

LCD TV UB8X

TRAINING MANUAL

UNB8000XFZ**



Agenda

- I. Inside of *UB8X*
- II. Key parts and New function of UB8X
- III. Board description
- IV. Disassembly
- V. Trouble Shooting

Inside of UB8X



Inside of UB8X

Items

Specification

UN**B8000XFXZA

	Size (W*D*H) with Stand	UN46B8000XFXZA : 44.53 x 29.8 x 10.9inches UN55B8000XFXZA : 52.05 x 33.86 x 12.09inches
	Weight with Stand	UN46B8000XFXZA : 22.8kg UN55B8000XFXZA : 29kg
	Panel Resolution	1920*1080
	A/V	1AV
	S-VIDEO	No
	component	1 component 480i/p,720p,1080i/p
	PC	1 Dsub
	HDMI	4 HDMI
	Tuner	1 NTSC/VSB/QAM tuner
	USB	2 USB
	Sound Output	10W/15W
	DNIe	Yes
	PIP	Yes
	Sound option	SRS TruSurround HD
	Headphone	No
	Response time	3ms
	Luminance [cd/m2, typical]	500
	C/R	5,000,000
	Anynet+(hdmi cec)	Yes
	View Angle(H/V)	178/178
	Power Supply	AC 110~220V,60Hz
	Power Consumption	220W/260W
	Stand-by Power consumption	0.1W/0.1W

Spec Comparison

Model		SAMSUNG (UB8X) UN46B8000XFZXA	SAMSUNG (sapphire) LN46A850S1FXZA
Design			
Set	Size(without stand)	44.45 x 27.755 x 1.18 (Ultra slim)	44.05 x 27.26 x 1.74
Panel	Size	Diagonal 46"	Diagonal 46"
	Resolution	1920 x 1080	1920 x 1080
	Viewing angle	H : 178 V : 178	H : 178 V : 178
Color System		ATSC / NTSC	ATSC / NTSC
Tuner		1	1
Function	Contrast (cd/m ²)	500	500
	CR (Dynamic)	5,000,000 : 1	50000 : 1
	Enhancer	DNIe(FBE3)	DNIe(FBE3)
Back light unit		LED	CCFL
Additional Function		Internet@TV, Content Library, DLNA, Home network center, 240hz	Infolink 120hz
Power Consumption		220W	310W

Control & Connection Panel

- ☒ The product color and shape may vary depending on the model.
- ☒ The front panel buttons can be activated by touching them with your finger.

① REMOTE CONTROL SENSOR

Aim the remote control towards this spot on the TV.

② ⏪ (POWER)

Press to turn the TV on and off.

③ ▼ CH ^

Press to change channels. In the on-screen menu, use the ▼ CH ^ buttons as you would use the ▼ and ▲ buttons on the remote control.



Control & Connection Panel

④ –VOL+

Press to increase or decrease the volume.
In the on-screen menu, use the –VOL+ buttons as you would use the ▲ and ▼ buttons on the remote control.

⑤ MENU

Press to see an on-screen menu of your TV's features.

⑥ SOURCE ▶

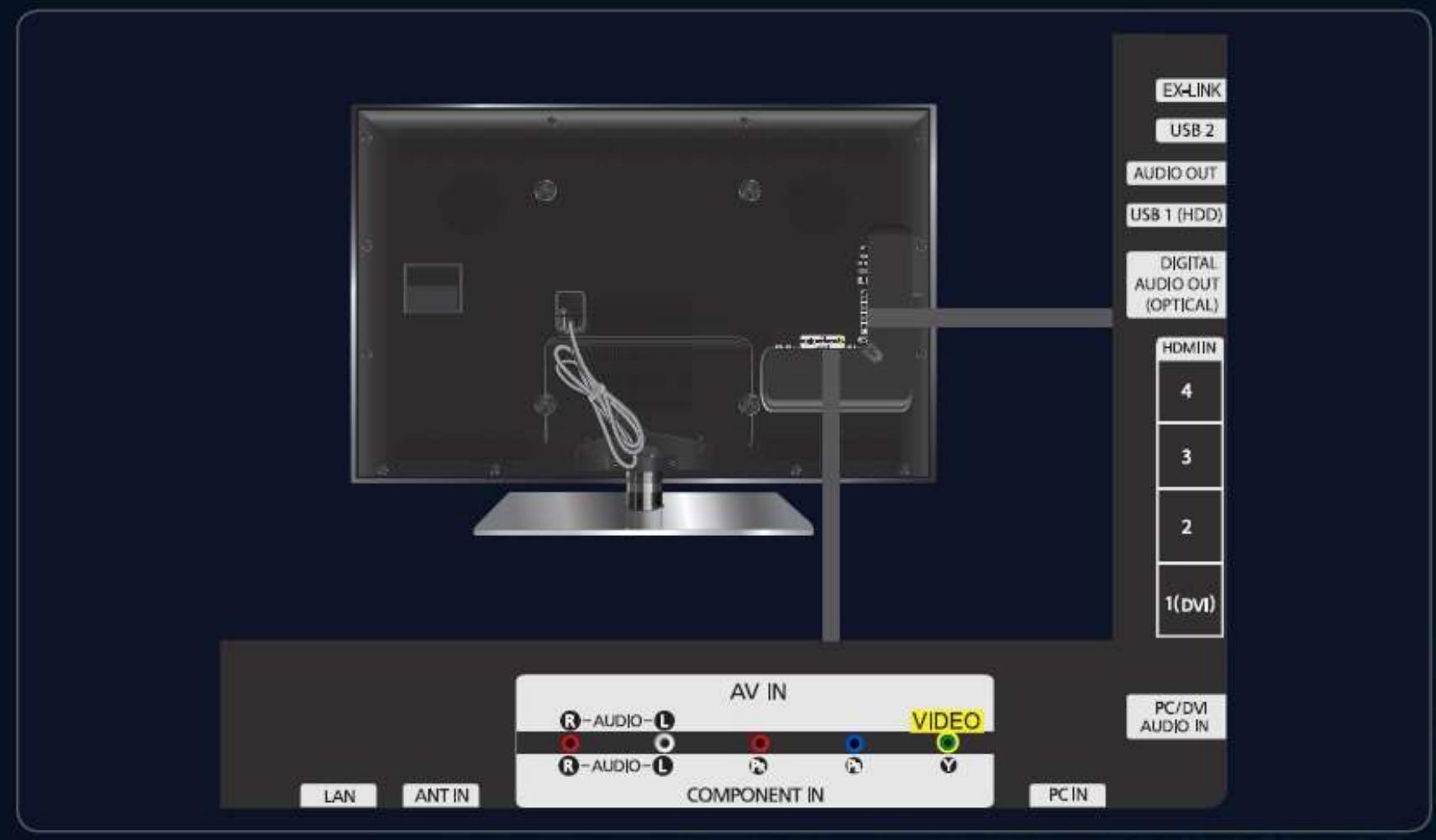
Toggles between all the available input sources. In the on-screen menu, use this button as you would use the ENTER ▶ button on the remote control.

⑦ SPEAKERS



Control & Connection Panel

 The product color and shape may vary depending on the model.



Control & Connection Panel

- ☒ The TV may not output sound and pictures may be displayed with abnormal color when DVD / Blu-ray player / Cable Box / Satellite receiver (Set-Top Box) supporting HDMI versions older than 1.3 are connected. When connecting an older HDMI cable and there is no sound, connect the HDMI cable to the **HDMI IN 1(DVI)** jack and the audio cables to the **PC/DVI AUDIO IN** jacks on the back of the TV. If this happens, contact the company that provided the DVD / Blu-ray player / Cable Box / Satellite receiver (Set-Top Box) to confirm the HDMI version, then request an upgrade.
- ☒ HDMI cables that are not 1.3 may cause annoying flicker or no screen display.
- ☒ Use the **HDMI IN 1(DVI)** jack for DVI connection to an external device. Use a DVI to HDMI cable or DVI-HDMI adapter (DVI to HDMI) for video connection and the **PC/DVI AUDIO IN** jacks for audio. When using an HDMI / DVI cable connection, you must use the **HDMI IN 1(DVI)** jack.
- ☒ When connecting via DVI, a separate audio connection must be made. Use a 2RCA to 3.5mm miniplugin cable for this purpose.

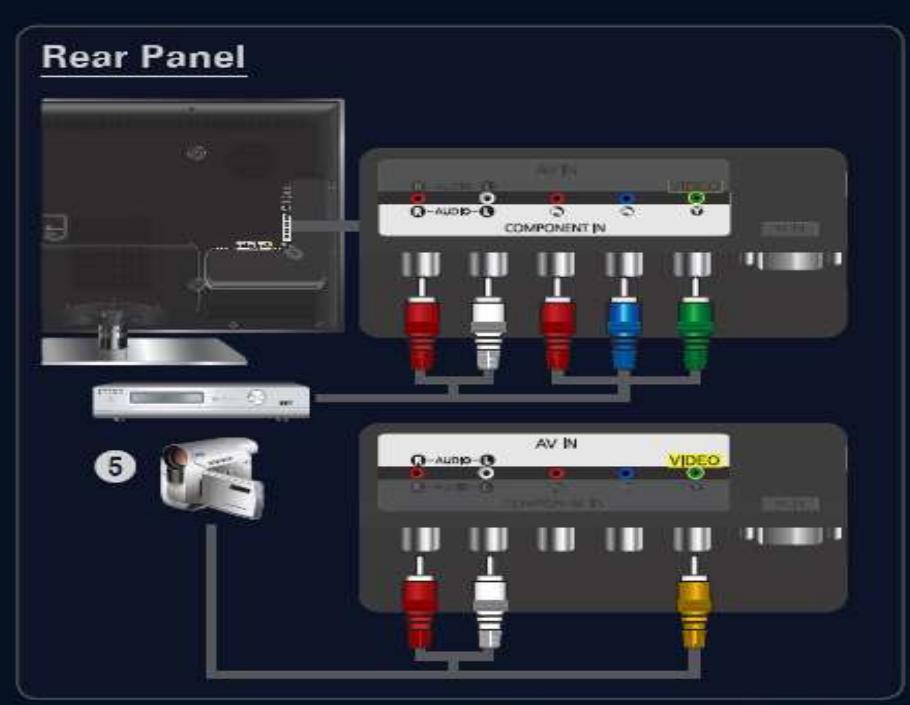
Control & Connection Panel

⑤ COMPONENT IN / AV IN

Connects Component video / audio.

The **COMPONENT IN** jack is also used as the **AV IN** jack.

- ☒ When connecting, match the color of the connector to the jack.
- ☒ Connect the video cable to the **COMPONENT IN [Y/VIDEO]** jack and the audio cable to the **COMPONENT IN [R-AUDIO-L]** jacks.



- ☒ If you have a 'mono' (non-stereo) VCR, use a Y-connector (not supplied) to connect to the right and left audio input jacks of the TV. Alternatively, connect the cable to the '**R**' jack. If your VCR is stereo, you must connect two cables.
- ☒ When connecting to **AV IN**, the color of the **AV IN [Y/VIDEO]** jack (Green) does not match the color of the video cable (Yellow).

Control & Connection Panel

⑥ PC IN

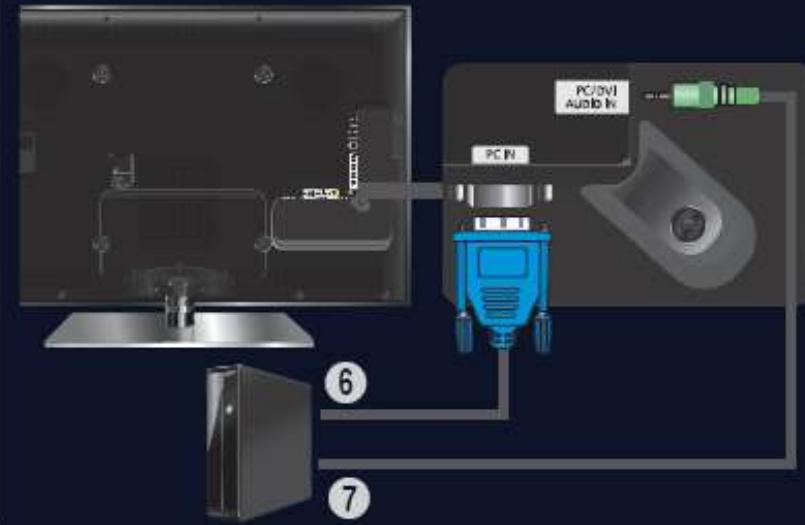
Connects to the video output jacks on your PC.

- ☒ If your PC supports an HDMI connection, you can connect this to the **HDMI IN 1(DVI), 2, 3 or 4** terminal.
- ☒ If your PC supports a DVI connection, you can connect this to the **HDMI IN 1(DVI) / PC/DVI AUDIO IN** terminal.

⑦ PC/DVI AUDIO IN

- Connect to the audio output jack on your PC.
- DVI audio outputs for external devices.

Rear Panel



Control & Connection Panel

⑧ KENSINGTON LOCK

The Kensington Lock (optional) is a device used to physically fix the system when used in a public place. If you want to use a locking device, contact the dealer where you purchased the TV.

- ☒ The location of the Kensington Lock may be different depending on its model.

⑨ DIGITAL AUDIO OUT (OPTICAL)

Connects to a Digital Audio component such as a Home theater receiver.

- ☒ When a Digital Audio System is connected to the **DIGITAL AUDIO OUT (OPTICAL)** jack: Decrease the volume of the TV and adjust the volume level with the system's volume control.



Control & Connection Panel

- ☒ 5.1CH audio is possible when the TV is connected to an external device supporting 5.1CH.
- ☒ When the Home Theater receiver is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a DTV(air) signal, the TV will send out 5.1 channel sound to the Home theater receiver. When the source is a digital component such as a DVD / Blu-ray player / Cable Box / Satellite receiver (Set-Top Box) and is connected to the TV via HDMI, only 2 channel sound will be heard from the Home Theater receiver. If you want to hear 5.1 channel audio, connect the digital audio out jack on DVD / Blu-ray player / Cable Box / Satellite receiver (Set-Top Box) directly to an Amplifier or Home Theater, not the TV.

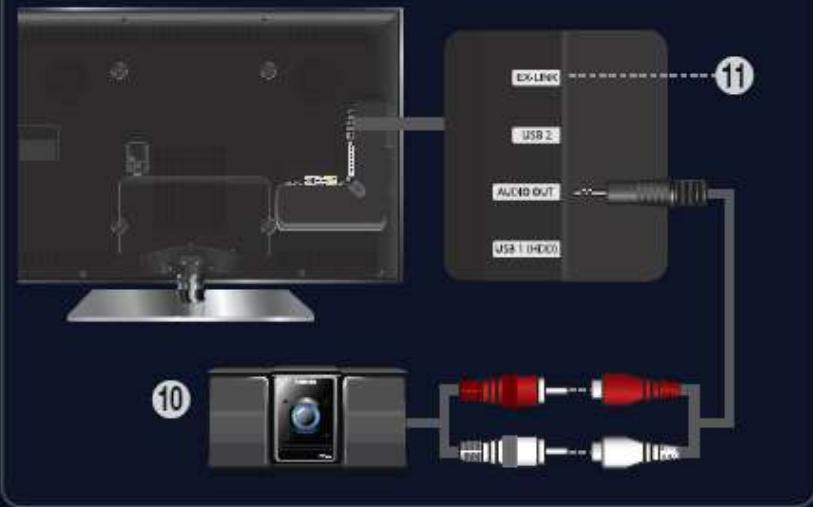
Control & Connection Panel

⑩ AUDIO OUT

Connects to the audio input jacks on your Amplifier/Home theater.

- ☒ When connecting, use the appropriate connector (sold separately).
- ☒ When an audio amplifier is connected to the **AUDIO OUT** jacks: Decrease the volume of the TV and adjust the volume level with the Amplifier's volume control.

Rear Panel



⑫ USB1(HDD) / USB2

Connector for software upgrades and Media Play, etc.

You can connect to Samsung's network wirelessly using the 'Samsung Wireless LAN Adapter' (Sold separately).

- ☒ For USB HDD, use the **USB1(HDD)** port.

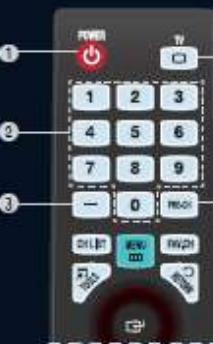
Rear Panel



Remote control

- ① You can use the remote control up to a distance of about 23 feet from the TV.
- ② The performance of the remote control may be affected by bright light.
- ③ The product color and shape may vary depending on the model.

