS LIST

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;

CC, CX, CK, CN, CH : Ceramic
CQ : Polyester
CE : Electrolytic
CF : Fixed Film

RD : Carbon Film
RS : Metal Oxide Film
RN : Metal Film
RH : CHIP, Metal Glazed(Chip)
RR : Drawing

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
CAPACITOR				
		C108	OCE476EK638	47UF KMG 50V M FM5 TP 5
		C1100	OCE106BF618	10UF KME 16V M FL TP5
		C1102	OCE107CK638	"100UF SHL,SD 50V M FM5 TP 5"
		C1112	OCE108EF630	1000UF KMG 16V M FM5 BULK
		C1113	OCE108EF630	1000UF KMG 16V M FM5 BULK
		C1114	OCE108EF630	1000UF KMG 16V M FM5 BULK
		C1115	OCE108EF630	1000UF KMG 16V M FM5 BULK
		C119	OCE106BF618	10UF KME 16V M FL TP5
		C120	OCE106BF618	10UF KME 16V M FL TP5
		C1200	OCE477EF638	470UF KMG 16V M FM5 TP 5
		C1202	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C123	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C124	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C1299	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C1304	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C131	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C132	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C133	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C134	OCE477EJ630	470UF KMG 35V M FM5 BULK
		C404	OCE227EJ638	220UF KMG 35V M FM5 TP 5
		C13	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C1303	OCH6101K416	100PF 50V J NP0 2012 R/TP
		C1308	OCH6101K416	100PF 50V J NP0 2012 R/TP
		C14	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C2	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C20	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C200	OCH6221K416	220PF 50V J NP0 2012 R/TP
		C237	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C238	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C319	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C321	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C324	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C326	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C327	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C328	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C329	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C331	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C333	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C336	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C338	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C339	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C340	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C341	OCH6150K416	15PF 50V J NP0 2012 R/TP
		C43	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C46	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C50	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C515	OCH6330K416	33PF 50V J NP0 2012 R/TP
		C516	OCH6330K416	33PF 50V J NP0 2012 R/TP
		C53	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C59	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C701	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C702	OCH6120K416	12PF 50V J NP0 2012 R/TP
		C74	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C755	OCH6471K416	470F 50V J NP0 2012 R/TP
		C756	OCH6471K416	470F 50V J NP0 2012 R/TP

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
DATE: 2004. 4. 20.				
		C757	OCH6471K416	470F 50V J NP0 2012 R/TP
		C758	OCH6101K416	100PF 50V J NP0 2012 R/TP
		C83	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C86	OCH6102K406	1000PF 50V J SL 2012 R/TP
		C924	OCH6050K116	5PF 50V D NP0 2012 R/TP
