SAMSUNG

LED-TV

Chassis : N98B

Model : UA22C4000P

UA26C4000P

UA32C4000P

SERVICE Manual

LED TV

UA22C4000P/UA26C4000P/UA32C4000P

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Refer to the service manual in the GSPN (see the rear cover) for the more information.

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SAMSUNG

GSPN (Global Service Partner Network)

Area	Web Site
North America	**http://service.samsungportal.com**
Latin America	**http://latin.samsungportal.com**
CIS	**http://cis.samsungportal.com**
Europe	**http://europe.samsungportal.com**
China	**http://china.samsungportal.com**
Asia	**http://asia.samsungportal.com**
Mideast & Africa	**http://mea.samsungportal.com**

1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings

1. For continued safety, do not attempt to modify the circuit board.

2. Disconnect the AC power and DC power jack before servicing.

1-1-2. Servicing the LED TV

1. When servicing the LED TV, Disconnect the AC line cord from the AC outlet.

2. It is essential that service technicians have an accurate voltage meter available at all times.
   Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the LED TV to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the LED TV.

2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistorcapacitor networks, mechanical insulators, etc.

3. Leakage Current Hot Check (Figure 1-1):
   WARNING : Do not use an isolation transformer during this test.
   Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
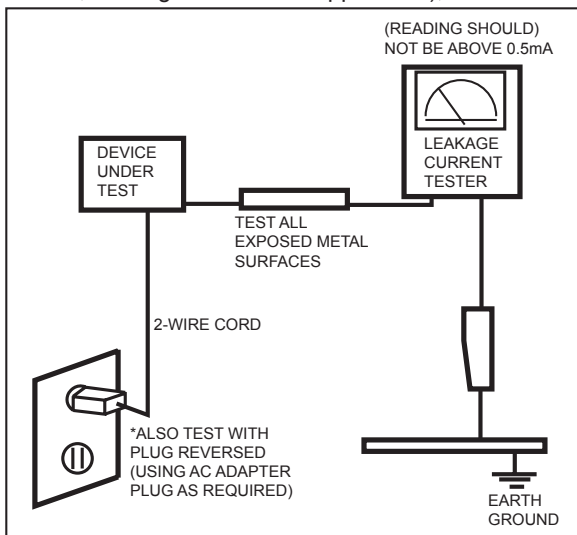

Figure 1-1. Leakage Current Test Circuit

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts.
   The current measured should not exceed 0.5 milliamp.
   Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safetyrelated characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by ⚠ on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.

Caution: Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.

Note: If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1 General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to:
   (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.

2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.

4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to theblades of the AC plug.
   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Electrostatically Sensitive Devices (ESD) Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the LED TV.

2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.

3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.

4. Use only a grounded-tip soldering iron to solder or desolder ESDs.

5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.

6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

7. Immediately before removing the protective material from the leads of a replacement ESD, 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 body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions

1. For safety reasons, more than a people are required for carrying the product.

2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.

3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.

4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.

5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.

6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.

7. When installing the product, leave enough space (0.4m) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.

2. Product specifications

2-1. Feature & Specifications

Model	UA22C4000P

Feature
▶ RF, 1-HDMI, 1-Component, 1-A/V , 1-USB2.0, D-SUB, Optical, Headphone ▶ Brightness : 400cd/m^2 ▶ Response Time : 4.5ms

Specifications	
Item	**Description**
LCD Panel	22inch HD 50/60Hz
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)
Display Colors	16.7M color
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated
Input Sync Signal	H/V Separate, TTL, P. or N.
Maximum Pixel Clock rate	74.25MHz
Active Display Horizontal/Vertical	18.80 x 10.57 inches(477.417(H) x 268.416(V) mm)
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz
Power Consumption	Under 60W (Under 0.3W, Stand by)
Dimensions Set (W x D x H)	21.5 x 7.5 x 16.2 inches (545.2 x 189.5 x 411.1 mm)_with stand 21.5 x 1.2 x 14.1 inches (545.2 x 29.9 x 359.0 mm)_without stand
Weight	12.6 lbs(5.7kg)_with stand 9.0 lbs(4.1kg)_without stand
TV System	Tuning : Frequency Synthesize (Refer to detailed Frequency Table) System : PAL, SECAM, NT4.43,NT3.58 Sound : BG, DK, M, I
Environmental Considerations	Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C) Operating Humidity : 10% ~ 90% Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C) Storage Humidity: 10% ~ 90%
Audio Spec.	- MAX Internal Audio Output Power : Each 3W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz 　　　　　　　　　　　AV/Componet/HDMI : 20 Hz ~ 20 kHz

Note: Dolby Digital Plus/Pluse, Game Mode, Film Mode, Energy Saving, Anynet$^+$

Model	UA26C4000P
Feature	

▶ RF, 3-HDMI, 1-Component, 1-A/V , 1-USB2.0, D-SUB, Optical, Headphone

▶ Brightness : 400 cd/m²

▶ Response Time : 4.5ms

Specifications	
Item	**Description**
LCD Panel	26inch HD 50/60Hz
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)
Display Colors	16.7M color
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated
Input Sync Signal	H/V Separate, TTL, P. or N.
Maximum Pixel Clock rate	74.25MHz
Active Display Horizontal/Vertical	22.67 x 12.74 inches(575.769(H) x 323.712(V) mm)
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz
Power Consumption	Under 65W (Under 0.3W, Stand by)
Dimensions Set (W x D x H)	25.7 x 8.7 x 18.9 inches (652.8 x 222.0 x 479.8 mm)_with stand 25.7 x 1.2 x 16.6 inches (652.8 x 29.9 x 422.8 mm)_without stand
Weight	21.4 lbs (9.7kg)_with stand 13.7 lbs (6.2kg)_without stand
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	PAL, SECAM, NT4.43,NT3.58
	Sound	BG, DK, M, I
Environmental Considerations	Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C) Operating Humidity : 10% ~ 90% Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C) Storage Humidity: 10% ~ 90%
Audio Spec.	- MAX Internal Audio Output Power : Each 5W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz 　　　　　　　　　　　AV/Componet/HDMI : 20 Hz ~ 20 kHz
Note: Dolby Digital Plus/Pluse, Game Mode, Film Mode, Energy Saving, Anynet⁺	

Model	UA32C4000P
Feature	

- ▶ RF, 3-HDMI, 1-Component, 1-A/V , 1-USB2.0, D-SUB
- ▶ Brightness : 400cd/m^2
- ▶ Response Time : 4.5ms

Specifications	
Item	Description
LCD Panel	32inch HD 50/60Hz
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)
Display Colors	16.7M color
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated
Input Sync Signal	H/V Separate, TTL, P. or N.
Maximum Pixel Clock rate	76MHz
Active Display Horizontal/Vertical	28.91 x 16.94 inches (734.4 (H) x 430.3 (V) mm)
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz
Power Consumption	Under 100W (Under 0.3W, Stand by)
Dimensions Set (W x D x H)	774.6 x 549.1 x 255.0 mm _with stand 774.6 x 491.8 x 29.9 mm _without stand
Weight	9.2kg _with stand 8.4kg _without stand
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	PAL, SECAM, NT4.43,NT3.58
	Sound	BG, DK, M, I
Environmental Considerations	Operating Temperature : 32˚F ~ 122˚F (0˚C ~ 50˚C) Operating Humidity : 10% ~ 90% Storage temperature : -4˚F ~ 140˚F (-20˚C ~ 60˚C) Storage Humidity: 10% ~ 90%
Audio Spec.	- MAX Internal Audio Output Power : Each 10W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz 　　　　　　　　　　 AV/Componet/HDMI : 20 Hz ~ 20 kHz

Note: Dolby Digital Plus/Pluse, Game Mode, Film Mode, Energy Saving, Anynet⁺

2-2. Specification Comparison to Old Models

※ O : application, X : non-application

Model	UC4Q(UA**C4000P)	LB4B(LA**B450B1)
Design		
Display Type	**LED TV**	LCD TV
Built-in Tuner	O	O
Resolution	1366 x 768	1366 x 768
LCD Panel	TFT LED Panel 50/60Hz	TFT LCD Panel 50/60Hz
Screen Size	**22"/26"/32"**	26"/32"/37"/40"
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	**22"**　**21.5 x 7.5 x 16.2 inches _with stand** **26"**　**25.7 x 8.7 x 18.9 inches _with stand** **32"**　**30.5 x 10.0 x 21.6 inches _with stand**	26"　26.0 x 8.5 x 19.4 inches _with stand 32"　31.4 x 9.4 x 22.8 inches _with stand
Weight	**22"**　**4.1kg_with stand** **26"**　**6.2kg_with stand** **32"**　**9.2kg_with stand**	26"　6.5kg_with stand 32"　11.4kg_with stand
Brightness	400 cd/m^2	500 cd/m^2
Picture Enhacer	**DNIe (SX1)**	DNIe (Lola3)
Equalizer	5 Band	5 Band
Auto Volume Control	O	O
Surround Sound	**Dolby Digital Plus/Pluse**	SRS TruSurround HD & Dolby Digital
Speaker Output	**22" 3W / 26" 5W / 32" 10W**	10W + 10W
PIP	O	O
Caption	O	O
Entertainment Mode	X	X
Game Mode	O	O
Energy Saving	O	O
Anynet$^+$	O	O
Antenna	1	1

2-3. Detail Factory Option

※ If you replace the main board with new one, please change the factory option as well.
The options you must change are "Type, "Local set" and "Front Color".

• **LC4000**

Model Name			UA22C4000P	UA26C4000P	UA32C4000P
Panel		Vendor	CMO	CMO	CMO
		CODE	BN07-00865A	BN07-00847A	BN07-00848A
		SPEC	22P6TH0E	26P6AH0E	32P6AG0E
SMPS		IP Board (SEC)	BN44-00347A	BN44-00349A	BN44-00349A
Byte	**Item**	CHASSIS ASS'Y	-	-	-
		PBA ASSY CODE	-	-	-
0	Factory Reset	-	-	-	-
1	Type		22A6AH0C	22P6TH0E	32P6AG0E
2	Local Set		Depending on country	Depending on country	Depending on country
3	Model		UC4000	UC4000	UC4000
4	Tuner		DRXKSEMCO	DRXKSEMCO	DRXKSEMCO
5	DDR		0	0	0
6	Light Effect		OFF	OFF	OFF
7	Ch Table		Depending on country	Depending on country	Depending on country
8	Country		…	…	…
9	Front Color		T-R-BLK	T-R-BLK	T-R-BLK

■ CHANNEL FREQUENCY TABLE

1. OUTPUT FREQUENCY : ANALOG fv:45.75MHz, fs:41.25MHz   DIGITAL Fc:44MHz

2. TUNING STEP SIZE   : FIRST PLL 250KHz   SECOND PLL 62.5KHz

(Unit : MHz)