- ④ **POWER:** Turns the TV on and off.
- ⑤ **NUMERIC BUTTONS:** Press to change the channel.
- ⑥ **CH:** Press to select additional channels (digital) being broadcast by the same station. For example, to select channel '54-3', press '54', then press 'CH' and '3'.
- ⑦ **TV:** Selects the TV mode directly.
- ⑧ **PRE-CH:** Enables you to return to the previous channel you were watching.



- ⑨ **CH LIST:** Used to display Channel Lists on the screen.
- ⑩ **TOOLS:** Use to quickly select frequently used functions.
- ⑪ **UPA/DOWN▼/LEFT◀/RIGHT▶/ENTER:** Press the Up/Down/Left/Right sections of the wheel button and Enter to select on-screen menu items and change menu values. You can navigate up and down the menu, switch channels and adjust the volume by turning the wheel button.
- ⑫ **INTERNET:** Press to use various internet services to view useful information and entertaining content.
- ⑬ **MENU:** Displays the main on-screen menu.
- ⑭ **FAV.CH:** Press to switch to your favorite channels.
- ⑮ **RETURN:** Returns to the previous menu.

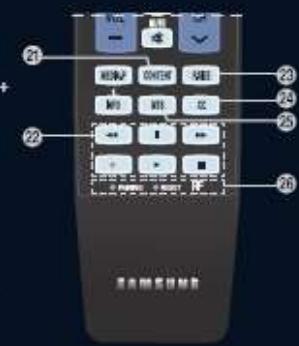


- ⑯ **COLOR BUTTONS:** Use these buttons in the Channel list, Internet@TV, Media Play menu, etc.

- ⑰ **-VOL+/-VOL-:** Press to increase or decrease the volume.
- ⑱ **MEDIA.P:** Allows you to play music files, pictures, and movies.
- ⑲ **INFO:** Press to display information on the TV screen.
- ⑳ **EXIT:** Press to exit the menu.
- ㉑ **SOURCE:** Press to display and select the available video sources.
- ㉒ **CH ▼ ▲:** Press to change channels.
- ㉓ **MUTE:** Press to temporarily cut off the sound.
- ㉔ **CONTENT:** This function enables you to view the Content Library.

- ㉕ **Use these buttons in the DMA, Media Play and Anynet+ modes. (■):** This remote can be used to control recording on Samsung recorders with the Anynet+ feature)

- ㉖ **P SIZE:** Picture size selection.
- ㉗ **CC:** Controls the caption decoder.
- ㉘ **MTS:** Press to choose stereo, mono or Separate Audio Program (SAP broadcast).
- ㉙ **PAIRING/RESET:** Uses for pairing TV and Remote Control.
- ㉚ **For detailed procedures on using the Pairing, refer to the 'Pairing a Remote Control' instructions.**



Remote control

Finding the Remote Control

1. Press the Volume (-) button on the front panel of the TV and hold it down for 10 seconds. The TV will transmit a signal to find the remote control.
2. The remote control will generate an alarm sound for 30 seconds. Search for the remote control from the location where the sound is heard the loudest.
 If no sound is heard, please try again.
3. If the remote control has been found, press any remote control button to stop the sound.



Auto Paring

- **What is Pairing?**

→ A process that enables two-way communication between the TV and the remote control when their MAC addresses match after the TV saved the MAC address of the remote control and vice versa.

- **What is Auto Pairing?**

→ An automatic pairing method that completes the pairing of the TV and the remote control internally without user intervention when a user operates the remote control after purchasing a TV with a RF remote control.

※ When the **Auto Pairing** function is used in a shop, **Pairing** with a TV may fail.
Therefore, in this case, **Pairing** should be completed using the existing method.

The **Auto Pairing** is a simplified pairing method for customer convenience.

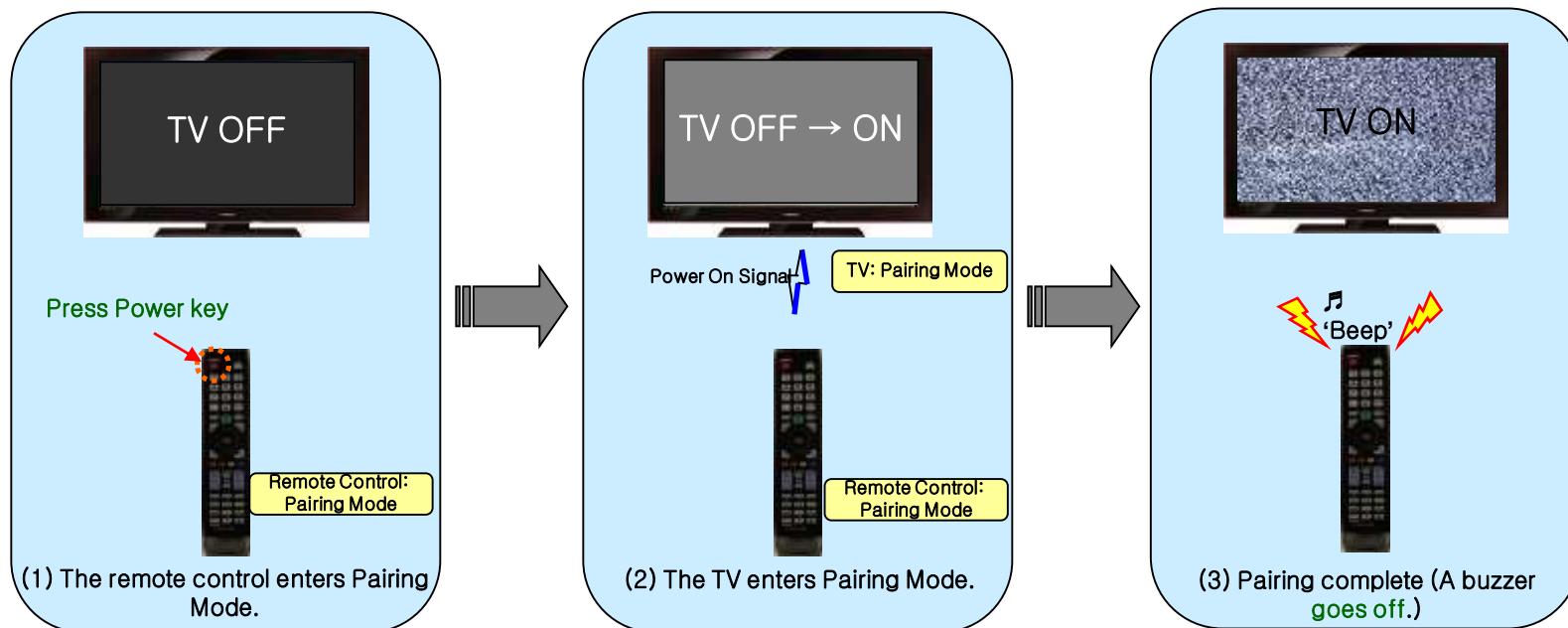
Auto Paring method

- 1. When the TV is turned off (Standby mode)

- 1) Press the Power key on the RF remote control. (For models for European countries: numeric and CH +- keys included)
→ The remote control enters Pairing Mode.

(The Power command is sent through the *Broadcasting Signal (refer to the Appendix). The TV is turned on or off accordingly.)

- 2) The TV that receives the Power command is turned on.
→ The TV enters Pairing Mode.
(Pairing Mode is maintained until Pairing is complete.)
- 3) Pairing Mode is completed.
→ A 'Beep' goes off.



<Figure 1> Auto Pairing Operation

Auto Paring method

- 2. When the TV is turned on (When powered on using the Function key.)

1) Press any key on the RF remote control.

→ The remote control enters Pairing Mode.

(After paring is complete, the key pressed by the user transmits the corresponding command to the TV.)

* The customer cannot recognize the internal pairing operation.

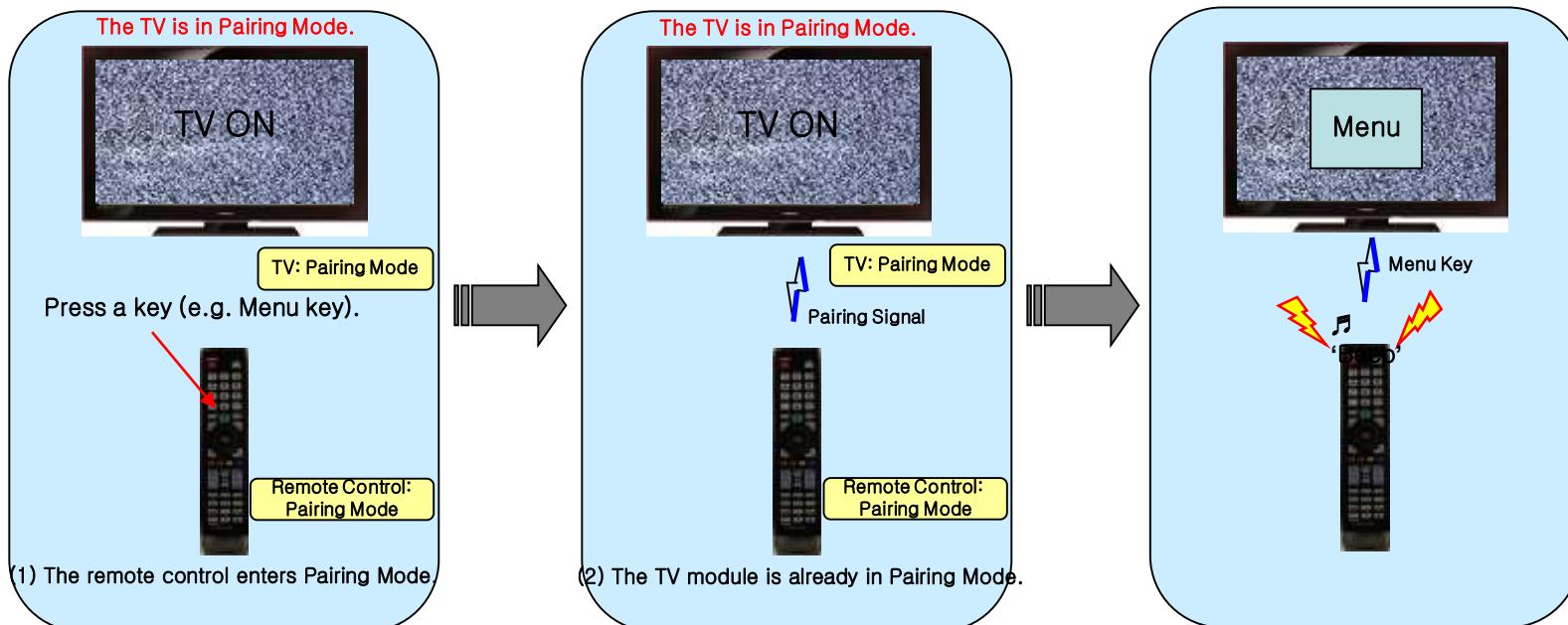
: The time taken to complete the pairing and to send the command is less than 1 second.

2) The TV is already in Pairing Mode.

→ A TV, the paring of which is not completed, remains in Pairing Mode while the TV is turned on.

3) Pairing Mode is completed.

→ A 'Beep' goes off.



<Figure 2> Auto Pairing Operation

(3) After Pairing is complete (a Buzzer goes off), the menu screen is displayed.

Remote control

Pairing a Remote Control

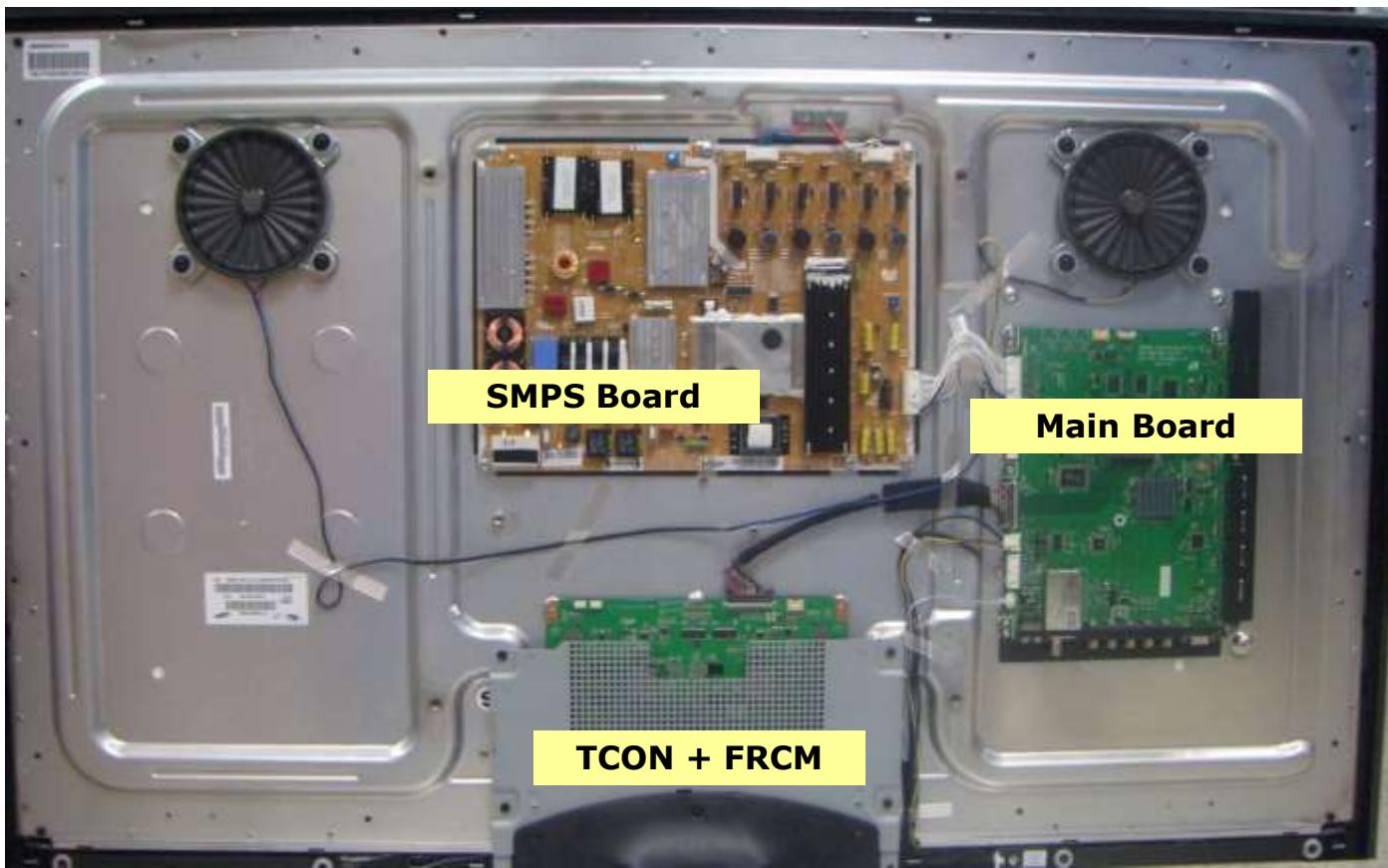
You can pair the TV and the remote control so that the remote control only controls the TV.

1. Plug the TV power plug into the power outlet.
☒ Turn the TV power switch off.
2. Press the **PAIRING** on the remote control button.
☒ Use a sharp object to press the button.
☒ Keep a distance of less than 1m between the TV and the remote control.
3. Press the **POWER(○)** button on the front panel of the TV. The TV is turned on and Pairing with the remote control is automatically completed.
4. Press the remote control buttons to check if the remote control is properly paired.
☒ If the remote control does not work, attempt the pairing process again.
☒ If the remote control does not work even after the above measures have been taken, press the **RESET** button, and replace the batteries.