		C925	OCH6050K116	5PF 50V D NP0 2012 R/TP
		C129	181-007F	"MPE ECQ-V1H224JL3(TR), 50V 0"
		C130	181-007F	"MPE ECQ-V1H224JL3(TR), 50V 0"
		C10	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C1001	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C1002	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C1003	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C1004	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C1007	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C1010	OCK273DK51A	27000PF 2012 50V 10% B(Y5P)
		C107	OCK225DFK4A	"2.2UF 2012 16V 20%, -20% F(Y5"
		C109	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C11	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C110	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C113	OCK225DFK4A	"2.2UF 2012 16V 20%, -20% F(Y5"
		C114	OCK225DFK4A	"2.2UF 2012 16V 20%, -20% F(Y5"
		C115	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C116	OCK562CK51A	5600PF 1608 50V 10% R/TP B(Y
		C117	OCK562CK51A	5600PF 1608 50V 10% R/TP B(Y
		C118	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C12	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C125	OCK105EK56A	1UF 3216 50V 10% X7R R/TP
		C126	OCK105EK56A	1UF 3216 50V 10% X7R R/TP
		C127	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C128	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1300	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1301	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C1302	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C1305	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C1306	OCK103CK51A	0.01UF 1608 50V 10% R/TP B(Y
		C1307	OCH3103K516	10000PF 50V 10% B(Y5P) 2012
		C135	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C136	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C15	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C16	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C18	OCK106EF56A	10UF 3216 16V 10% X7R R/TP
		C19	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C23	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C25	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C26	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C27	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C28	OCK334CF94A	"0.33UF 1608 16V 80%, -20% F(Y"
		C29	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C3	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C30	OCK334CF94A	"0.33UF 1608 16V 80%, -20% F(Y"
		C306	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C31	OCK104CK56A	0.1UF 1608 50V 10% R/TP X7R
		C318	OCH3104K566	0.1UF 50V 10% X7R 2012 R/TP
		C32	OCK334CF94A	"0.33UF 1608 16V 80%, -20% F(Y"

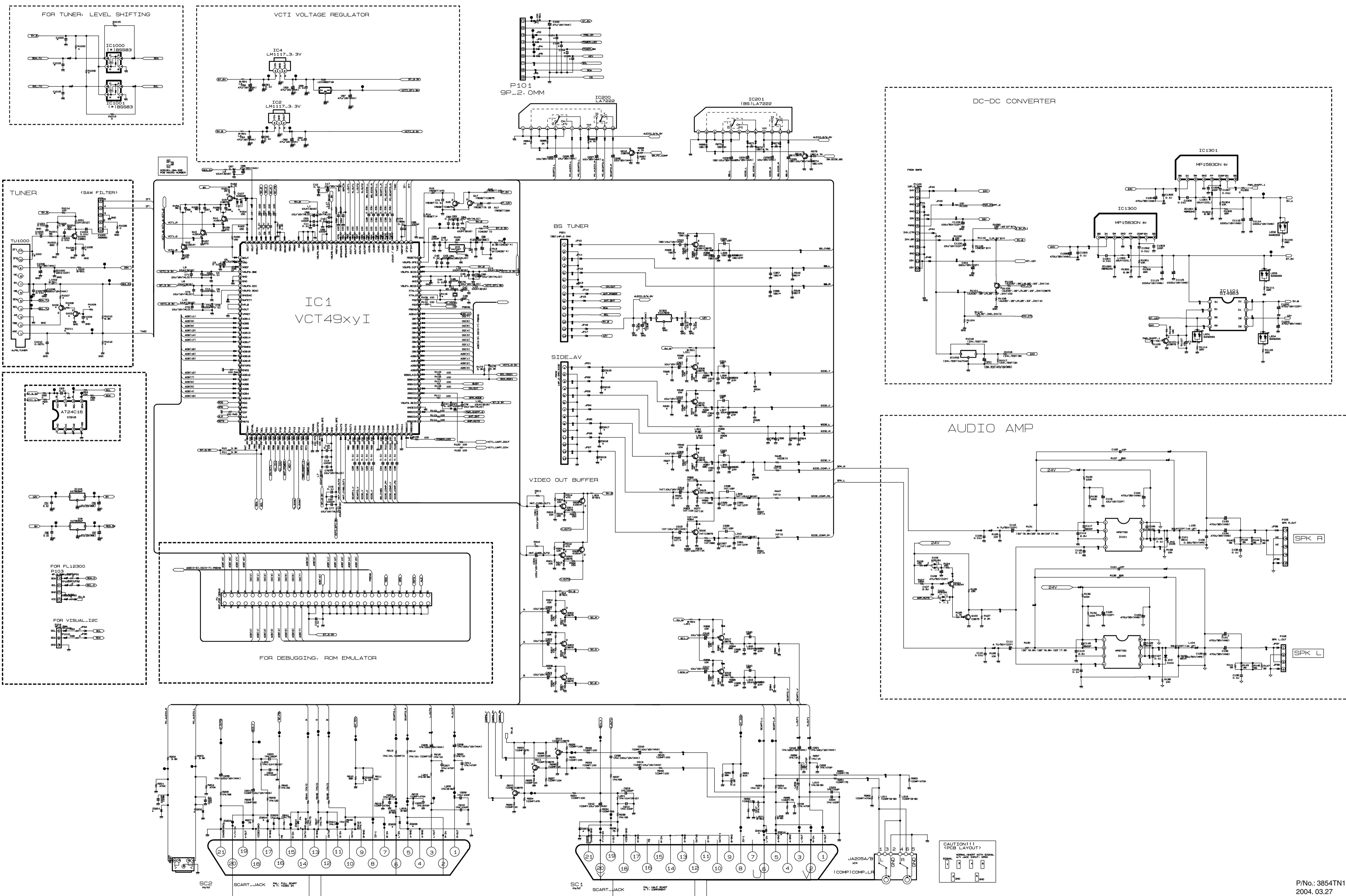
DATE: 2004. 4. 20.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C111	OCE475EK638	4.7UF KMG 50V 20% FM5 TP 5
		C112	OCE475EK638	4.7UF KMG 50V 20% FM5 TP 5
		C17	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C206	OCH8226F691	22UF 16V 20% 105STD (CYL) R/
		C208	OCH8226F691	22UF 16V 20% 105STD (CYL) R/
		C219	OCH8226F691	22UF 16V 20% 105STD (CYL) R/
		C221	OCH8226F691	22UF 16V 20% 105STD (CYL) R/
		C225	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C226	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C227	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C228	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C231	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C232	OCH8106J691	10UF 35V 20% 105STD (CYL) R/