CH Number	AREA								
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
C00	-	-	-	-	-	-	-	-	-	-
C01	46.25	VHF	49.75	VHF	49.75	VHF	44.25	VHF	-	-
C02	48.25	VHF	59.25	V-L	59.25	V-L	55.25	V-L	-	-
C03	55.25	V-L	77.25	V-L	77.25	V-L	62.25	V-L	-	-
C04	62.25	V-L	85.25	V-L	85.25	V-L	175.25	V-H	175.25	V-H
C05	175.25	V-H	93.25	VHF	93.25	VHF	182.25	V-H	183.25	V-H
C06	182.25	V-H	175.25	V-H	175.25	V-H	189.25	V-H	191.25	V-H
C07	189.25	V-H	183.25	V-H	183.25	V-H	196.25	V-H	199.25	V-H
C08	196.25	V-H	191.25	V-H	191.25	V-H	203.25	V-H	207.25	V-H
C09	203.25	V-H	199.25	V-H	199.25	V-H	210.25	V-H	215.25	V-H
C10	210.25	V-H	207.25	V-H	207.25	V-H	217.25	VHF	223.25	VHF
C11	217.25	VHF	215.25	V-H	215.25	V-H	224.25	VHF	231.25	VHF
C12	224.25	VHF	223.25	VHF	223.25	VHF	45.25	VHF	239.25	VHF
C13	53.75	VHF	53.75	VHF	45.75	VHF	-	-	247.25	VHF
C14	-	-	62.25	V-L	53.75	VHF	-	-	-	-
C15	82.25	V-L	82.25	V-L	61.75	V-L	-	-	-	-
C16	-	-	-	-	-	-	69.75	V-L	-	-
C17	183.75	V-H	183.75	V-H	95.75	VHF	-	-	-	-
C18	192.25	V-H	192.25	V-H	-	-	-	-	-	-
C19	201.25	V-H	-	-	201.25	V-H	-	-	-	-
C20	-	-	210.25	V-H	-	-	-	-	-	-
C21	471.25	UHF	471.25	UHF	471.25	UHF	471.25	UHF	471.25	UHF
C22	479.25	UHF	479.25	UHF	479.25	UHF	479.25	UHF	479.25	UHF
C23	487.25	UHF	487.25	UHF	487.25	UHF	487.25	UHF	487.25	UHF
C24	495.25	UHF	495.25	UHF	495.25	UHF	495.25	UHF	495.25	UHF
C25	503.25	UHF	503.25	UHF	503.25	UHF	503.25	UHF	503.25	UHF
C26	511.25	UHF	511.25	UHF	511.25	UHF	511.25	UHF	511.25	UHF
C27	519.25	UHF	519.25	UHF	519.25	UHF	519.25	UHF	519.25	UHF
C28	527.25	UHF	527.25	UHF	527.25	UHF	527.25	UHF	527.25	UHF
C29	535.25	UHF	535.25	UHF	535.25	UHF	535.25	UHF	535.25	UHF
C30	543.25	UHF	543.25	UHF	543.25	UHF	543.25	UHF	543.25	UHF
C31	551.25	UHF	551.25	UHF	551.25	UHF	551.25	UHF	551.25	UHF
C32	559.25	UHF	559.25	UHF	559.25	UHF	559.25	UHF	559.25	UHF
C33	567.25	UHF	567.25	UHF	567.25	UHF	567.25	UHF	567.25	UHF
C34	575.25	UHF	575.25	UHF	575.25	UHF	575.25	UHF	575.25	UHF
C35	583.25	UHF	583.25	UHF	583.25	UHF	583.25	UHF	583.25	UHF
C36	591.25	UHF	591.25	UHF	591.25	UHF	591.25	UHF	591.25	UHF
C37	599.25	UHF	599.25	UHF	599.25	UHF	599.25	UHF	599.25	UHF
C38	607.25	UHF	607.25	UHF	607.25	UHF	607.25	UHF	607.25	UHF
C39	615.25	UHF	615.25	UHF	615.25	UHF	615.25	UHF	615.25	UHF
C40	623.25	UHF	623.25	UHF	623.25	UHF	623.25	UHF	623.25	UHF
C41	631.25	UHF	631.25	UHF	631.25	UHF	631.25	UHF	631.25	UHF
C42	639.25	UHF	639.25	UHF	639.25	UHF	639.25	UHF	639.25	UHF
C43	647.25	UHF	647.25	UHF	647.25	UHF	647.25	UHF	647.25	UHF
C44	655.25	UHF	655.25	UHF	655.25	UHF	655.25	UHF	655.25	UHF
C45	663.25	UHF	663.25	UHF	663.25	UHF	663.25	UHF	663.25	UHF
C46	671.25	UHF	671.25	UHF	671.25	UHF	671.25	UHF	671.25	UHF
C47	679.25	UHF	679.25	UHF	679.25	UHF	679.25	UHF	679.25	UHF
C48	687.25	UHF	687.25	UHF	687.25	UHF	687.25	UHF	687.25	UHF
C49	695.25	UHF	695.25	UHF	695.25	UHF	695.25	UHF	695.25	UHF
C50	703.25	UHF	703.25	UHF	703.25	UHF	703.25	UHF	703.25	UHF
C51	711.25	UHF	711.25	UHF	711.25	UHF	711.25	UHF	711.25	UHF
C52	719.25	UHF	719.25	UHF	719.25	UHF	719.25	UHF	719.25	UHF
C53	727.25	UHF	727.25	UHF	727.25	UHF	727.25	UHF	727.25	UHF
C54	735.25	UHF	735.25	UHF	735.25	UHF	735.25	UHF	735.25	UHF
C55	743.25	UHF	743.25	UHF	743.25	UHF	743.25	UHF	743.25	UHF
C56	751.25	UHF	751.25	UHF	751.25	UHF	751.25	UHF	751.25	UHF
C57	759.25	UHF	759.25	UHF	759.25	UHF	759.25	UHF	759.25	UHF
C58	767.25	UHF	767.25	UHF	767.25	UHF	767.25	UHF	767.25	UHF
C59	775.25	UHF	775.25	UHF	775.25	UHF	775.25	UHF	775.25	UHF
C60	783.25	UHF	783.25	UHF	783.25	UHF	783.25	UHF	783.25	UHF

(Unit : MHz)

CH Number	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
	AREA									
C61	791.25	UHF	791.25	UHF	791.25	UHF	791.25	UHF	791.25	UHF
C62	799.25	UHF	799.25	UHF	799.25	UHF	799.25	UHF	799.25	UHF
C63	807.25	UHF	807.25	UHF	807.25	UHF	807.25	UHF	807.25	UHF
C64	815.25	UHF	815.25	UHF	815.25	UHF	815.25	UHF	815.25	UHF
C65	823.25	UHF	823.25	UHF	823.25	UHF	823.25	UHF	823.25	UHF
C66	831.25	UHF	831.25	UHF	831.25	UHF	831.25	UHF	831.25	UHF
C67	839.25	UHF	839.25	UHF	839.25	UHF	839.25	UHF	839.25	UHF
C68	847.25	UHF	847.25	UHF	847.25	UHF	847.25	UHF	847.25	UHF
C69	855.25	UHF	855.25	UHF	855.25	UHF	855.25	UHF	855.25	UHF
C70	-	-	-	-	-	-	53.75	-	53.75	-
C71	-	-	-	-	62.25	VHF	-	-	62.25	VHF
C72	-	-	-	-	82.25	V-L	82.25	V-L	82.25	V-L
C73	-	-	-	-	-	-	-	-	-	-
C74	69.75	V-L	-	-	-	-	183.25	V-H	-	-
C75	76.25	V-L	-	-	192.25	V-H	192.25	V-H	192.25	V-H
C76	83.25	V-L	-	-	201.25	V-H	201.25	V-H	201.25	V-H
C77	90.25	VHF	-	-	210.25	V-H	-	-	210.25	V-H
C78	97.25	VHF	217.25	VHF	217.25	VHF	-	-	217.25	VHF
C79	59.25	V-L	224.25	VHF	224.25	VHF	-	-	224.25	VHF
C80	-	-	93.25	VHF	-	-	-	-	-	-
C81	49.75	VHF	-	-	-	-	49.75	VHF	49.75	VHF
C82	-	-	-	-	-	-	59.25	V-L	59.25	V-L
C83	77.25	V-L	-	-	77.25	V-L	77.25	V-L	77.25	V-L
C84	85.25	V-L	-	-	85.25	V-L	85.25	V-L	85.25	V-L
C85	-	-	-	-	93.25	VHF	93.25	VHF	93.25	VHF
C86	-	-	-	-	-	-	-	-	-	-
C86	183.25	V-H	-	-	-	-	-	-	-	-
C86	191.25	V-H	-	-	-	-	191.25	V-H	-	-
C86	199.25	V-H	-	-	199.25	V-H	199.25	V-H	-	-
C86	207.25	V-H	-	-	207.25	V-H	207.25	V-H	-	-
C86	215.25	VHF	-	-	-	-	215.25	VHF	215.25	VHF
C86	223.25	VHF	-	-	-	-	223.25	VHF	223.25	VHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
C00	46.25	VHF	-	-	-	-
C01	57.25	V-L	49.75	VHF	-	-
C02	64.25	V-L	57.75	V-L	55.25	V-L
C03	86.25	V-L	65.75	V-L	61.25	V-L
C04	95.25	VHF	77.25	V-L	67.25	V-L
C05	102.25	VHF	85.25	V-L	77.25	V-L
C06	175.25	V-H	168.25	VHF	83.25	V-L
C07	182.25	V-H	176.25	V-H	175.25	V-H
C08	189.25	V-H	184.25	V-H	181.25	V-H
C09	196.25	V-H	192.25	V-H	187.25	V-H
C10	209.25	V-H	200.25	V-H	193.25	V-H
C11	216.25	VHF	208.25	VHF	199.25	VHF
C12	224.25	VHF	216.25	VHF	205.25	VHF
C13	138.25	V-H	471.25	UHF	211.25	VHF
C14	203.25	V-H	479.25	UHF	471.25	UHF
C15	-	-	487.25	UHF	477.25	UHF
C16	-	-	495.25	UHF	483.25	UHF
C17	-	-	503.25	UHF	489.25	UHF
C18	-	-	511.25	UHF	495.25	UHF
C19	-	-	519.25	UHF	501.25	UHF
C20	-	-	527.25	UHF	507.25	UHF
C21	x	-	535.25	UHF	513.25	UHF
C22	x	-	543.25	UHF	519.25	UHF
C23	x	-	551.25	UHF	525.25	UHF
C24	x	-	559.25	UHF	531.25	UHF
C25	x	-	607.25	UHF	537.25	UHF
C26	x	-	615.25	UHF	543.25	UHF
C27	x	-	623.25	UHF	549.25	UHF
C28	527.25	UHF	631.25	UHF	555.25	UHF
C29	534.25	UHF	639.25	UHF	561.25	UHF
C30	541.25	UHF	647.25	UHF	567.25	UHF
C31	548.25	UHF	655.25	UHF	573.25	UHF
C32	555.25	UHF	663.25	UHF	579.25	UHF
C33	562.25	UHF	671.25	UHF	585.25	UHF
C34	569.25	UHF	679.25	UHF	591.25	UHF
C35	576.25	UHF	687.25	UHF	597.25	UHF
C36	583.25	UHF	695.25	UHF	603.25	UHF
C37	590.25	UHF	703.25	UHF	609.25	UHF
C38	597.25	UHF	711.25	UHF	615.25	UHF
C39	604.25	UHF	719.25	UHF	621.25	UHF
C40	611.25	UHF	727.25	UHF	627.25	UHF
C41	618.25	UHF	735.25	UHF	633.25	UHF
C42	625.25	UHF	743.25	UHF	639.25	UHF
C43	632.25	UHF	751.25	UHF	645.25	UHF
C44	639.25	UHF	759.25	UHF	651.25	UHF
C45	646.25	UHF	767.25	UHF	657.25	UHF
C46	653.25	UHF	775.25	UHF	663.25	UHF
C47	660.25	UHF	783.25	UHF	669.25	UHF
C48	667.25	UHF	791.25	UHF	675.25	UHF
C49	674.25	UHF	799.25	UHF	681.25	UHF
C50	681.25	UHF	807.25	UHF	687.25	UHF
C51	688.25	UHF	815.25	UHF	693.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
C52	695.25	UHF	823.25	UHF	699.25	UHF
C53	702.25	UHF	831.25	UHF	705.25	UHF
C54	709.25	UHF	839.25	UHF	711.25	UHF
C55	716.25	UHF	847.25	UHF	717.25	UHF
C56	723.25	UHF	855.25	UHF	723.25	UHF
C57	730.25	UHF	863.25	UHF	729.25	UHF
C58	737.25	UHF	-	-	735.25	UHF
C59	744.25	UHF	-	-	741.25	UHF
C60	751.25	UHF	-	-	747.25	UHF
C61	758.25	UHF	-	-	753.25	UHF
C62	765.25	UHF	-	-	759.25	UHF
C63	772.25	UHF	-	-	765.25	UHF
C64	779.25	UHF	-	-	771.25	UHF
C65	786.25	UHF	567.25	UHF	777.25	UHF
C66	793.25	UHF	575.25	UHF	783.25	UHF
C67	800.25	UHF	583.25	UHF	789.25	UHF
C68	807.25	UHF	591.25	UHF	795.25	UHF
C69	814.25	UHF	599.25	UHF	801.25	UHF
C70	53.75	-	-	-	807.25	UHF
C71	62.25	VHF	-	-	813.25	UHF
C72	82.25	V-L	-	-	819.25	UHF
C73	-	-	-	-	825.25	UHF
C74	183.25	-	-	-	831.25	UHF
C75	192.25	V-H	-	-	837.25	UHF
C76	201.25	V-H	-	-	843.25	UHF
C77	-	V-H	-	-	849.25	UHF
C78	-	VHF	-	-	855.25	UHF
C79	-	VHF	-	-	861.25	UHF
C80	-	-	-	-	867.25	UHF
C81	49.75	VHF	-	-	873.25	UHF
C82	59.25	V-L	-	-	879.25	UHF
C83	77.25	V-L	-	-	885.25	UHF
C84	85.25	V-L	-	-	-	-
C85	93.25	VHF	-	-	-	-
C86	-	-	-	-	-	-
C86	-	-	-	-	-	-
C86	191.25	-	-	-	-	-
C86	199.25	-	-	-	-	-
C86	207.25	-	-	-	-	-
C86	215.25	VHF	-	-	-	-
C86	223.25	VHF	-	-	-	-

