



# Plasma TV

Chassis : F71A(P\_HD)\_C45X  
Model Code : PS42C450B1WXB

## ***SERVICE*** Manual

### Plasma TV



PS42C450B1W

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



#### **GSPN (Global Service Partner Network)**

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

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## 2. Product Specification

### 2-1 Product Feature

#### ■ Features

Block	Specification		Major IC
RF	Digital/Analog (DTV Built In)		PAL-SEMCO TUNER TRIDENT_SA1
PDP Module	Samsung SDI 42" HD U2P	Samsung SDI 50" HD U2P	42" HD / 50" HD
Power	Dongyang ENP SMPS 220V		
Video	PAL, DVB HDMI COMPONENT, PC		TRIDENT_SA1
Sound	SRS TruSurround HD, Dolby Digital		STA369BW
Cabinet	C450 Design		

## ■ Europe Specification

Model	PS42C45X	PS50C45X
<b>Dimensions (WxHxD)</b>	41.5 x 28.5 x 12.4 inches (without stand) 41.5 x 12.4 x 28.3 inches (with stand)	48.4 x 32.0 x 12.4 inches (without stand) 48.4 x 12.4 x 31.8 inches (with stand)
<b>Weight</b>	53.1 lbs (without stand) 61.2 lbs (with stand)	69.0 lbs (without stand) 77.1 lbs (with stand)
<b>Voltage</b>	AC 100~240V, 60Hz, 550W	
<b>PC Resolution</b>	1024 x 768	1365 x 768
<b>Screen Size</b>	42 inches (16:9)	50 inches (16:9)
<b>ANTENNA Input</b>	ANT - AIR/CABLE IN 75Ω unbalanced	
<b>VIDEO Input</b>	AV1 COMPONENT1 - 480i/480p/720p/1080i/1080p PC HDMI1- 480p/720p/1080i/1080p HDMI2 (DVI Compatible) - 480p/720p/1080i/1080p HDMI3 (SIDE-AV) - 480p/720p/1080i/1080p SCART	
<b>AUDIO Input</b>	AV1 COMPONENT1 - 480i/480p/720p/1080i/1080p PC DVI SCART	
<b>Audio Output</b>	AUDIO (L/R)	
<b>Speaker Output</b>	10W + 10W, 82 dB (± 2 dB)	
<b>New Features</b>	Anynet+, WISELINK	

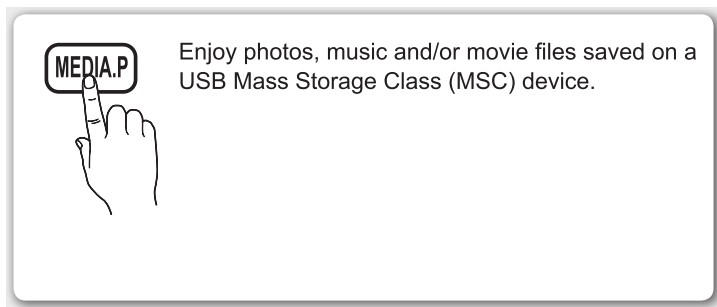
## ■ Australia Specification

Model	PS42C451B2D	PS50C451B2D
Dimensions (WxHxD)	41.5 x 28.5 x 12.4 inches (without stand) 41.5 x 12.4 x 28.3 inches (with stand)	48.4 x 32.0 x 12.4 inches (without stand) 48.4 x 12.4 x 31.8 inches (with stand)
Weight	53.1 lbs (without stand) 61.2 lbs (with stand)	69.0 lbs (without stand) 77.1 lbs (with stand)
Voltage	AC 100~240V, 60Hz, 550W	
PC Resolution	1024 x 768	1365 x 768
Screen Size	42 inches (16:9)	50 inches (16:9)
ANTENNA Input	ANT - AIR/CABLE IN 75Ω unbalanced	
VIDEO Input	AV1 COMPONENT1 - 480i/480p/720p/1080i/1080p PC HDMI1- 480p/720p/1080i/1080p HDMI2 (DVI Compatible) - 480p/720p/1080i/1080p HDMI3 (SIDE-AV) - 480p/720p/1080i/1080p COMPONENT2 - 480i/480p/720p/1080i/1080p	
AUDIO Input	AV1 COMPONENT1 - 480i/480p/720p/1080i/1080p PC DVI COMPONENT2 - 480i/480p/720p/1080i/1080p	
Audio Output	AUDIO (L/R)	
Speaker Output	10W + 10W, 82 dB (± 2 dB)	
New Features	Media Play, Anynet+	

## 2-1-1 New Features explanation

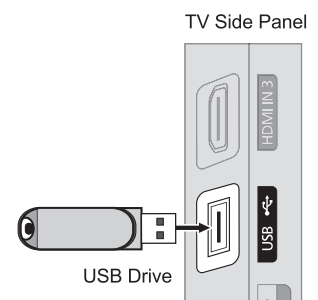
### ■ Media Play

This function enables you to view photo (JPEG) you take more easily, listen to audio files recorded in a USB, and see a movie or acting screen just by connecting USB device.



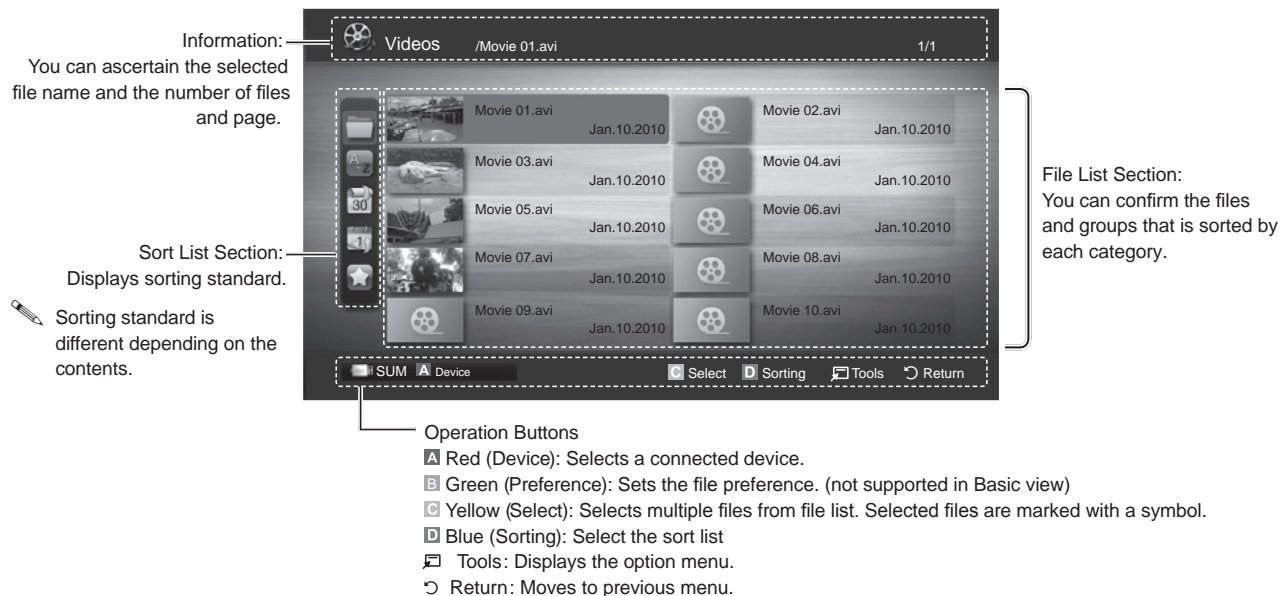
### Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music and/or movie files to the USB jack on the side of the TV.
3. When USB is connected to the TV, popup window appears. Then you can select Media Play.



## Screen Display

Move to the file you desired using the up/down/right/left buttons and then press the ENTER button.  
The file is played.



<< Videos >>

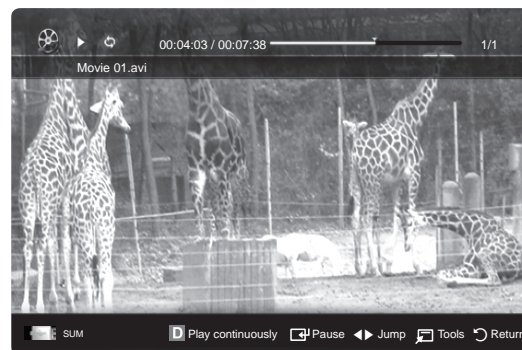
### Playing a Video

- Press the ◀ or ▶ button to select Videos, then press the ENTER button in the Media Play menu.
- Press the ◀/▶/▲/▼ button to select the desired video in the file list.
- Press the ENTER button or Play button.
  - The selected file is displayed on the top with its playing time.
  - The playing duration of a movie file may be displayed as "00:00:00" if the playback time information is not found at the start of the file.

▣ In this mode, you can enjoy movie clips contained on a Game, but you cannot play the Game itself.

### Supported Subtitle Formats

Name	File extension	Format
MPEG-4 time-based text	.txt	XML
SAMI	.smi	HTML
SubRip	.srt	string-based
SubViewer	.sub	string-based
Micro DVD	.sub or .txt	string-based





## ♦ Supported Subtitle Formats

Container	Video Decoder	Resolution	Audio codec
AVI ASF MKV MP4 3GPP VRO VOB PS TS RMVB FLV	Divx 3.11	1920x1080	MP3
	Divx 4.x		AC3
	Divx 5.1		LPCM
	Divx 6.0		ADPCM
	XviD		(MULAW, ALAW)
	H.264		AAC
	MPEG-4 SP		HE-AAC
	MPEG-4 ASP		WMA
	Window Media Video v9		DD+
	MPEG2		MPEG
	MPEG1		DTS HD
			AMR
			QCELP
			Real Audio
			(RealAudio6 Cook, RealAudio9,10 RealAudio Lossless)

Playing movie continuously (Resume Play)

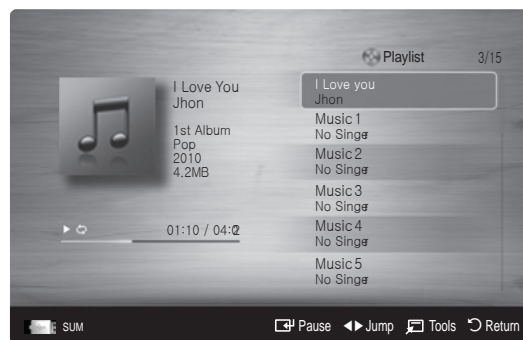
If you exit the playing movie function, the movie can be played later from the point where it was stopped.

1. Select the movie file you want to play continuously by pressing the ◀ or ▶ button to select it from the file list section.
  2. Press the Play/ENTER button.
  3. Select Play Continuously (Resume Play) by pressing the Blue button.
- ▣ The Movie will begin to play from where it was stopped.
  - ▣ If the Cont. movie Play Help function is set to On in the Settings menu, a pop-up message will appear when you resume play a movie file.

## &lt;&lt; Music &gt;&gt;

Playing a Music

1. Press the ◀ or ▶ button to select Music, then press the ENTER button in the Media Play menu.
  2. Press the ◀/▶/▲/▼ button to select the desired Music in the file list.
  3. Press the ENTER button or Play button.
- ▣ Only displays files with the MP3 file extension. Other file extensions are not displayed, even if they are saved on the same USB device.
  - ▣ If the sound is strange when playing MP3 files, adjust the Equalizer in the Sound menu. (An over-modulated MP3 file may cause a sound problem.)
    - The playback duration of a music file may be displayed as "00:00:00" if playback time information is not found at the start of the file.
  - ▣ REW and FF buttons do not function during play.



## &lt;&lt; Photos &gt;&gt;

Viewing a Photo (or Slide Show)

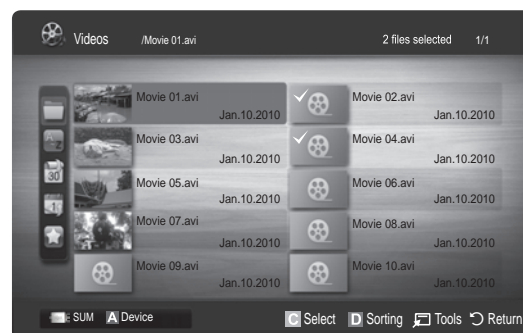
1. Press the ◀ or ▶ button to select Photos, then press the ENTER button in the Media Play menu.
  2. Press the ◀/▶/▲/▼ button to select the desired photo in the file list.
  3. Press the ENTER button or Play button.
    - While a photo list is displayed, press the (Play)/ENTER button on the remote control to start slide show.
    - All files in the file list section will be displayed in the slide show.
    - During the slide show, files are displayed in order from currently being shown.
- ▣ Music files can be automatically played during the Slide Show if the Background Music is set to On.



### Playing the multiple files

#### Playing the selected video/music/photo files

1. Press the Yellow button in the file list to select the desired file.
2. Repeat the above operation to select multiple files.
  - The (✓) mark appears to the left of the selected files.
  - To cancel a selection, press the Yellow button again.
  - To deselect all selected files, press the TOOLS button and select Deselect All.
3. Press the Play/ENTER button.



#### Playing the video/music/photo file group

1. While a file list is displayed, move to the any file in desired group.
2. Press the TOOLS button and select Play Current Group.

### Media Play Additional Function

#### Sorting the file list

Press the Blue button in the file list to sort the files.

Category	Operations	Videos	Music	Photos
Basic View	It shows whole folder. You can view the photo by selecting the folder.	✓	✓	✓
Title	It sorts and displays the file title in Symbol/Number/Alphabet/Special order.	✓	✓	✓
Preference	It sorts and displays the file by preference. You can change the file preference in the file list section using the Green button.	✓	✓	✓
Latest Date	It sorts and shows files by latest date.	✓		✓
Earliest Date	It sorts and shows files by earliest date.	✓		✓
Artist	It sorts the music file by artist in alphabetical.		✓	
Album	It sorts the music file by album in alphabetical order.		✓	
Genre	It sorts music files by the genre.		✓	
Mood	It sorts music files by the mood. You can change the music mood information.		✓	
Monthly	It sorts and shows photo files by month. It sorts only by month (from January to December) regardless of year.			✓

### Videos/Music/Photos Play Option menu

Category	Operations	Videos	Music	Photos
Title	You can move the other file directly.	✓		
Repeat Mode	You can play movie or music files repeatedly.	✓	✓	
Picture Size (Mode1 / Mode2 / Original)	You can adjust the picture size for preference.	✓		
Picture Setting	You can adjust the picture setting.	✓		✓
Sound Setting	You can adjust the sound setting.	✓	✓	✓
Subtitle Setting	You can play the video with Subtitle. This function only works if the subtitles are the same file type as the video.	✓		
Stop Slide Show / Start Slide Show	You can start or stop a Slide Show.			✓
Slide Show Speed	You can select the slide show speed during the slide show.			✓
Background Music	You can set and select background music when watching a Slide Show.			✓
Zoom	You can zoom into images in full screen mode.			✓
Rotate	You can rotate images in full screen mode.			✓
Information	You can see detailed information about the played file.	✓	✓	✓

<< Settings >>

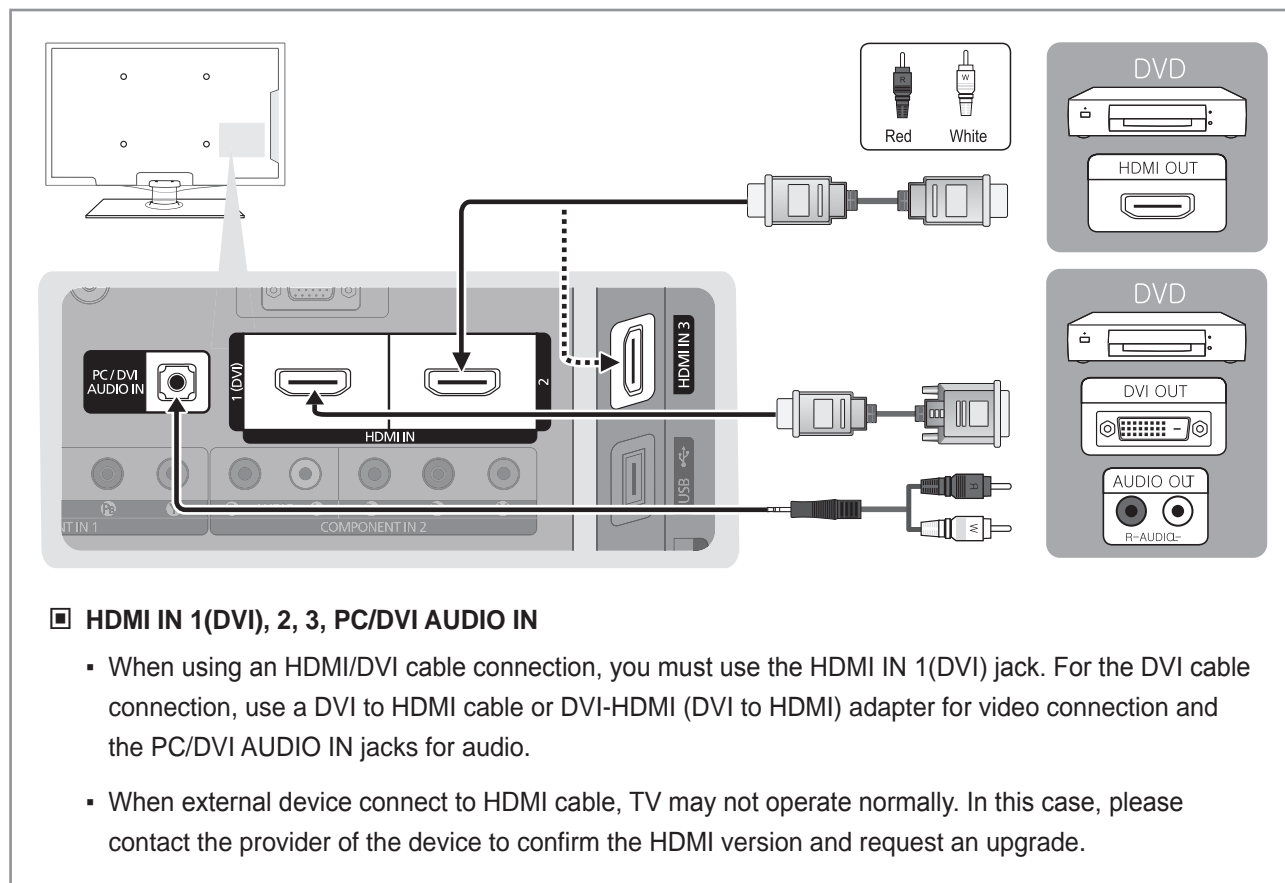
#### Using the Setup Menu

- Cont. movie Play (Resume Play) Help (On / Off): Select to display the help pop-up message for continuous movie playback.
- Get the DivX® VOD registration code: Shows the registration code authorized for the TV. If you connect to the DivX web site and register the registration code with a personal account, you can download VOD registration file. If you play the VOD registration using Media Play, the registration is completed.  
- For more information on DivX® VOD, visit "www.DivX.com."
- Get the DivX® VOD deactivation code: When DivX® VOD is not registered, the registration deactivation code is displayed. If you execute this function when DivX® VOD is registered, the current DivX® VOD registration is deactivated.
- Information: Select to view information about the connected device.