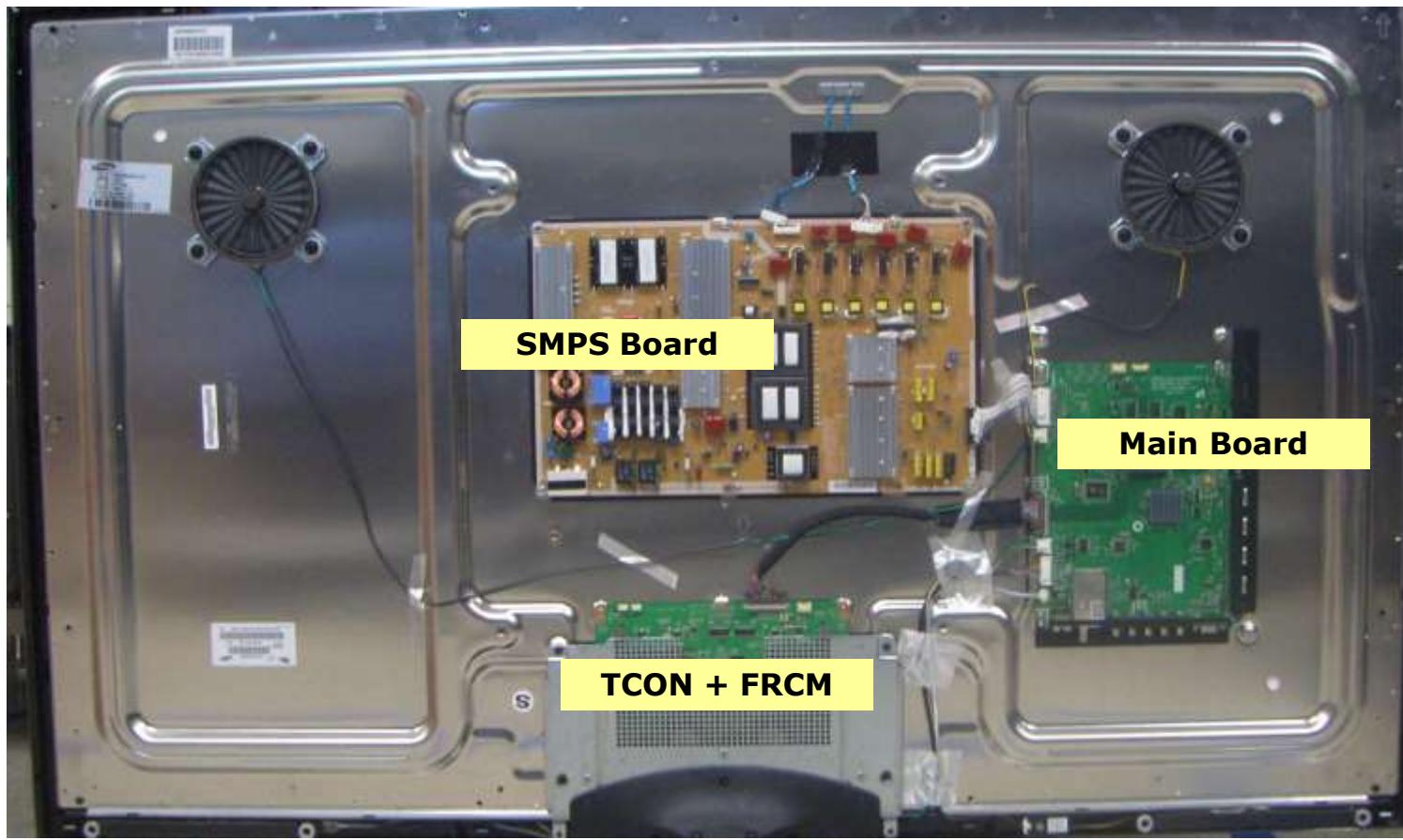
Inner Feature of UB8X 46"

- SMPS Board, Main Board, Panel



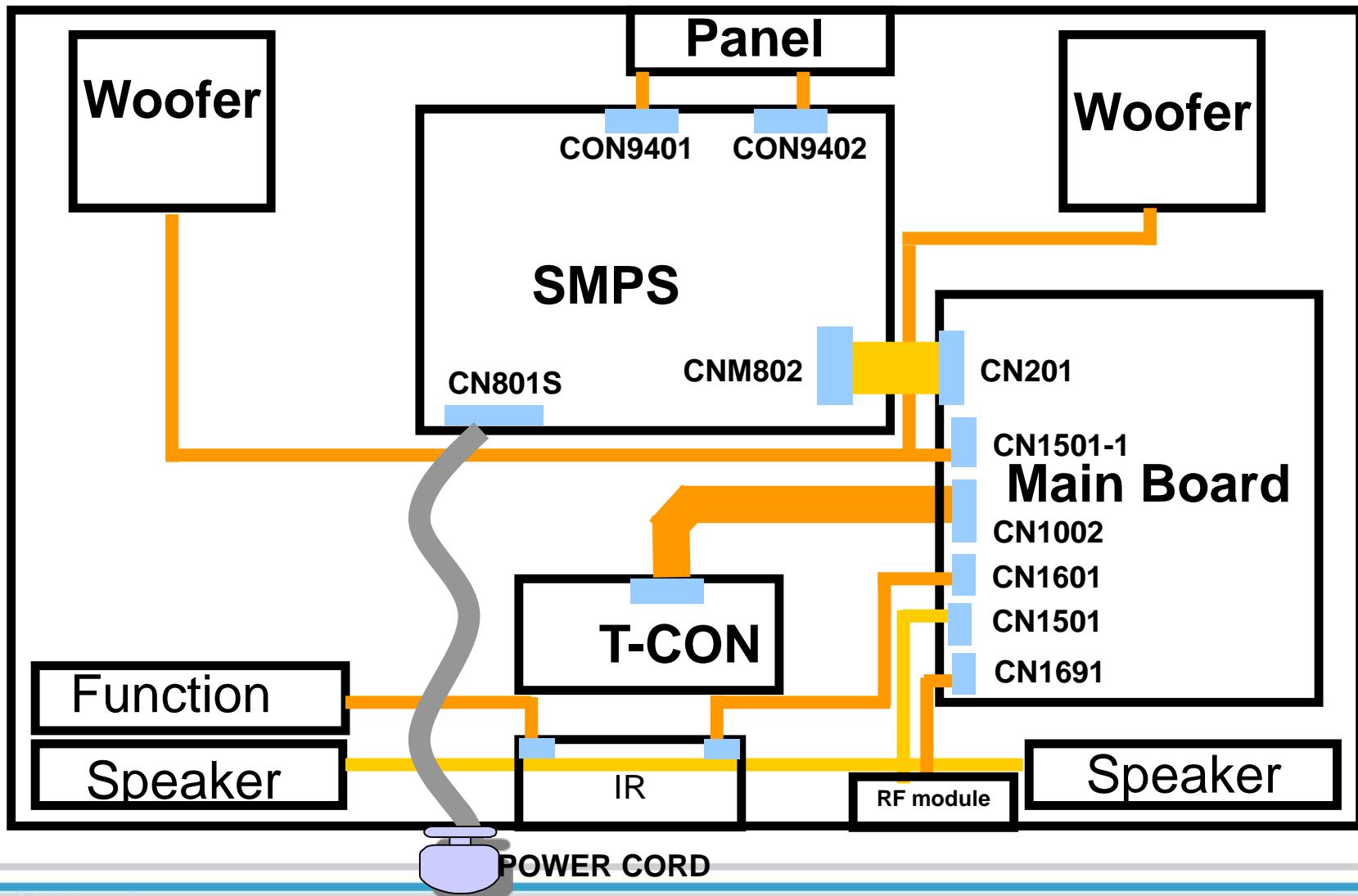
Inner Feature of UB8X 55"

- SMPS Board, Main Board, Panel



Inner Feature of UB8X 46“,55”