Cable CHANNEL

(Unit : MHz)

CH Number	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
S01	105.25	VHF	103.25	VHF	103.25	VHF	105.25	VHF	105.25	VHF
S02	112.25	VHF	111.25	VHF	111.25	VHF	112.25	VHF	112.25	VHF
S03	119.25	VHF	119.25	VHF	119.25	VHF	119.25	VHF	119.25	VHF
S04	126.25	VHF	127.25	VHF	127.25	VHF	126.25	VHF	126.25	VHF
S05	133.25	VHF	135.25	VHF	135.25	VHF	133.25	VHF	133.25	VHF
S06	140.25	VHF	143.25	VHF	143.25	VHF	140.25	VHF	140.25	VHF
S07	147.25	VHF	151.25	VHF	151.25	VHF	147.25	VHF	147.25	VHF
S08	154.25	VHF	159.25	VHF	159.25	VHF	154.25	VHF	154.25	VHF
S09	161.25	VHF	167.25	VHF	167.25	VHF	161.25	VHF	161.25	VHF
S10	168.25	VHF	231.25	VHF	231.25	VHF	168.25	VHF	168.25	VHF
S11	231.25	VHF	239.25	VHF	239.25	VHF	231.25	VHF	231.25	VHF
S12	238.25	VHF	247.25	VHF	247.25	VHF	238.25	VHF	238.25	VHF
S13	245.25	VHF	253.25	VHF	253.25	VHF	245.25	VHF	245.25	VHF
S14	252.25	VHF	263.25	VHF	263.25	VHF	252.25	VHF	252.25	VHF
S15	259.25	VHF	271.25	VHF	271.25	VHF	259.25	VHF	259.25	VHF
S16	266.25	VHF	279.25	VHF	279.25	VHF	266.25	VHF	266.25	VHF
S17	273.25	VHF	287.25	VHF	287.25	VHF	273.25	VHF	273.25	VHF
S18	280.25	VHF	295.25	VHF	295.25	VHF	280.25	VHF	280.25	VHF
S19	287.25	VHF	303.25	UHF	303.25	UHF	287.25	VHF	287.25	VHF
S20	294.25	VHF	-	-	-	-	294.25	VHF	294.25	VHF
S21	303.25	UHF	-	-	-	-	303.25	UHF	303.25	UHF
S22	311.25	UHF	311.25	UHF	311.25	UHF	311.25	UHF	311.25	UHF
S23	319.25	UHF	319.25	UHF	319.25	UHF	319.25	UHF	319.25	UHF
S24	327.25	UHF	327.25	UHF	327.25	UHF	327.25	UHF	327.25	UHF
S25	335.25	UHF	335.25	UHF	335.25	UHF	335.25	UHF	335.25	UHF
S26	343.25	UHF	343.25	UHF	343.25	UHF	343.25	UHF	343.25	UHF
S27	351.25	UHF	351.25	UHF	351.25	UHF	351.25	UHF	351.25	UHF
S28	359.25	UHF	359.25	UHF	359.25	UHF	359.25	UHF	359.25	UHF
S29	367.25	UHF	367.25	UHF	367.25	UHF	367.25	UHF	367.25	UHF
S30	375.25	UHF	375.25	UHF	375.25	UHF	375.25	UHF	375.25	UHF
S31	383.25	UHF	383.25	UHF	383.25	UHF	383.25	UHF	383.25	UHF
S32	391.25	UHF	391.25	UHF	391.25	UHF	391.25	UHF	391.25	UHF
S33	399.25	UHF	399.25	UHF	399.25	UHF	399.25	UHF	399.25	UHF
S34	407.25	UHF	407.25	UHF	407.25	UHF	407.25	UHF	407.25	UHF
S35	415.25	UHF	415.25	UHF	415.25	UHF	415.25	UHF	415.25	UHF
S36	423.25	UHF	423.25	UHF	423.25	UHF	423.25	UHF	423.25	UHF
S37	431.25	UHF	431.25	UHF	431.25	UHF	431.25	UHF	431.25	UHF
S38	439.25	UHF	439.25	UHF	439.25	UHF	439.25	UHF	439.25	UHF
S39	447.25	UHF	447.25	UHF	447.25	UHF	447.25	UHF	447.25	UHF
S40	455.25	UHF	455.25	UHF	455.25	UHF	455.25	UHF	455.25	UHF
S41	463.25	UHF	463.25	UHF	463.25	UHF	463.25	UHF	463.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
S01	105.25	VHF	112.25	VHF	73.25	VHF
S02	112.25	VHF	120.25	VHF	55.25	VHF
S03	119.25	VHF	128.25	VHF	61.25	VHF
S04	126.25	VHF	136.25	VHF	67.25	VHF
S05	133.25	VHF	144.25	VHF	77.25	VHF
S06	140.25	VHF	152.25	VHF	83.25	VHF
S07	147.25	VHF	160.25	VHF	175.25	VHF
S08	154.25	VHF	224.25	VHF	181.25	VHF
S09	161.25	VHF	232.25	VHF	187.25	VHF
S10	168.25	VHF	240.25	VHF	193.25	VHF
S11	231.25	VHF	248.25	VHF	199.25	VHF
S12	238.25	VHF	256.25	VHF	205.25	VHF
S13	245.25	VHF	264.25	VHF	211.25	VHF
S14	252.25	VHF	272.25	VHF	121.25	VHF
S15	259.25	VHF	280.25	VHF	127.25	VHF
S16	266.25	VHF	288.25	VHF	133.25	VHF
S17	273.25	VHF	296.25	VHF	139.25	VHF
S18	280.25	VHF	304.25	UHF	145.25	VHF
S19	287.25	VHF	312.25	UHF	151.25	VHF
S20	294.25	VHF	320.25	UHF	157.25	VHF
S21	303.25	UHF	328.25	UHF	163.25	VHF
S22	311.25	UHF	336.25	UHF	169.25	VHF
S23	319.25	UHF	344.25	UHF	217.25	VHF
S24	327.25	UHF	352.25	UHF	223.25	VHF
S25	335.25	UHF	360.25	UHF	229.25	VHF
S26	343.25	UHF	368.25	UHF	235.25	VHF
S27	351.25	UHF	376.25	UHF	241.25	VHF
S28	359.25	UHF	384.25	UHF	247.25	VHF
S29	367.25	UHF	392.25	UHF	253.25	VHF
S30	375.25	UHF	400.25	UHF	259.25	VHF
S31	383.25	UHF	408.25	UHF	265.25	VHF
S32	391.25	UHF	416.25	UHF	271.25	VHF
S33	399.25	UHF	424.25	UHF	277.25	VHF
S34	407.25	UHF	432.25	UHF	283.25	VHF
S35	415.25	UHF	440.25	UHF	289.25	VHF
S36	423.25	UHF	448.25	UHF	295.25	VHF
S37	431.25	UHF	456.25	UHF	301.25	UHF
S38	439.25	UHF	x	x	307.25	UHF
S39	447.25	UHF	x	x	313.25	UHF
S40	455.25	UHF	x	x	319.25	UHF
S41	463.25	UHF	x	x	325.25	UHF
S42					331.25	UHF
S43					337.25	UHF
S44					343.25	UHF
S45					349.25	UHF
S46					355.25	UHF
S47					361.25	UHF
S48					367.25	UHF
S49					373.25	UHF
S50					379.25	UHF
S51					385.25	UHF
S52					391.25	UHF
S53					397.25	UHF
S54					403.25	UHF
S55					409.25	UHF
S56					415.25	UHF
S57					421.25	UHF
S58					427.25	UHF
S59					433.25	UHF
S60					439.25	UHF
S61					445.25	UHF
S62					451.25	UHF
S63					457.25	UHF
S64					463.25	UHF
S65					469.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
S66					475.25	UHF
S67					481.25	UHF
S68					487.25	UHF
S69					493.25	UHF
S70					499.25	UHF
S71					505.25	UHF
S72					511.25	UHF
S73					517.25	UHF
S74					523.25	UHF
S75					529.25	UHF
S76					535.25	UHF
S77					541.25	UHF
S78					547.25	UHF
S79					553.25	UHF
S80					559.25	UHF
S81					565.25	UHF
S82					571.25	UHF
S83					577.25	UHF
S84					583.25	UHF
S85					589.25	UHF
S86					595.25	UHF
S87					601.25	UHF
S88					607.25	UHF
S99					613.25	UHF
S90					619.25	UHF
S91					625.25	UHF
S92					631.25	UHF
S93					637.25	UHF
S94					643.25	UHF
S95					91.25	VHF
S96					97.25	VHF
S97					103.25	VHF
S98					109.25	VHF
S99					115.25	VHF
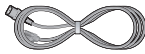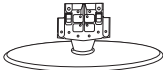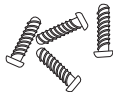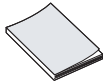
CATV CH mark (A row) : China area : attach 'Z'

besides area : attach 'S'

For example) China : Z10

besides area : S10

2-4. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-01019A	Samsung Electronics Service center
	Power Cord	3903-000525	
	Stand	26", 32" : BN96-13156A 22" : BN96-10168C	
	Screw (for the stand - M4, L6)	6003-000133	
	Owner's Instructions	BN68-02767A	
	Warranty Card / Registration Card / Safety Guide Manual (Not available in all locations)		

2-5. Media Play

2-5-1. Using the Media Play Function

MEDIA.P

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device.

MediaPlay

Videos

SUM A Change Device   D Device Mode Enter Return

Connecting a USB Device

1. Turn on your TV.

2. Connect a USB device containing photo, music and/or movie files to the **USB 1(HDD)** jack on the side of the TV.

3. When USB is connected to the TV, popup window appears. Then you can select **Media Play**.

TV Rear Panel

USB (HDD)

USB Drive
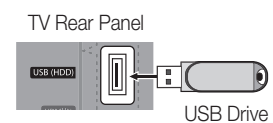
✎ It might not work properly with unlicenced multimedia files.

✎ Need-to-Know List before using **Media Play (USB)**

- MTP (Media Transfer Protocol) is not supported.

- The file system supports FAT16, FAT32 and NTFS.

- Certain types of USB Digital camera and audio devices may not be compatible with this TV.

- Media Play only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the TV's USB port.

- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.

- Connect a USB HDD to the dedicated port, **USB 1(HDD)** port.

- Do not disconnect the USB device while it is loading.

- The higher the resolution of the image, the longer it takes to display on the screen.

- The maximum supported JPEG resolution is 15360X8640 pixels.

- For unsupported or corrupted files, the "Not Supported File Format" message is displayed.

- If the files are sorted by Basic View, up to 1000 files can be displayed in each folder.

- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation of content, the distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.

- If more than 2 PTP devices are connected, you can only use one at a time.

- If more than two MSC devices are connected, some of them may not be recognized. A USB device that requires high power (more than 500mA or 5V) may not be supported.

● **Supported Video Formats**

File Extention	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbsp)	Audio Codec
*.avi *.mkv	AVI MKV	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / DTS HD
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.asf	ASF	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP / MP / HP	1920x1080	6 ~ 30	8	MP3 / ADPCM / AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	
*.3gp	3GPP	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	ADPCM / AAC / HE-AAC / QCELP / AMR NB/WB
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.vro	VRO VOB	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM
		MPEG2	1920x1080	24 / 25 / 30	30	
*.mpg *.mpeg	PS	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM / AAC
		MPEG2	1920x1080	24 / 25 / 30	30	
		H.264	1920x1080	6 ~ 30	25	
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24 / 25 / 30	30	AC3 / AAC / MP3 / DD+ / HE-AAC
		H.264	1920x1080	6 ~ 30	25	
		VC1	1920x1080	6 ~ 30	25	

Other Restrictions

✎ NOTE

- If there are problems with the contents of a codec, the codec will not be supported.
- If the information for a Container is incorrect and the file is in error, the Container will not be able to play correctly.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Fram/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.