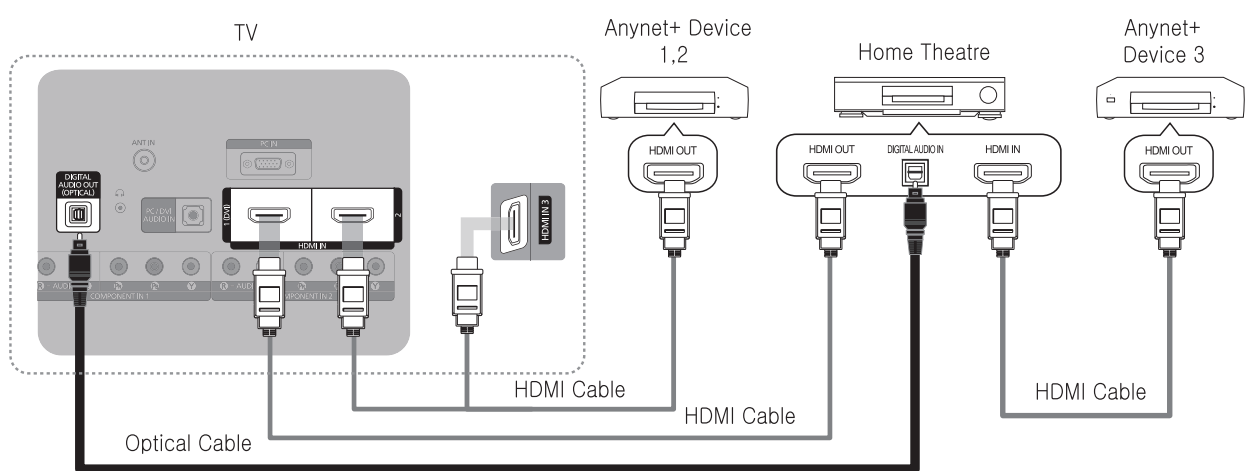
## ■ Anynet+

Anynet+ is an AV network system that enables you to control all connected Samsung AV devices with your Samsung TV's remote.

### To connect to a TV



### To connect to Home Theatre






1. Connect the HDMI IN (1(DVI), 2 or 3) jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.
2. Connect the HDMI IN jack of the home theatre and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

#### NOTE




- Connect the Optical cable between the DIGITAL AUDIO OUT (OPTICAL) jack on your TV and the Digital Audio Input on the Home Theatre.
- When following the connection above, the Optical jack only outputs 2 channel audio. You will only hear sound from the Home Theatre's Front, Left and Right speakers and the subwoofer. If you want to hear 5.1 channel audio, connect the DIGITAL AUDIO OUT (OPTICAL) jack on the DVD / satellite box (i.e. Anynet Device 1 or 2) directly to the Amplifier or Home Theatre, not the TV.
- Connect only one Home Theatre.
- You can connect an Anynet+ device using the HDMI cable. Some HDMI cables may not support Anynet+ functions.
- Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.
- Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

## 2-2 Specifications Analysis

### ■ Europe Specifications Analysis

Model		PS42C45X	PS50C45X	PS50B450
Design				
Basic	Display Type	PDP TV	PDP TV	PDP TV
	Built-In Tuner	O	O	O
	Resolution	1024 x 768	1365 x 768	1365 x 768
	PDP Module	U2P	U2P	U1P
	Screen Size	42 inches	50 inches	50 inches
	Picture ratio	16 : 9	16 : 9	16 : 9
Picture	Brightness	1,500Cd/m2	1,500Cd/m2	1,500Cd/m2
	Contrast Ratio	10000:1	10000:1	10000:1
	Picture Enhacer	DNle	DNle	O
Audio	Equalizer	5 Band	5 Band	5 Band
	Auto Volume Control	O	O	O
	Surround Sound	SRS TruSurround HD	SRS TruSurround HD	SRS TruSurround XT
	Speaker Output	10W + 10W	10W + 10W	10W + 10W
Features	PIP	O	O	O
	Double Screen	O	O	O
	Caption	O	O	O
	Still Image	O	O	O
	EPG	O	O	O
	My Color Control	O	O	O
	Energy Saving	O	O	O
	Screen Burn Protection	O	O	O
	Anynet	O	O	O

※ O: Feature Included, X: Not Included




Model		PS42C45X	PS50C45X	PS50B450
Design				
Connections	Antenna	1 (Cable/Air)	1 (Cable/Air)	1 (Cable/Air)
	AV Input	1 Input	1 Input	1 Input
	S-Video	O	O	-
	Component (Y/PB/PR)	1 Input	1 Input	1 Input
	PC (D-SUB)	1 Input	1 Input	1 Input
	DVI	O	O	O
	HDMI	3 Input	3 Input	3 Input
	Sub Woofer	O	O	O
	Optical	1	1	1
	etc.	USB 1 Input	USB 1 Input	USB 1 Input
ETC	Speaker/Stand	Built-in Speaker	Built-in Speaker	Built-in Speaker

※ O: Feature Included, X: Not Included




※ For the power supply and power consumption, refer to the label attached to the product.



## ■ Australia Specifications Analysis

Model		PS42C451B2D	PS50C451B2D	PS50B450
Design				
Basic	Display Type	PDP TV	PDP TV	PDP TV
	Built-In Tuner	O	O	O
	Resolution	1024 x 768	1365 x 768	1365 x 768
	PDP Module	U2P	U2P	U1P
	Screen Size	42 inches	50 inches	50 inches
	Picture ratio	16 : 9	16 : 9	16 : 9
Picture	Brightness	1,500Cd/m2	1,500Cd/m2	1,500Cd/m2
	Contrast Ratio	10000:1	10000:1	10000:1
	Picture Enhacer	DNle	DNle	O
Audio	Equalizer	5 Band	5 Band	5 Band
	Auto Volume Control	O	O	O
	Surround Sound	SRS TruSurround HD	SRS TruSurround HD	SRS TruSurround XT
	Speaker Output	10W + 10W	10W + 10W	10W + 10W
Features	PIP	O	O	O
	Double Screen	O	O	O
	Caption	O	O	O
	Still Image	O	O	O
	EPG	O	O	O
	My Color Control	O	O	O
	Energy Saving	O	O	O
	Screen Burn Protection	O	O	O
	Anynet	O	O	O

※ O: Feature Included, X: Not Included

Model		PS42C451B2D	PS50C451B2D	PS50B450
Design				
Connections	Antenna	1 (Cable/Air)	1 (Cable/Air)	1 (Cable/Air)
	AV Input	1 Input	1 Input	1 Input
	S-Video	O	O	-
	Component (Y/PB/PR)	2 Input	2 Input	1 Input
	PC (D-SUB)	1 Input	1 Input	1 Input
	DVI	O	O	O
	HDMI	3 Input	3 Input	3 Input
	Sub Woofer	O	O	O
	Optical	1	1	1
	etc.	USB 1 Input	USB 1 Input	USB 1 Input
ETC	Speaker/Stand	Built-in Speaker	Built-in Speaker	Built-in Speaker

※ O: Feature Included, X: Not Included

※ For the power supply and power consumption, refer to the label attached to the product.

## 2-3 Detail Factory Option

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- 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”, “A factory setup data might be different depending on model's feature such as inch, and the region they're going to be sold.”.

### ■ Europe Detail Factory Option

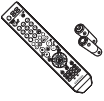




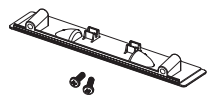
Item	Data
Factory Reset	
Type	42HHcD4 / 50HHcD4
Local Set	EU
Model	PC450
Tuner	DRXSEMCO
DDR	0
Light Effect	Off
Ch Table	SEH
Country	
Front Color	S-C-Gray

### ■ Australia Detail Factory Option


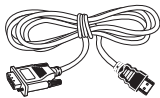


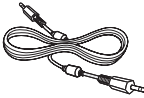

Item	Data
Factory Reset	
Type	42HHcD4 / 50HHcD4
Local Set	AD_AU
Model	PC451
Tuner	DRXALPS
DDR	0
Light Effect	Off
Ch Table	SDMA
Country	
Front Color	S-C-Gray

## 2-4 Accessories

### 2-4-1 Supplied Accessories

Accessories	Item	Item code	Remark
	Remote Control Batteries	BN59-01012A 4301-000103	Samsung Service Center
	Power Cord	3903-000456	
	Owner's Instructions	BN68-02575F	
	Cloth-Clean	BN63-01798B	
	Ferrite Core for Power Cord	3301-002049	
	Cover-Bottom Screws (2ea)	BN63-06456A 6003-001621	

**2-4-2 Sold Separately**


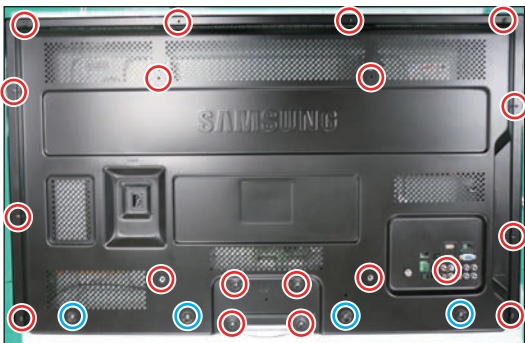


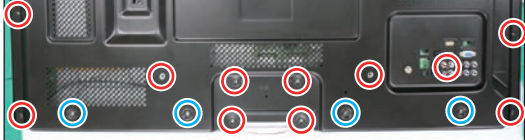

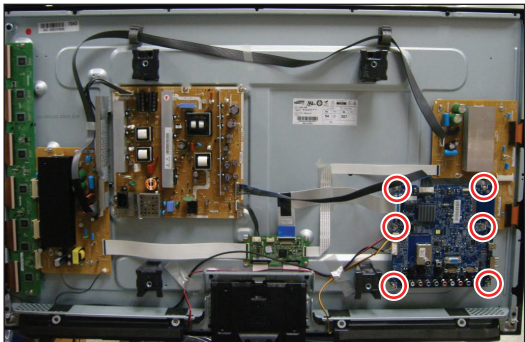

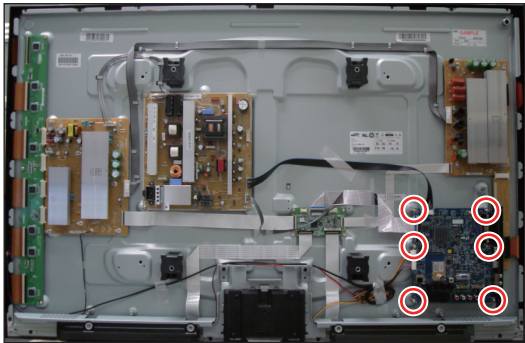

Accessories	Item	Item code	Remark
	HDMI Cable	-	Samsung Service Center
	HDMI/DVI cable	-	
	Component Cables (RCA)	-	
	PC Cable	-	
	PC Audio Cable	-	
	Antenna Cable	-	

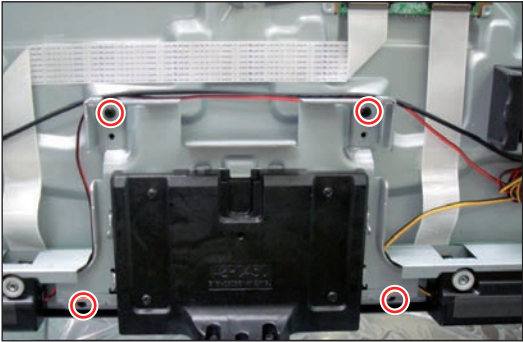

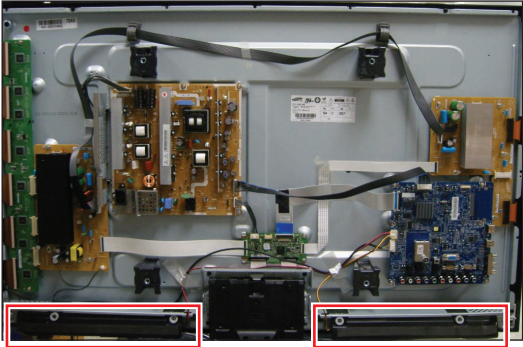
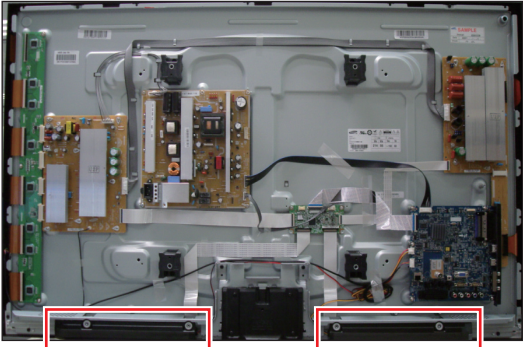
## 3. Disassembly & Reassembly

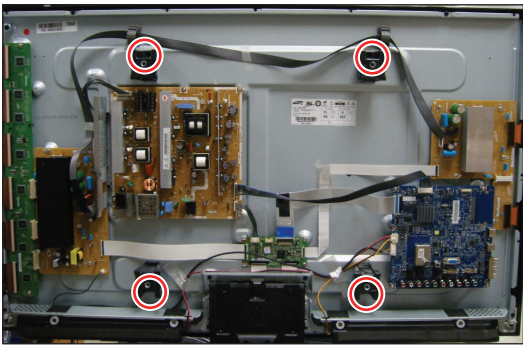

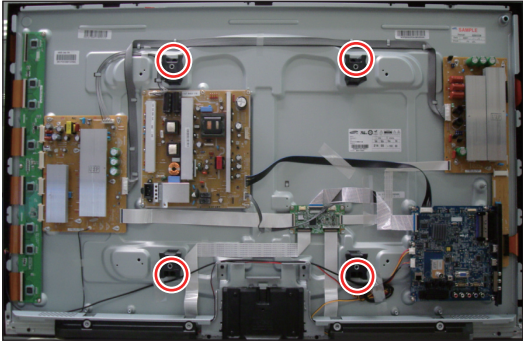

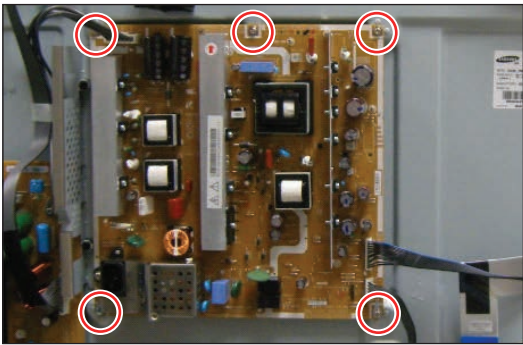

### 3-1 Overall Disassembly & Reassembly



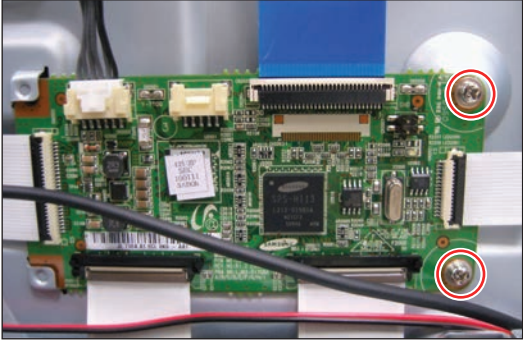



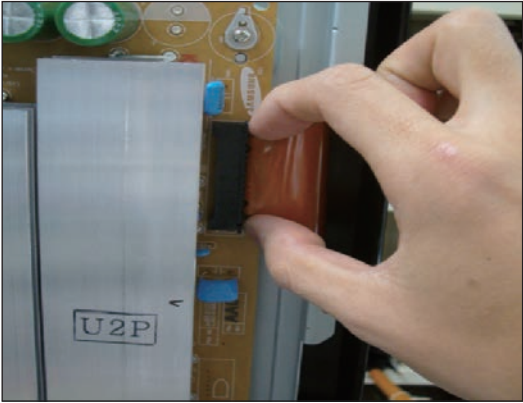
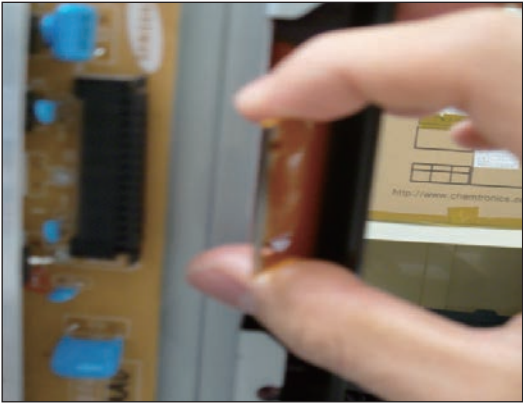
- Be sure to separate the power cord before disassembling the unit.
- Discharge the capacitors first when separating PCB's with high capacity capacitors such as SMPS, X Main Board, Y Main Board, etc. (A spark may be generated by the electric charge, and there is danger of electronic shock.)
- Check that the cables are properly connected referring to the circuit diagram when disassembling or assembling the unit taking care not to damage the cables.
- Take care not to scratch the Glass Filter in the front.
- Assemble the boards in the reverse order of the disassembly.
- The plasma must be layed down on a flat padded surface for disassembly and reassembly.