		C235	OCE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C236	OCE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C300	OCE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C301	OCE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C302	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C303	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C304	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C307	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C308	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C309	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C312	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C313	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C314	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C315	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C316	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C317	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C5	OCE475WJ6DC	4.7UF MVK 35V 20% R/TP(SMD)
		C502	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C503	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C52	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C520	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C525	OCH8106F691	10UF 16V 20% 105STD (CYL) R/
		C54	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C543	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C55	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C560	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C566	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C604	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C605	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C607	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C62	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C63	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C703	OCE107WF6DC	100UF MVK 16V 20% R/TP(SMD)
		C805	OCE227WF6DC	220UF MVK 16V 20% R/TP(SMD)
		C806	OCE227WF6DC	220UF MVK 16V 20% R/TP(SMD)
		C807	OCE227WF6DC	220UF MVK 16V 20% R/TP(SMD)
		C814	OCE227WF6DC	220UF MVK 16V 20% R/TP(SMD)
		C815	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C857	OCE227WF6DC	220UF MVK 16V 20% R/TP(SMD)
		C858	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C859	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C860	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C861	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C862	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C863	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C87	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C88	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C900	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C953	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
DATE: 2004. 4. 20.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C956	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C957	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C959	OCH8476F691	47UF 16V 20% 105STD (CYL) R/
		C97	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C972	OCH8476H691	47UF 25V 20% 105STD (CYL) R/
		C1500	OCN1040K949	0.1M 50V Z F TA52
		C1501	OCN4710K519	470P 50V K B TA52
		C1600	OCN1040K949	0.1M 50V Z F TA52
		C2006	OCN4710K519	470P 50V K B TA52
		C2007	OCN4710K519	470P 50V K B TA52
DIODEs				
		D100	0DRFC00288A	SS14 FAIR CHILD R/TP SMA 20-
		D101	0DRFC00288A	SS14 FAIR CHILD R/TP SMA 20-
		IC751	0DRSE00018A	SRV05-4-TC SEMTECH R/TP SOT2
		IC754	0DRSE00018A	SRV05-4-TC SEMTECH R/TP SOT2
		ZD1300	0DR34009AA	MTRS340 TP FAIRCHILD NON 40V