Video Decoder	Audio Decoder
• Supports up to H.264, Level 4.1 • H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. • GMC 2 over is not support. • H.263 is not supported.	• Supports up to WMA 7, 8, 9, STD • WMA 9 PRO does not support 2 channel excess multi channel or lossless audio. • WMA sampling rate 22050Hz mono is not supported.
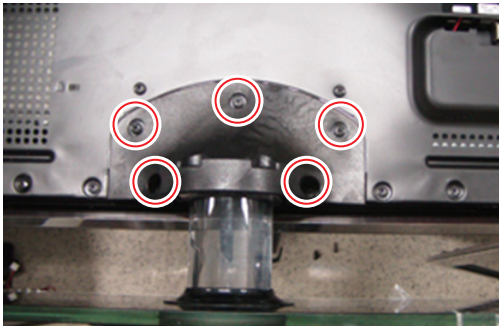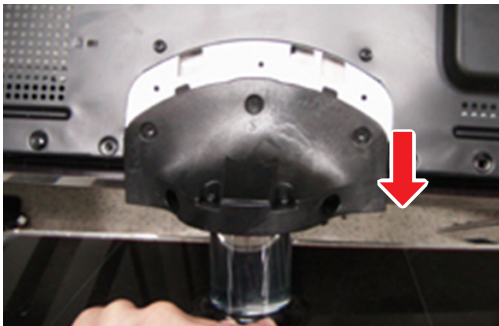
3. Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the UA26C4000P LED TV.
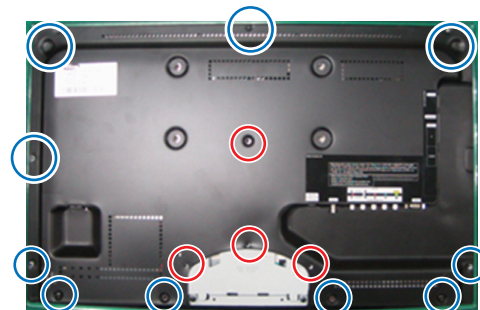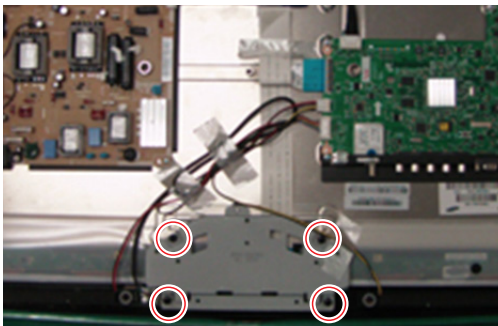
⚠ **WARNING:** This LED TV contains electrostatically sensitive devices. Use caution when handling these components.
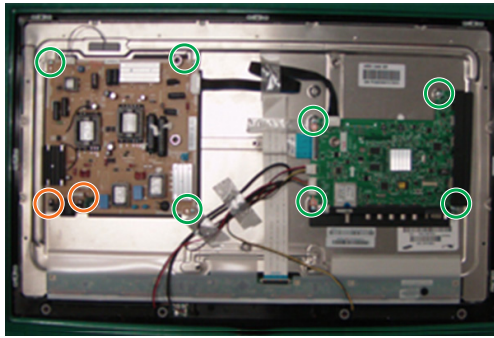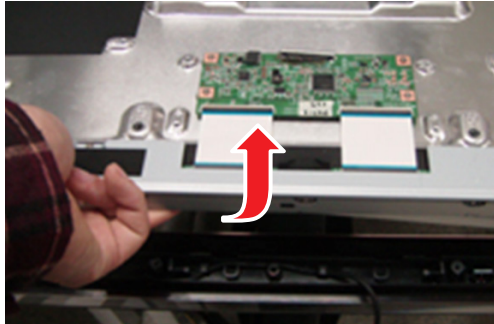
3-1. Disassembly and Reassembly

⚠ **Cautions:** 1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.

Description	Picture Description	Screws
1. Place monitor face down on cushioned table. Remove 5 (22" 3 screws) screws from the stand. Remove stand. In CASE 22" You can take the rear cover off without removing stand.		
		 6003-000133
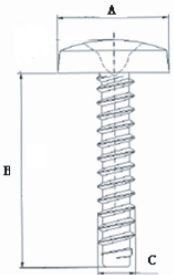
Description	Picture Description	Screws
2. **26" C4000 :** Remove the 13 screws of rear-cover. **22" C4000 :** Remove the 10 screws of rear-cover.		 6003-000133 6003-001003
3. Lift up the rear-cover.		
4. Remove the left and right speaker.		
5. Lift up the stand link. Remove the 4 screws of bracket stand link.		 6003-000133

Description	Picture Description	Screws
6. Remove the 4 screws of main board and 5 screws of IP board.	

6001-002283

6001-000115 |
| 7. Lift up the panel. | | |

※ Reassembly procedures are in the reverse order of disassembly procedures.

Screw Size

Code No.	A (mm)	B (mm)	C (mm)	Q'ty	
6003-001003	8.3~8.4	12~12.4	4~4.15		
6003-000133	8.3~8.4	7.9~8.3	3.70~3.83		
6001-002283	6.3~6.5	5.0~5.6	2.87~8.98		
6001-000115	5.8~6.3	9.4~10.0	2.87~2.98		

4. Troubleshooting
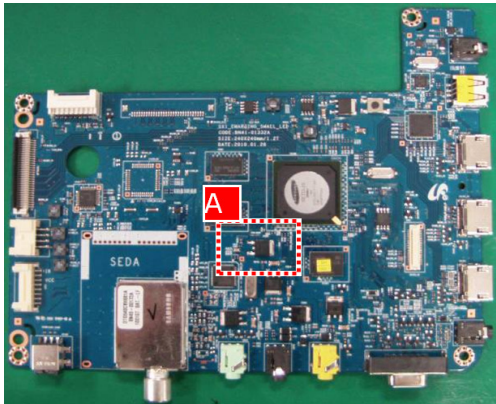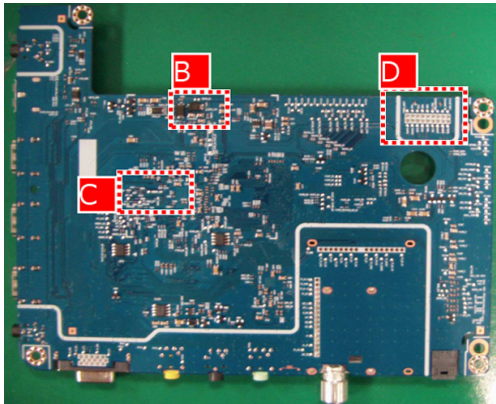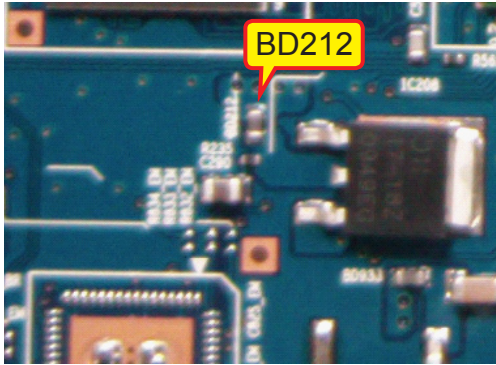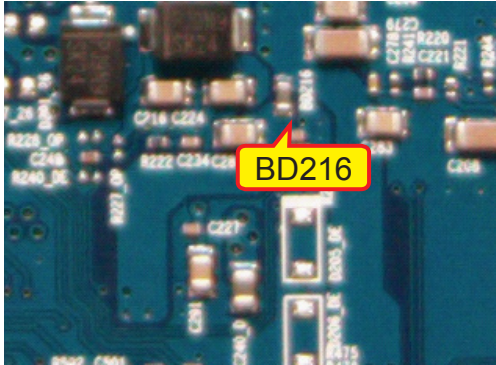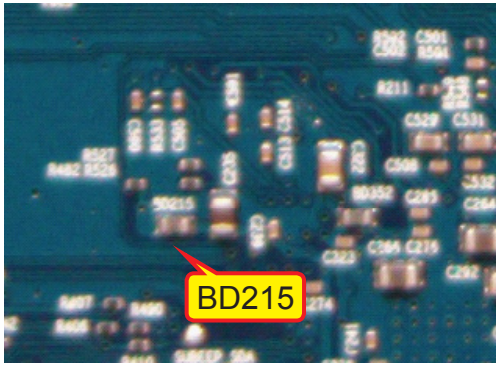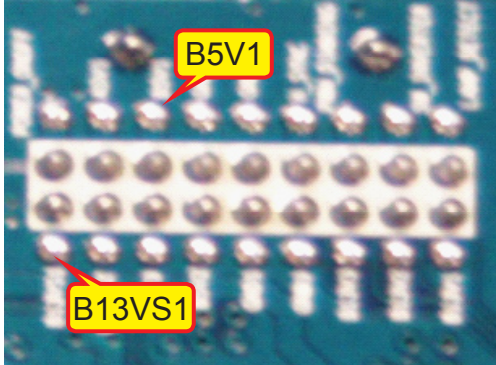
4-1. Troubleshooting

4-1-1. Previous check

1. Check the various cable connections first.
    • Check to see if there is a burnt or damaged cable.
    • Check to see if there is a disconnected or loose cable connection.
    • Check to see if the cables are connected according to the connection diagram.

2. Check the power input to the Main Board.
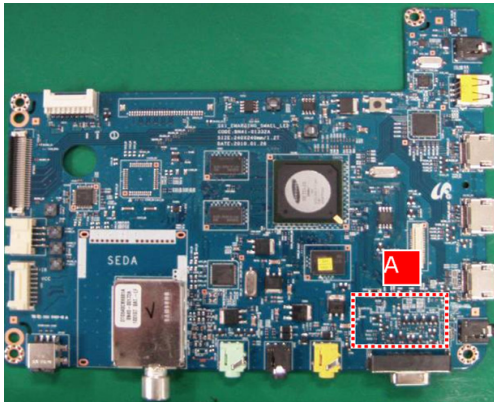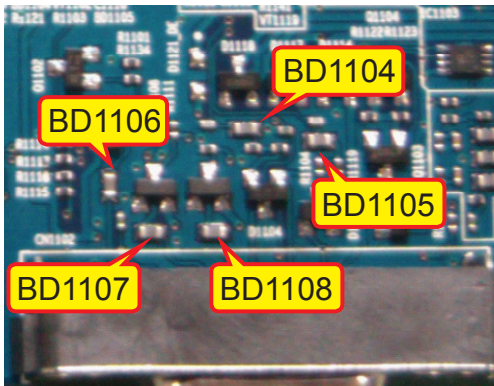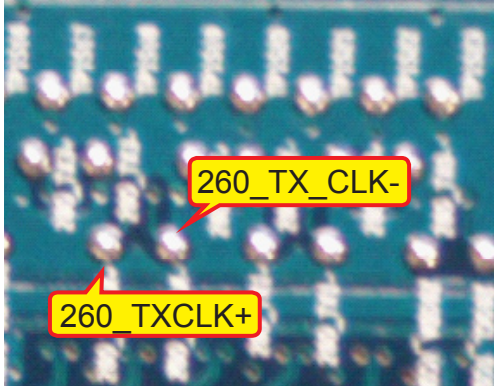
4-1-2. No Power

Symptom	– The LEDs on the front panel do not work when connecting the power cord. – The SMPS relay does not work when connecting the power cord. – The units appears to be dead.
Major checkpoints	The IP relay or the LEDs on the front panel does not work when connecting the power cord if the cables are improperly connected or the Main Board or SMPS is not functioning. In this case, check the following: – Check the internal cable connection status inside the unit. – Check the fuses of each part. – Check the output voltage of SMPS. – Replace the Main Board.
Diagnostics	Lamp(Backlight) Off, power indicator LED on? → No → Change 18p power cable. ↓ Yes Does proper Stand-By DC A5V appear at TP-A5V1? → No → ↓ Yes Does proper Main DC B13C, B5V appear at TP-B13VS1, B5V1? → No → ↓ Yes Does proper DC-A3.3V appear at BD215? → No → Change the Main Assy. ↓ Yes Does proper B3.3V, B1.8V, A3.3V_ PW appear at BD216(B3.3V_PW), BD212(B1.8V_PW), BD215(A3.3V_PW)? → No → ↓ Yes Does proper DC B13V appear at LVDS connector Pin #1~5 of T-con b'd? → No → Change the LVDS cable. ↓ Yes A power is supplied to set? → No → Check a other function. (No picture part) Replace a LCD Panel.
Caution	Make sure to disconnect the power before working on the IP board.

Location (Main)			
TOP		**BOTTOM**	
Detail			
A		**B**	
C		**D**	

4-1-3. No Video (Analog PC signal)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the PC source – Check the Arsenal, Check the Chelsea. – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

Diagnostics flowchart:

Power indicator LED is off. Lamp(Backlight) on, no video ? — No → Check a set in the 'Stand-by mode' or 'DPMS mode'.

↓ Yes

Check the PC source and check the connection of D-SUB ? — No → Input the analog PC signal properly.

↓ Yes

❶ Does the signal appear at BD1106, BD1107, BD1108, BD1104, BD1105 (R,G,B,H,V)? — No → Check CN1102 PC Cable. Change the Main Assy.

↓ Yes

❷ Does the digital data appear at TP-260_TXCLK+, 260_TXCLK- ? — No → Check IC1102(SX1) Change the Main Assy.