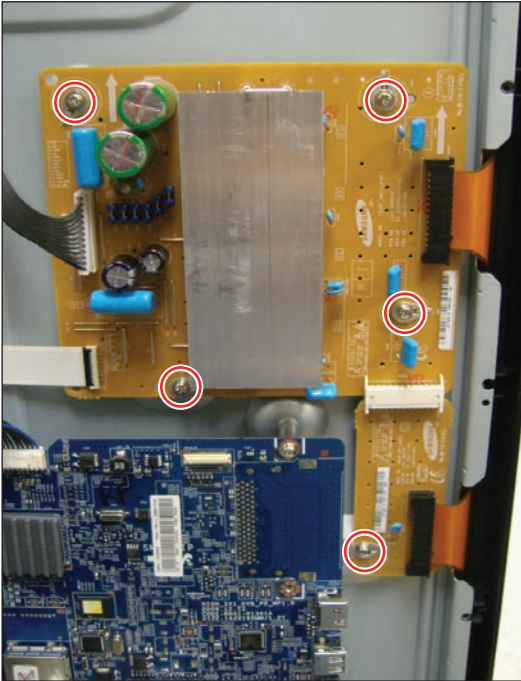

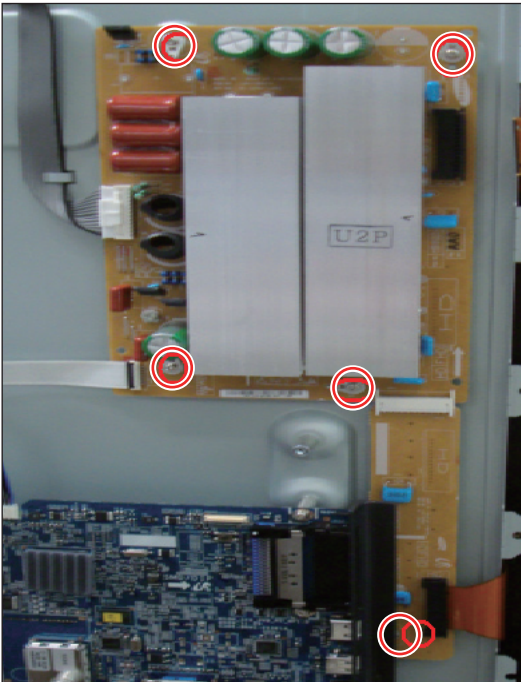
Description	Description Photo
1. Remove 19 screws. (  ) : BH,+,B,M4,L12,ZPC(BLK),SWRCH18 * L : Screw Length(mm)	  6003-001003
2. Remove 4 screws. (  ) : BH,+,S,M4,L10,ZPC(BLK),SWRCH18 * L : Screw Length(mm)	  6003-000337
3. Remove the Cover Rear.	
4. Detach all connectors from the Main Board.  5. Remove 6 screws. : PH,+,WSP,M3,L8,NI PLT,SWRCH18A * L : Screw Length(mm)	  6001-001921
6. Remove the Main Board.	  6001-001921

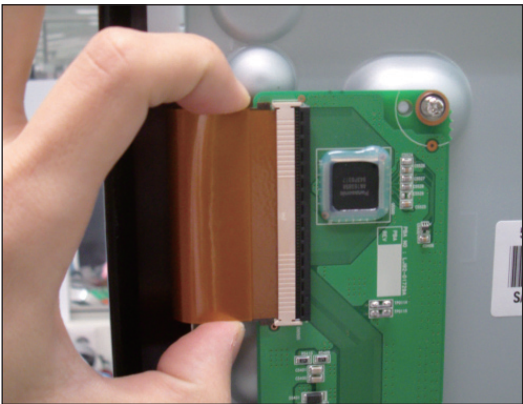
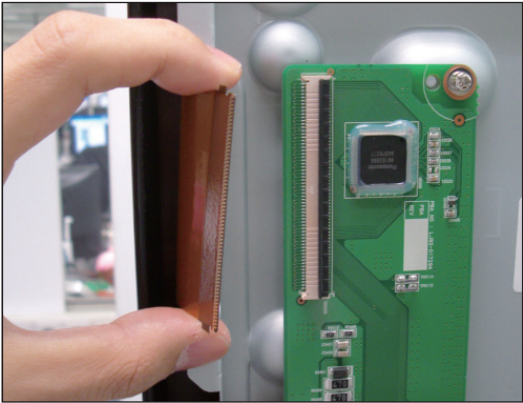
Description	Description Photo
<div>7. Remove 4 screws. : BH,+,B,M4,L12,ZPC(BLK),SWRCH18 * L : Screw Length(mm)</div> <div>8. Remove the BRACKET-SUPPORT STAND.</div>	<div></div> <div> 6003-001003</div>
<div>9. Remove P-SPEAKER. (No screw for holding)</div>	<div> &lt;42" PDP&gt;</div> <div> &lt;50" PDP&gt;</div>

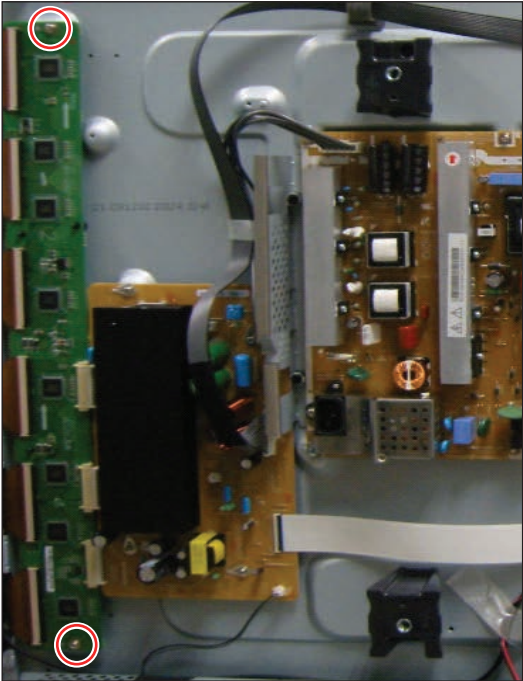
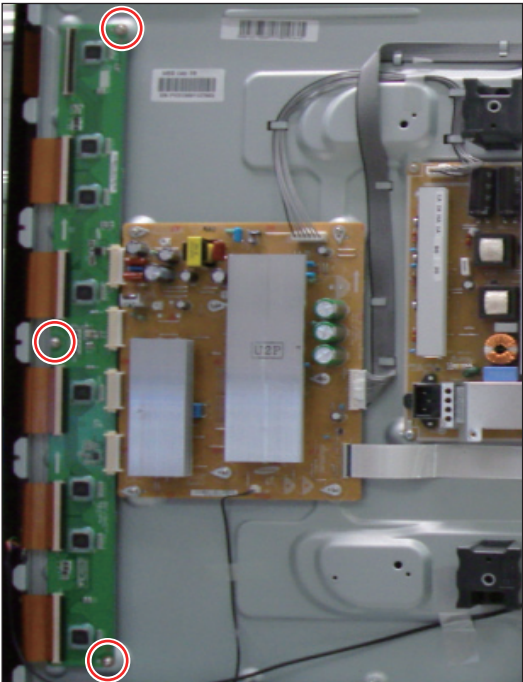
Description	Description Photo
<p>10. Remove 4 screws. : BH,+,S,M4,L10,ZPC(BLK),SWRCH18 * L : Screw Length(mm)</p> <p>11. Remove Holder Module.</p> <p>⚠ Please lay the PDP panel face down on a soft surface when separating front cover.</p>	<div data-bbox="726 315 1251 658">  </div> <p data-bbox="922 674 1054 703">&lt;42" PDP&gt;</p> <div data-bbox="1305 443 1406 539">  </div> <p data-bbox="1281 555 1433 584">6003-000337</p> <div data-bbox="726 757 1251 1099">  </div> <p data-bbox="922 1115 1054 1144">&lt;50" PDP&gt;</p> <div data-bbox="1305 882 1406 978">  </div> <p data-bbox="1281 994 1433 1023">6003-000337</p>
<p>12. Detach all connectors from the SMPS.</p> <p>13. Remove 5 screws. : PH,+,WSP,M3,L8,NI PLT,SWRCH18A * L : Screw Length(mm)</p> <p>14. Remove the SMPS.</p> <p>⚠ Wear gloves when handling the power board as there may be some remaining electrical charge in the capacitor. Specifically, avoid touching any part of the capacitor.</p>	<div data-bbox="726 1193 1251 1536">  </div> <div data-bbox="1305 1361 1406 1458">  </div> <p data-bbox="1281 1473 1433 1503">6001-001921</p>



Description	Description Photo
<p>15. Detach all connectors from the Logic Board.</p> <p>16. Remove 2 screws. : PH,+,WSP,M3,L8,NI PLT,SWRCH18A * L : Screw Length(mm)</p> <p>17. Remove the Logic Board.</p>	<div data-bbox="726 320 1251 658">  </div> <p data-bbox="922 678 1054 707">&lt;42" PDP&gt;</p> <div data-bbox="1305 443 1406 539">  </div> <p data-bbox="1281 562 1430 591">6001-001921</p> <div data-bbox="726 757 1251 1097">  </div> <p data-bbox="922 1117 1054 1146">&lt;50" PDP&gt;</p> <div data-bbox="1305 882 1406 978">  </div> <p data-bbox="1281 1001 1430 1030">6001-001921</p>
<p>18. Detach all Connectors from the X-Main Board.</p> <p>※ To separate the Flat Cable of the X-Main Board, press the upper and the lower sides of the connector.</p>	<div data-bbox="726 1196 1251 1597">  </div> <div data-bbox="726 1648 1251 2049">  </div>

Description	Description Photo
<p>19. Remove 5 screws. : PH,+,WSP,M3,L8,NI PLT,SWRCH18A * L : Screw Length(mm)</p> <p>20. Remove the X-Main Board with X-Buffer Board.</p>	<div><p>6001-001921</p></div> <p>&lt;42" PDP&gt;</p>
	<div><p>6001-001921</p></div> <p>&lt;50" PDP&gt;</p>

Description	Description Photo
<p data-bbox="172 315 671 425">21. Detach the scan board connectors from the panel by pulling the holder from both the top and bottom ends.</p>	<div data-bbox="726 315 1251 716"></div> <div data-bbox="726 770 1251 1171"></div>

Description	Description Photo
<p>22. Remove 2 screws. (42" PDP) Remove 3 screws. (50" PDP) : PH,+,WSP,M3,L8,NI PLT,SWRCH18A * L : Screw Length(mm)</p> <p>23. Remove the Y-Buffer Board.</p>	<div><p>&lt;42" PDP&gt;</p></div> <div><p>&lt;50" PDP&gt;</p></div>


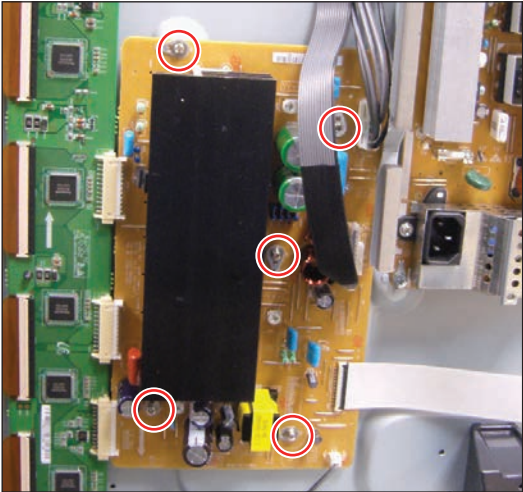

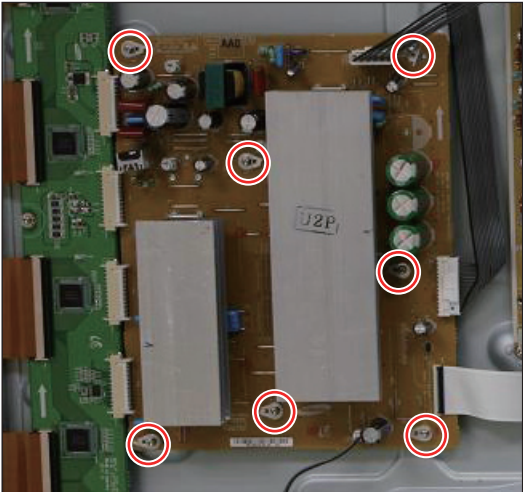


6001-001921



6001-001921

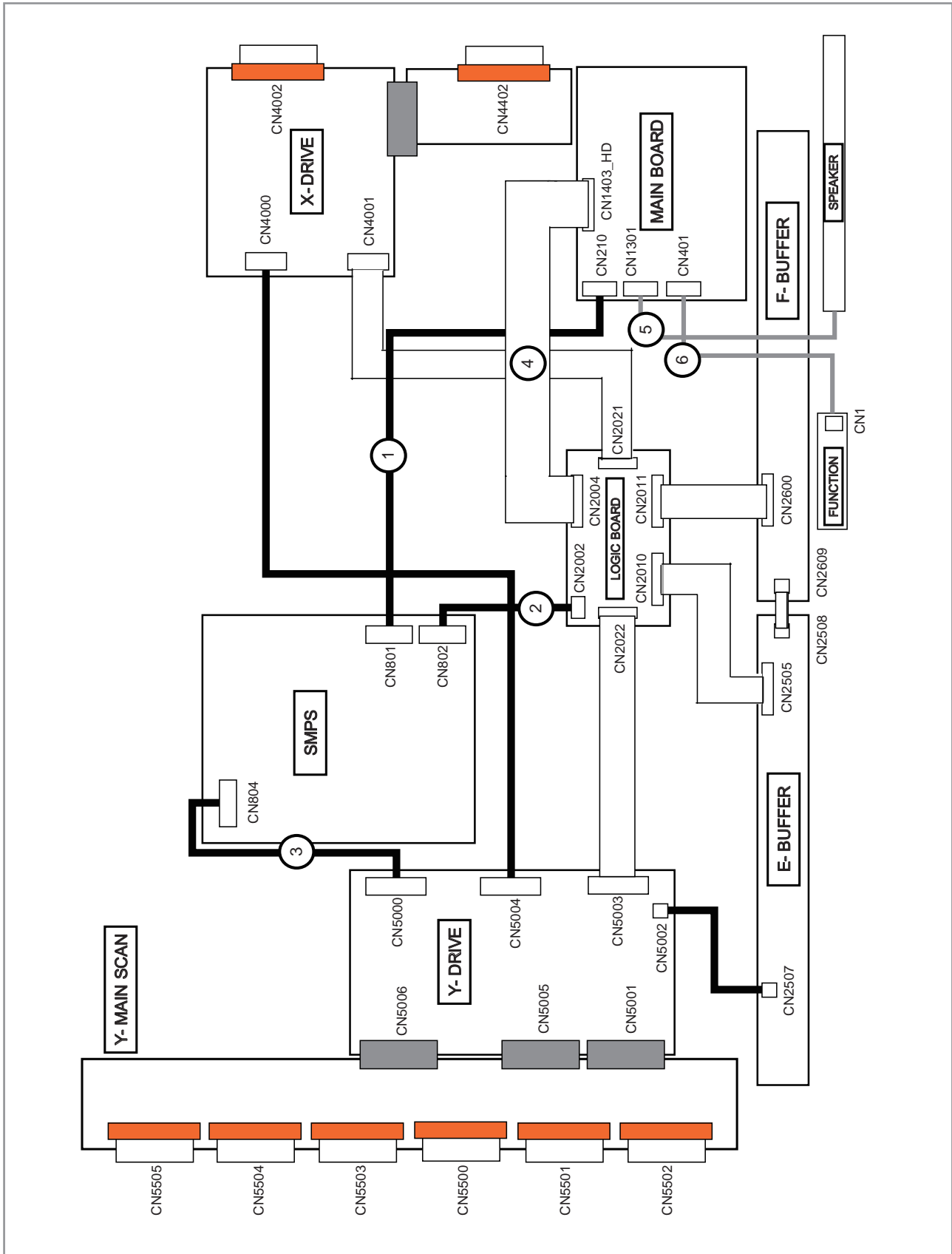


Description	Description Photo
<p>24. Detach all connectors from the Y-Main Board.</p> <p>25. Remove 5 screws. (42" PDP) Remove 7 screws. (50" PDP) : PH,+,WSP,M3,L8,NI PLT,SWRCH18A * L : Screw Length(mm)</p> <p>26. Remove the Y-Main Board.</p>	<div><p>6001-001921</p><p>&lt;42" PDP&gt;</p></div> <div><p>6001-001921</p><p>&lt;50" PDP&gt;</p></div>