		ZD1301	0DR34009AA	MTRS340 TP FAIRCHILD NON 40V
		D102	0DS181009AA	KDS181 TP KEC SOT-23 80V 3
		D103	0DS181009AA	KDS181 TP KEC SOT-23 80V 3
		D107	0DS226009AA	KDS226 TP KEC SOT-23 80V 30
		D711	0DD184009AA	KDS184 TP KEC - 85V - - - 30
		D104	0DZ620009HB	UDZ S 6.2B TP ROHM SOD323 20
		D105	0DZ620009HB	UDZ S 6.2B TP ROHM SOD323 20
		D700	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		D701	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		D702	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		D703	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		D704	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		D705	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		D706	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD10	0DZ910009FE	UDZS 9.1B TP ROHM - - 9.1V -
		ZD1000	0DZ330009DF	MTZJ33B TP ROHM-K DO34 0.5W
		ZD201	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD202	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD203	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD204	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD205	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD206	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD207	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD208	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD210	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD213	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD214	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD215	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD216	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD217	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD218	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD219	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD220	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD221	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD851	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
		ZD852	0DZRM00178A	UDZS TE-17 5.1B ROHM R/TP SM
IC				
		IC3	0IKE702700D	"KIA7027AF 3, SOT-89 TP RESET"
		C500	0IZZTSA001A	"RZ/RT-30""/26""/23""/27"" LZ50 F"
		IC200	0ISA72200A	LA7222 (1280 AUDIO) - - -
		IC501	0IMMRREB010A	"M12L64322A-6T ESMT 86P, TSOP"
		IC749	0IMMRSG036A	"M24C02-WMN6T SGS-THOMSON 8P,"

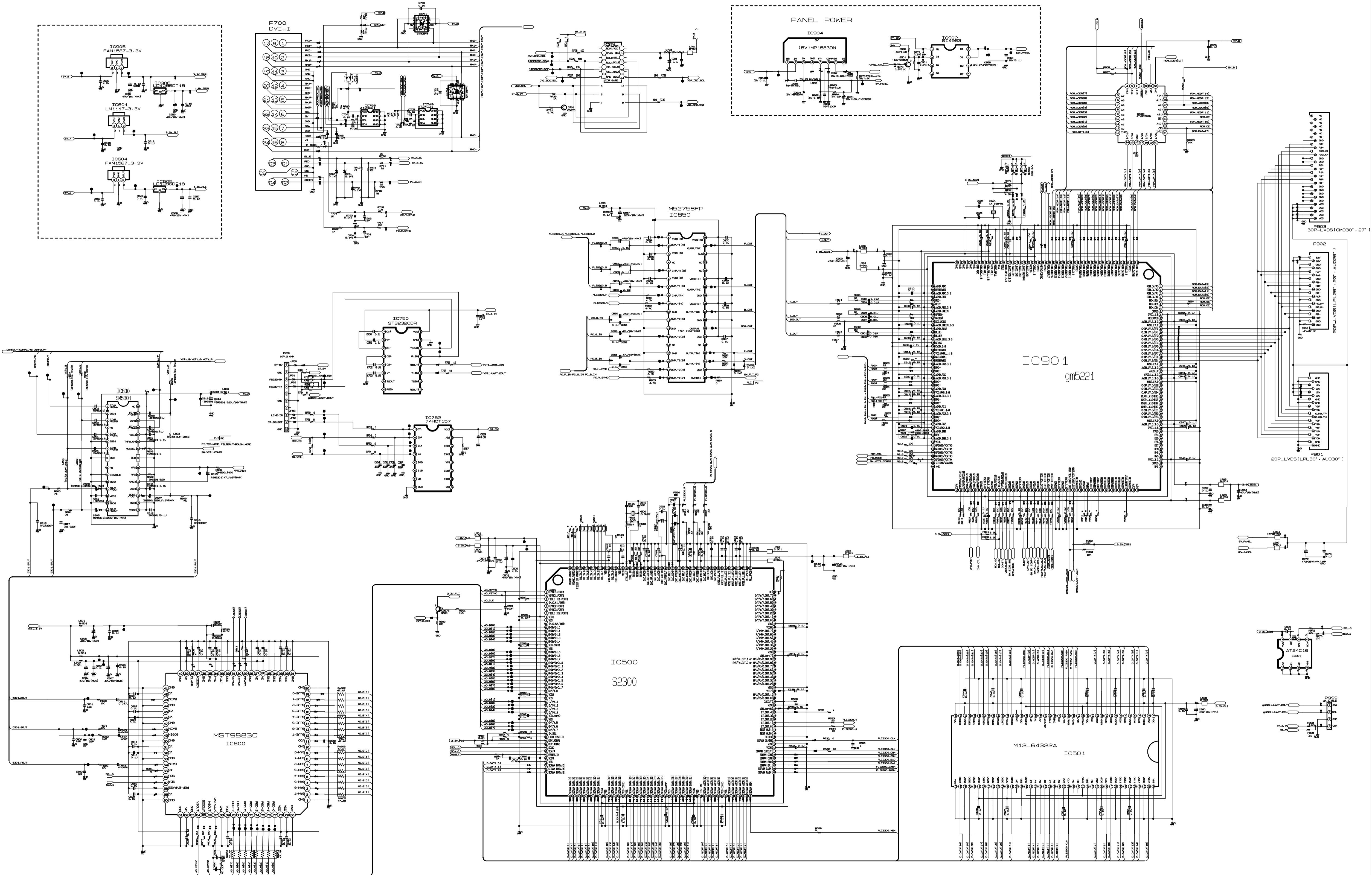
DATE: 2004. 4. 20.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		Q318	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q500	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q701	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
		Q901	0TR387500AA	CHIP 2SC3875S(ALY) BK KEC -
	IC1101	0TFV180005A	VISHAY SI4963DY R/TP SO-8 -2	
	IC902	0TFV180005A	VISHAY SI4963DY R/TP SO-8 -2	
RESISTORs				
		L303	0RH0000D622	0 1/10W P-TYPE TAPPING
		R10	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R1001	0RH0562D622	56 1/10W 5 D.R/TP
		R1003	0RH8200D622	820 1/10W 5 D.R/TP
		R1004	0RH3000D622	300 1/10W 5 D.R/TP
		R1005	0RH0682D622	68 1/10W 5 D.R/TP
		R1010	0RH7501D622	7.5K 1/10W 5 D.R/TP
		R1011	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1012	0RH7502D622	75K 1/10W 5 D.R/TP
		R1013	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1014	0RH1000D622	100 1/10W 5 D.R/TP
		R1015	0RH0000D622	0 1/10W P-TYPE TAPPING
		R1026	0RH0000D622	0 1/10W P-TYPE TAPPING
		R104	0RH1000D622	100 1/10W 5 D.R/TP
		R106	0RH1500D622	150 1/10W 5 D.R/TP
		R107	0RH1503D622	150K 1/10W 5 D.R/TP
		R11	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R1100	0RH1000D622	100 1/10W 5 D.R/TP