↓ Yes

Check the LVDS cable? Check the T-Con B'd? Replace the LCD panel? — No → Please, Contact Tech support.

Location (Main)		
TOP		**BOTTOM**
Detail		
A		**B**

WAVEFORMS

❶	**PC input (V-sink , H-sink , R/G/B)**

❷	**LVDS output**
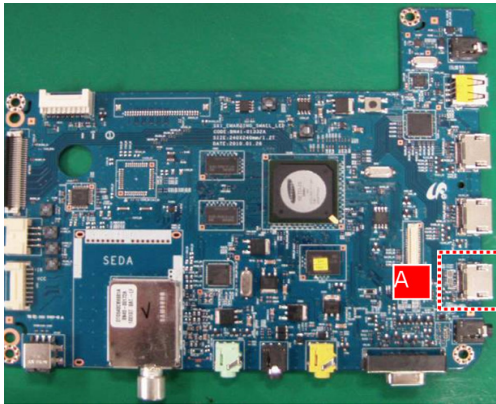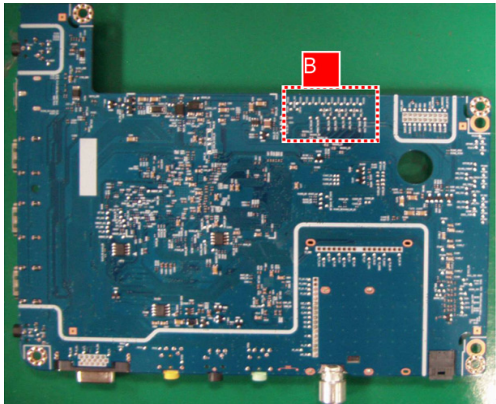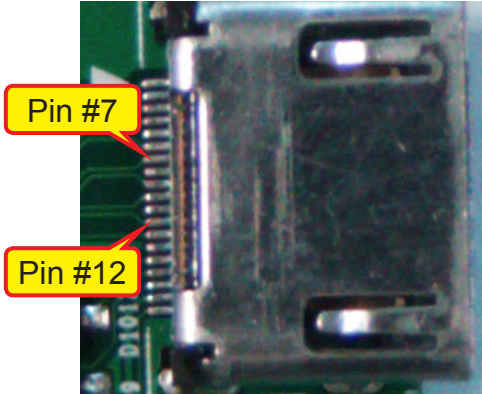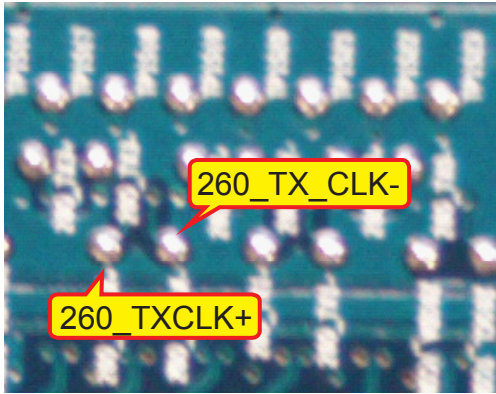
4-1-4. No video (HDMI1, 2 - Digital signal)
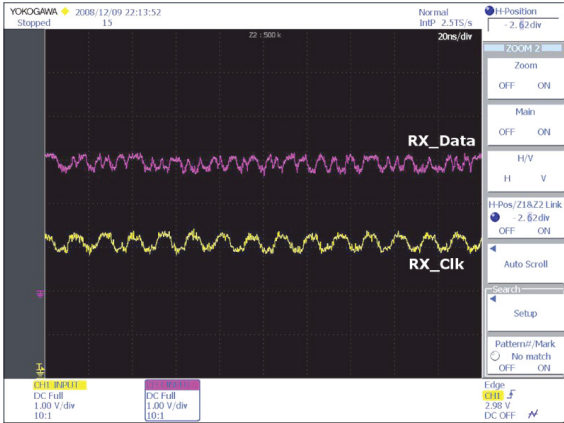
Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the HDMI source. – Check the HDMI switch, Check the Chelsea. – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	Power indicator LED is off. Lamp(Backlight) on, no video ? **No** → Check a set in the 'Stand-by mode' ↓ **Yes** Check the HDMI source and check the connection of HDMI cable ? **No** → Input the HDMI signal properly. ↓ **Yes** ❸ Does the signal appear at CN1201 (Pin#12, #7)(HDMI1) (HDMI RX_CLK, RX_Data)? **No** → Check CN1201, CN1202_26, CN1203_26. Check HDMI cable. Change the Main Assy. ↓ **Yes** ❷ Does the digital data appear at TP-260_TXCLK+, 260_TXCLK- ? **No** → Check IC1102(SX1) Change the Main Assy. ↓ **Yes** Check the LVDS cable? Check the T-Con B'd? Replace the LCD panel? **No** → Please, Contact Tech support.
Caution	Make sure to disconnect the power before working on the IP board.

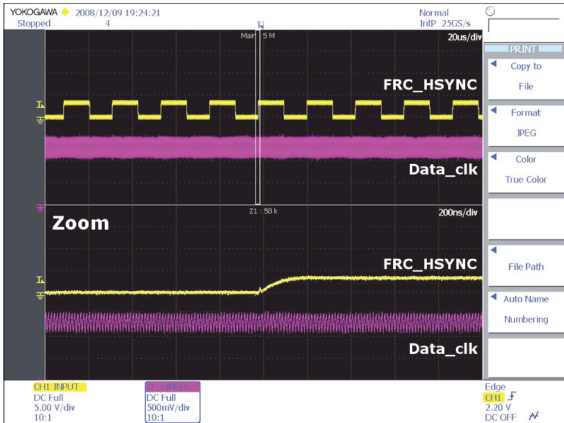| Location (Main)		
TOP		**BOTTOM**
Detail		
A		**B**

Pin #7

Pin #12

260_TX_CLK-

260_TXCLK+

WAVEFORMS

❸	HDMI input (RX_Data, RX_Clk)

❷	LVDS output

4-1-5. No Video (Tuner_CVBS)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Tuner CVBS source. – Check the Tuner, Check the Chelsea. – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	Power indicator LED is off. Lamp(Backlight) on, no video ? — No → Check a set in the 'Stand-by mode' ↓ Yes Check the RF source and check the connection of RF cable ? — No → Input the RF source properly. ↓ Yes Does the DC B33V_TU_PW, B5V_TU_PW appear at TP-VT, B+_5V pin of Tuner? — No → Change the Main Assy. ↓ Yes ❷ Does the digital data appear at TP-260_TXCLK+, 260_TXCLK- ? — No → Check IC1102(SX1) Change the Main Assy. ↓ Yes Check the LVDS cable? Check the T-Con B'd? Replace the LCD panel? — No → Please, Contact Tech support.
Caution	Make sure to disconnect the power before working on the IP board.

Location (Main)			
TOP		**BOTTOM**	
Detail			
A	VT / B+_5V	**B**	260_TX_CLK- / 260_TXCLK+

WAVEFORMS

❷	LVDS output

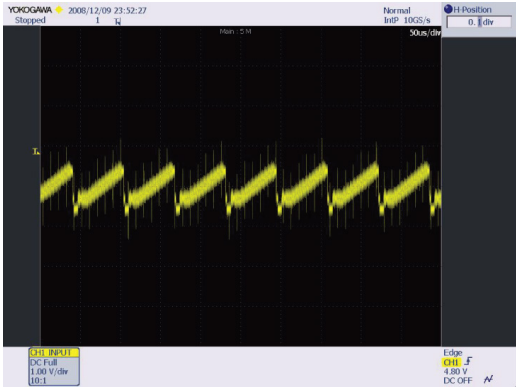## 4-1-6. No Video (Video CVBS)

Symptom	– Audio is normal but no picture is displayed on the screen.
Major checkpoints	– Check the Video CVBS source – Check the Chelsea. – This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	Power indicator LED is off. Lamp(Backlight) on, no video ? — No → Check a set in the 'Stand-by mode' ↓ Yes Check the video source and check the connection of video cable? — No → Input the video source properly. ↓ Yes Does the CVBS data appear at pin COMP1_Y ? — No → Check CN701. Change the Main Assy. ↓ Yes ❷ Does the digital data appear at TP-260_TXCLK+, 260_TXCLK-? — No → Check IC1102(SX1) Change the Main Assy. ↓ Yes Check the LVDS cable? Check the T-Con B'd? Replace the LCD panel? — No → Please, Contact Tech support.
Caution	Make sure to disconnect the power before working on the IP board.

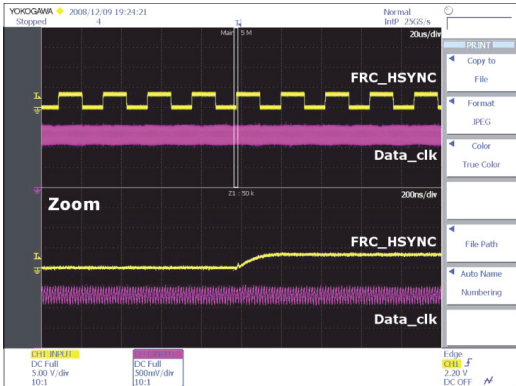| Location (Main)		
TOP		
BOTTOM		

Detail	
A	 COMP1_Y
B	 260_TX_CLK- 260_TXCLK+

WAVEFORMS
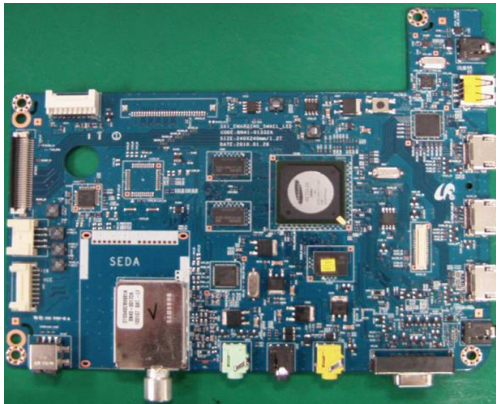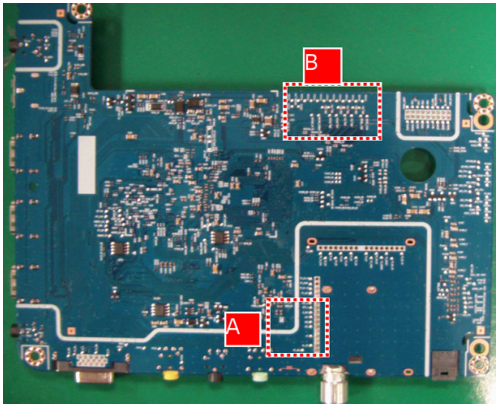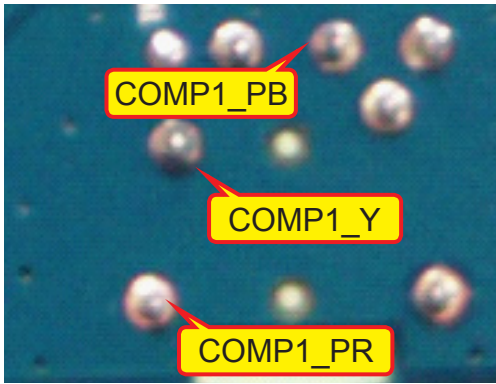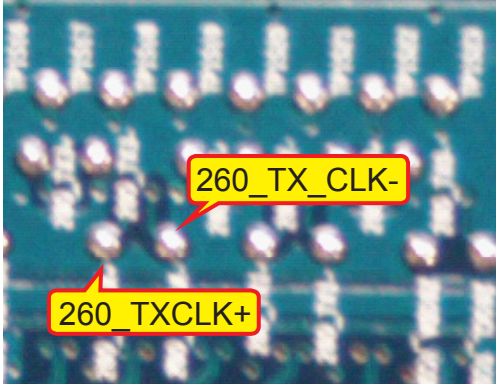
❹	CVBS OUT (Grey Bar)	
❷	LVDS output	

4-1-7. No Video (Component)
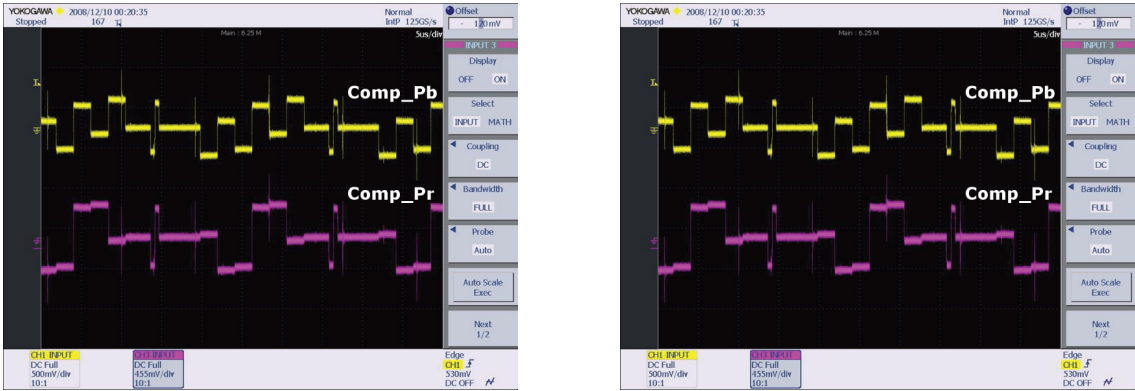
Symptom	− Audio is normal but no picture is displayed on the screen.
Major checkpoints	− Check the Component source − Check the chelsea. − This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

Diagnostics flowchart:

Power indicator LED is off. Lamp(Backlight) on, no video ? → **No** → Check a set in the 'Stand-by mode'

↓ Yes

Check the component source and check the connection of component cables(Y,Pb,Pr)? → **No** → Input the component source properly.