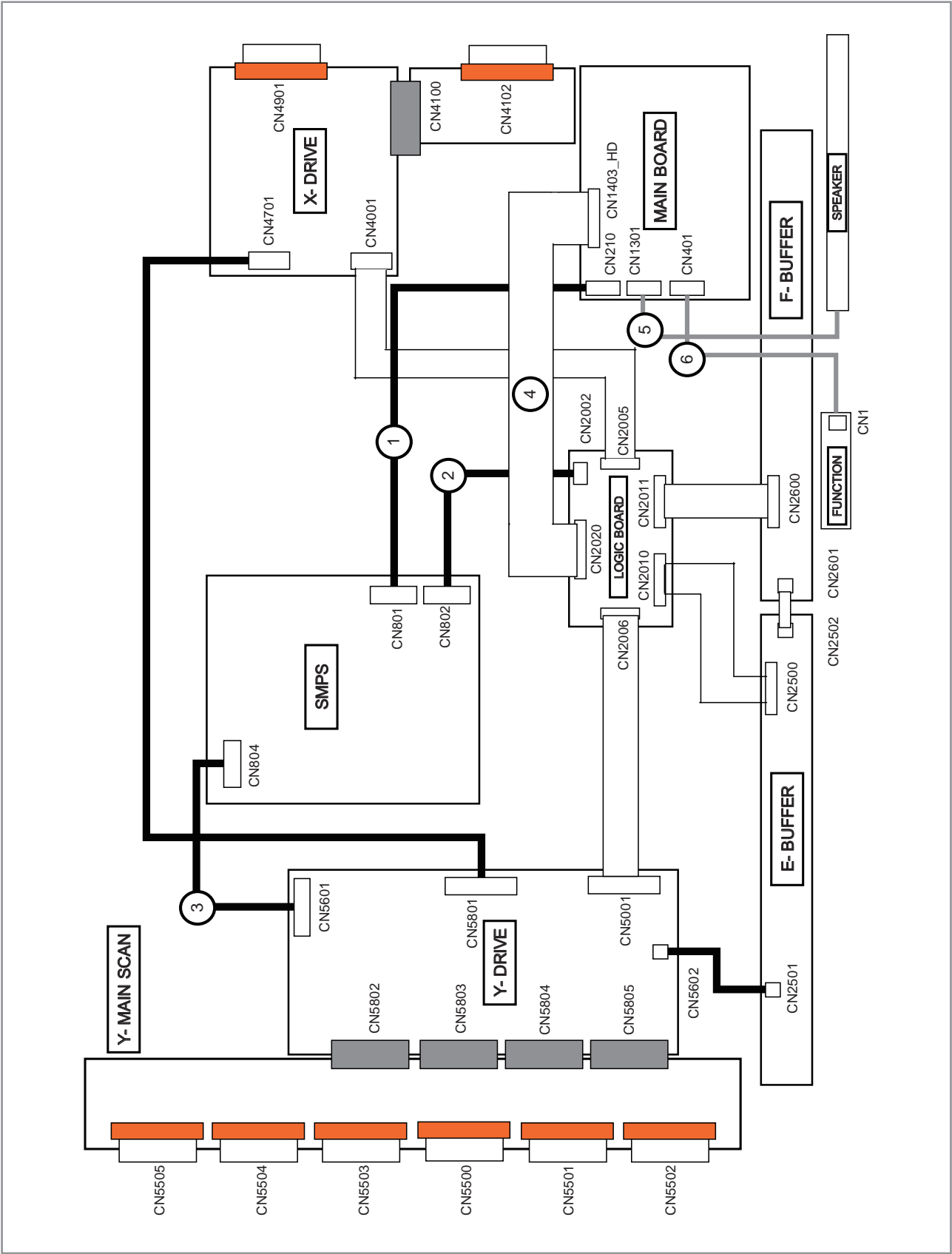
## 6. Wiring Diagram

### 6-1 Overall Wiring

#### ■ 42" Overall Wiring


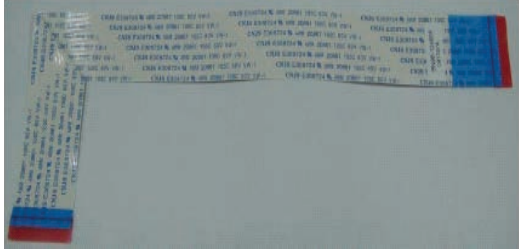


■ 50" Overall Wiring





※ The code number of cable(Lead-connector) can be changed, see “5. Exploded View & Part List.”

#### ■ 42" Cable (Lead-connector)

Use	① POWER 12P	④ LVDS FFC 30P
Code	BN39-01285B	BN96-12469F
Photo		

#### ■ 50" Cable (Lead-connector)

Use	① POWER 12P	④ LVDS FFC 30P
Code	BN39-01285C	BN96-12469H
Photo		



### 6-1-1 Pin Connection

① CN801 (SMPS) ↔ CN210 (Main Board)	
Pin No.	Signal
1	PS_ON
2	STBY
3	GND_15Vamp
4	15Vamp
5	GND_5.3V
6	GND_5.3V
7	5.3V
8	5.3V
9	GND_15V
10	15V
11	15V
12	5.3V

② CN802 (SMPS) ↔ CN2002 (Logic Board)	
Pin No.	Signal
1	D5.3V
2	D5.3V
3	GND
4	GND
5	PS_ON
6	VS_ON

③ CN804 (SMPS) ↔ CN5000 (42" Y Board) / CN5601 (50" Y Board)	
Pin No.	Signal
1	Vs
2	Vs
3	GND
4	Vg
5	GND
6	Va

④ CN1403_HD (MAIN Board) ↔ CN2004 (42" Logic Board) / CN2020 (50" Logic Board)			
Pin No.	Signal	Pin No.	Signal
1	SDA	16	ROCLK+
2	GND	17	ROCLK-
3	SCL	18	GND
4	GND	19	RO[2]+
5	UART Rx	20	RO[2]-
6	GND	21	GND
7	UART Tx	22	RO[1]+
8	GND	23	RO[1]-
9	3D_SYNC	24	GND
10	GND	25	RO[0]+
11	PDP_GO	26	RO[0]-
12	GND	27	RO[4]+
13	RO[3]+	28	RO[4]-
14	RO[3]-	29	GND
15	GND	30	GND

⑤ CN1301 (MAIN Board) ↔ SPEAKER	
Pin No.	Signal
1	R+_OUT
2	R-_OUT
3	L+_OUT
4	L-_OUT

⑥ CN401 (MAIN Board) ↔ POWER&IR	
Pin No.	Signal
1	IR
2	GND
3	A3.3V
4	SCL
5	SDA
6	KEY_INPUT1
7	KEY_INPUT2
8	LED
9	A3.3V
10	GND

**6-1-2 Connector role**

Loc. No.	Description
CN801	Power input connect (12 Pin) for Main Board
CN802	Power input connect (6 Pin) for Logic Board
CN804	Vs (202V),Vg (15V) Power input connect (6 Pin) of SMPS for Y-Drive
CN210	Power input connect (12 Pin) from SMPS
CN1301	Speak out connect on Main Board
CN1403_HD	Image signal (LVDS) connect (31 Pin) for Logic board

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## 4. Troubleshooting

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### 4-1 Checkpoints by Error Mode

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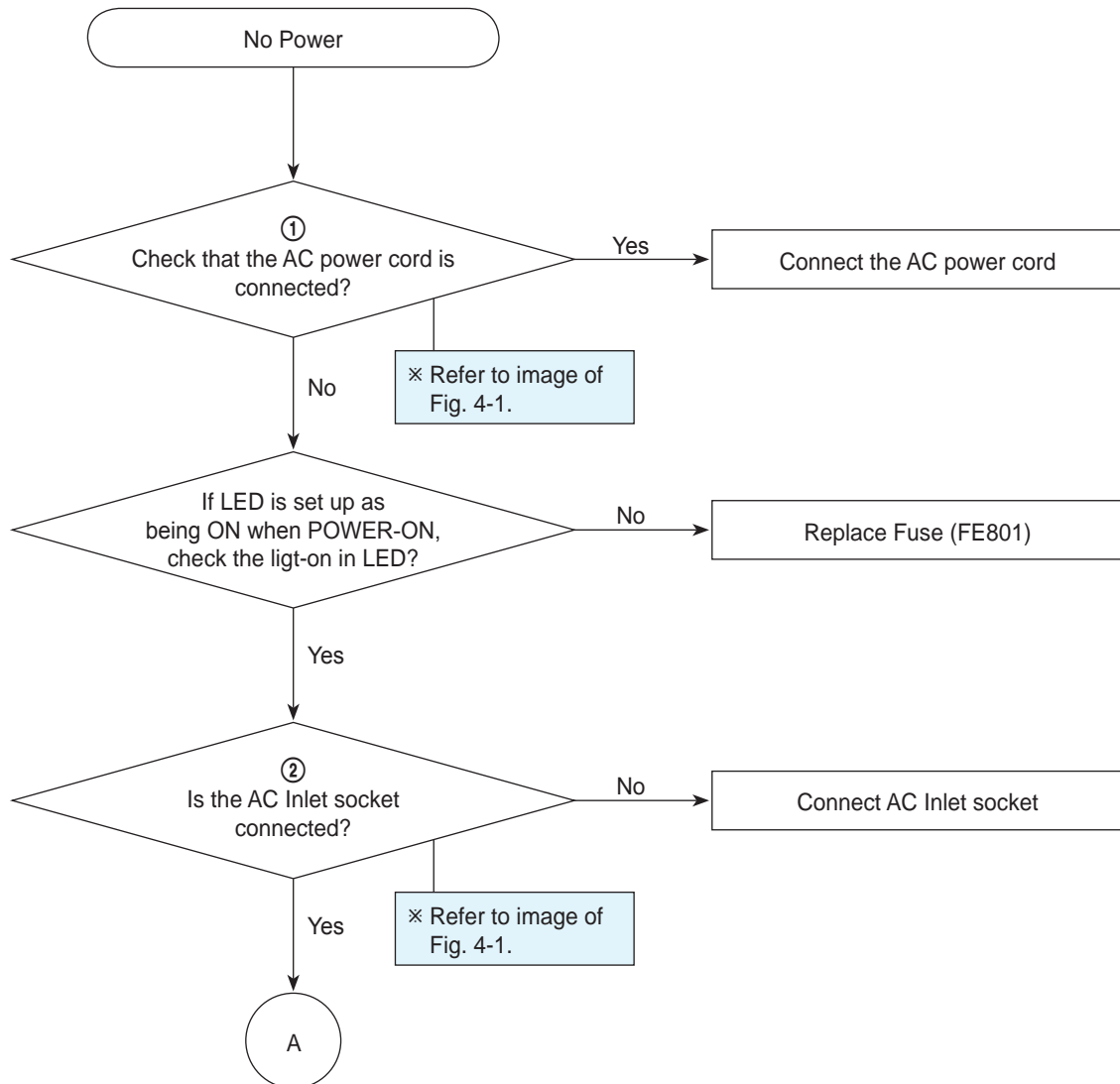
#### 4-1-1 First Checklist for Troubleshooting

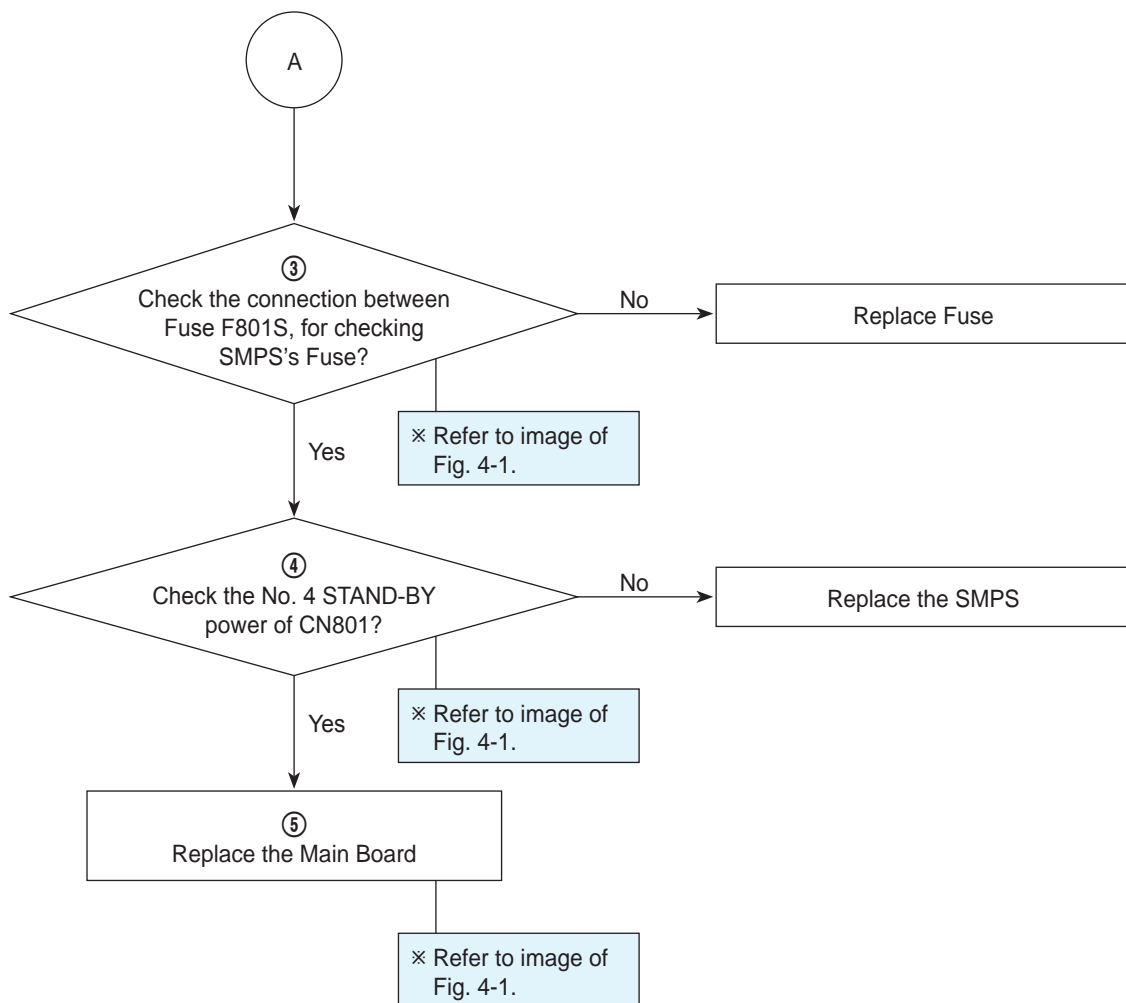
1. Check the various cable connections first.
  - Check to see if there is a burnt or damaged cable.
  - Check to see if there is a disconnected or loose cable connection.
  - Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the Main Board.
3. Check the voltage in and out between the SMPS ↔ Main Board, between the SMPS ↔ X, Y Main Board, and between the Logic Boards.