■ IP Board, Main Board, Panel

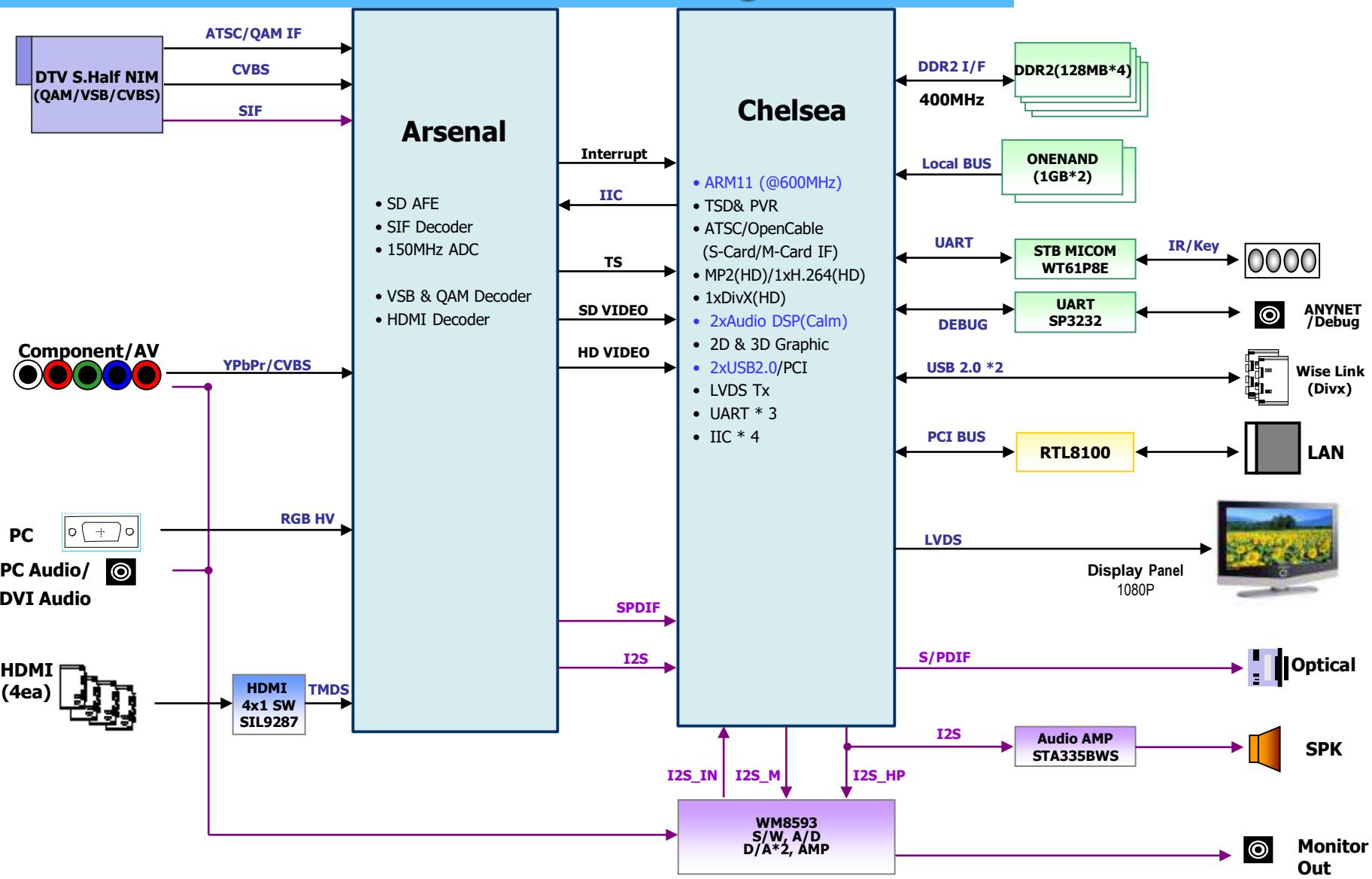


Key parts of UB8X

1. Chelsea/Arsenal Block Diagram
2. I2C/UART
3. Power Tree
4. Reset Timing Sequence

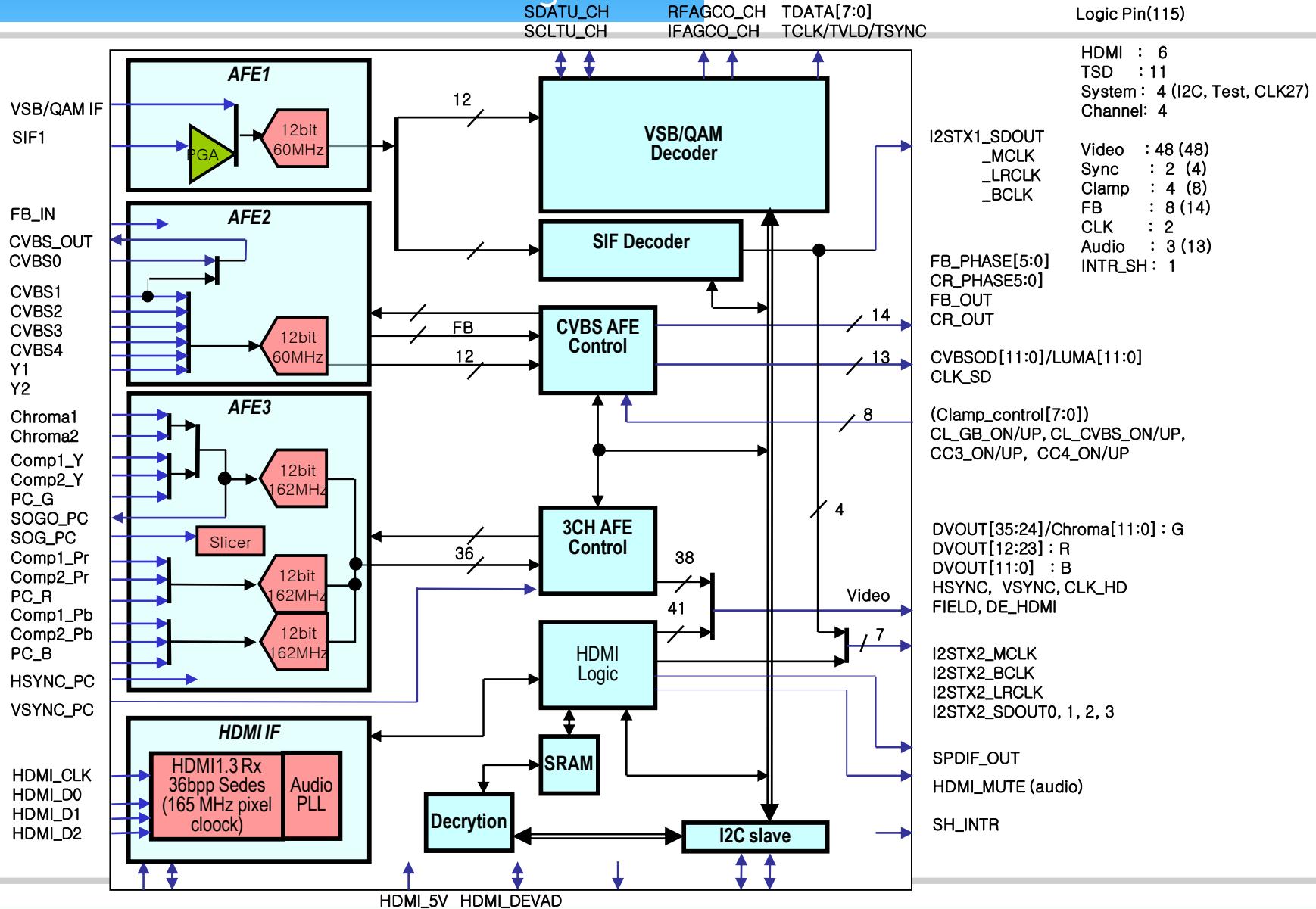
Inside of UB8X

Arsenal/Chelsea Block Diagram



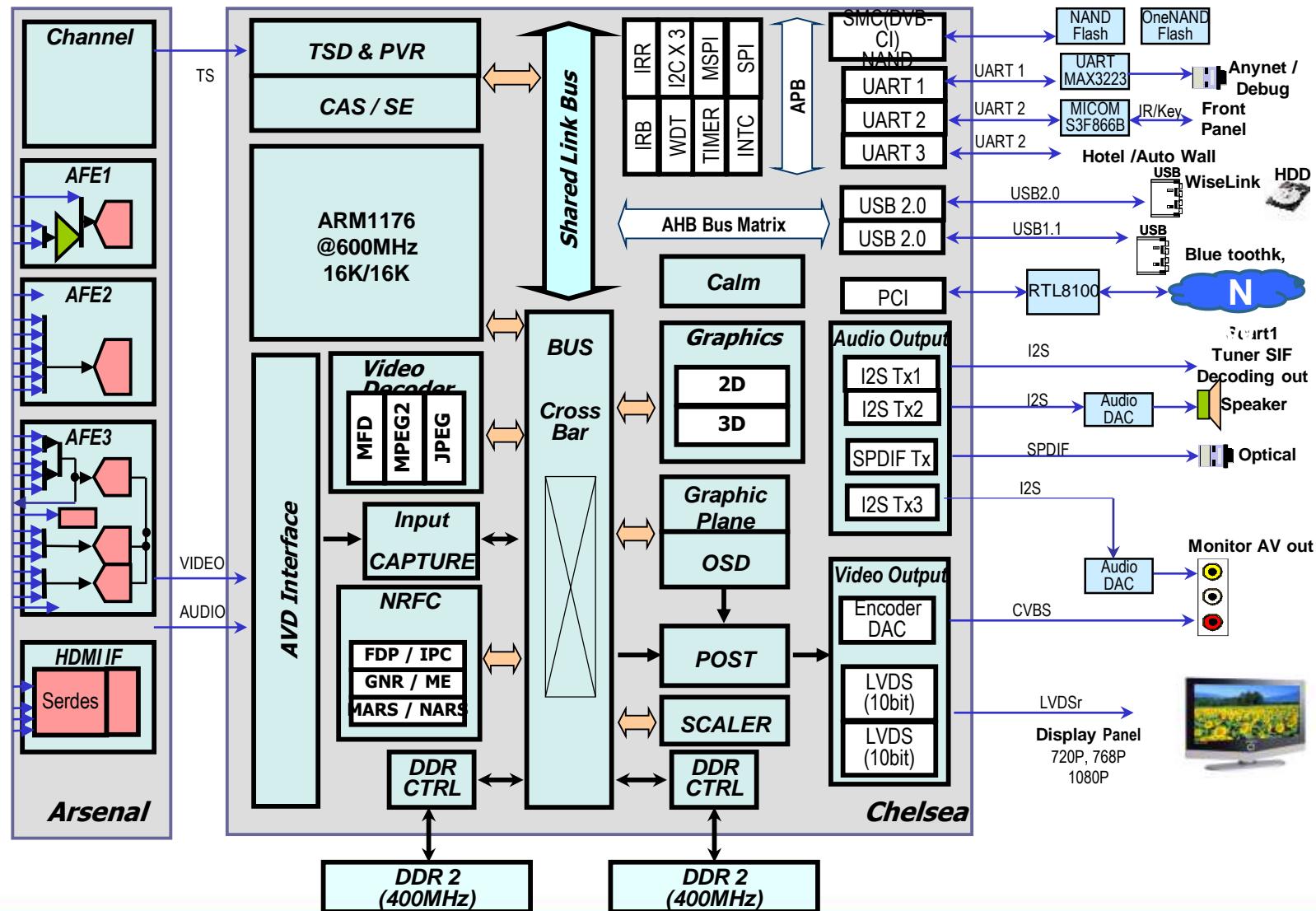
Inside of UB8X

Arsenal Internal Block Diagram

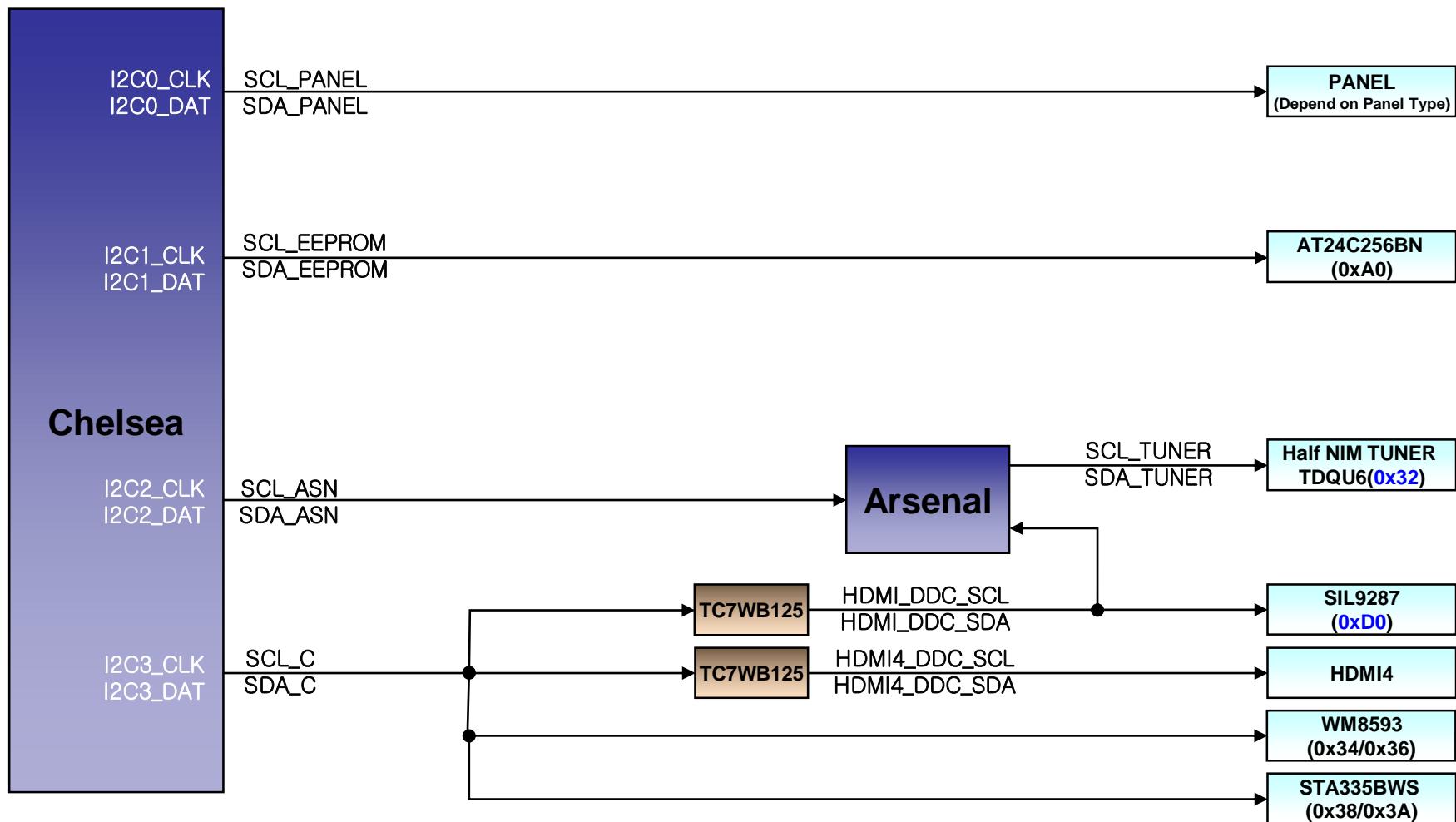


Inside of UB8X

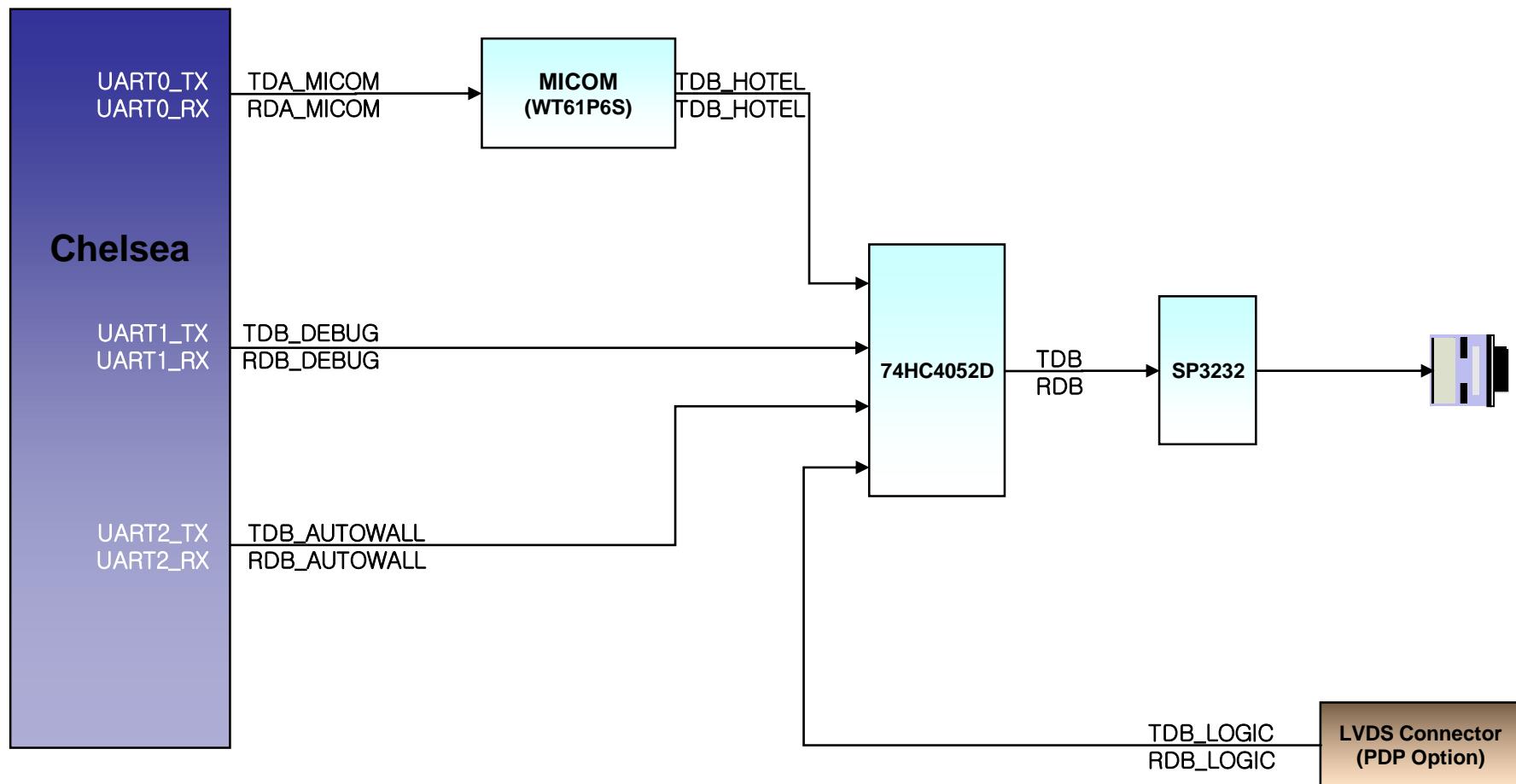
Chelsea Internal Block Diagram



I2C Tree

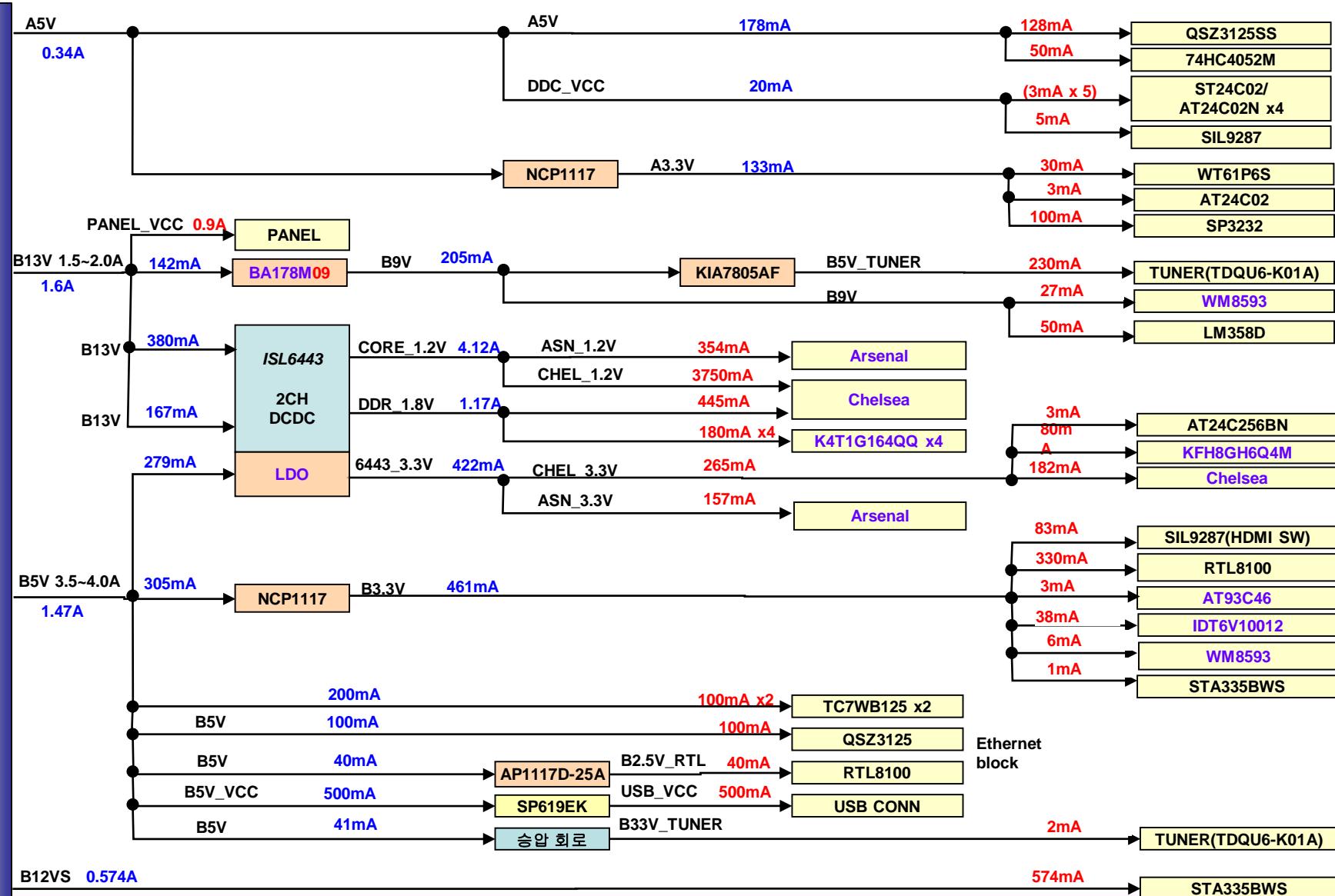


Uart Tree

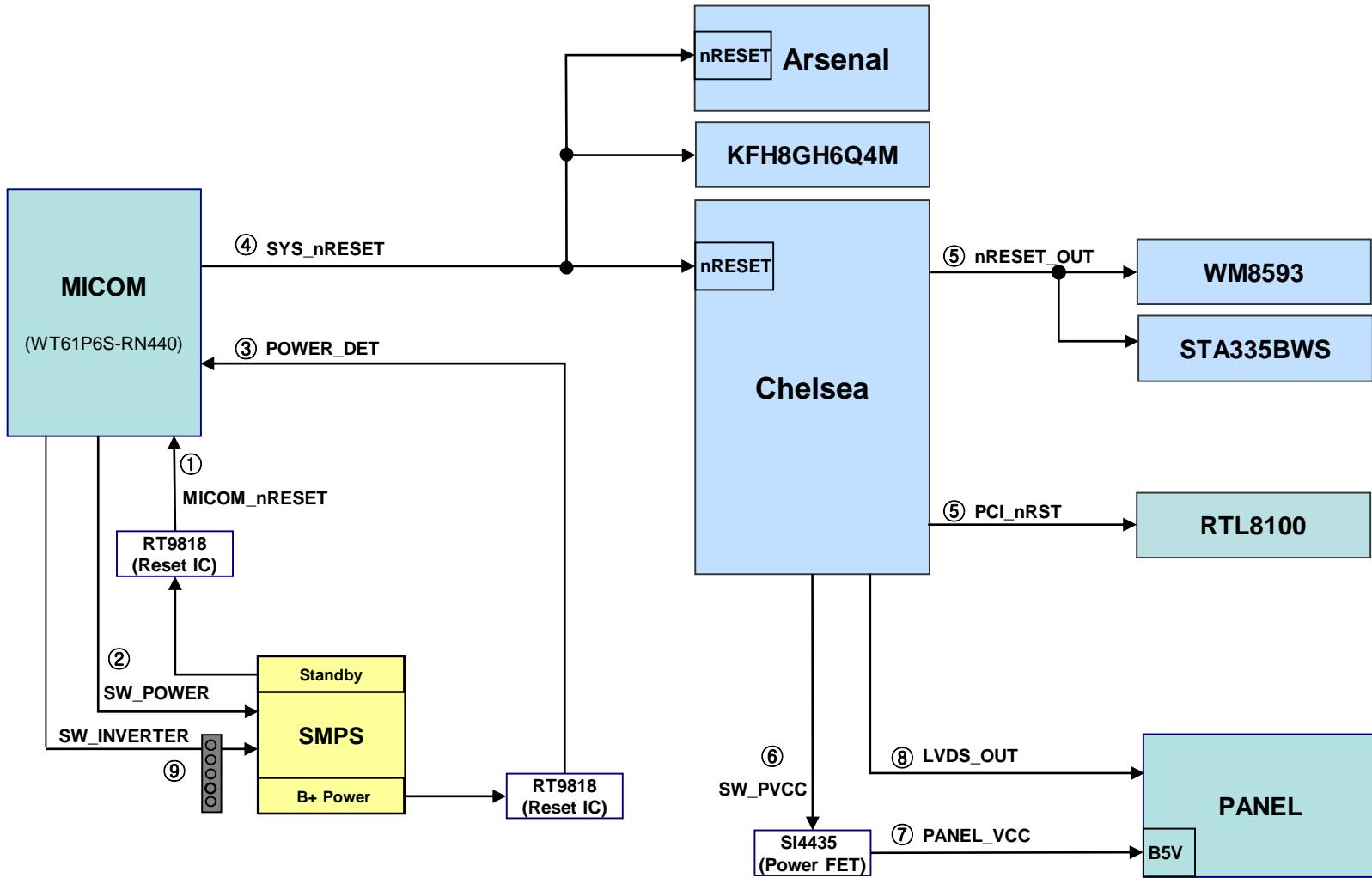


Inside of UB8X

Power Tree



Reset Tree



New Function of UB8X

1. Network setting
2. Media Play (USB & DLNA)
3. Home network Center
4. Content Library
5. Yahoo TV
6. Auto motion 240hz
7. Trusurround HD
8. Supported PC timing
9. PIP table
10. HDMI/DVI edit
11. Edge LED
12. Ultra clear panel