		R1102	0RH1000D622	100 1/10W 5 D.R/TP
		R1106	0RH1202D622	12K 1/10W 5 D.R/TP
		R1107	0RH1502D622	15K 1/10W 5 D.R/TP
		R1112	0RH0000D622	0 1/10W P-TYPE TAPPING
		R118	0RH1000D622	100 1/10W 5 D.R/TP
		R126	0RH1502D622	15K 1/10W 5 D.R/TP
		R132	0RH1003D622	100K 1/10W 5 D.R/TP
		R133	0RH1003D622	100K 1/10W 5 D.R/TP
		R134	0RH1003D622	100K 1/10W 5 D.R/TP
		R135	0RH1003D622	100K 1/10W 5 D.R/TP
		R1350	0RH0000D622	0 1/10W P-TYPE TAPPING
		R140	0RH0392D622	39 1/10W 5 D.R/TP
		R141	0RH0392D622	39 1/10W 5 D.R/TP
		R142	0RH0392D622	39 1/10W 5 D.R/TP
		R143	0RH0392D622	39 1/10W 5 D.R/TP
		R144	0RH0392D622	39 1/10W 5 D.R/TP
		R145	0RH0392D622	39 1/10W 5 D.R/TP
		R146	0RH0392D622	39 1/10W 5 D.R/TP
		R147	0RH0392D622	39 1/10W 5 D.R/TP
		R154	0RH0822D622	82 1/10W 5 D.R/TP
		R156	0RH0822D622	82 1/10W 5 D.R/TP
		R158	0RH0822D622	82 1/10W 5 D.R/TP
		R162	0RH2701D622	2.7K 1/10W 5 D.R/TP
		R201	0RH4703D622	470K 1/10W 5 D.R/TP
		R202	0RH3901D622	3.9K 1/10W 5 D.R/TP
		R203	0RH3901D622	3.9K 1/10W 5 D.R/TP
		R204	0RH4703D622	470K 1/10W 5 D.R/TP
		R22	0RH0000D622	0 1/10W P-TYPE TAPPING
		R24	0RH1000D622	100 1/10W 5 D.R/TP
		R25	0RH1000D622	100 1/10W 5 D.R/TP
		R266	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R267	0RH4702D622	47K 1/10W 5 D.R/TP
		R268	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R271	0RH0000D622	0 1/10W P-TYPE TAPPING
		R273	0RH0000D622	0 1/10W P-TYPE TAPPING
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R312	0RH4700D622	470 1/10W 5 D.R/TP
		R313	0RH1500D622	150 1/10W 5 D.R/TP
		R314	0RH4700D622	470 1/10W 5 D.R/TP
		R315	0RH1500D622	150 1/10W 5 D.R/TP
		R322	0RH1500D622	150 1/10W 5 D.R/TP
		R394	0RH6800D622	680 OHM 1 / 10 W 5% D R/TP
		R395	0RH6800D622	680 OHM 1 / 10 W 5% D R/TP
		R44	0RH1000D622	100 1/10W 5 D.R/TP
		R45	0RH1000D622	100 1/10W 5 D.R/TP
		R502	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R505	0RH0000D622	0 1/10W P-TYPE TAPPING
		R506	0RH0000D622	0 1/10W P-TYPE TAPPING
		R520	0RH1800D622	180 1/10W 5 D.R/TP
		R527	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R530	0RH0000D622	0 1/10W P-TYPE TAPPING
		R607	0RH1000D622	100 1/10W 5 D.R/TP
		R610	0RH2701D622	2.7K 1/10W 5 D.R/TP
		R700	0RH0000D622	0 1/10W P-TYPE TAPPING
		R703	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R705	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R712	0RH0752D622	75 1/10W 5 D.R/TP
		R713	0RH0752D622	75 1/10W 5 D.R/TP
		R715	0RH1202D622	12K 1/10W 5 D.R/TP
		R716	0RH0752D622	75 1/10W 5 D.R/TP
		R719	0RH1502D622	15K 1/10W 5 D.R/TP
		R725	0RH1000D622	100 1/10W 5 D.R/TP
		R726	0RH0000D622	0 1/10W P-TYPE TAPPING
		R729	0RH1000D622	100 1/10W 5 D.R/TP
		R730	0RH1000D622	100 1/10W 5 D.R/TP
		R737	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R738	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R752	0RH0000D622	0 1/10W P-TYPE TAPPING
		R753	0RH0000D622	0 1/10W P-TYPE TAPPING
		R755	0RH0102D622	10 1/10W 5 D.R/TP
		R756	0RH0102D622	10 1/10W 5 D.R/TP
		R760	0RH0000D622	0 1/10W P-TYPE TAPPING
		R761	0RH0000D622	0 1/10W P-TYPE TAPPING
		R802	0RH8200D622	820 1/10W 5 D.R/TP
		R803	0RH0000D622	0 1/10W P-TYPE TAPPING
		R805	0RH0752D622	75 1/10W 5 D.R/TP
		R806	0RH4700D622	470 1/10W 5 D.R/TP
		R809	0RH0102D622	10 1/10W 5 D.R/TP
		R83	0RH1000D622	100 1/10W 5 D.R/TP
		R85	0RH1000D622	100 1/10W 5 D.R/TP
		R850	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R851	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R854	0RH0000D622	0 1/10W P-TYPE TAPPING
		R87	0RH1000D622	100 1/10W 5 D.R/TP
		R89	0RH1000D622	100 1/10W 5 D.R/TP