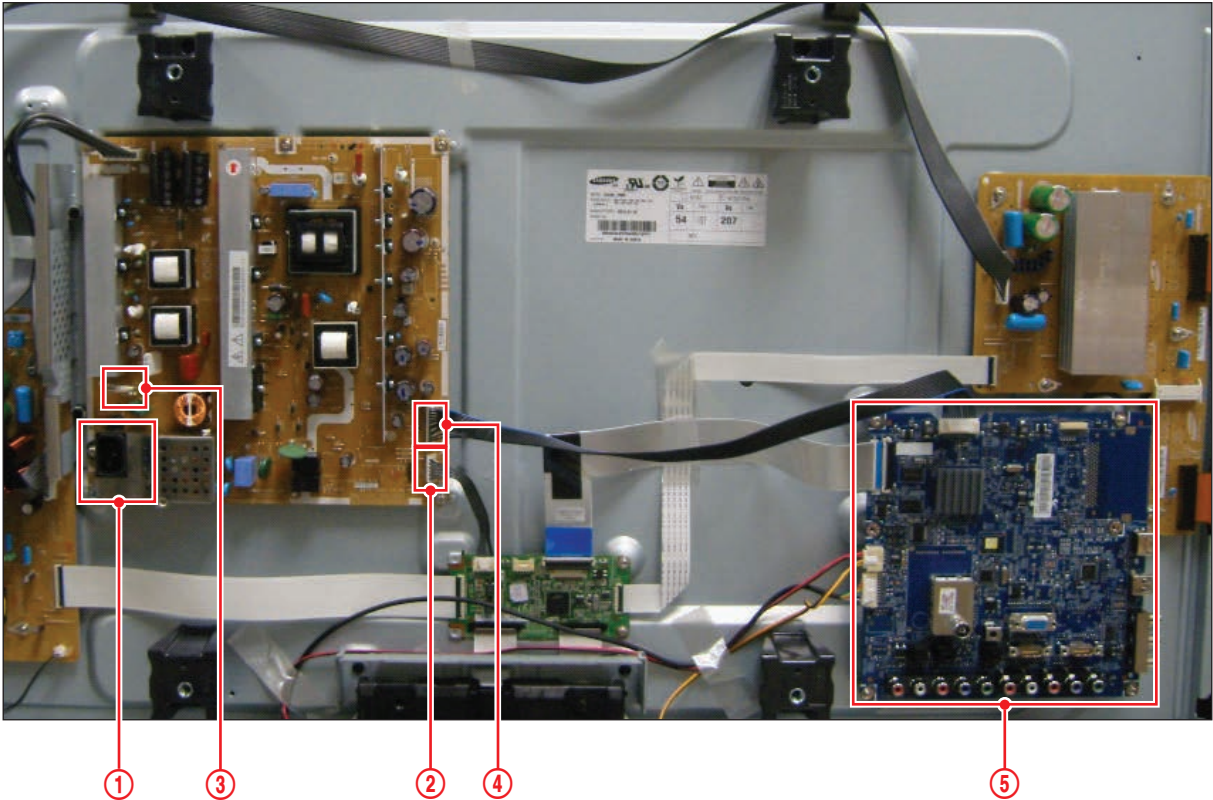
## 4-1-2 Checkpoints by Error Mode

### ■ No Power

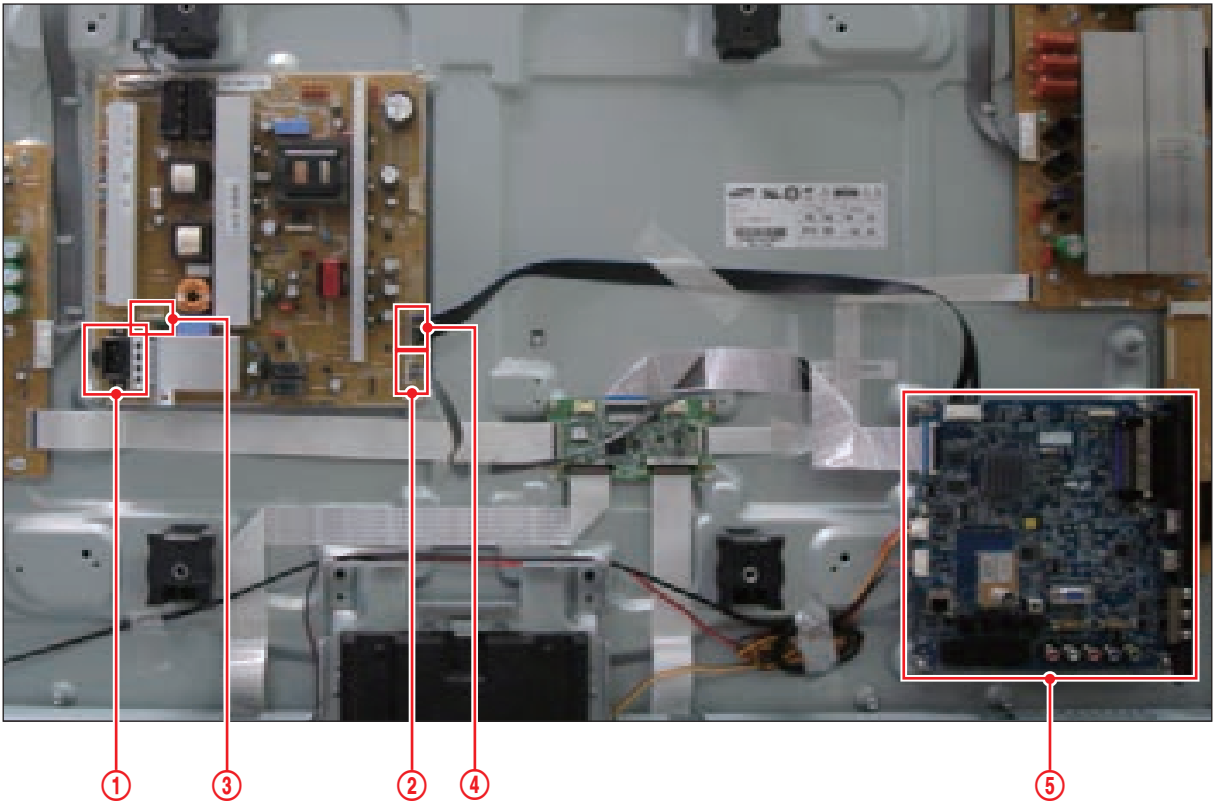
<b>Symptom</b>	<ul style="list-style-type: none"> <li>- The LEDs on the front panel do not work when connecting the power cord.</li> <li>- The SMPS relay does not work when connecting the power cord.</li> <li>- The unit appears to be dead.</li> </ul>
<b>Major Checklist</b>	<p>The SMPS relay or the LEDs 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.</p> <p>In this case, check the following:</p> <ul style="list-style-type: none"> <li>- Check the internal cable connection.</li> <li>- Check the fuses.</li> <li>- Check the output voltages of the SMPS.</li> <li>- Replace the Main Board.</li> </ul>







<42" PDP>

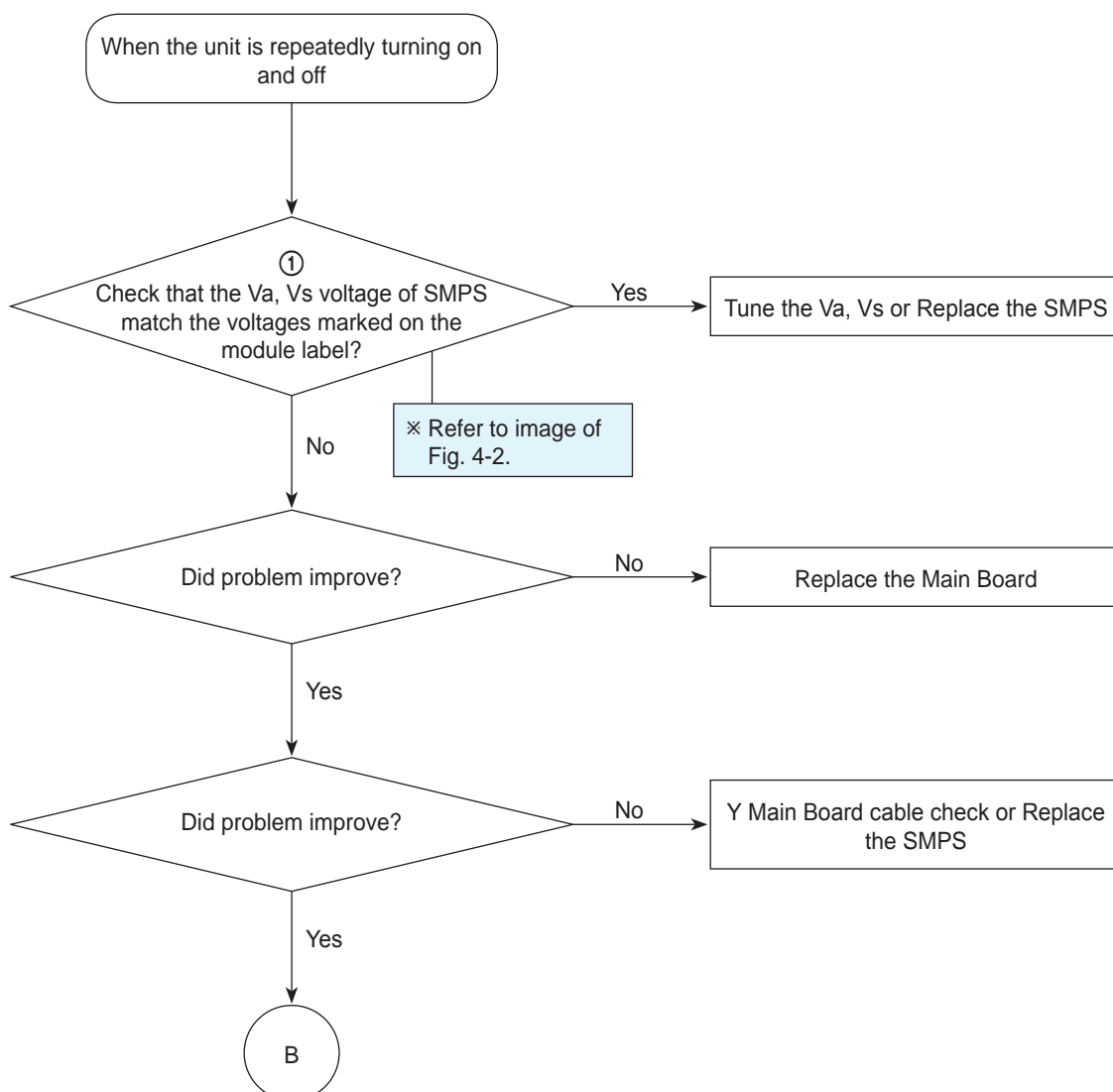


<50" PDP>

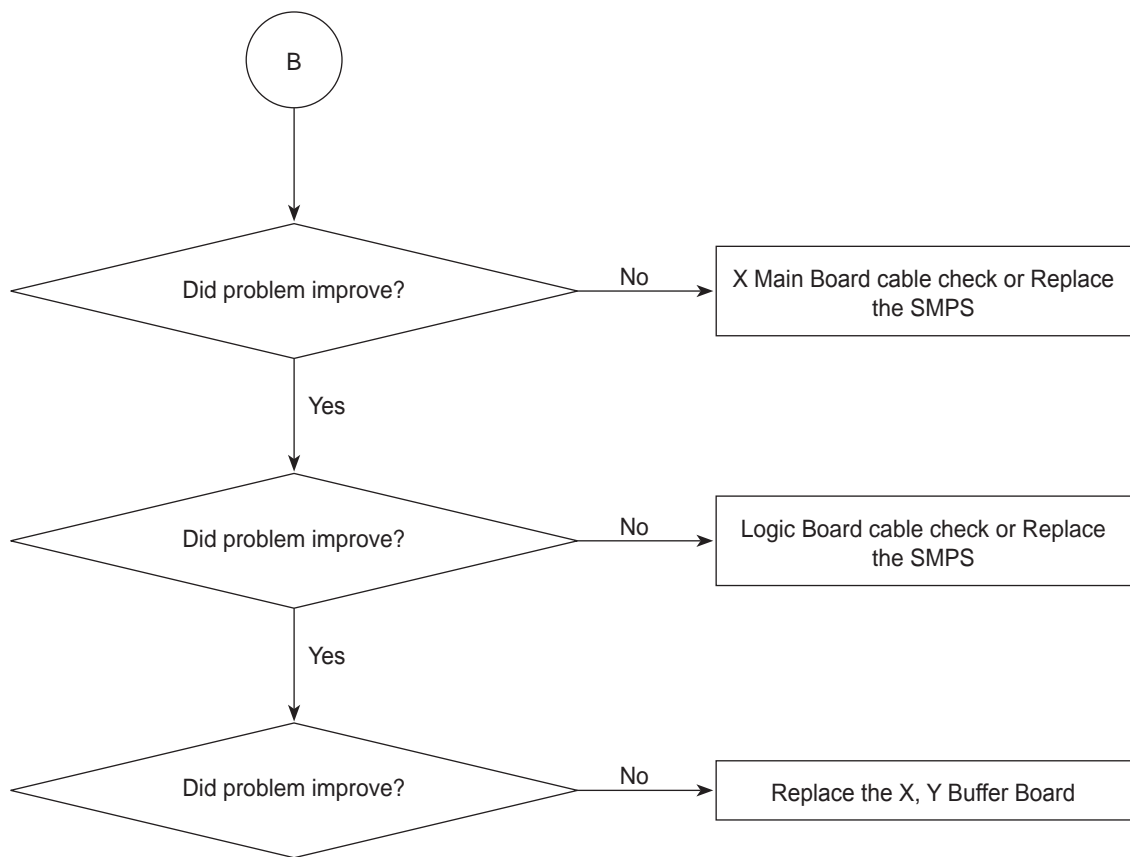
<Fig. 4-1>

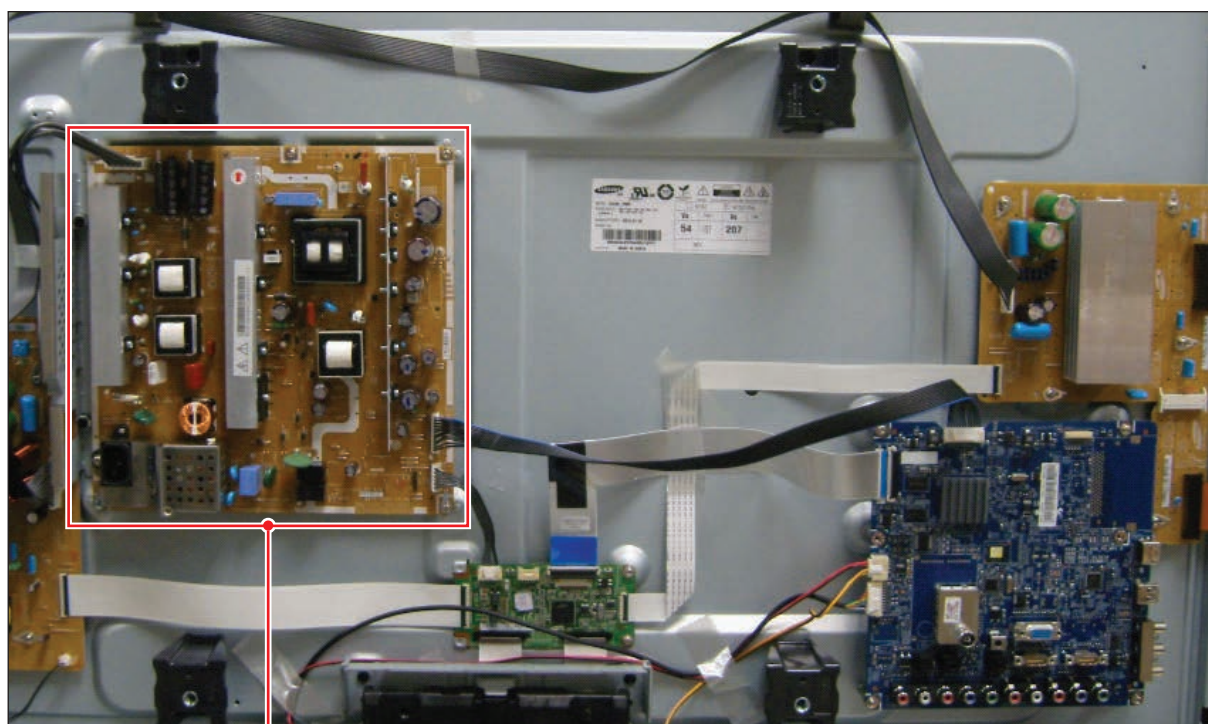
# ■ When the unit is repeatedly turning on and off

<b>Symptom</b>	The SMPS relay is repeatedly turning on and off.
<b>Major Checklist</b>	<p>In general, the SMPS relay repeatedly turns on and off by the protection function due to a defect on a board connected to the SMPS.</p> <ul style="list-style-type: none"> <li>- Disconnect all cables from the SMPS, operate the SMPS alone and check if the SMPS works properly and if each voltage output is correct.</li> <li>- If the symptom continues even when SMPS is operating alone, replace the SMPS.</li> <li>- If the symptom is not observed when operating the SMPS alone, find any defective assemblies by connecting the cables one by one.</li> </ul>
<b>Caution</b>	When separating and connecting the cables such as SMPS, X MAIN Board and Y MAIN Board, a spark may be generated by the electric charge of the high capacity capacitor. Therefore, wait some time after disconnecting the power cord from the unit.