Network setting

Network Connection

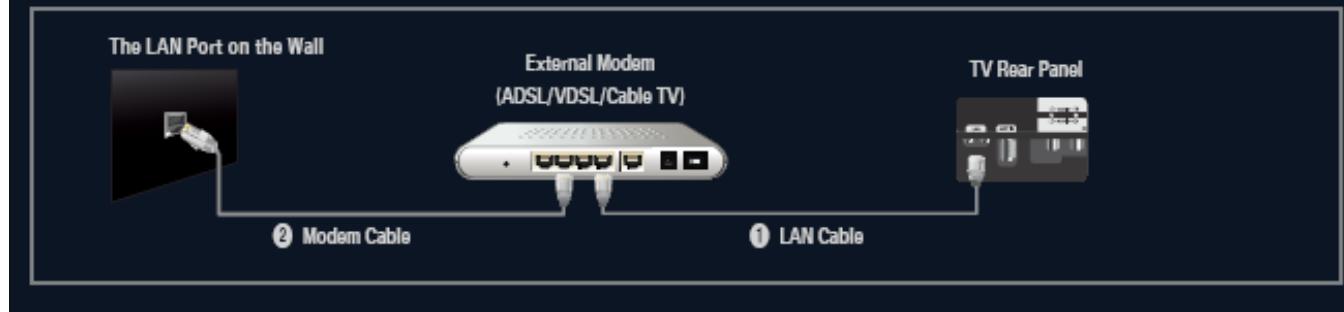
You can set up the Internet Protocol so that you can communicate with various connected networks.

□ Network Connection - Cable

■ LAN Connection for a DHCP Environment

The procedures to set up the network using Dynamic Host Configuration Protocol (DHCP) are described below. Since an IP address, subnet mask, gateway, and DNS are automatically allocated when DHCP is selected, you do not have to enter them manually.

1. Connect the LAN port on the rear panel of the TV and the external modem with a LAN Cable.
2. Connect the LAN port on the wall and the external modem with a Modem Cable.



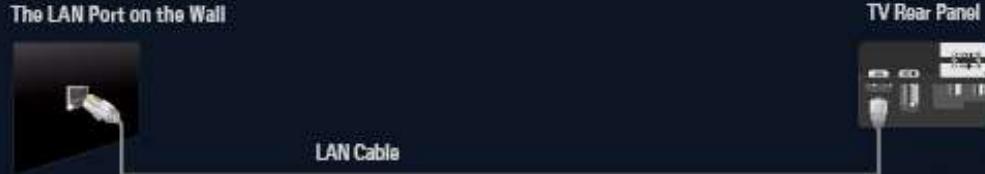
Network setting

Network Connection

You can connect the LAN via a Sharer (Router).



You can connect the LAN port and the TV directly depending on your network status.



Network setting

Network Connection

- ▣ The terminals (the position of the port and the type) of the external device may differ depending on the manufacturer.
- ▣ If the IP address allocation by the DHCP server has failed, turn the external modem off, turn it on again after at least 10 seconds and then try again.
- ▣ For the connections between the external modem and the Sharer (Router), refer to the owner's manual of the corresponding product.
- ▣ You can connect the TV to the LAN directly without connecting it through a Sharer (Router)
- ▣ You cannot use a manual-connection-type ADSL modem because it does not support DHCP. You have to use an automatic-connection-type ADSL modem.

Network setting

Network Connection

■ LAN Connection for Static IP Environment

The procedures to set up the network using a static IP address are described below. You have to manually enter the IP address, subnet mask, gateway, and DNS that are provided by your Internet Service Provider (ISP).

1. Connect the LAN port on the rear panel of the TV and the LAN port on the wall using the LAN cable.



You can connect the LAN via a Sharer (Router).



▣ The terminals (the position of the port and the type) of the external device may differ depending on the manufacturer.

▣ If you are using a static IP address, your ISP will inform you of the IP address, subnet mask, gateway, and DNS. You must enter these values to complete the network settings. If you do not know the values, ask your network administrator.

Network setting

Network Connection

- ☒ For the information on how to configure and connect a Sharer (Router), refer to the owner's manual for the corresponding product.
- ☒ You can connect the TV to the LAN directly without connecting it through a Sharer (Router).
- ☒ If you use an IP Sharer (IP Router) that supports DHCP, you can set up the device as either DHCP or static IP.
- ☒ For the procedures to use a static IP address, ask your Internet Service Provider.

Network setting

Network Connection

Network Connection - Wireless

You can connect to the network wirelessly through a wireless IP sharer.



1. Connect the 'Samsung Wireless LAN Adapter' into the **USB1(HDD)** or **USB2** terminal of the TV.
- You must use the 'Samsung Wireless LAN Adapter'(WIS09ABGN) to use a wireless network.

Network setting

Network Connection

- ☒ Samsung's Wireless LAN adapter sold separately. The WIS09ABGN Wireless LAN adapter is offered by select retailers, Ecommerce sites and Samsungparts.com.
- ☒ To use a wireless network, your TV must be connected to a wireless IP sharer. If the wireless IP sharer supports DHCP, your TV can use a DHCP or static IP address to connect to the wireless network.
- ☒ You must use a wireless IP sharer that supports IEEE 802.11B, IEEE 802.11N or IEEE 802.11G. When you play DLNA video over IEEE 802.11B/G connection, the video may not be played smoothly.
- ☒ If the wireless IP sharer allows you to turn on / off the Ping connection function, turn it on.
- ☒ Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communications may fail.

Network setting

Network Connection

- ☒ If you apply a security system other than the systems listed below, it will not work with the TV.
 - When applying the security key for the AP (wireless IP sharer), only the following is supported.
 - 1) Authentication Mode : OPEN, SHARED, WPAPSK, WPA2PSK
 - 2) Encryption Type : WEP, TKIP, AES
 - When applying the security key for the Ad-hoc mode, only the following is supported.
 - 1) Authentication Mode : SHARED, WPANONE
 - 2) Encryption Type : WEP, TKIP, AES
- ☒ If AP supports WPS(Wi-Fi Protected Setup) and WPN setting is Enable, you can be supported WPS security system. You can access by push button or register PINCODE. Also in case you know security key, you can input. In case of push button method, will not connected AP pushed down regardless of selected SSID. For the PBC type of WPS, the AP for which the PUSH button is pressed is connected regardless of the network name (SSID) selected in the network list.
- ☒ If the device isn't certified, it may not connect to TV by Samsung Wireless USB dongle.

Network setting

Setting the Network

□ Network Type

Select Cable or Wireless as the method to connect to the network.

 The menu is activated only if the 'Samsung Wireless LAN Adapter' is connected.

■ Cable

Connect to the network using a cable.

■ Wireless

Connect to the network wirelessly.

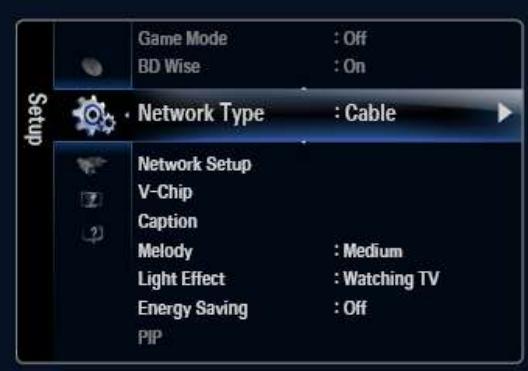
□ Network Setup

■ Cable Network Setup

(when Network Type is set to Cable)

 Please check if the LAN cable is connected.

- Internet Protocol Setup → Auto Setup / Manual Setup
- Network Test: You can test or confirm the network connection status after setting up the network.



Cable Network Setup

Internet Protocol Setup : Auto Setup

Network Test

IP Address	:	[]	[]	[]	[]
Subnet Mask	:	[]	[]	[]	[]
Gateway	:	[]	[]	[]	[]
DNS Server	:	[]	[]	[]	[]

◀ Move □ Select ⌂ Return

Network setting

Setting the Network

When unable to connect to a wired network

If your Internet service provider has registered the MAC address of the device used to connect to the Internet for the first time and authenticates the MAC address each time you connect to the Internet, your TV may not be able to connect to the Internet as the MAC address differs from that of the device (PC).

In this case, ask your Internet service provider about the procedures to connect devices other than your PC (such as your TV) to the Internet. If your Internet service provider requires an ID or password to connect to the Internet (network), your TV may not be able to connect to the Internet. In this case, you have to enter your ID or password when connecting to the Internet using an Internet Sharer (Router).

The internet connection may fail due to a firewall problem. In this case, contact your Internet service provider. If you cannot connect to the Internet even if you have followed the procedures of your Internet service provider, please contact Samsung Electronics at 1-800-SAMSUNG.

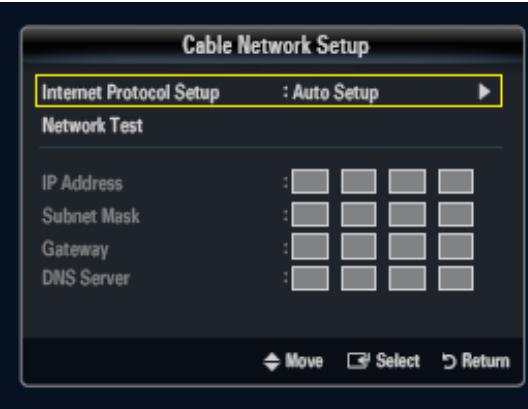
Network setting

Setting the Network

Cable Network Setup-Auto Setup

If you connect the LAN cable and it supports DHCP, the Internet Protocol (IP) Settings are automatically configured.

1. Set Network Type to Cable.
2. Select Cable Network Setup.
3. Set Internet Protocol Setup to Auto Setup.
The Internet Protocol is set automatically.
4. Select Network Test to check the network connectivity.



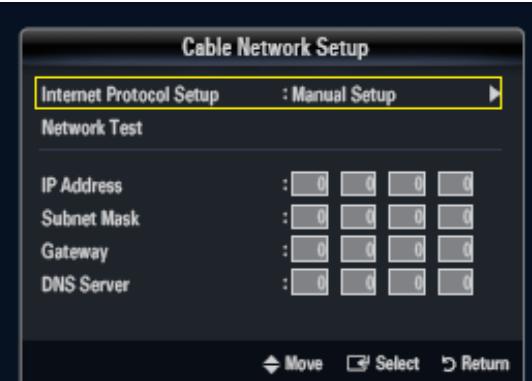
Network setting

Setting the Network

Cable Network Setup-Manual Setup

To connect the TV to the LAN using a static IP address, you must set up the Internet Protocol (IP).

1. Set Network Type to Cable.
2. Select Cable Network Setup.
3. Set Internet Protocol Setup to Manual Setup.
4. Set up IP Address, Subnet Mask, Gateway and DNS Server.
 - ☞ Press the number buttons on the remote control when you set the Network manually.
5. Select Network Test to check the network connectivity.

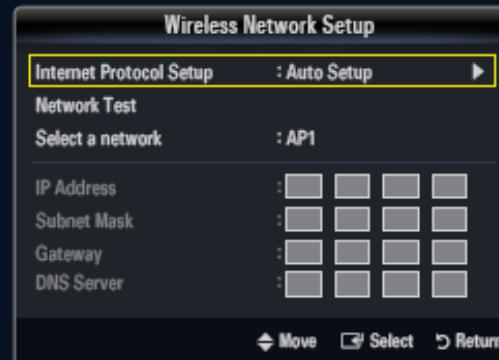


Network setting

Setting the Network

■ Wireless Network Setup

- The menu is activated only if the 'Samsung Wireless LAN Adapter' is connected.**
- **Internet Protocol Setup → Auto Setup / Manual Setup**
- **Network Test: You can test or confirm the network connection status after setting up the network.**



When unable to connect to an AP

Your TV may fail to locate an AP that is configured as a private SSID type. In this case, please change the AP settings and try again. If your Internet service provider has registered the MAC address of the device used to connect to the Internet for the first time and authenticates the MAC address each time you connect to the Internet, your TV may not be able to connect to the Internet as the MAC address differs from that of the device (PC).

In this case, ask your Internet service provider about the procedures to connect devices other than your PC (such as your TV) to the Internet. If you cannot connect to the Internet even if you have followed the procedures of your Internet service provider, please contact a Samsung Electronics at 1-800-SAMSUNG.

Network setting

Setting the Network

- Select a network
 - Access Point: You can select the IP sharer to use when using a wireless network.
 - ☒ If a wireless Access Point is not in the Access Point list, press the Red button.
 - ☒ When the connection is made, you will be returned to the screen automatically.
 - ☒ If you have selected an Access Point with a security authentication:
The Security Key input screen appears. Enter the security key and press the Blue button on the remote control.
 - ☒ If security encryption type is WEP, 0~9, A~F will be available when you input security key.



Network setting

Setting the Network

- **Ad-hoc:** You can connect to a mobile device without an access point through the 'Samsung Wireless LAN Adapter' by using a peer to peer network.

How to connect to new Ad-hoc

1. Choose Select a network, then a device list is displayed.
2. While in the device list, press the Blue button on the remote or select Ad-hoc.
 The message The existing network system may have limited functionality. Do you want to change the network connection? is displayed.
3. Input the generated Network Name(SSID) and Security Key into the device you want to connect.

The existing network system may have limited functionality. Do you want to change the network connection?

Yes

No

Network setting

Network Connection

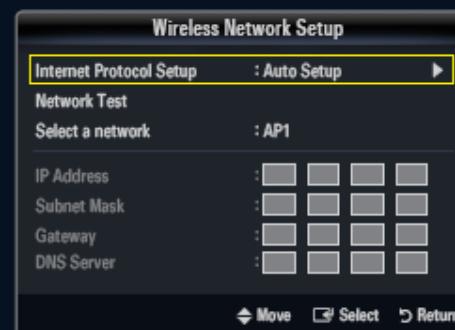
How to connect existing Ad-hoc device

1. Choose Select a network, then list of device is displayed.
2. In list of device, select the device you want.
3. If security key was applied, input the security key again.
 - ▣ If network doesn't work normally, please check Network Name(SSID) and Security Key again. If the Security Key is incorrect, it can be the reason of malfunction.
 - ▣ Even if connection has no problem, It can be failed at second item of Network Test.

Wireless Network Setup-Auto Setup

If you want to connect AP, AP should support DHCP. Only in case of connecting device which supports Ad-hoc mode, you can connect without DHCP.