		R930	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R931	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R941	0RH1000D622	100 1/10W 5 D.R/TP
		R960	0RH1000D622	100 1/10W 5 D.R/TP
		R964	0RH0000D622	0 1/10W P-TYPE TAPPING
		R969	0RH1202D622	12K 1/10W 5 D.R/TP
		R971	0RH1502D622	15K 1/10W 5 D.R/TP
		R978	0RH0000D622	0 1/10W P-TYPE TAPPING
		R979	0RH0000D622	0 1/10W P-TYPE TAPPING
		R980	0RH0000D622	0 1/10W P-TYPE TAPPING
		R999	0RH0000D622	0 1/10W P-TYPE TAPPING
		RA600	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA601	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100

DATE: 2004. 4. 20.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		RA602	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA603	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA604	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		RA605	0RRZVTA001A	MNR-14-E0A-J-101 R OHM 100
		R1600	0RD3301Q609	3.30K 1/4W(3.5% TA52
		R1601	0RD2200Q609	220 1/4W(3.5% TA52
		R1602	0RD1000Q609	100 1/4W(3.5% TA52
		R1603	0RD1201Q609	1.20K 1/4W(3.5% TA52
		R2001	0RD0752Q609	75 1/4W(3.5% TA52
		R2002	0RD0752Q609	75 1/4W(3.5% TA52
		R2003	0RD0752Q609	75 1/4W(3.5% TA52
		R2004	0RD0752Q609	75 1/4W(3.5% TA52
		R2005	0RD0752Q609	75 1/4W(3.5% TA52
		R2006	0RD4703Q609	470K 1/4W(3.5% TA52
		R2007	0RD4703Q609	470K 1/4W(3.5% TA52
		R1700	0RN8200F409	820 1/6W 1% TA52
		R1701	0RN6200F409	620 1/6W 1% TA52
		R1702	0RN5100F409	510 1/6W 1% TA52
		R1703	0RN4300F409	430 OHM 1/6 W 1.00% TA52
		R1704	0RN3300F409	330 1/6W 1% TA52
		R1705	0RN2700F409	270 1/6W 1% TA52
		R1706	0RN2701F409	2.7K OHM 1/6 W 1.00% TA52
		R100	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R1002	0RH1501D622	1.5K OHM 1 / 10 W 2012 5.00%
		R101	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R102	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R103	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R105	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R108	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R109	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R110	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R1105	0RH1001D622	1K OHM 1 / 10 W 2012 5.00% D
		R111	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R1110	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R112	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R113	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R114	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R115	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R116	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R117	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R120	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R121	0RJ0000D677	0 OHM 1/10 W 5% 1608 R/TP
		R122	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R123	0RJ2202D677	22K OHM 1/10 W 5% 1608 R/TP
		R124	0RJ1500D677	150 OHM 1/10 W 5% 1608 R/TP
		R125	0RJ4701D677	4.7K OHM 1/10 W 5% 1608 R/TP
		R127	0RJ3301D677	3.3K OHM 1/10 W 5% 1608 R/TP
		R128	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R129	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R130	0RJ5601D477	5.6K OHM 1/10 W 1% 1608 R/TP
		R1300	0RJ6801D477	6.8K OHM 1/10 W 1% 1608 R/TP
		R1301	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R1302	0RJ2202D477	22K OHM 1/10 W 1% 1608 R/TP
		R1303	0RJ6801D477	6.8K OHM 1/10 W 1% 1608 R/TP
		R1304	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R1305	0RJ2202D477	22K OHM 1/10 W 1% 1608 R/TP
		R131	0RJ5601D477	5.6K OHM 1/10 W 1% 1608 R/TP