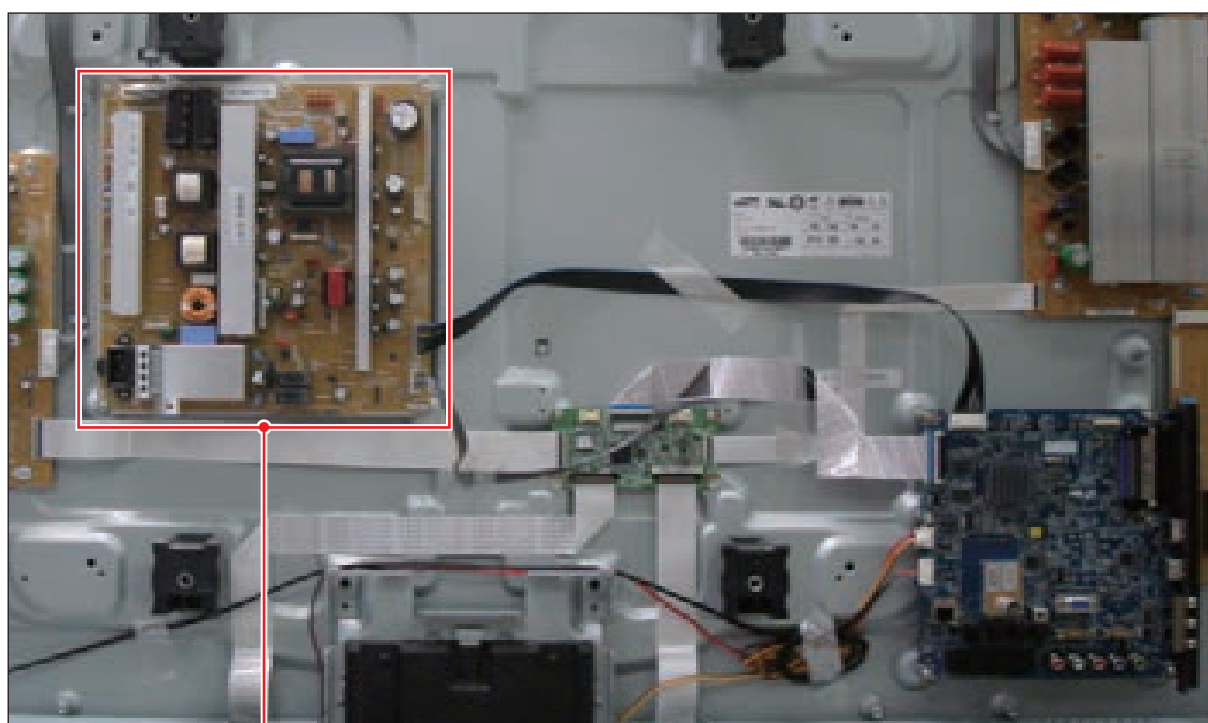








<42" PDP>

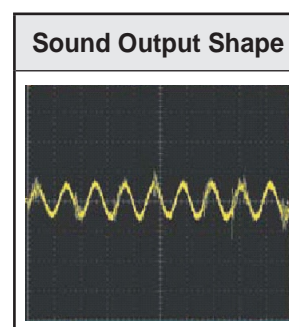
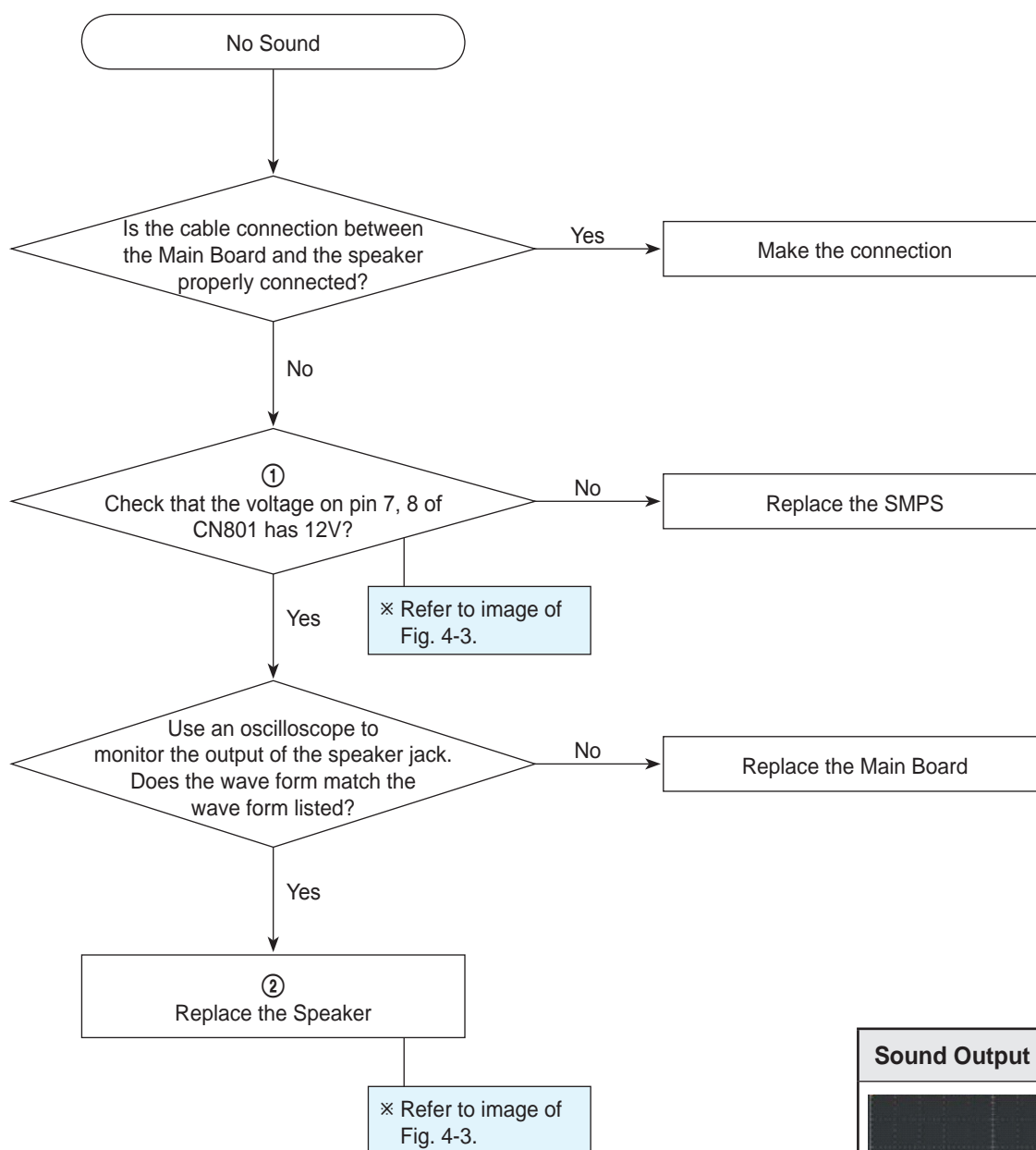


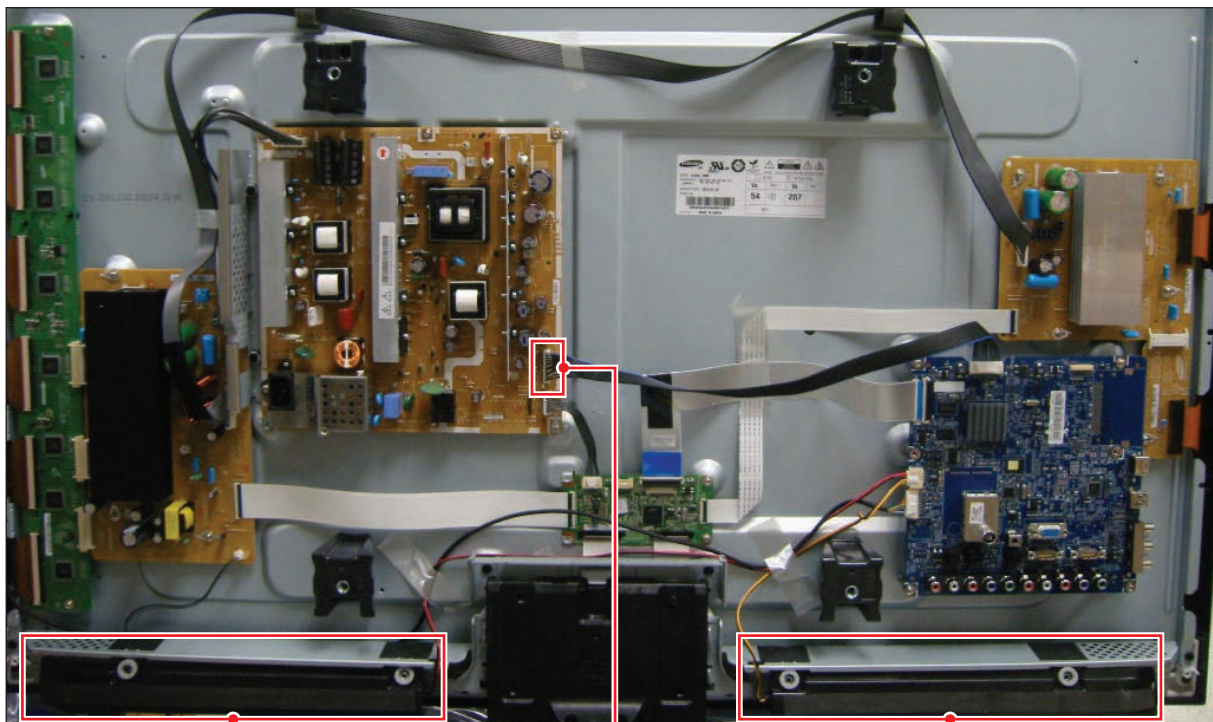
<50" PDP>

<Fig. 4-2>

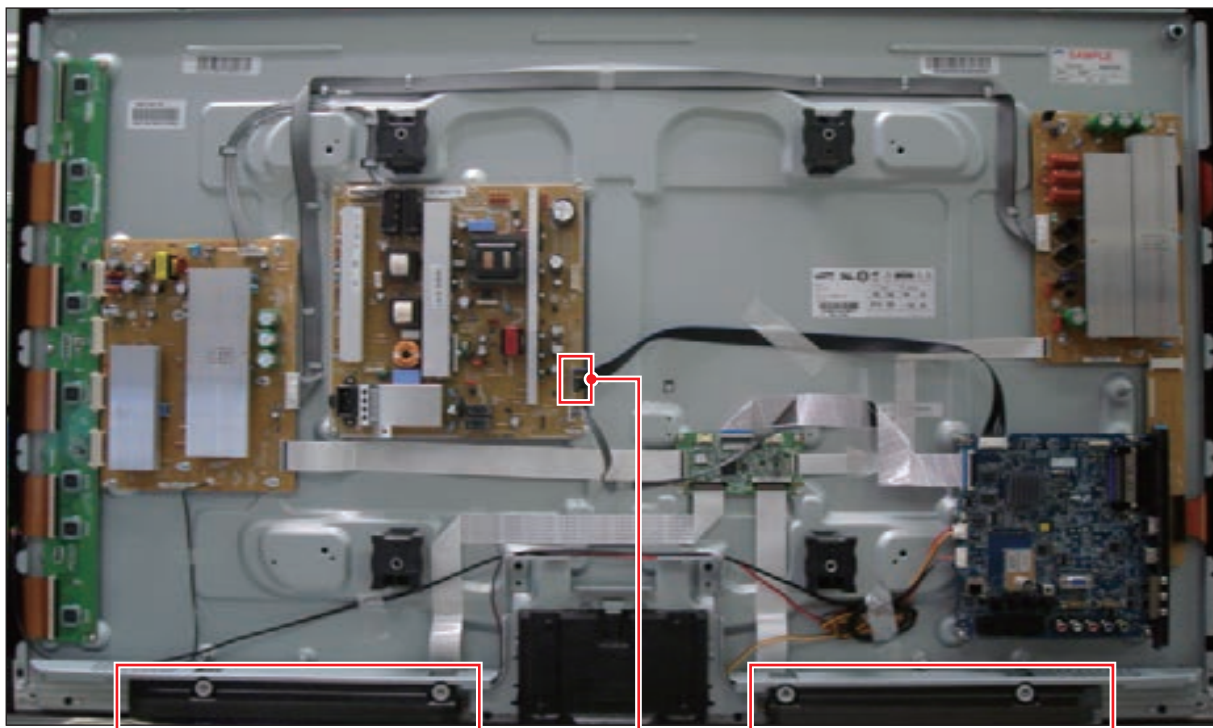
## ■ No Sound

<b>Symptom</b>	Video is normal but there is no sound.
<b>Major Checklist</b>	<p>Generally there are four things that can cause this issue.</p> <ul style="list-style-type: none"> <li>- Speakers not connected</li> <li>- Speakers are defective</li> <li>- Main board audio error</li> <li>- SMPS not supplying voltage to the main board</li> </ul>







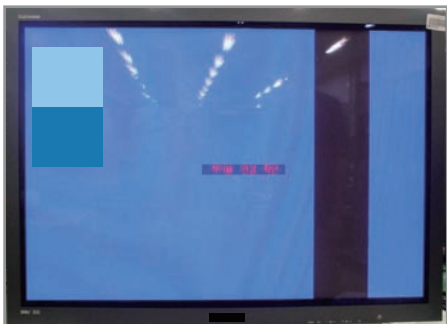

<42" PDP>




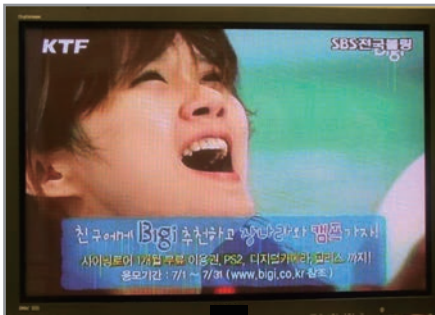
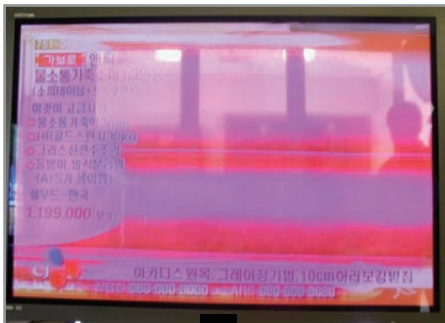
<50" PDP>

<Fig. 4-3>

### 4-1-3 Faults and Corrective Actions

Symptom	Related Image	Causes and Countermeasures
A blank vertical cell (block) appears on the screen.		<p>Address buffer defect</p> <ul style="list-style-type: none"> <li>- Replace the corresponding upper/lower buffers (E, F or G)</li> </ul> <p>COF defect (burnt)</p> <ul style="list-style-type: none"> <li>- Replace the module</li> </ul>
A green screen appears when the TV is turned on.		<p>The Scale is not resetting</p> <ul style="list-style-type: none"> <li>- Replace the Main board</li> </ul>
The OSD box appears but there is no text.		<p>Incorrect program version</p> <ul style="list-style-type: none"> <li>- Check the version of each program</li> <li>- Replace the Main board</li> </ul>
A blank upper (or lower) block appears on the screen.		<p>Upper/Lower Y Buffer defect</p> <ul style="list-style-type: none"> <li>- Replace the corresponding upper/lower buffers</li> </ul>



Symptom	Related Image	Causes and Countermeasures
Either the main or sub picture does not appear.		Replace the Main board
A vertical green line appears on the screen.		The SMPS voltage is incorrect - Adjust the SMPS voltage according to the voltage printed on the module label
Dim screen (blurred in red)		X-Main board defect - Replace the X-Main board

#### 4-1-4 Troubleshooting Procedures by assembly

※ If Major Symptoms is happened, Check Assembly refer to table as follow.

Assembly	Major Symptoms
SMPS-PDP TV	No power, Blank screen, the Relay repeats On and Off
ASSY PDP P-X-MAIN BOARD	Blank screen
ASSY PDP P-Y-MAIN BOARD	Blank screen
ASSY PDP P-LOGIC MAIN BOARD	Blank screen, Screen noise
ASSY PDP P-X-MAIN BUFFER BOARD	Upper screen is blank
ASSY PDP P-Y-MAIN BUFFER BOARD	Lower screen is blank
ASSY PDP P-E-BUFFER BOARD	Corresponding Buffer Board block screen is blank
ASSY PDP P-F-BUFFER BOARD	Corresponding Buffer Board block screen is blank
ASSY PCB MISC-MAIN	No Power, Abnormal screen for each input source, PIP screen trouble, Sound trouble
ASSY BOARD P-TOUCH FUNCTION&IR	The side function key does not work properly. The remote control does not work properly, the LED does not work properly.

## 4-2 Adjustment

---

### 4-2-1 Service Instruction

#### ■ Before performing service

1. Check if the measurement and test equipment is working properly.
2. Secure sufficient work space for disassembling the product.
3. Prepare a soft pad for disassembling the product.

#### ■ Service adjustment after board replacement

##### <If adjustment equipment is available>

1. PDP Option of Factory Mode → set the Factory Data Type item as the suitable value of relevant model.
2. Adjust Calibration of Factory Mode for each mode.
3. Adjust White Balance of Factory Mode.

##### <If adjustment equipment is not available>

1. Write down the value of HDMI White Balance of Factory Mode before replacing Board.
2. PDP Option of Factory Mode → set the Factory Data Type item as the suitable value of relevant model.
3. Set the value of HDMI White Balance with the value written down before.