1. Set Network Type to Wireless.
2. Select Wireless Network Setup.
3. Set Internet Protocol Setup to Auto Setup.
 - ▣ The Internet Protocol is set automatically.
4. Select a network through Select a network.
5. Select Network Test to check the network connectivity.

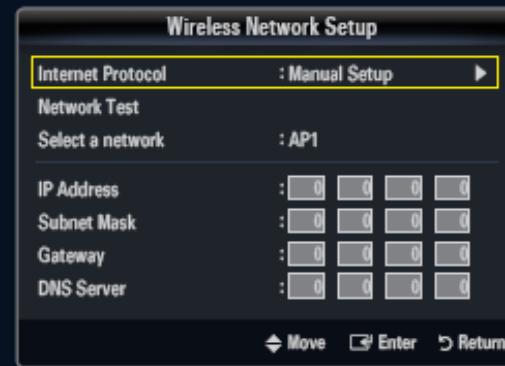


Network setting

Network Connection

Wireless Network Setup-Manual Setup

1. Set Network Type to Wireless.
2. Select Wireless Network Setup.
3. Set Internet Protocol Setup to Manual Setup.
4. Set up IP Address, Subnet Mask, Gateway and DNS Server.
 Press the number buttons on the remote control when you set the Network manually.
5. Select a network through Select a network.
6. Select Network Test to check the network connectivity.



Media Play(USB & DLNA)

Connecting a USB Device

1. Press the **POWER** button to turn the TV on.
2. Connect a USB device containing photo, music and/or movie files to the **USB1(HDD)** or **USB2** jack on the side of the TV.
3. When the Application selection screen is displayed, press the **ENTER**  button to select Media Play (USB & DLNA).



New Function of UB8X

Media Play(USB & DLNA)

Media Play_USB

Connectivity > WISELINK Pro



This function enables you to view and listen to photo(JPEG), audio files(MP3) and movie (MPEG) saved on a USB Mass Storage Class (MSC) device.

New Function of UB8X

Media Play(USB & DLNA)

Media Play_DLNA

Connectivity > DLNA



TV 1 corresponding to DLNA

You can share content stored in your PC

(For example, children can watch an action movie separately in children's room.)



- PC-It is applied to OS Window XP, VISTA only.
- You can install it after downloading from DLNA CD and www.samsung.com



TV 2 corresponding to DLNA

You can share content stored in your PC

(You can watch a drama separately in your living room)



You can connect DLNA to your TV after setting up a network in your house.

You must install DLNA software on your PC in order to share stored content on your TV.

New Function of UB8X

Media Play(USB & DLNA)

● Supported Format vs. '08

Image Category		
Wireless Ready		
Seek function		
Supported Format	Image	Progressive JPEG
	Audio	
	Video	

08 model	09 model
5 category	3 category
X	O
X	O
SMI	SMI,SRT,SUB,TXT,TTXT
X	O
Same	
5 File extension	over 9 File extension

'08 Video format

File Extension	Container	Video Decoder	Resolution	Audio codec
*.avi	AVI	Xvid	800x600	PCM
				ADPCM
		H.264 BP	1920x1088	AC3
				PCM
		MPEG1 SP	800x600	PCM
				ADPCM
*.mp4	MP4	MPEG1 ASP	800x600	ADPCM
				PCM
		MJPEG	800x600	PCM
				ADPCM
		H.264 BP	1920x1088	AAC
				PCM
*.mpg	PS	H.264 MP	1920x1088	AAC
				PCM
*.vro	VRO	MPEG2	1920x1088	AC3
*.vob	VRO	MPEG2	1920x1088	AC3

'09 Video format

File Extension	Container	Video Decoder	Audio Codec	Resolution	FPS(FPS=60)	Frame	Comments
*.avi	AVI	Xvid	H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	5	HD ready
				800x600	6 ~ 50	5	HD ready
				800x600	6 ~ 50	5	HD ready
				1920x1080	6 ~ 50	50	HD ready
				1920x1080	6 ~ 50	25	HD ready , OHCI 1-Wraping Point support
		H.264	H.264 LPCM ADPCM AAC ALAW	1920x1080	6 ~ 50	25	H.264 , SO_RR not support
				800x600	6 ~ 50	25	Same as DivX 4 ~ OHCI 1-Wraping Point support
				800x600	6 ~ 50	5	Technic H.264 support
				800x600	6 ~ 50	5	HD ready
				800x600	6 ~ 50	5	HD ready
*.mp4	MP4	H.264	H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	50	HD ready , OHCI 1-Wraping Point support
				800x600	6 ~ 50	25	HD ready , OHCI 1-Wraping Point support
				800x600	6 ~ 50	25	HD ready , OHCI 1-Wraping Point support
				800x600	6 ~ 50	25	Same as DivX 4 ~ OHCI 1-Wraping Point support
				800x600	6 ~ 50	5	Technic H.264 support
		VBR	VBR H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	50	HD ready
				800x600	6 ~ 50	25	HD ready
				800x600	6 ~ 50	25	HD ready
				800x600	6 ~ 50	25	HD ready , OHCI 1-Wraping Point support
				800x600	6 ~ 50	5	Technic H.264 support
*.m4v	MP4	H.264	H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	25	Same as DivX 4 ~ OHCI 1-Wraping Point support
				800x600	6 ~ 50	25	HD ready
				800x600	6 ~ 50	25	HD ready
				800x600	6 ~ 50	25	HD ready , OHCI 1-Wraping Point support
				800x600	6 ~ 50	5	Technic H.264 support
		VOI	VOI H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	25	VOI SP/H.264 not support
				800x600	6 ~ 50	25	PHO > 90° R.R not support
				800x600	6 ~ 50	25	Same as DivX 4 ~ OHCI 1-Wraping Point support
				800x600	6 ~ 50	5	Technic H.264 support
				800x600	6 ~ 50	5	HD ready
*.rip	SOPP	H.264	H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	25	PHO > 90° R.R not support
				800x600	6 ~ 50	25	PHO > 90° R.R not support
				800x600	6 ~ 50	25	PHO > 90° R.R not support
		H.264	H.264 LPCM ADPCM AAC ALAW	800x600	6 ~ 50	25	Same as DivX 4 ~ OHCI 1-Wraping Point support
				800x600	6 ~ 50	25	HD ready
				800x600	6 ~ 50	5	Technic H.264 support

•There are some technical differences between USB(local play) and DLNA(network play).

So DLNA may have some limitations of functions such as play, seek, jump in unusual case.

New Function of UB8X

internet@TV

View Mode



Widgets



Home Network Center setting

About the Home Network Center

The Home Network Center connects the TV sets and mobile phones through a network. You can view call arrivals, text message contents, and schedules set on the mobile phone on the TV using the Home Network Center. In addition, you can play the media contents saved on the mobile phones such as videos, photos and music by importing them onto the TV via the network.

- ☒ If the device supports **DLNA DMC (Digital Media Controller)** function, Home Network Center function is available.
- ☒ The Samsung **SCH-i910** mobile phone supports the Home Network Center. Other models will be added in the future.
- ☒ The mobile device may need additional software installation. For details, refer to each user's guide.
- ☒ To play media contents on the TV, you need a mobile phone or PDA(Personal Digital Assistant) that supports the **DLNA DMC (Digital Media Controller)** function

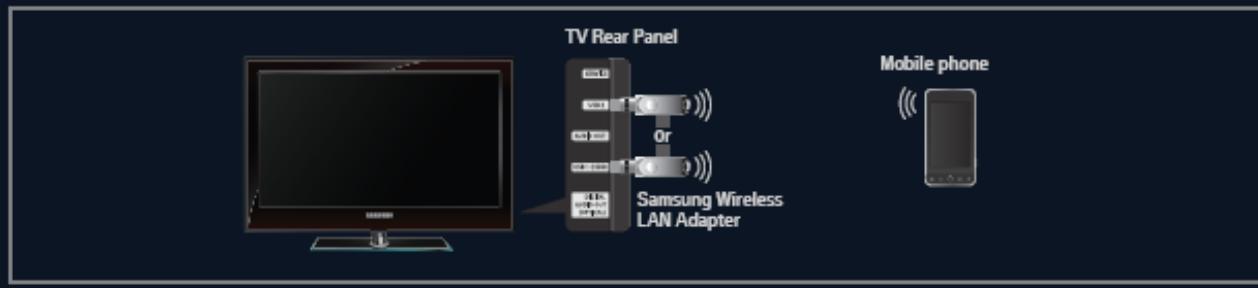
Home Network Center setting

Connecting to the Home Network Center

For more information about the network settings, refer to ‘Configuring the Network’.

- Connecting to a WLAN Ad-hoc network

1. Connect the ‘Samsung Wireless LAN Adapter’ to the **USB1(HDD)** or **USB2** port of the TV.



2. For more information on how to configure Ad-hoc network, refer to ‘Setting the Network’.
 - ☒ For information on configuring the mobile phone’s network settings, refer to the mobile phone manual.
3. Set up the IP address, SSID and password for the mobile phone in the Ad-hoc Settings of the mobile phone using the Network Name (SSID) and Security Key (password) displayed on the TV.

Home Network Center setting

- Connecting through a Wireless IP sharer

1. Connect the LAN port of the TV and the Wireless IP sharer using the LAN cable.

 Although the LAN port is connected, the network settings are configured for the wireless network.



 For the procedures to set up the wireless sharer and the mobile phone, refer to the manual of the corresponding device.

Home Network Center setting

Message

Shows a list of mobile phones which have been set up with this TV to use the message function (the call arrivals, text message contents and schedules set on the mobile phone).

Allowed

Allows the mobile phone.

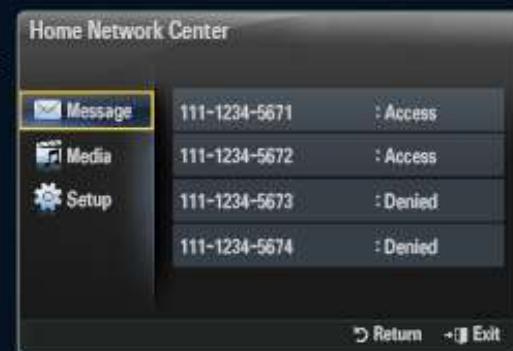
Denied

Blocks the mobile phone.

Delete

Deletes the mobile phone from the list.

 This function just deletes the name from the list. If the deleted mobile device turns on or tries to connect to the TV, it may be shown on the list.



Home Network Center setting

Media

Shows a list of mobile phones which allow you to import media contents (videos, photos, music) from the phone.

 Besides mobile phone, other mobile devices that support **DLNA DMC** are available.

Allowed

Allows the mobile phone.

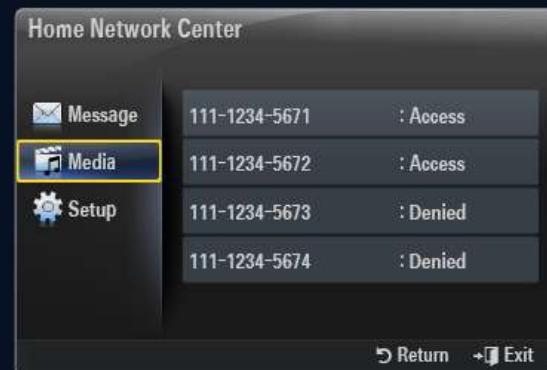
Denied

Blocks the mobile phone.

Delete

Deletes the mobile phone from the list.

 This function just deletes the corresponding name on the list. If the deleted mobile device turns on or tries to connect to the TV, it may be shown on the list.



Home Network Center setting

Setup

Message → On / Off

You can determine whether to use the message function (the call arrivals, text message contents, and schedules set on the mobile phone).

Media → On / Off

You can select whether to use the play function that plays the contents (videos, photos, music) from the mobile phone.

TV name

You can set the TV name so as to find it easily on the mobile device.

 If you selects User Input, you can type the TV name by OSK(On Screen Keyboard).



Home Network Center setting



Home Network Center :
Menu -> Application -> Home Network Center

Media On/Off function
on TV.

Message On/Off on TV.



Changeable TV name
displayed on Mobile Phone

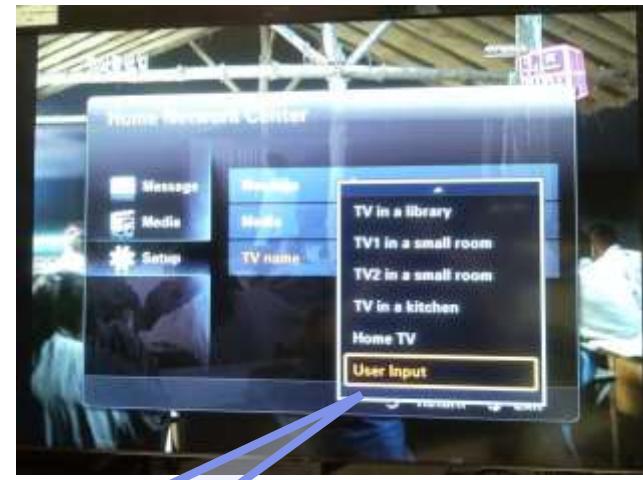
Home Network Center Setup

Home Network Center setting



If users select one of names in MENU, users can change name.

Home Network Center Setup
TV name change



TV name
can be
changed by
OSK(On
Screen
Keyboard).



Home Network Center setting

**IF (A) mobile phone number
is 010-269-9902**



(A) display TV OSD, can send
Messages.

(A) doesn't display TV, can't send
Messages.
If users don't know number, set
Denied.

If you want delete number,
Select Delete.

Message: access control

Home Network Center setting



Media: access control → same method with Message access control

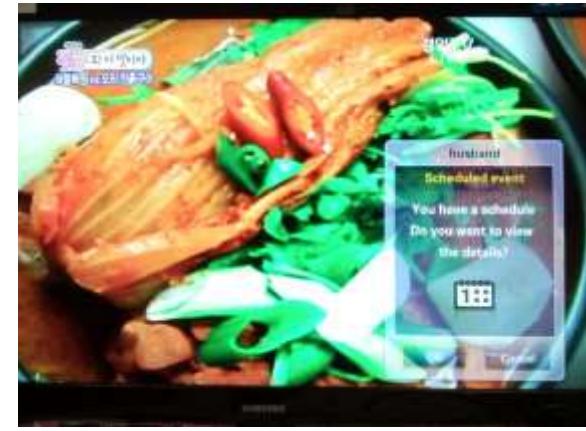
Message



received Message



Phone call



Displayed Schedule

For 20 second, 3 times , 5 minute duty.



If Media Play is ON and received Message, TV displays a small icon.
To check details , exit Media play.

Media

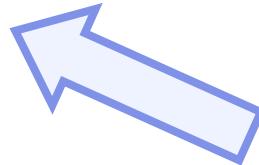


When TV is on, If received
Media .

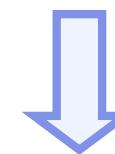
Press the exit in 3 seconds
If Press Return ,
Media play is canceled.