		R136	0RJ8202D677	82K OHM 1/10 W 5% 1608 R/TP
		R137	0RJ8202D677	82K OHM 1/10 W 5% 1608 R/TP
		R138	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R139	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R15	0RJ4700D677	470 OHM 1/10 W 5% 1608 R/TP
			R152	0 OHM 1/10 W 5% 1608 R/TP
			R153	0 OHM 1/10 W 5% 1608 R/TP
			R155	270 OHM 1/10 W 5% 1608 R/TP
			R157	270 OHM 1/10 W 5% 1608 R/TP
			R159	270 OHM 1/10 W 5% 1608 R/TP
			R16	10K OHM 1/10 W 5% 1608 R/TP
			R160	150 OHM 1/10 W 5% 1608 R/TP
			R161	22 OHM 1/10 W 5% 1608 R/TP
			R163	150 OHM 1/10 W 5% 1608 R/TP
			R164	150 OHM 1/10 W 5% 1608 R/TP
			R17	22K OHM 1/10 W 5% 1608 R/TP
			R173	3.3K OHM 1/10 W 5% 1608 R/TP
			R175	3.3K OHM 1/10 W 5% 1608 R/TP
			R18	0 OHM 1/10 W 5% 1608 R/TP
			R205	68 OHM 1/10 W 5% 1608 R/TP
			R207	75 OHM 1/10 W 5% 1608 R/TP
			R209	22 OHM 1/10 W 5% 1608 R/TP
			R210	39K OHM 1/10 W 5% 1608 R/TP
			R211	51K OHM 1/10 W 5% 1608 R/TP
			R213	1K OHM 1/10 W 5% 1608 R/TP
			R214	1K OHM 1/10 W 5% 1608 R/TP
			R218	1K OHM 1/10 W 5% 1608 R/TP
			R220	1K OHM 1/10 W 5% 1608 R/TP
			R237	68 OHM 1/10 W 5% 1608 R/TP
			R238	22 OHM 1/10 W 5% 1608 R/TP
			R239	75 OHM 1/10 W 5% 1608 R/TP
			R240	22 OHM 1/10 W 5% 1608 R/TP
			R241	75 OHM 1/10 W 5% 1608 R/TP
			R244	0 OHM 1/10 W 5% 1608 R/TP
			R245	75 OHM 1/10 W 5% 1608 R/TP
			R246	0 OHM 1/10 W 5% 1608 R/TP
			R247	75 OHM 1/10 W 5% 1608 R/TP
			R248	0 OHM 1/10 W 5% 1608 R/TP
			R249	75 OHM 1/10 W 5% 1608 R/TP
			R250	39K OHM 1/10 W 5% 1608 R/TP
			R251	51K OHM 1/10 W 5% 1608 R/TP
			R253	1K OHM 1/10 W 5% 1608 R/TP
			R254	1K OHM 1/10 W 5% 1608 R/TP
			R256	1K OHM 1/10 W 5% 1608 R/TP
			R257	1K OHM 1/10 W 5% 1608 R/TP
			R264	1K OHM 1 / 10 W 2012 5.00% D
			R265	1K OHM 1 / 10 W 2012 5.00% D
			R300	10K OHM 1 / 10 W 2012 5.00%
			R301	10K OHM 1 / 10 W 2012 5.00%
			R302	10K OHM 1 / 10 W 2012 5.00%
			R303	10K OHM 1/10 W 5% 1608 R/TP
			R304	10K OHM 1 / 10 W 2012 5.00%
			R305	10K OHM 1 / 10 W 2012 5.00%
			R306	10K OHM 1 / 10 W 2012 5.00%
			R307	10K OHM 1 / 10 W 2012 5.00%
			R308	10K OHM 1 / 10 W 2012 5.00%
			R309	10K OHM 1 / 10 W 2012 5.00%
			R317	270 OHM 1/10 W 5% 1608 R/TP
			R319	270 OHM 1/10 W 5% 1608 R/TP
			R321	270 OHM 1/10 W 5% 1608 R/TP
			R323	150 OHM 1/10 W 5% 1608 R/TP
			R326	0 OHM 1/10 W 5% 1608 R/TP
			R329	0 OHM 1/10 W 5% 1608 R/TP
			R338	10K OHM 1 / 10 W 2012 5.00%
			R339	10K OHM 1 / 10 W 2012 5.00%
			R34	0 OHM 1/10 W 5% 1608 R/TP
			R342	10K OHM 1 / 10 W 2012 5.00%

DATE: 2004. 4. 20.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R92	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R920	0RJ4990D477	499 OHM 1/10 W 1% 1608 R/TP
		R921	0RJ4990D477	499 OHM 1/10 W 1% 1608 R/TP
		R923	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R924	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R925	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R926	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R927	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R928	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R929	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R93	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R933	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R934	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R935	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R936	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R937	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R938	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R939	