## 4-2-2 How to Access Service Mode

### 1. General Remote

To Enter : **POWER OFF** → **INFO** → **MENU** → **MUTE** → **POWER ON**

To Exit : **POWER OFF** → **POWER ON**

### 2. Factory Remote

To Enter : **POWER ON** → **INFO** → **Factory Key** (Interval between key strokes: less than 3 sec)

To Exit : Press the Factory key twice. (Pressing once enters Aging Mode)

### 3. Settings when entering Factory mode

- Sharp Screen (Dynamic), Color Tone (Cool1), Factory (Dynamic CE Off)

### 4. Adjustment Procedures

- Channel ▲▼ Key : Select an item.
- Volume ◀▶ Key : Adjust the value up or down.
- MENU Key : Save the changes to the EEPROM and return to the higher-level mode.
- Using the Numeric (0~9) keys, you can select a channel.
- Using the SOURCE key, you can switch AV modes.

### 5. Initial SERVICE MODE DISPLAY State

Option	T-TDT5DEUC – XXXX.X
Control	T-TDT5DEUS – XXXX.X
SVC	EDID SUCCESS
Expert	CALIB
ADC/WB	Option
Advanced	

※ The version of the firmware displayed at the bottom of the screen may differ and the firmware is subject to change for the improvement of product functions.

※ If you have adjusted the settings in Service Mode, you have to reset the product.

## 4-2-3 Factory Data

### ■ Option

Item	Data	Range
Factory Reset		
Type	42HHcD4	42HHcD3 / 50HHcD4 / 50FARn4 / 50FARv4 / 58FARn1 / 58FARv1 / 63FARn1
Local Set	EU or AD_Au	EU / EU Italy / EU_Africa / EU_Israel / NORDIG / AD_Au / CIS
Model	PC450 or PC451	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	DRXSEMCO or DRXKALPS	S2Semco / T2CXD / DRXKSEM_E / DRXKALPS / DRXKSEM_2
DDR	0	0 / 1 / 2
Light Effect	Off	On / Off
Ch Table	SEH or SDMA_AU	NONE / PBA / SUWON / SESK / SEH / SERK / SDMA_AU / SDMA_NZ / SDMA_SG / SEIN / SAVINA / SIEL_C / SIEL_N / TTSEC / TSED / TSE / IRAN
Country		
Front Color	W-Violet or S-C-Gray	S-C-Gray / S-R-Black / S-BLK / T-R-BLK / T-C_Gray / W-Violet / W-Milky / T-M-Brn / T-W-Gray / W-D-Gray / W-M-White

## ■ Control

Menu	Item	Data	Range
EDID	EDID Protect	On	On / Off
	EDID Type	P13_1920_1080	L12_1366_768 / L13_1366_768 / L12_1920_1080 / L13_1920_1080 / P12_1024_768 / P13_1024_768 / P12_1366_768 / P13_1366_768 / P12_1920_1080
Sub Option	EDID Write(0x4D,0)	P13_1920_1080	
	Video Mute Time	8	1 ~ 10
	Inch	50"	19" / 22" / 23" / 26" / 27" / 32" / 37" / 40" / 42" / 46" / 50" / 52" / 57"
	Dimm Type	EXT	Don't adjustment
	D.Gamma	Off	Off / 0.85 / 0.880.90.0.93 / 0.95 / 0.98 / M1 / M2 / M3 / M4
	TTX	On	On / Off
	TTX List	Flof	Flof / List
	TTX Group	W Europe	Lang OSD / W Europe / E Europe / Russia / Greek / Turkey / Arab / Farsi / ArabHbrw
	High Devi	Off	On / Off
	Volume Curve	EA	EA / India
	NT Conversion	Off	On / Off
	Language Group	East Asia	East Asia / Iran / Israel / Middle Asia
	Anynet+	On	On / Off
	Auto Power	On	On / Off
	LNA Menu	Off	On / Off
	LVDS_Format	Default	Don't adjustment
	Carrier Mute	Off	On / Off
	HDMI EQ1	Off	Off / Low / Middle / Strong
	HDMI EQ2	Off	Off / Low / Middle / Strong
	HDMI EQ3	Low	Off / Low / Middle / Strong
	HDMI EQ4	Low	Off / Low / Middle / Strong
	Watch Dog	Off	On / Off
	Bus Stop		
	Panel Auto Setting		Don't adjustment

Menu	Item	Data	Range
Sub Option	HotPlug	On	On / Off
	HotplugCtrl	On	On / Off
	HOTPlugDelay	9	0 ~ 63
	USB Upgrade	On	On / Off
	Spread Spectrum		On / Off
PDP Option	PixelShift Test	Off	On / Off
	Logic Download	Off	On / Off
	Pattern Select		
	FRC Mode		100Hz / Repeat
	FRC DBG MarkOn		0 ~ 31
	FRC Bypass		On / Off
	FRC MV Force		On / Off
	MB SW		On / Off
	MB Offset		0 ~ 255
	Ve Control		On / Off
	DRC		On / Off
	Logic USB D/L		
Hotel Option	Not used	Not used	
Shop Option	Off	On / Off	
Sound	Detection Threshold		
	FM Prescale	22	0 ~ 255
	AM Prescale	22	0 ~ 255
	Nicam Prescale	33	0 ~ 255
	FM M Prescale	23	0 ~ 255
	SC1 Vol	12	0 ~ 255
	SC2 Vol	12	0 ~ 255
	Audio Delay Normal	8	0 ~ 255
	Audio Delay Game	8	0 ~ 255
	Num of Check	10	0 ~ 255
	Stereo Cnt	10	0 ~ 255
	MP3 Level	12	0 ~ 255

Menu	Item	Data	Range
Sound	Ext Volume Scale	2	0 ~ 255
	R2E Scart2 ffset	1	0 ~ 255
	NTP3200		
	NTP Master Volume	30	0 ~ 255
	NTP PWM Modulation	208	0 ~ 255
	NTP DRC Thresh1	53	0 ~ 255
	NTP DRC Thresh2	35	0 ~ 255
	NTP Speaker EQ	On	On / Off

## ■ SVC

Menu	Item	Data	Range
Test Pattern	Pattern Sel		
	FRC PC Mode	Off	On / Off
	Logic Pattern Sel	0	0 ~ 13
	Logic Level Sel	255	0 ~ 255
Panel auto Setting		Failure	
Panel Display Time		4Hr	4Hr
Logic Usb D/L		Success	
Tuner Status	DVB		
	ISDB-T		

## ■ Expert

Menu	Item	Data	Range
N/D ADJ	...		
Source	...		

## ■ ADC/WB

Menu	Item	Data	Range
ADC			
ADC Target	1st_AV_Low	17	0 ~ 255
	1st_AV_High	234	0 ~ 255
	1st_AV_Delta	3	0 ~ 255
	1st_Comp_Low	17	0 ~ 255
	1st_Comp_High	234	0 ~ 255
	1st_Comp_Delta	3	0 ~ 255
	1st_PC_Low	1	0 ~ 255
	1st_PC_High	235	0 ~ 255
	1st_PC_Delta	3	0 ~ 255
	2nd_Low	2	0 ~ 255
	2nd_High	235	0 ~ 255
	2nd_Delta	1	0 ~ 255
ADC Result	ADC Result	Depend on Calibration results	0 ~ 255
	1st_AV_Gain		0 ~ 255
	1st_AV_Offset		0 ~ 255
	1st_Comp_Gain		0 ~ 255
	1st_Comp_Gain_Cb		0 ~ 255
	1st_Comp_Gain_Cr		0 ~ 255
	1st_Comp_Offset		0 ~ 255
	1st_Comp_Offset_Cb		0 ~ 255
	1st_Comp_Offset_Cr		0 ~ 255
	1st_PV_R_Gain		0 ~ 255
	1st_PV_G_Gain		0 ~ 255
	1st_PV_B_Gain		0 ~ 255
	1st_PC_R_Offset		0 ~ 255
	1st_PC_G_Offset		0 ~ 255
	1st_PC_B_Offset		0 ~ 255

Menu	Item	Data	Range
ADC Result	2nd_R_Offset	Depend on Calibration results	0 ~ 255
	2nd_G_Offset		0 ~ 255
	2nd_B_Offset		0 ~ 255
	2nd_R_Gain		0 ~ 255
	2nd_G_Gain		0 ~ 255
	2nd_B_Gain		0 ~ 255
WB	Sub Brightness	Depend on W/B adjustment	0 ~ 255
	Red Offset		0 ~ 255
	Green Offset		0 ~ 255
	Blue Offset		0 ~ 255
	Sub Contrast		0 ~ 255
	Red Gain		0 ~ 255
	Green Gain		0 ~ 255
	Blue Gain		0 ~ 255

## ■ Advanced

Menu	Item	Data	Range
Sub Setting	Gamma	0.95	
	Pwm Max	100	
	Pwm Min	7	
	Pwm Mid	10	
	Contrast Dimming	Off	
	7.5 IRE NTSC	...	
	7.5 IRE Offset	...	
	Comp Phase	49	
	Led Peak On/Off	off	
EPA Standard	Standard Contrast	95	0 ~ 100
	Standard Brightness	42	0 ~ 100
	Standard Sharpness	50	0 ~ 100
	Standard Color	50	0 ~ 100
	Standard Tint	0	0 ~ 100
	Standard Backlight	14	0 ~ 100
WB Movie	WB Movie	Off	On / Off
	Color Mode	-	Dynamic / Standard / Movie
	Color Tone	-	Cool / Normal / Warm1 / Warm2
	Msub Brigh	-	0 ~ 255
	Msub Contr	-	0 ~ 255
	W1_RGAIN	-	0 ~ 255
	W1_BGAIN	-	0 ~ 255
	W1_ROFFS	-	0 ~ 255
	W1_BOFFS	-	0 ~ 255
	W2_RGAIN	-	0 ~ 255
	W2_BGAIN	-	0 ~ 255
	W2_ROFFS	-	0 ~ 255
	W2_BOFFS	-	0 ~ 255
	N_RGAIN	-	0 ~ 255
	N_BGAIN	-	0 ~ 255



Menu	Item	Data	Range
WB Movie	W2_ROFFS	-	0 ~ 255
	W2_BOFFS	-	0 ~ 255
	N_RGAIN	-	0 ~ 255
	N_BGAIN	-	0 ~ 255
	N_ROFFS	-	0 ~ 255
	N_BOFFS	-	0 ~ 255
	Movie Contr	-	3 ~ 100
	Movie Brigh	-	2 ~ 100
	Movie Color	-	1 ~ 100
	Movie Sharp	-	0 ~ 100
	Movie Tint	-	0 ~ 50
	Movie BkLight	-	0 ~ 10
	M.Gamma	-	Off / 0.85 / 0.88 / 0.90 / 0.93 / 0.95 / 0.98 / M1 / M2 / M3 / M4
	M_Sub Gamma	-	-3 ~ +3

## 4-2-4 Service Adjustment

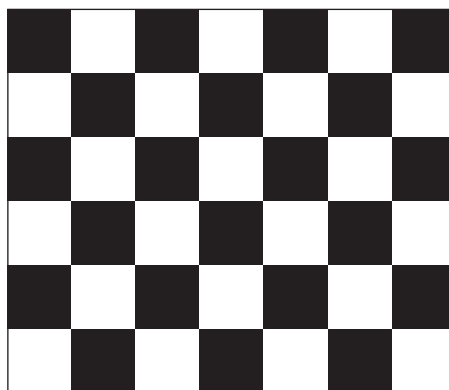
### ■ White Balance - Calibration

If picture color is wrong, do calibration first.

Execute calibration in Factory Mode

1. Source : VIDEO
2. Setting Mode : PAL (Mode: #2)
3. Pattern : Pattern #24 (Chess Pattern)
4. Use Equipment : K-7256 or Equipment of equality level
5. Work order
  - 1) Enter by Factory Mode select "ADC/WB".
  - 2) Select "ADC".
  - 3) Select "AV CALIBRATION" again in CALIBRATION MENU.
  - 4) After Completing Calibration, come out "Av success". OSD on the screen

Source AV : PAL composite  
PC : 1280\*720/60Hz

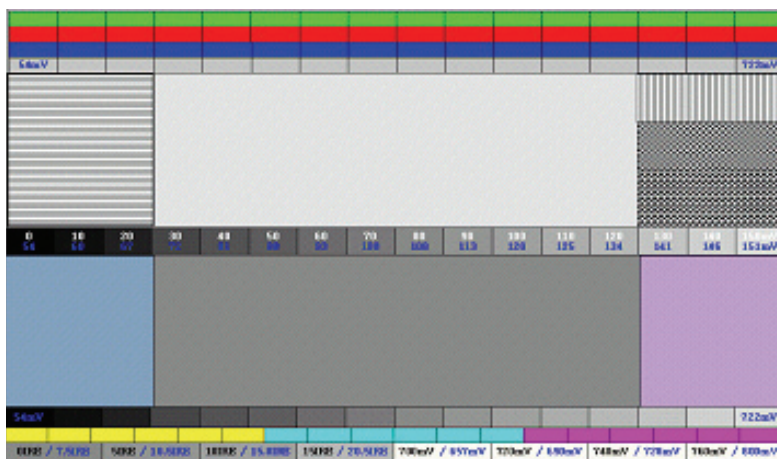


< Chess Pattern >

## ■ White Balance

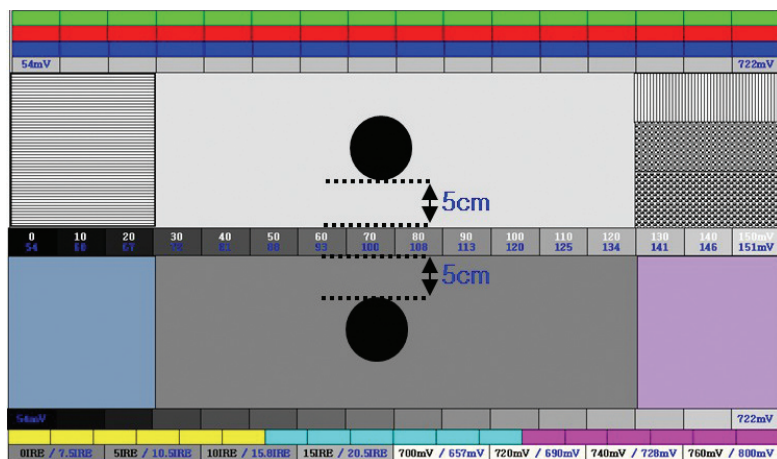
Adjust spec.

1. Source : HDMI
2. Setting Mode : 1280\*720@60Hz
3. Pattern : Pattern #92
4. Use Equipment : MIK-7256 (MSPG925L)



### 5. Work order

- 1) Connect HDMI (DVI) output terminal of MIK-7256 (MSPG925L) to the HDMI input in main set
- 2) Set the input to HDMI mode
- 3) Enter the White Balance menu of service mode
- 4) Contact CA-210 sensor to glass filter



< Fixed Position of CA210 Probe >

- 5) Adjust the low light
- Adjust Sub-Bright to set the 'Y' value
  - Adjust R-Offset ('x') and B-Offset ('y') to the color coordinates.
  - \* Do not adjust G-Offset data
- 6) Adjust the high light
- Adjust Sub-Contrast to set the 'Y' value
  - Adjust R-Gain ('x') and B-Gain ('y') to the color coordinates.
  - \* Do not adjust the G-gain data

Input mode		(CA-210)			
		x	y	Y(L)	T(K), MPCD
CVBS (PAL)	H/L	278	285	Don't Control (Sub_CT:133)	10,500/±0
	L/L	278	285	7.3 cd/m <sup>2</sup> (2.2 Ft)	10,500/±0
COMP (720P)	H/L	278	285	Don't Control (Sub_CT:133)	10,500/±0
	L/L	278	285	7.3 cd/m <sup>2</sup> (2.2 Ft)	10,500/±0
HDMI (720P)	H/L	278	285	Don't Control (Sub_CT:133)	10,500/±0
	L/L	278	285	7.3 cd/m <sup>2</sup> (2.2 Ft)	10,500/±0

## 4-2-5 Replacements & Calibration

\* Check items listed after changing each

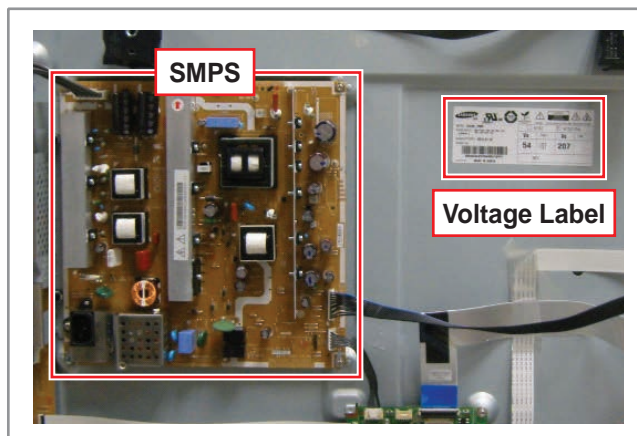
Replaced assembly items	Check Items
ASSY PCB MISC-MAIN	① Auto Program ② White Balance Adjust
SMPS-PDP TV	Vs, Va voltage check and adjust
ASSY PDP P-X-MAIN BOARD	Not to be adjusted
ASSY PDP P-Y-MAIN BOARD	
ASSY PDP P-LOGIC MAIN BOARD	
ASSY PDP P-X-MAIN BUFFER BOARD	
ASSY PDP P-Y-MAIN BUFFER BOARD	
ASSY PDP P-E-BUFFER BOARD	
ASSY PDP P-F-BUFFER BOARD	
ASSY BOARD P-TOUCH FUNCTION&IR	

※ When replacing the SMPS or PDP panel, you have to check the voltage printed on the panel sticker and adjust it.