↓ Yes

❺ Does the component data appear at pin COMP1_Y, COMP1_PB, COMP1_PR(Comp/Y, Pb, Pr)? → **No** → Check CN701. Change the Main Assy.

↓ Yes

❷ Does the digital data appear at TP-260_TXCLK+, 260_TXCLK- ? → **No** → Check IC1102(SX1) Change the Main Assy.

↓ Yes

Check the LVDS cable? Check the T-Con B'd? Replace the LCD panel? → **No** → Please, Contact Tech support.

Location (Main)		
TOP		**BOTTOM**
Detail		
A	COMP1_PB COMP1_Y COMP1_PR	**B**	260_TX_CLK- 260_TXCLK+

WAVEFORMS
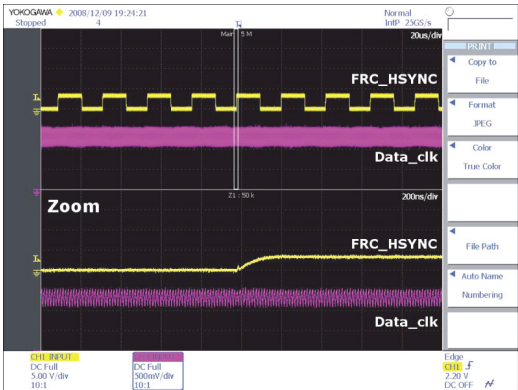
❺	Compnent_Y (Gray scale) / Pb / Pr (Color bar)
❷	LVDS output
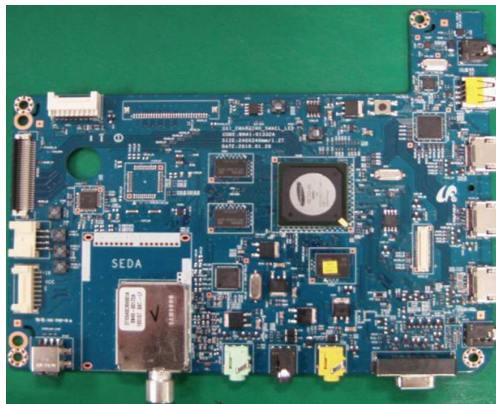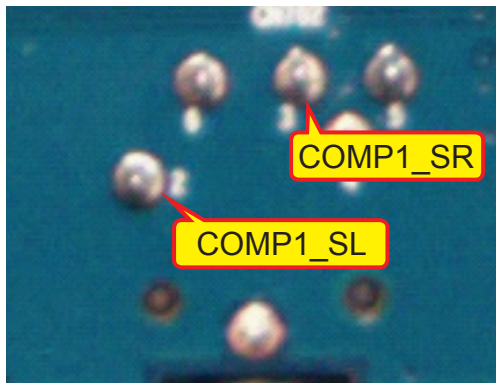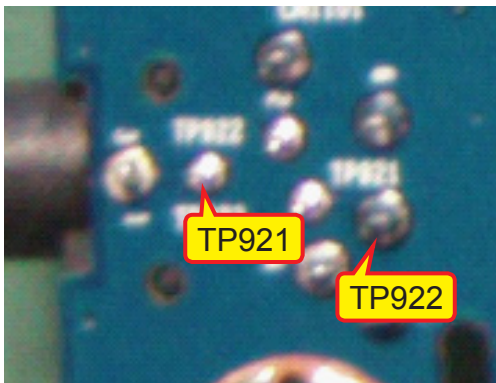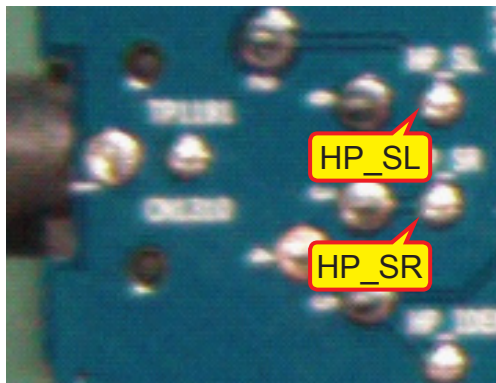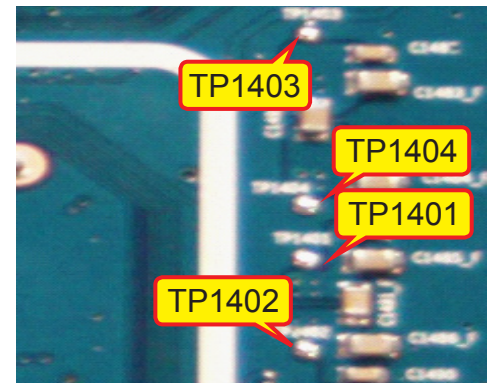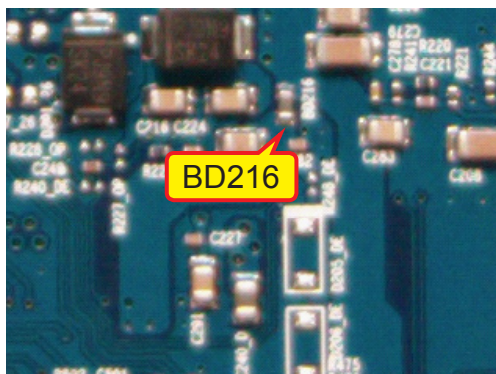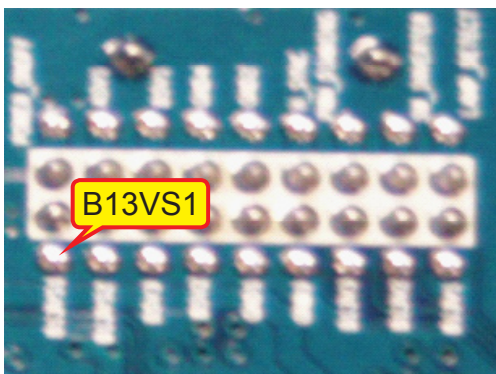
4-1-8. No Sound
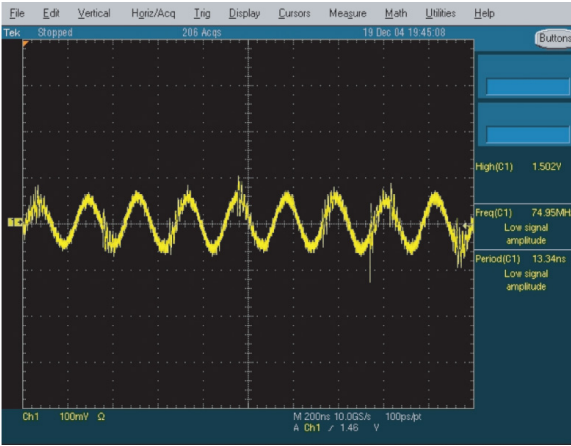
Symptom	– Video is normal but there is no sound..
Major checkpoints	– When the speaker connectors are disconnected or damaged. – When the sound processing part of the Main Board is not functioning. – Speaker defect..
Diagnostics	
Caution	Make sure to disconnect the power before working on the IP board.

Check the source and
check the connection of sound cable
(Comp/PC/DVI to HDMI) ?

No → Input the sound source properly.

↓ Yes

Does the sound data appear at pin COMP1_
SR, COMP1_SL(Comp R/L)
TP-921, 922 (PC/DVI R/L)
TP-HP_SR, HP_SL(Headphone out R/L)?

No → Check CN702, CN1101, CN1310.
Change the Main Assy.

↓ Yes

Does proper Main DC B13C, B3.3V appear at
TP-B13VS1, BD216?

No → Change the Main Assy.

↓ Yes

❼ Does the sound data appear at TP-1401, 1402,
1403, 1404 (L-, L+, R-, R+)?

No → Check IC1102 (SX1)
Check IC1401 (Sound AMP).
Change the Main Assy.

↓ Yes

Replace speaker ?

No → Please, Contact Tech support.

Location (Main)	
TOP	BOTTOM

Detail	
A COMP1_SR / COMP1_SL	**B** TP921 / TP922
B HP_SL / HP_SR	**B** TP1403 / TP1404 / TP1401 / TP1402
B BD216	**B** B13VS1

WAVEFORMS

❼ | **Speaker out**

4-2. Alignments and Adjustments

4-2-1. General Alignment Instuction

1. Usually, a color LCD-TV needs only slight touch-up adjustment upon installation.
   Check the basic characteristics such as height, horizontal and vertical sync.

2. Use the specified test equipment or its equivalent.

3. Correct impedance matching is essential.

4. Avoid overload. Excessive signal from a sweep generator might overload the front-end
   of the TV. When inserting signal markers, do not allow the marker generator to distort test result.

5. Connect the TV only to an AC power source with voltage and frequency as specified on
   the backcover nameplate.

6. Do not attempt to connect or disconnect any wire while the TV is turned on. Make sure
   that the power cord is disconnected before replacing any parts.

7. To protect against shock hazard, use an isolation transformer.

4-3. Factory Mode Adjustments

4-3-1 Entering Factory Mode

To enter 'Service Mode' Press the remote -control keys in this sequence :

- If you do not have Factory remote - control

| Info | → | Menu | → | Mute | → | POWER ON |

4-3-2 How to Access Service Mode

Using the Customer Remote

1. Turn the power off and set to stand-by mode

2. Press the remote buttons in this order to turn the set on.

3. The set turns on and enters service mode. This may take approximately 20 seconds.

4. Press the Power button to exit and store data in memory.
   - If you fail to enter service mode, repeat steps 1 and 2 above.

5. Initial SERVICE MODE DISPLAY State

Option
Control
SVC
Expert
ADC/WB
Advanced
T-TDT5DAAC-XXX
T-TDT5DAAC-XXX
EDID SUCCESS
CALIB : AV X COM X PC X HDMI X
Option : XXXX XXXX XXXX X
SDAL-XXX
RFS : 0130 T-TDT5DAAC
20XX-XX-XX
TYPE : XX
MODEL : XXXXX
MAC FAIL
FACTORY DATA VER : XXX
EERC VERSION : XXX
DTP-AP-COMP-310-01
DTP-HIIG-0304
DTP-BP-0314
DATE OF PURCHASE : XX/XX/XX

* How to enter the hidden factory mode.

a. into the factory mode

b. move the tap to Advanced

c. key input : 0 + 0 + 0 + 0

** hidden menu : Advanced

6. Buttons operations withn Service Mode

Menu	Full Menu Display/Move to Parent Menu
Direction Keys ▲/▼	Item Selection by Moving the Cursor
Direction Keys ◄/►	Data Increase / Decrease for the Selected Item
Source	Cycles through the active input source that are connected to the unit