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R94	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R940	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R942	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R943	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R944	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R945	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R946	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R947	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R948	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R949	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R95	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R950	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R952	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R953	0RJ1002D677	10K OHM 1/10 W 5% 1608 R/TP
		R96	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R963	0RH1002D622	10K OHM 1 / 10 W 2012 5.00%
		R965	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R966	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R967	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R968	0RJ0222D677	22 OHM 1/10 W 5% 1608 R/TP
		R970	0RJ1001D677	1K OHM 1/10 W 5% 1608 R/TP
		R972	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R975	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R98	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
		R99	0RJ1000D677	100 OHM 1/10 W 5% 1608 R/TP
CONNECTOR				
		P101	6602T20008E	SMW200-06 YEONHO 6P 2.0MM LO
		P103	366-932C	IL-G-04P LGC 2.5MM S/T STICK
		P104	366-932B	IL-G-03P LGC 2.5MM S/T STICK
		P2000	6602T20008N	SMW200-14 YEONHO 14P 2.0MM L
		P202	6602T20008N	SMW200-14 YEONHO 14P 2.0MM L
		P901	6630VF00520	12507WR SERIES YEONHO 20P 1.
		P999	6602V12001C	1.25MM 4P 53261-0490 J-MOLEX
		P1100	6631T25019K	12P-12P H-H 180MM UL1007AWG2
		P750	6631T20033F	10P-10P H-H 220MM UL1061AWG2
FILTER & CRYSTAL				
		X11	6202VDT002E	SX-1SMD SUNNY RADIAL 2025000
		X500	6202VDT002J	SX-1 SUNNY 13.50000MHZ +/-
		X900	6202VDT002B	SX-1 SUNNY SC14.3MHZ +/- 30
		Z1000	6200QL3001Z	B39361-X6966-D100 EPCOS ST

DATE: 2004. 4. 20.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
SWITCH				
		SW1600	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1700	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1701	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1702	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1703	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1704	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1705	140-313A	TACT 2LEAD 100G(TA) LG C&D N
		SW1706	140-313A	TACT 2LEAD 100G(TA) LG C&D N
JACK				
		P700	6612BBBHN6A	440062-1 AMP DVI INTERACED R
		JA100	6612F00059C	KJA-SHS360LB KSD SHIELD 3.6P
		JA2000	6612J00060A	PMJ016-07 PARK ELEC. RCA/DIN
		JA2001	380-336E	WA6013E PARKELEC RCA 1P WH G
		JA2002	380-336F	WA6013E PARKELEC RCA RED 1P
		SC1	381-091C	UPJ-R1-019 UGCOM 21PIN W/SHI
		SC2	381-091C	UPJ-R1-019 UGCOM 21PIN W/SHI
OTHERs				
		LD1600	0DLBE0109AA	BRIGHT LED ELECTRONICS BL-BU
		IC900	6620F00017A	CCSD-32T-SM WOYOUNG 32P PLC
MISCELLANEOUS				
		IR1500	6726TV0001A	REMOTE CONTROLLER RECEIVER
		TU1000	6700VS0003A	TUNER, TAEW-G051D LG INOTEK
ACCESSORIES				
		P/CORD	6410VEH003A	M2511A-001 VOLEX VDE/SEMKO 1
		R/CONTROLLER	6710T00008B	RT-17LZ40 AHPLKX FOR AUSTRAL
		CORD,AV	6852TAZ006U	A/V CABLE KCA-ST-0-0017 UL28
		CABLE,DVI	6866TDV001E	UL2990 DT 2000MM BLACK(9930)
		CABLE,DVI	6866TDV004R	UL20276(7.5MM) DT 2000MM GRA







P/NO : 3828TSL101W

Apr., 2004
Printed in Korea