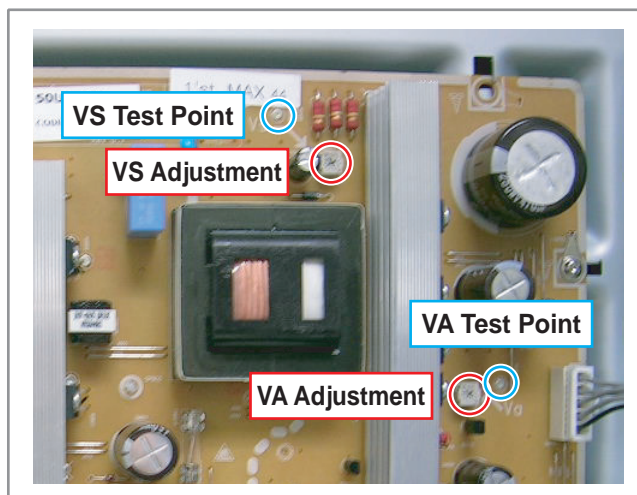
## ■ Voltage Adjustment

1. After replacing the SMPS or PDP panel, you must adjust the voltage referring to the voltage label printed on the panel. (If you do not adjust the voltage, an abnormal discharge symptom may appear.)

	Value	Board Adjustment
	U2P	
Vs	207	SMPS
Va	56	
Vset	-	
Ve	97	
Vsc	-197	



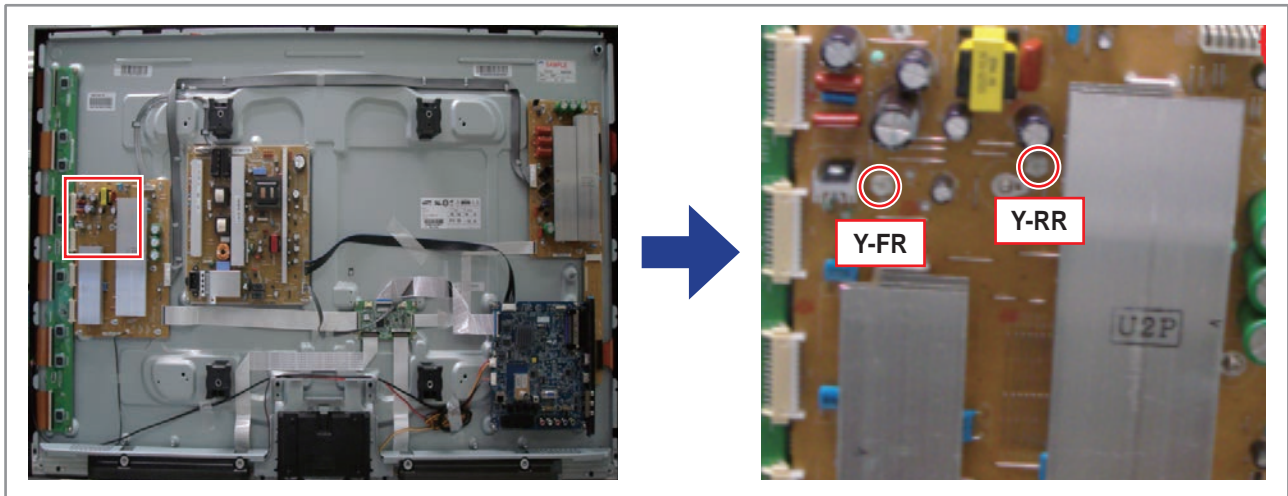
2. A point of adjusting SMPS-MAIN voltage.



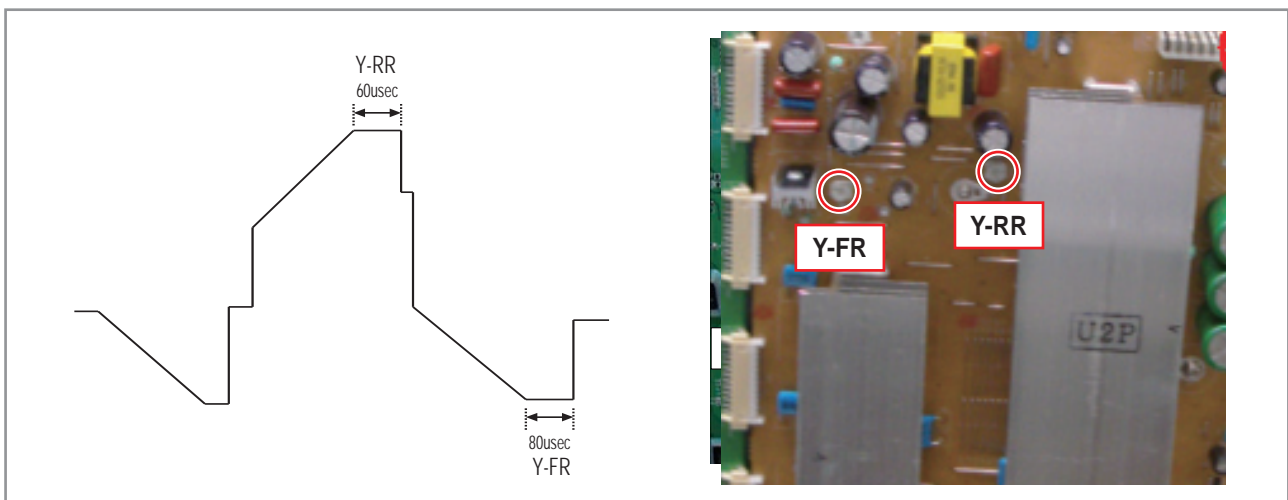
## ■ SMPS Output Voltag

		Output Voltage			Output Current				Load Characteristics	Usage	Remark
		Normal	Regulation	Variable Range	Min	Max	Peak	Typical			
1	Vs	198V	±1.5%	195~210	0.0 A	2.4 A	15.0 A	2.0 A	Pulsating	Drive	
2	Va	55V	±2%	Fixed	0.0 A	2.0 A	13.0 A	1.5 A	Pulsating	Drive	
3	D5.3V	5.2V	±5%	Fixed	0.0 A	6.5 A	7.0 A	4.5 A	Constant	Image, Logic	
4	D15V	15V	±5%	Fixed	0.0 A	3.0 A	5.0 A	2.2 A	Constant/ Pulsating	Image, Drive	
5	15V_amp	15V	±5%	Fixed	0.0 A	3.0 A	5.0 A	0.5 A	Constant / Pulsating	Sound	
6	STBY	5.2V	±3%	5V	0.0 A	1.0 A	1.5 A	0.3 A	Constant	Stand-by	step change

## ■ Y-RR and Y-FR controls



※ Set the main reset (rising : 60usec, falling : 80usec) by change the value of variable resistor.



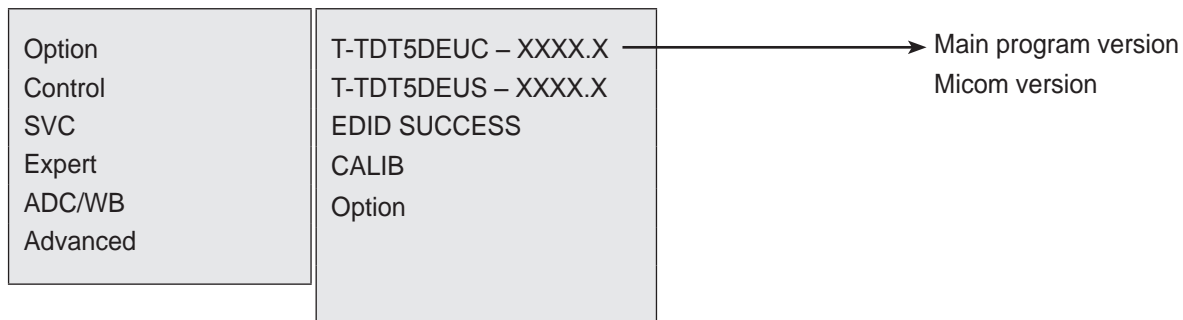


## 4-3 Upgrade

### 4-3-1 How to Check the Version of the Program

1. Procedures for checking in the Factory Menu.

When entering Factory Mode, the version of the software is displayed at the bottom of the menu as described on 4-2-2 How to Access Service Mode.



### 4-3-2 USB Download Method

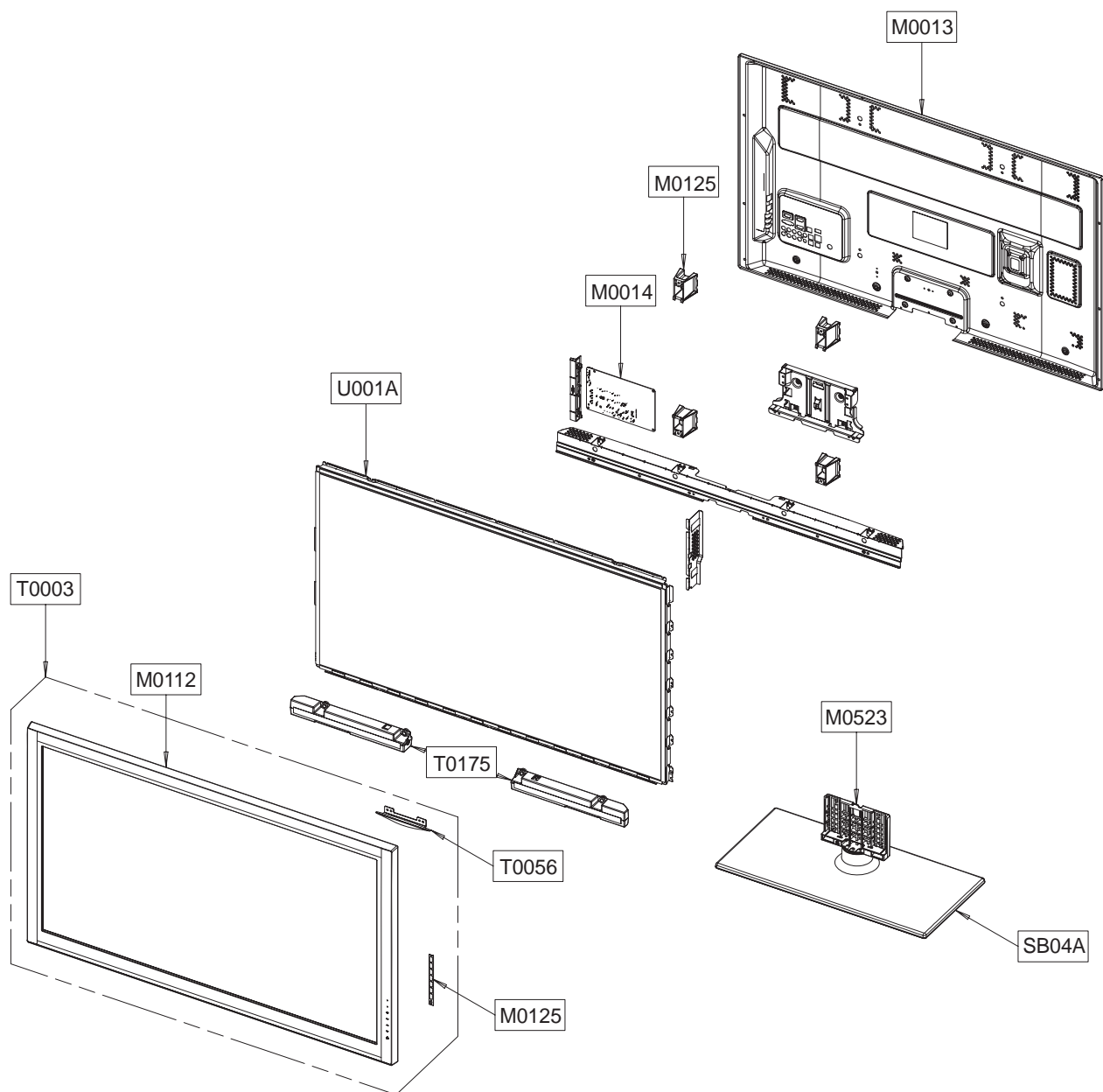
1. Copy the Upgrade Files into the ROOT folder in USB flash driver.
2. USB Download
  - 1) Connect the usb memory stick including file "T-TDT5DEUC - XXXX.X"
  - 2) Enter "Software Upgrade"
  - 3) A product is going to find the file which is to be used for upgrading.
  - 4) It takes about 2~3 minutes to complete software upgrade
  - 5) When the upgrade finishes, discard the usb memory stick and restart the set.
  - 6) To confirm, the update is successfully done, enter factory mode and check the version of program "T-TDT5DEUC - XXXX.X"



# MEMO

## 5. Exploded View & Part List

### 5-1 Exploded View



## ■ Part List

Loc. No.	Part No.	Description;Specification	Qty.	SNA	Remark
M0013	BN96-13004E	ASSY COVER P-REAR;PC430,PCM,T0.45,BKN-P8	1	SA	
M0014	BN94-03257G	ASSY PCB MISC-MAIN;PS50C450B1W*,CIS	1	SA	△
M0112	BN63-06449C	COVER-FRONT;PC450 42,PC(ROSE BLACK),V1,V	1	SNA	
M0125	BN96-13389B	ASSY BOARD P-TOUCH FUNCTION&IR;PN42C450,	1	SA	
M0125	BN61-06064A	HOLDER-WALL;42PC450,ABS HB,BLK(BK0020)	4	SNA	
M0523	BN96-11138B	ASSY STAND P-GUIDE;PC450 42/50	1	SA	
SB04A	BN96-13016D	ASSY STAND P-BASE;PC430/PC450 42/50,PC A	1	SA	
T0003	BN96-12980C	ASSY COVER P-FRONT;PC450 42,PC(Rose Blac	1	SA	
T0056	BN63-06455A	COVER-DECORATION;42PC450,PETG,V2,CLEAR(T	1	SNA	
T0175	BN96-12832A	ASSY SPEAKER P;6ohm,4pin,10W,L:300 R:550	1	SA	
U001A	BN96-12648A	ASSY PDP MODULE P;S42AX-YD13,PP42AF076A,	1	SA	△

## 5-2 Service Item

Loc. No.	Part No.	Description;Specification	Qty.	Remark
T0175	BN96-12832A	ASSY SPEAKER P;6ohm,4pin,10W,L:300 R:550	1	
T0003	BN96-12980C	ASSY COVER P-FRONT;PC450 42,PC(Rose Blac	1	
M0125	BN96-13389B	ASSY BOARD P-TOUCH FUNCTION&IR;PN42C450,	1	
M0013	BN96-13004E	ASSY COVER P-REAR;PC430,PCM,T0.45,BKN-P8	1	
M0523	BN96-11138B	ASSY STAND P-GUIDE;PC450 42/50	1	
SB04A	BN96-13016D	ASSY STAND P-BASE;PC430/PC450 42/50,PC A	1	
M2893	BN39-01285B	LEAD CONNECTOR;PN42C450,Flat Connector A	1	
M0251	BN96-12469F	ASSY CABLE P;PS42C450,FFC CABLE,342MM,30	1	
U001A	BN96-12648A	ASSY PDP MODULE P;S42AX-YD13,PP42AF076A,	1	△
P001A	BN44-00329A	DC VSS-PDP TV;PZ-4,AC/DC,AC100~240V,50/6	1	△
T0037	BN96-12651A	ASSY PDP P-LOGIC MAIN BOARD;S42AX-YB09,P	1	
T0941	BN96-12652A	ASSY PDP P-E-BUFFER BOARD;S42AX-YB09,PL4	1	
T0942	BN96-12653A	ASSY PDP P-F-BUFFER BOARD;S42AX-YB09,PL4	1	
T0045	BN96-13067A	ASSY PDP P-X-MAIN BOARD;S42AX-YB09,PL42A	1	△
T0045	BN96-13068A	ASSY PDP P-X-MAIN BUFFER BOARD;S42AX-YB0	1	
T0262	BN96-13069A	ASSY PDP P-Y-MAIN BOARD;S42AX-YB09,PL42A	1	△
T1963	BN96-13070A	ASSY PDP P-Y SCAN BUFFER BOARD;S42AX-YB0	1	
M0014	BN94-03257G	ASSY PCB MISC-MAIN;PS50C450B1W*,CIS	1	△
CIS3	BN40-00173A	TUNER;DTOS40CVL081A,DVB-T/C,164CH,38.9MH	1	
T0074	BN59-01012A	REMOCON;TM950,SAMSUNG,20PIN SINGLE,48KEY	1	
RB01	BN63-06456C	COVER-BOTTOM;42PC450,PC+ABS,V0,BK0008	1	