4-3-3 Factory Data

■ Option

OPTION	Factory Name	Data	Range
	Factory Reset		
	Type		NONE/19O6TH0C/19A6TH0C/22I6TH0C/22A6TH0C/22D6TH0C/22P6TH0C/26A6AH0C/26D6AH0C/26L6AH0C/26P6AH0C/32A6AH0C32D6AH0C/32L6AH0C32P6AH0C/32A6AF0C/32L6AF0C/32A1AF0C/32L1AF0C/37L6AF0C/37L1AF0C/40A6AF0C/40D6AF0C/40L6AF0C/40A1AF0C/40L1AF0C/40A1UF0C/40D1UF0C/40L1UF0C/46A6AF0C/46D6AF0C/46L6AF0C/46A1AF0C/46L1AF0C/46A1UF0C/46D1UF0C/46L1UF0C/55A1UF0C/55L1UF0C/65L1UF0C/19R6TH0E/22D6TH0E/26D6AH0E/32D6AH0E32D6UF0E/32A1UF0E/32D1UF0E/37L6UF0E/37D1UF0E/37L1UF0E/40D6UF0E/40A1UF0E/40D1UF0E/46D6UF0E/46L6UF0E/46A1UF0E/46D1UF0E/46L1UF0E/55A1UF0E/55D1UF0E/55L1UF0E/65L1UF0E/42HHcD3/50HHcD450FArN4/50FArV458FArN1/58FArV163FArN1/
	Local Set	…	
	Model	LC550 LC540 LC530 LC450	LC350/LC450/LC450H/LC451LC452/LC457HLC459H/LC480/LC530/LC530H/LC539H/LC540/LC550/LC560/LC580/LC570/LC610/LC620/LC630/LC631/LC632/LC633/LC640/LC650/LC652/LC653/LC654/LC670/UC400/UC400H/UC4010/UC5000/UC5100/UC6000/UC6200/UC6300/UC6400/UC6400H/UC6500/UC6510/UC6530/UC6540/UC6550/UC6600/UC6620/UC6630/UC6700/UC6720/UC6730/UC6740/UC6800/UC6830/UC6900/UC6900H/UC8000/PC420/PC430/PC431/PC432/PC450/PC451/PC480/PC520/PC530/PC531/PC540/PC541/PC550/PC551/PC560/PC580/PC590/PC670/PC6100/PC6400/PC6500/PC7000/PC7700/PC8000
	TUNER	DRX3900J	
	DDR	0	
	Country	USA	
	Front Color		NONE/W-MILKY/T-M-Brn/T-W-Brn/T-W-Gray/W-D-Gray/W-M-Whit/W-Violet/T-C-Gray/T-R-BLK/S-BLK/S-RBLK/S-C-Gray/

4. Troubleshooting

■ Control

Control	Factory Name
	EDID
	Sub Option
	PDP Option
	Hotel Option
	Shop Option
	Asia Option
	Sound
	Config Option
	SCC

EDID	Factory Name	Data	Range
	EDID ON/OFF	Off	
	EDID WRITE ALL	…	
	EDID WRITE PC	…	
	EDID WRITE HDMI	…	
	EDID WRITE HDMI1	…	
	EDID WRITE HDMI2	…	
	EDID WRITE HDMI3	…	
	EDID WRITE HDMI4	…	
	EDID 1.2 PORT	…	
	EDID WRITE DVI	…	

Sub Option	Factory Name	Data	Range
	RF Mute Time	600ms	0ms~1000ms
	RS-232 Jack	UART	Debug/Login/UART
	Watchdog	OFF	ON/OFF
	WD Count	0	255
	Dimm Type	EXT	fixed
	Lvds Format	JEIDA	JEIDA/VESA/19INCH
	MediaPlay DB	On whth 5MB	fixed
	MediaPlay Movie	chapterinMedia	fixed
	MediaPlay DLNA	OFF	fixed
	MediaPlay PlayList	OFF	fixed
	OTN Server Type	operationg	operation/development
	OTN Test Server	OFF	OFF/ A/B/C/D/E Zone
	OTN Support	ON	ON/OFF
	OTN Reset		not modifyed
	OTN Duration	OFF	ON/OFF
	OTN Fail Test	OFF	ON/OFF
	T-CON USB Download	Failure	fixed
	View Log		not modifyed
	SST		not modifyed
	2nd mips	ON	ON/OFF
	2nd mips count	0	0~255
	Region	USA	fixed
	PC Auto Ident	Enable	Auto/Enable

Hotel Option	Factory Name	Data	Range
	Hotel Mode	OFF	
	SI Vender	…	
	Power On Channel	…	
	Channel Type	…	
	Power On Volume	…	
	Min Volume	…	
	Max Volume	…	
	Panel Button Lock	…	
	Power On Source	…	

Shop Option	Factory Name	Data	Range
	Shop Mode	OFF	ON/OFF
	Exhibition Mode	OFF	ON/OFF

Sound	Factory Name	Data	Range
	High Devi	OFF	ON/OFF
	Carrier_Mute	ON	ON/OFF
	Speaker Delay Normal	10	0~255
	Pilot Level High Thld	0x70h	0x00~0xff
	Pilot Level Low Thld	0x20h	0x00~0xff
	Speaker EQ	ON	ON/OFF
	SPDIF PCM Gain	-9dB	-10dB~0dB

■ SVC

SVC	Factory Name	Data	Range
	Test Pattern		
	Panel Display Time	0Hr	fixed
	Tuner Status		

Test Pattern	Factory Name	Data	Range
	Pattern Sel	OFF	OFF/ White/Grey/Black/Red/Green/Blue
	RFC PC Mode	OFF	ON/OFF
	Logic Pattern Sel	…	Not modified
	Logic Level Sel	…	Not modified

TUNER STATUS	Factory Name	Data	Range
	DVB		
	ISDB-T		

DVB	Factory Name	Data	Range
	SNR		Not modified
	BER		Not modified
	Singal Strength		Not modified
	Bandwidth		Not modified
	Frequency		Not modified
	LNA Status		Not modified
	FFT		Not modified
	Modulation		Not modified
	Code Rate		Not modified
	GI		Not modified
	Hier Modulation		Not modified
	Frequency Offset		Not modified
	Timing Offset		Not modified
	AGC		Not modified
	UCB		Not modified
	PLL Type		Not modified
	DEMOD Type		Not modified
	TPS LOCK		Not modified
	RS Lock		Not modified
	SSI		Not modified
	SQI		Not modified

ISDB-T	Factory Name	Data	Range
	FFT Size_1		Not modified
	Guard Interval_1		Not modified
	Freq. Offset_1		Not modified
	SNR_1		Not modified
	IF AGC_1		Not modified
	TMCC Lock_1		Not modified
	TS Packet_1		Not modified
	Master Lock_1		Not modified
	A_Modulation_1		Not modified
	A_Code Rate_1		Not modified
	A_Timer InterLeave_1		Not modified
	A_Segments Num_1		Not modified
	A_Ber_1		Not modified
	B_Modulation_!		Not modified
	B_Code Rate_1		Not modified
	B_Timer InterLeave_1		Not modified
	B_Segments Num_1		Not modified
	B_BER_1		Not modified
	C_Modulation_1		Not modified
	C_Code Rate_1		Not modified
	C_Timer InterLeave_1		Not modified
	C_Segments Num_1		Not modified
	C_BER_1		Not modified

■ Expert

Expert	Factory Name	Data	Range
	N / D ADJ	Off	Off / On / FIX
	SOURCE	...	Not modified

■ ADC/WB

ADC/WB	Factory Name
	ADC
	ADC Target
	ADC RESULT
	WB

ADC	Factory Name	Data	Range
	AV Calibration	Success	Success / Failure
	Comp Calibration	Success	Success / Failure
	PC Calibration	Success	Success / Failure
	HDMI Calibration	Success	Success / Failure

ADC Target	Factory Name	Data	Range
	1st_AV_Low	18	0 ~ 255
	1st_AV_High	220	0 ~ 255
	1st_AV_Delta	1	0 ~ 255
	1st_COMP_Low	16	0 ~ 255
	1st_COMP_High	235	0 ~ 255
	1st_COMP_Delta	1	0 ~ 255
	1st_PC_Low	2	0 ~ 255
	1st_PC_High	235	0 ~ 255
	1st_PC_Delta	1	0 ~ 255
	2nd_Low	1	0 ~ 255
	2nd_High	235	0 ~ 255
	2nd_Delta	1	0 ~ 255

ADC RESULT	Factory Name	Data	Range
	1st_AV_Gain	127	0 ~ 255
	1st_AV_Offset	139	0 ~ 255
	1st_Comp_Gain	68	0 ~ 255
	1st_Comp_Gain_Cb	68	0 ~ 255
	1st_Comp_Gain_Cr	68	0 ~ 255
	1st_Comp_Offset	127	0 ~ 255
	1st_Comp_Offset_Cb	127	0 ~ 255
	1st_Comp_Offset_Cr	127	0 ~ 255
	1st_PC_R_Gain	96	0 ~ 255
	1st_PC_G_Gain	95	0 ~ 255
	1st_PC_B_Gain	94	0 ~ 255
	1st_PC_R_Offset	127	0 ~ 255
	1st_PC_G_Offset	127	0 ~ 255
	1st_PC_B_Offset	127	0 ~ 255
	2nd_R_Offset	110	0 ~ 255
	2nd_G_Offset	110	0 ~ 255
	2nd_B_Offset	110	0 ~ 255
	2nd_R_Gain	165	0 ~ 255
	2nd_G_Gain	165	0 ~ 255
	2nd_B_Gain	165	0 ~ 255

WB	Factory Name	Data	Range
	Sub Brightness	128	0 ~ 255
	R_Offset	128	0 ~ 255
	G_Offset	128	0 ~ 255
	B_Offset	128	0 ~ 255
	Sub Contrast	128	0 ~ 255
	R_Gain	128	0 ~ 255
	G_Gain	128	0 ~ 255
	B_Gain	128	0 ~ 255
	Movie R Offset	122	0 ~ 255
	Movie B Offset	145	0 ~ 255
	Movie R Gain	156	0 ~ 255
	Movie B Gain	39	0 ~ 255

ADC RESULT

4-4. White Balance - Calibration

4-4-1 White Balance -Calibration

1. Calibration

⟶

AV Calibration
Comp Calibration
PC Calibration
HDMI Calibration
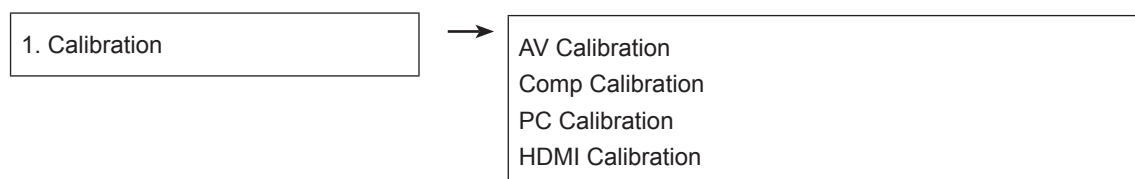
4-4-2 White Balance - Adjustment

(low light)   (hight light)

3. W/B

⟶

Sub Bright	Sub Contrast
R offset	R gain
G offset	G gain
B offset	B gain
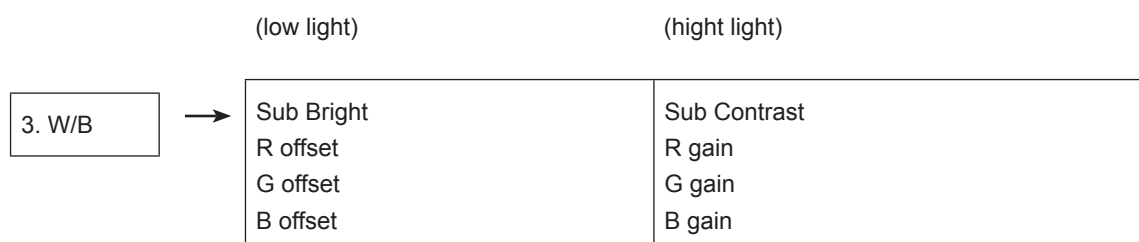
(W/B adjustment Condition refer next page)

4-5. White Ratio (Balance) Adjustment

1. You can adjust the white ratio in factory mode (1:Calibration, 3:White-Balance).

2. Since the adjustment value and the data value vary depending on the input source, you have to adjust these in CVBS, Component 1 and HDMI 1 modes.

3. The optimal values for each mode are configured by default. (Refer to Table 1, 2)
   It varies with Panel's size and Specification.

- Equipment : CS-210
- Pattern: MIK K-7256 #92 "Flat W/B Pattern" as standard
- Use other equipment only after comparing the result with that of the Master equipment.

- Set Aging time : 60min

- Calibration and Manual setting for WB adjustment.
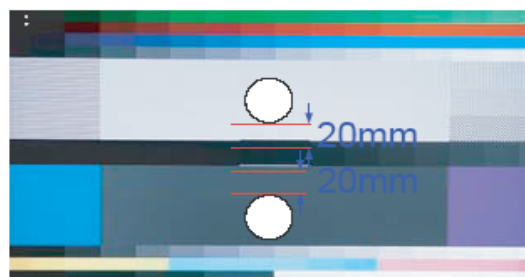
HDMI : Calibration at #24 Chessboard Pattern ⟶ Manual adjustment #92 pattern (720p)

COMP: Calibration at #24 Chessboard Pattern ⟶ Manual adjustment at #92 pattern (720p)

CVBS: Calibration at #24 Chessboard Pattern ⟶ Manual adjustment at #92 pattern (NTSC)

- If finishing in HDMI mode, adjustment coordinate is almost same in AV/COMP mode.