3 seconds



After finishing Media play,
It returns as a picture before this

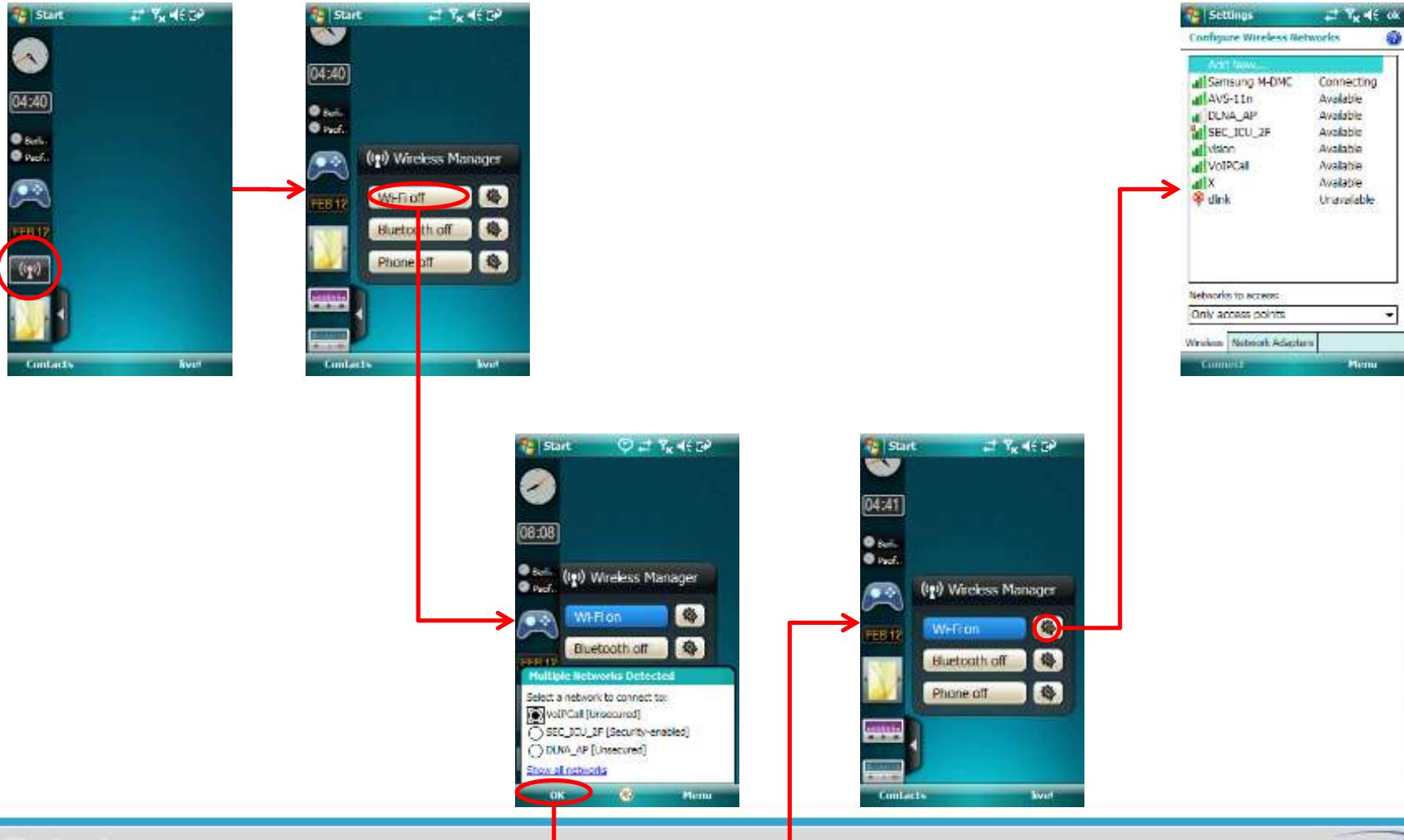


Media Play



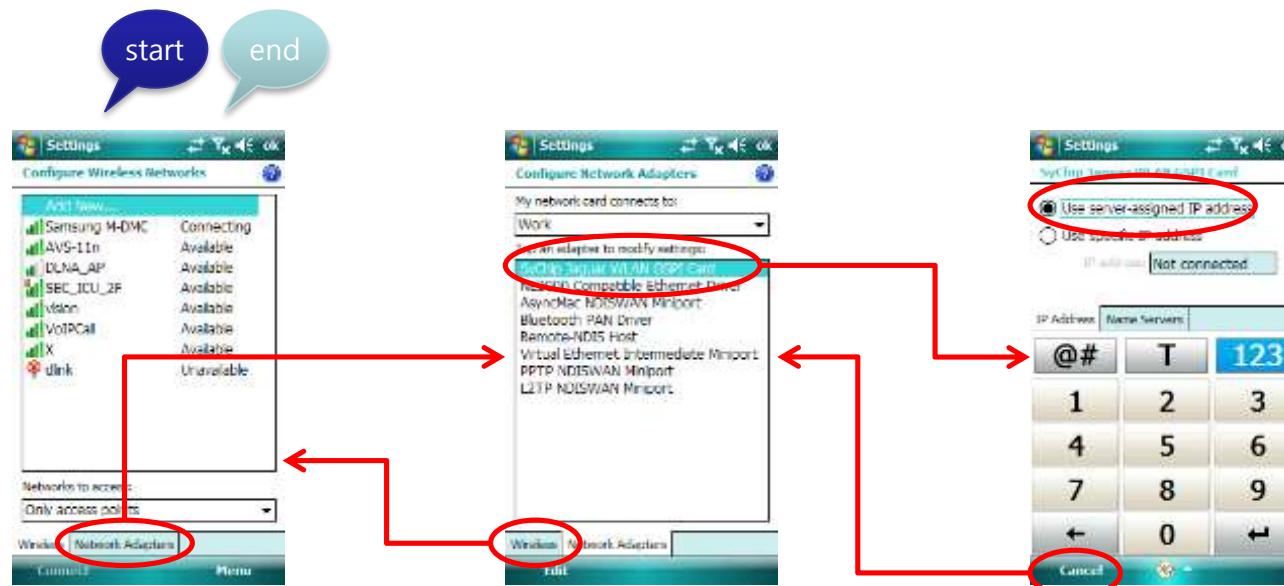
Mobile phone setting

Wi-Fi on



Mobile phone setting

Wi-Fi setting



Mobile phone setting

end

AP connection

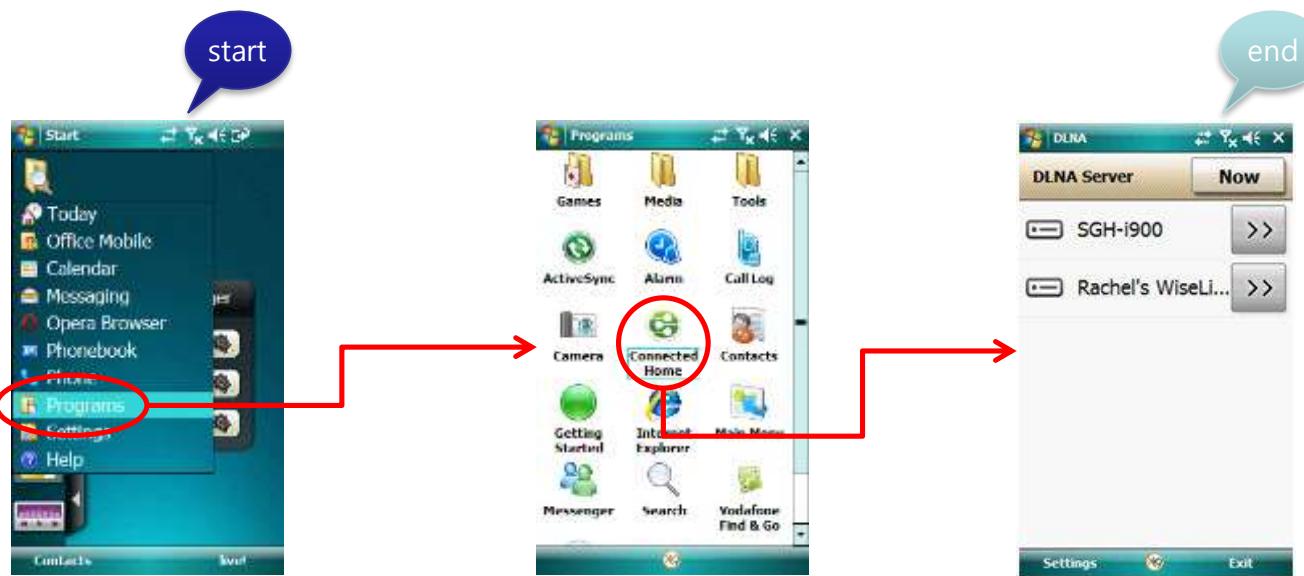


* If AP requires a security password, change Data Encryption as a WEP and enter Network key.

** If Connect key is acting, keep on connection until condition 'connected' of AP.

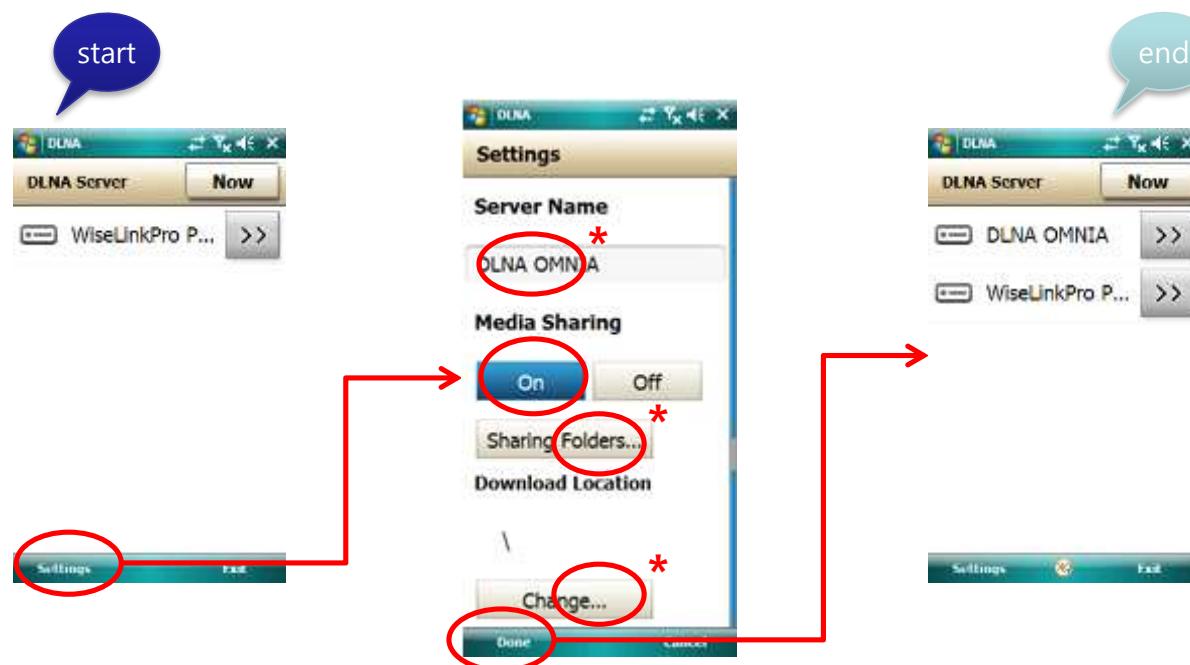
Mobile phone setting

Connected Home start (Media)



Mobile phone setting

Media server ON



*

Refer to next pages.

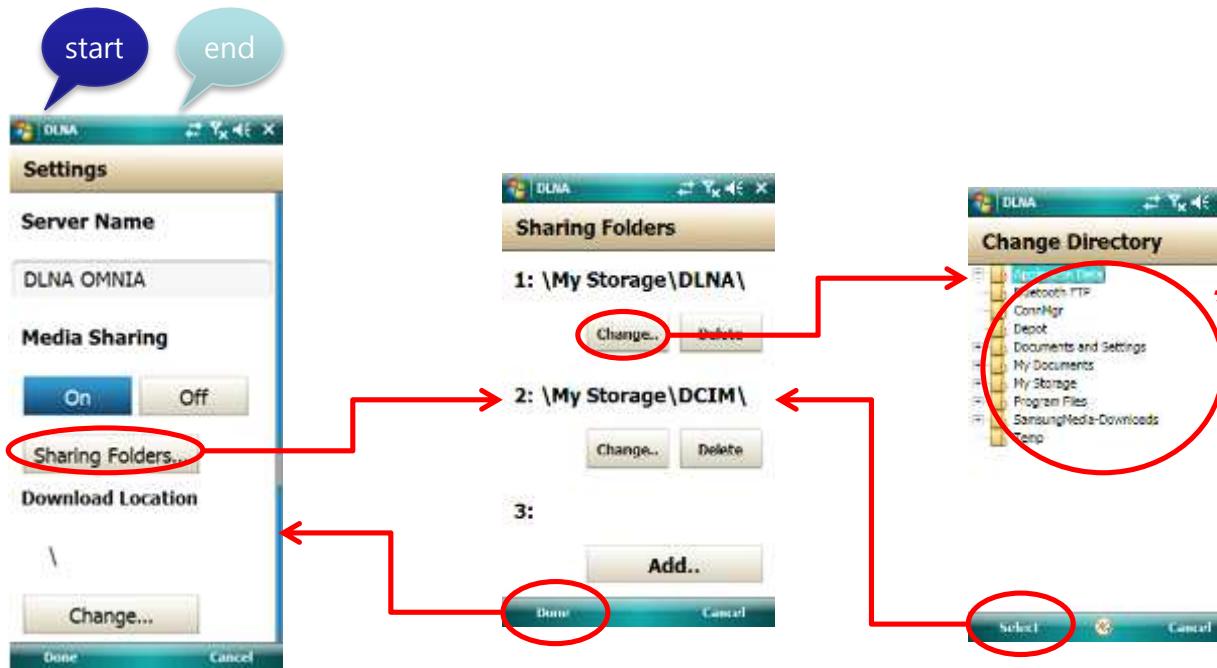
Mobile phone setting

Media server setting



Mobile phone setting

Media sharing folder setting

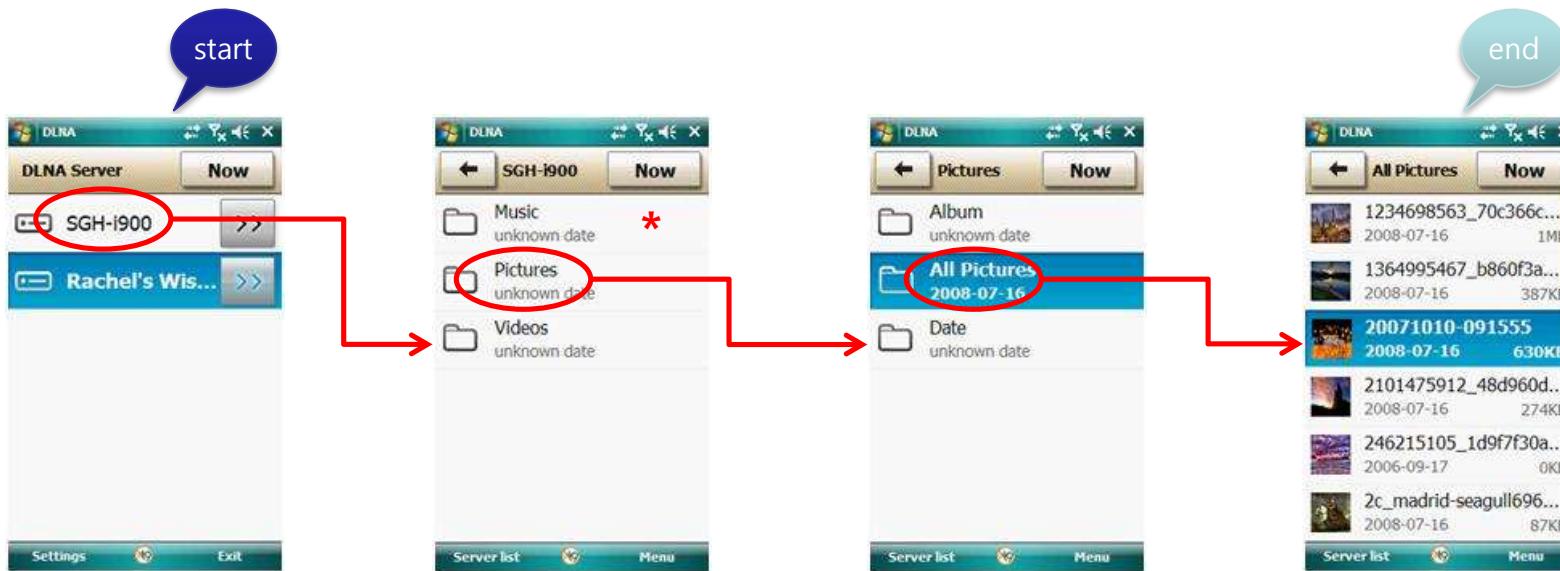


*

Folder >> 'My Storage\DCIM'