- White Balance Manual Adjustment

4-6. Servicing Information

4-6-1 USB Download Method

Software Upgrade upgrades can be performed via broadcasting signal or by downloading the new firmware from samsung.com to a USB memory device.
Current Version is the software already installed in the TV.

Note Software is represented as 'Year/Month/Day_Version'.
Installing the latest version is recommended.

▶ **By USB**: Insert a USB drive containing the firmware upgrade file downloaded from samsung.com into the TV. Please be careful not to disconnect the power or remove the USB drive until upgrades is complete. The TV will turn off and on automatically after completing the firmware upgrade. When software is upgraded, video and audio settings you have made will return to their default settings. We recommend you to write down your settings so that you can easily reset them after the upgrade.

▶ **Alternative Software (Backup)**: If there is an issue with the new firmware and it is affecting operation, you can change the software to the previous version.

  Note If software was changed, existing software is displayed.

6. Wiring Diagram

6-1. Wiring Diagram

■ **22"**
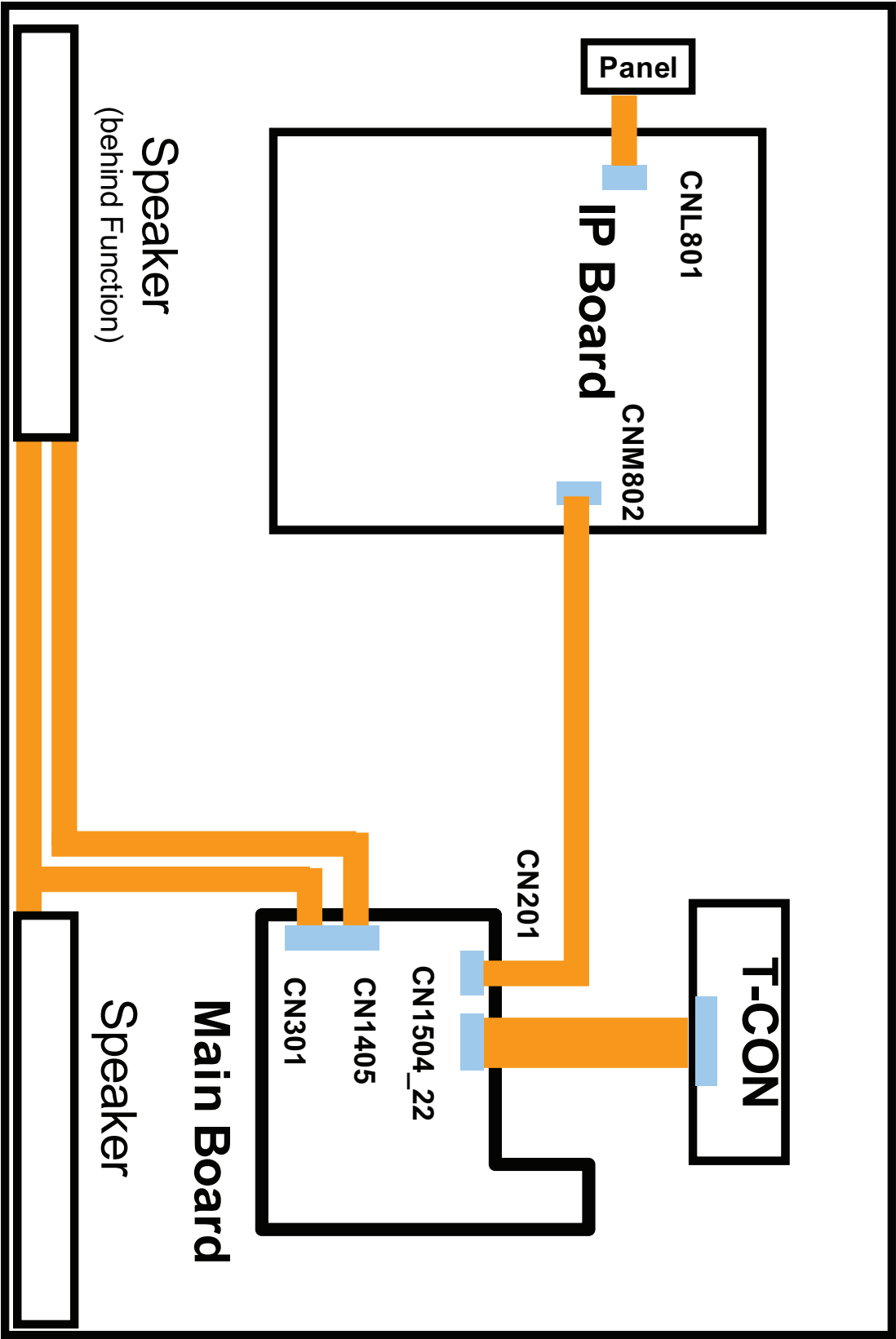
■ 26"/32"

6-2. Connector

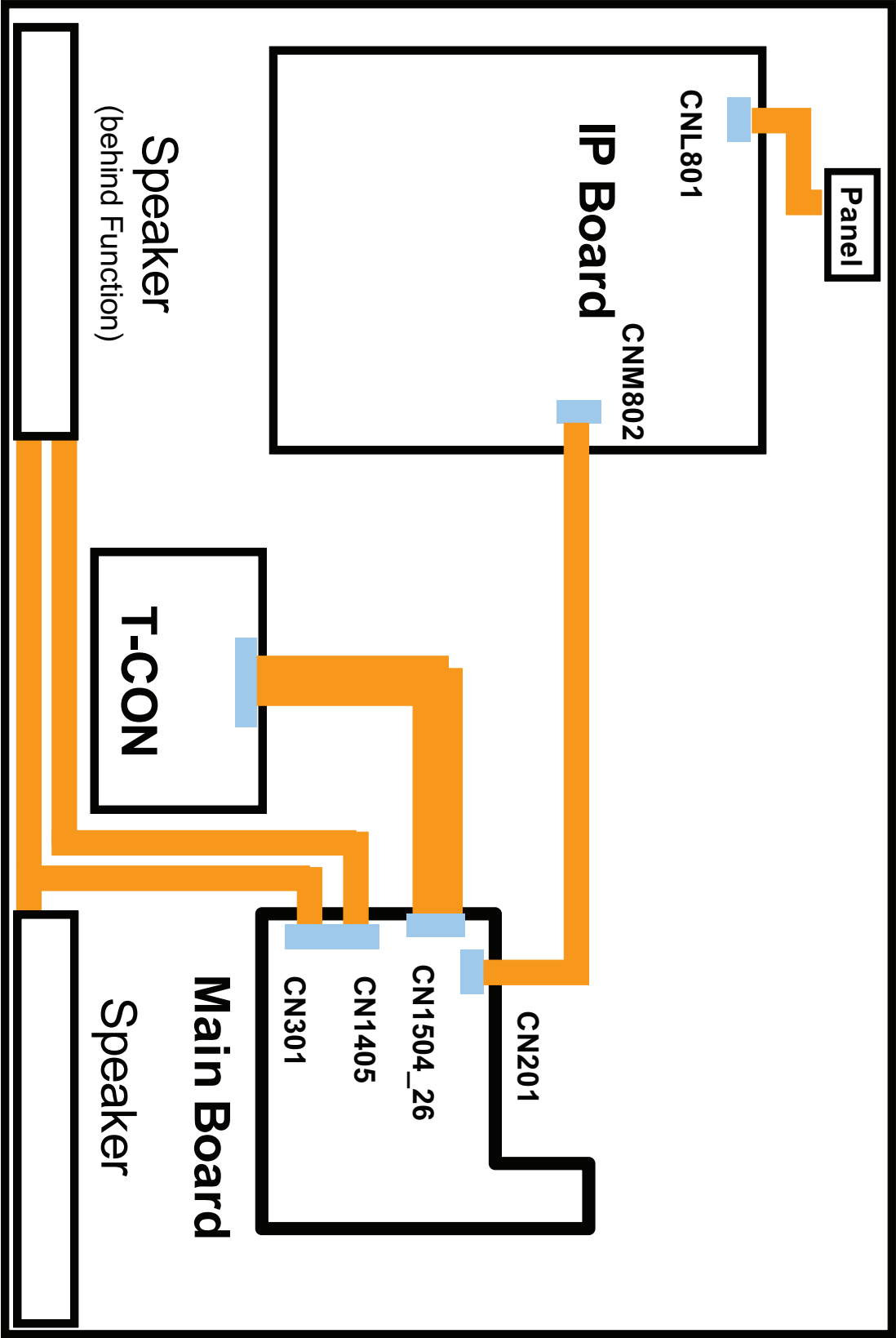| CN1504_22/CN1503_26 (To Panel)			
1	Panel_VCC	16	ODD[CLK]+
2	Panel_VCC	17	ODD[CLK]-
3	Panel_VCC	18	GND
4	Panel_VCC	19	ODD[2]+
5	Panel_VCC	20	ODD[2]-
6	GND	21	GND
7	GND	22	ODD[1]+
8	GND	23	ODD[1]-
9	TCON_WP	24	GND
10	FORMAT	25	ODD[0]+
11	NC	26	ODD[0]-
12	GND	27	GND
13	ODD[3]+	28	SDA_TCON
14	ODD[3]-	29	SCL_TCON
15	GND	30	NC

CN201(to Powr board)			
1	B12VS	10	GND
2	A5V	11	GND
3	B12VS	12	H_OUT
4	A5V	13	B13V
5	B5V	14	PWM_DIMMING
6	B5V	15	B13V
7	B5V	16	SW_NVERTER
8	GND	17	B13V
9	GND	18	IP_DET

CN301(FUNCTION)			
1	IR	5	MSDA
2	GND	6	KEY_INPUT1
3	A5V	7	KEY_INPUT2
4	MSCL	8	LED_STB

CN1405 (SPEAKER)			
1	R+	3	L+
2	R-	4	L-
3	CVBS	8	SL_IN

CN706 (USB)			
1	USB_VCC	3	USB_DP
2	USB_DM	4	GND

CN1102(PC)			
1	PC_RED	9	PC_5V
2	PC_GREEN	10	IDENT_PC
3	PC_BLUE	11	R_FANET
4	T_FANET	12	SDA_DOWN
5	GND	13	PC_HS
6	GND	14	PC_VS
7	GND	15	SCL_DOWN
8	GND		

CN1101(PC/DIV SOUND)			
1	GND	4	NC
2	PC_SR_IN	5	NC
3	PC_SL_IN	6	NC
4	T_FANET	12	SDA_DOWN

CN1003 (HDMI1)			
1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_RXCLK-
3	HDMI1_RX2-	13	HDMI_CEC
4	HDMI1_RX1+	14	GND
5	GND	15	SCL
6	HDMI1_RX1-	16	SDA
7	HDMI1_RX0+	17	GND
8	GND	18	5V
9	HDMI1_RX0-	19	HPD
10	HDMI1_RXCLK+		

CN1206_26 (HDMI2)			
1	HDMI2_RX2+	11	GND
2	GND	12	HDMI2_RXCLK-
3	HDMI2_RX2-	13	HDMI_CEC
4	HDMI2_RX1+	14	GND
5	GND	15	SCL
6	HDMI2_RX1-	16	SDA
7	HDMI2_RX0+	17	GND
8	GND	18	5V
9	HDMI2_RX0-	19	HPD
10	HDMI2_RXCLK+		

CN701(COMP1 JACK)		
1	GND	
2	COM2_SL	
3	COM2_SR	
4	GND	
5	COMP2_SR	
6	COMP2_SL	
7	GND	
8	COMP2_PR	
9	COMP2_PR	
10	GND	
11	COMP2_PB	
12	COMP2_PB	
13	GND	
14	IDENT_COMP2	
15	COMP2_Y	

CN1310(HEADPHONE)			
1	GND	4	GND
2	OUT_L	5	IDENT_HP
3	OUT_R	6	NC

6-3. Connector Functions

Connector	Functions
CN201 <-> IP CNM802	Supply main power and dimming signal from IP board to Main Board.
"CN1303_26/CN1304_19 <-> T-CON"	The LVDS signal transfered from Main Board to Panel .

6-4. Cables

Use	LEAD (Main-IP 18P)	LVDS (Main - TCON)
Code	22" C4000 : BN39-01267L 26" C4000 : BN39-01267A 32" C4000 : BN39-01267C	22" C4000 : BN96-12447N 26" C4000 : BN96-12469L 32" C4000 : BN96-12469M
Photo		