Mobile phone setting

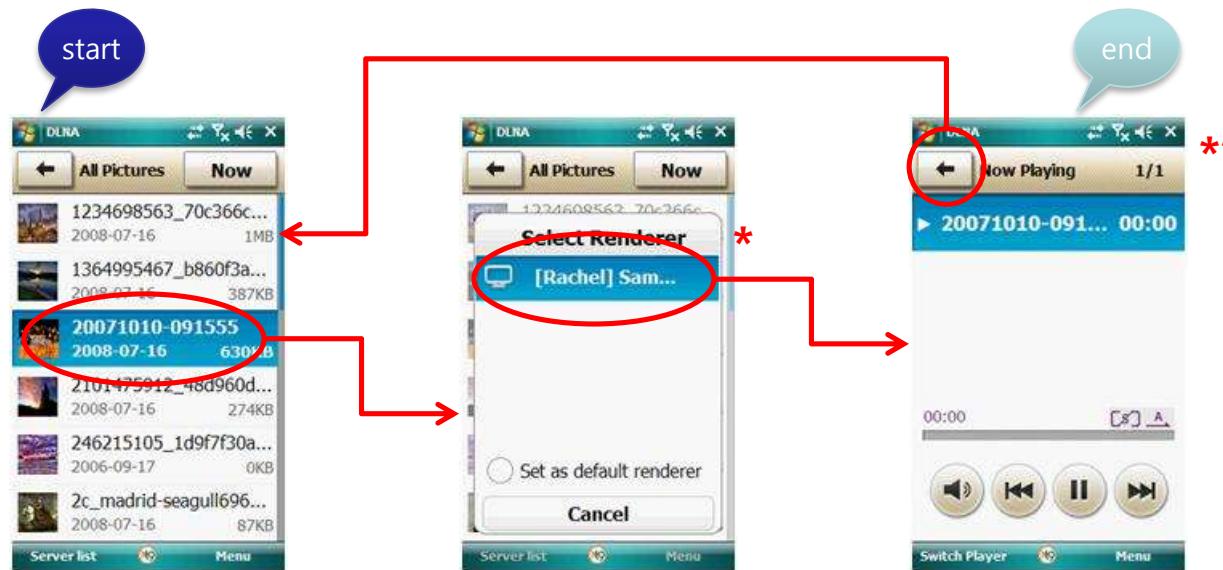
Media searching



*

Mobile phone setting

Media play



Mobile phone setting

start

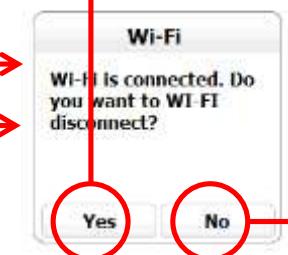
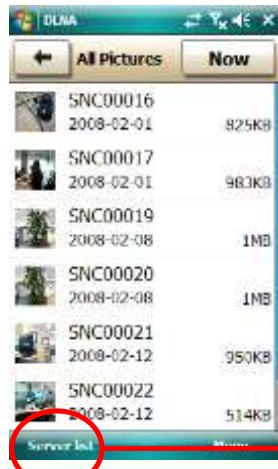
end

Media server OFF



시작

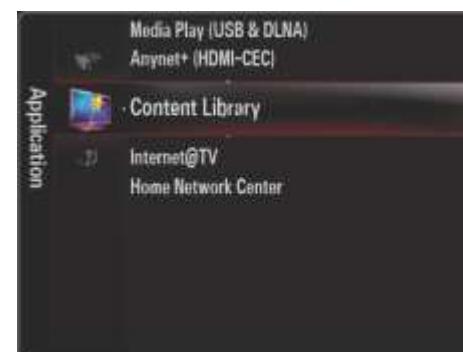
끝



Content Library

CONTENTS LIBRARY CONTAINS TEXT, GRAPHICS, IMAGES, MULTIMEDIA, AND OTHER MATERIALS FOR INFORMATIONAL AND PROMOTIONAL PURPOSES ONLY. MATERIALS IN CONTENTS LIBRARY HAS BEEN MODIFIED AND KEEPS BEING REVISED AND UPDATED. THE MATERIALS IN THE CONTENTS LIBRARY MAY NOT BE SUITABLE FOR ALL AUDIENCES.

INFORMATION IN THE CONTENTS LIBRARY IS PROVIDED 'AS IS.' ALTHOUGH THE INFORMATION PROVIDED TO YOU IN THE CONTENTS LIBRARY IS OBTAINED OR COMPILED FROM SOURCES WE BELIEVE TO BE RELIABLE, SAMSUNG CANNOT AND DOES NOT GUARANTEE THE ACCURACY, VALIDITY, TIMELINESS OR COMPLETENESS OF ANY INFORMATION OR DATA MADE AVAILABLE TO YOU FOR ANY PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES, INCLUDING NEGLIGENCE, SHALL SAMSUNG BE HELD LIABLE, WHETHER IN CONTRACT OR TORT, FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, ATTORNEY FEES, EXPENSES, OR ANY OTHER DAMAGES WHATSOEVER ARISING OUT OF, OR IN CONNECTION WITH, ANY INFORMATION CONTAINED IN, OR THE USE OF, THE CONTENTS LIBRARY, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.



Contents library



Content Library

How can I enter the main screen?

Press the [Menu] button to move to the [Application] item and select the [Contents Library] submenu to enter the main screen. Alternatively, you can enter the main menu screen of the corresponding service by pressing the [CONTENT] remote control shortcut key,

I want to know how to delete a content item saved on the TV or copy or move it to an external device.

Basically, copying and moving the contents saved on the TV is not supported. If you wish to delete a content item from the TV, select Contents Manager > My Contents, select a content item to be deleted and then select Delete. Then the content is removed from the corresponding category.

I have heard that the TV has built-in 1GB (or 2GB) flash memory. How can I access the memory?

The built-in flash memory inside the TV is for providing various features of the TV. You can view the status of the memory for the Content Library by selecting "Contents Manager" and viewing the used and free memory at the bottom left. Saving user content other than the content provided by Samsung Electronics is not supported. If there is free memory for the Content Library, you can directly play or copy the contents provided by Samsung Electronics by selecting the "USB" menu or "Internet Download" menu.

I want to show the pictures I have taken using the Gallery function in a SlideShow. How can I do this?

The [Contents Library] does not support playing a file that is not downloaded from samsung.com or from a 3rd party content provider linked by samsung.com. However, you can use the Image SlideShow function of WiseLink Pro.

Content Library

I wish to resume a game from the last point I played, but the game resumes from the beginning.

I have pressed a remote control button by mistake while playing content. The current service was terminated and the TV source screen is displayed.

I have heard that the built-in contents are played by the Adobe flash player, but I cannot play flash content on a USB memory device downloaded from the Internet.

I want to download and play a new content item other than the built-in contents. How can I do that?

I have downloaded new contents onto the USB memory device and inserted the USB memory device into the TV, but there is no response.

Playing the contents of an external USB memory device stops while operating.

[Contents Library] This function is only supported by the full version game purchased from Nurisem and by the full version game included with the TV by default.

Pressing a channel related button on the remote control shows the TV source screen. Take care not to press the Ch Up/Down, Ch List, Guide, Pre. Ch, or Fav. Ch button while playing content.

The [Contents Library] does not support playing a file other than the files authorized by Samsung Electronics for the playback by the corresponding model or files officially provided by a 3rd party content provider authorized by Samsung Electronics.

When the TV is connected to the Internet, and you select the "Contents Manager" > "Internet Download" item, the downloadable contents are listed. Additional new contents are expected to be provided through samsung.com and the contents provided by 3rd parties are expected to be provided under the responsibility of the corresponding 3rd party. When the TV is not connected to the Internet, visit the corresponding website, download the content to the USB device, select "Contents Manager">"USB", select the corresponding content and then copy the content to the TV or play the content.

Check the USB connection first. If there is no response on the screen even if the connection is properly connected, enter the Contents Library main screen, and press the "Red" color button to move to the USB content browsing screen. If there is no response even after this, turn the TV off and then on, re-insert the USB memory device, and repeat the above procedures.

Check the USB connection and then retry.

Yahoo TV

Product Vision

The TV Widget System on DTVs offers a compelling and powerful information and entertainment experience to consumers. Taking advantage of the capabilities of Internet-enabled TVs, TV Widgets are connected applications that consumers can personalize and enjoy while simultaneously watching live video or other media on their DTVs.

The TV Widget System solution uses the Yahoo! Widget Engine ("YWE"), which is a rich-media runtime client environment developed and distributed by Yahoo! to developers and publishers. YWE conventions and capabilities will be used to create the Platform UI, delivering the Widget applications lifecycle for the TV experience.

The TV Widget System provides a "write-once run-everywhere" software environment available to software developers, where an application written to specifications of the TV Widget System is able to run on other device implementations. This application environment also ensures a high level of privacy and security by isolating code, data and content between applications.

The TV Widget System allows end-users to install or remove applications via the Gallery Widget, which is a privileged Widget talking to one or more back-end Widget Gallery services used for provisioning new Widgets on the platform.

The TV Widget System will provide a TV-oriented Platform UI. Yahoo! and the Samsung will collaborate to customize the Platform UI and the Settings Widget as appropriate and practical for the Samsung's unique brand and user experience requirements.

Samsung will provide business rules and categories to customize the Widget Gallery services featuring its collection of Widgets.

Inside of UB8X

Yahoo TV



Yahoo TV
specification

- DTV support Yahoo Widget service
- Widget IPTV Service User Experience through Widget
- Users can download and install Widget in Gallery Server.
- A good quality contents and new profits by advertisement.
- In early Widget
 - Flickr, News, Weather, Finance



Inside of UB8X

Yahoo TV

- **Widget**
- **Widget mode**
 - Snippets Dock
 - Sidebar
 - Full Screen
 - Inline
- **Snippet**
- **Viewport**



Inside of UB8X

Yahoo TV

OOBE

- Out Of Box Experience
- When the first connecting, Users can set environment and see the an explanation.



Profile

- Profile for users on TV
- Each service By Profile
- Yahoo ID setting
- Administrator function

Gallery Widget

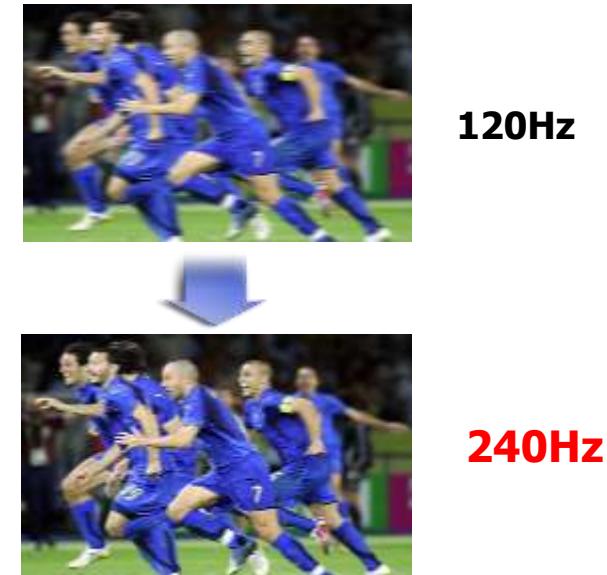
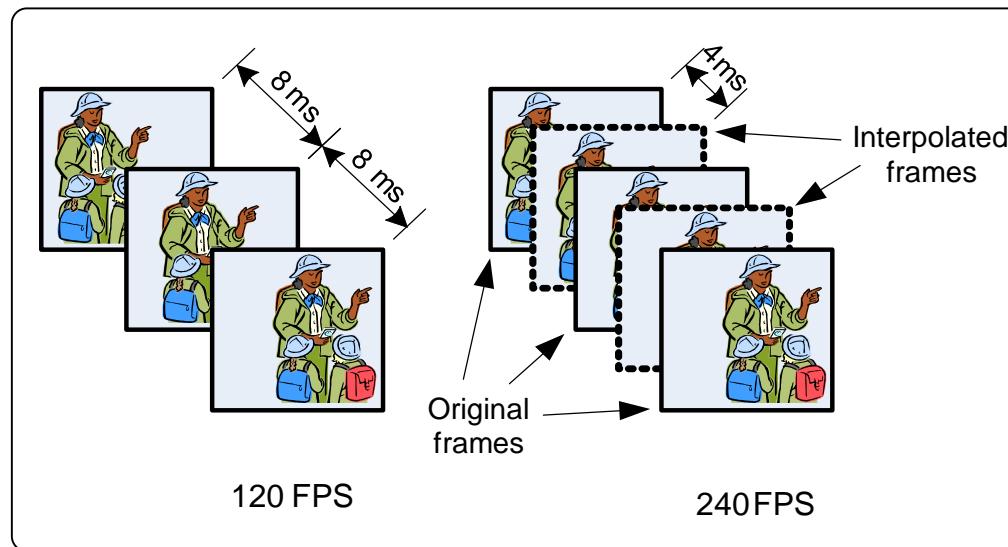
- Users can download and install Widget in Gallery Server.



Auto Motion Plus 240Hz

✓ Never deal with Motion Blur again

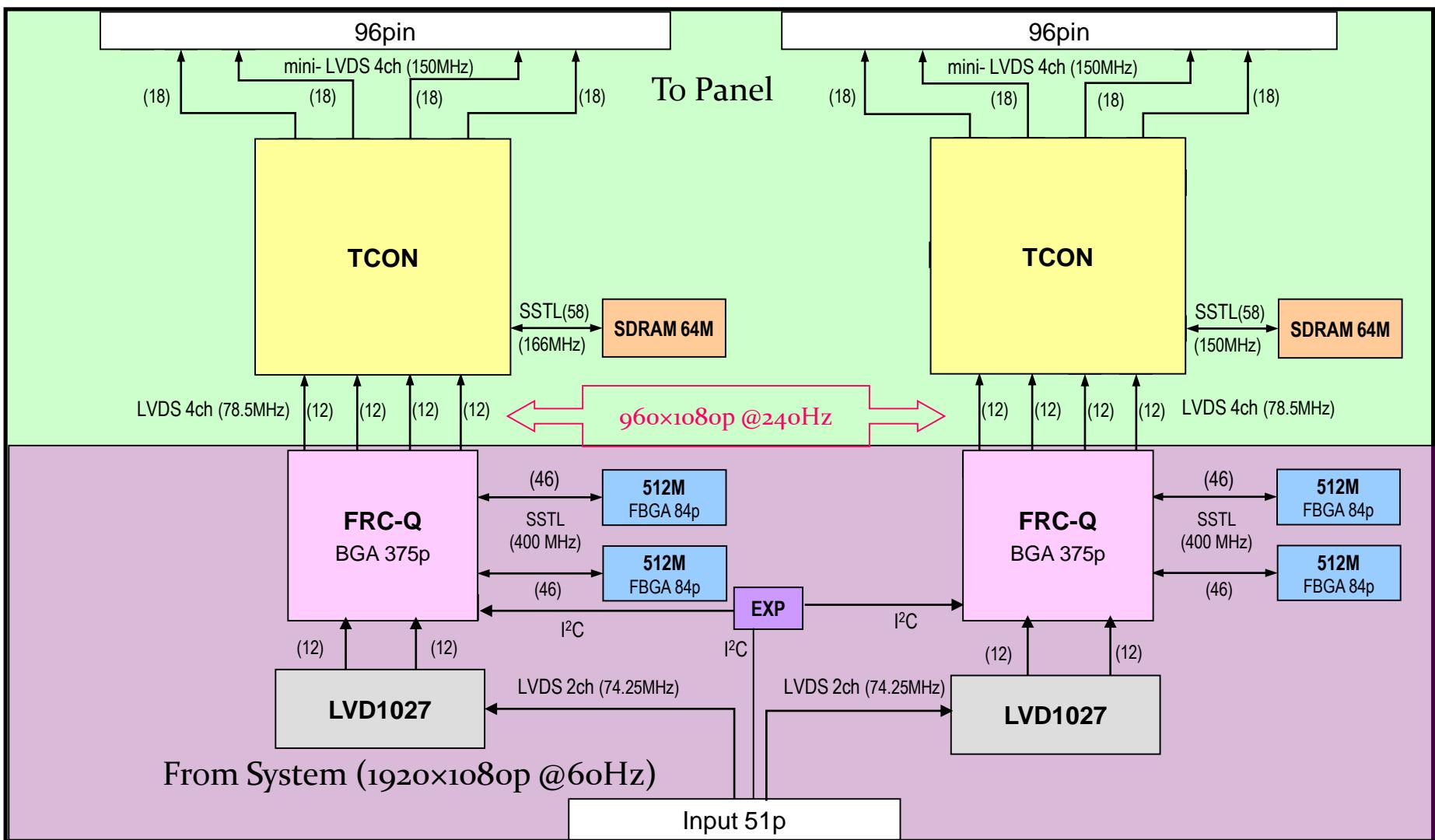
- Samsung 240Hz motion function will reproduce image closer to that of a real moving image perceived by the human eye.



	MPRT (BET) @12ppf	G-to-G (Typ.)
60Hz	15.7 ms	6.5 ms
120Hz	9.5 ms	5.5 ms
240Hz	4.7 ms	3.8 ms

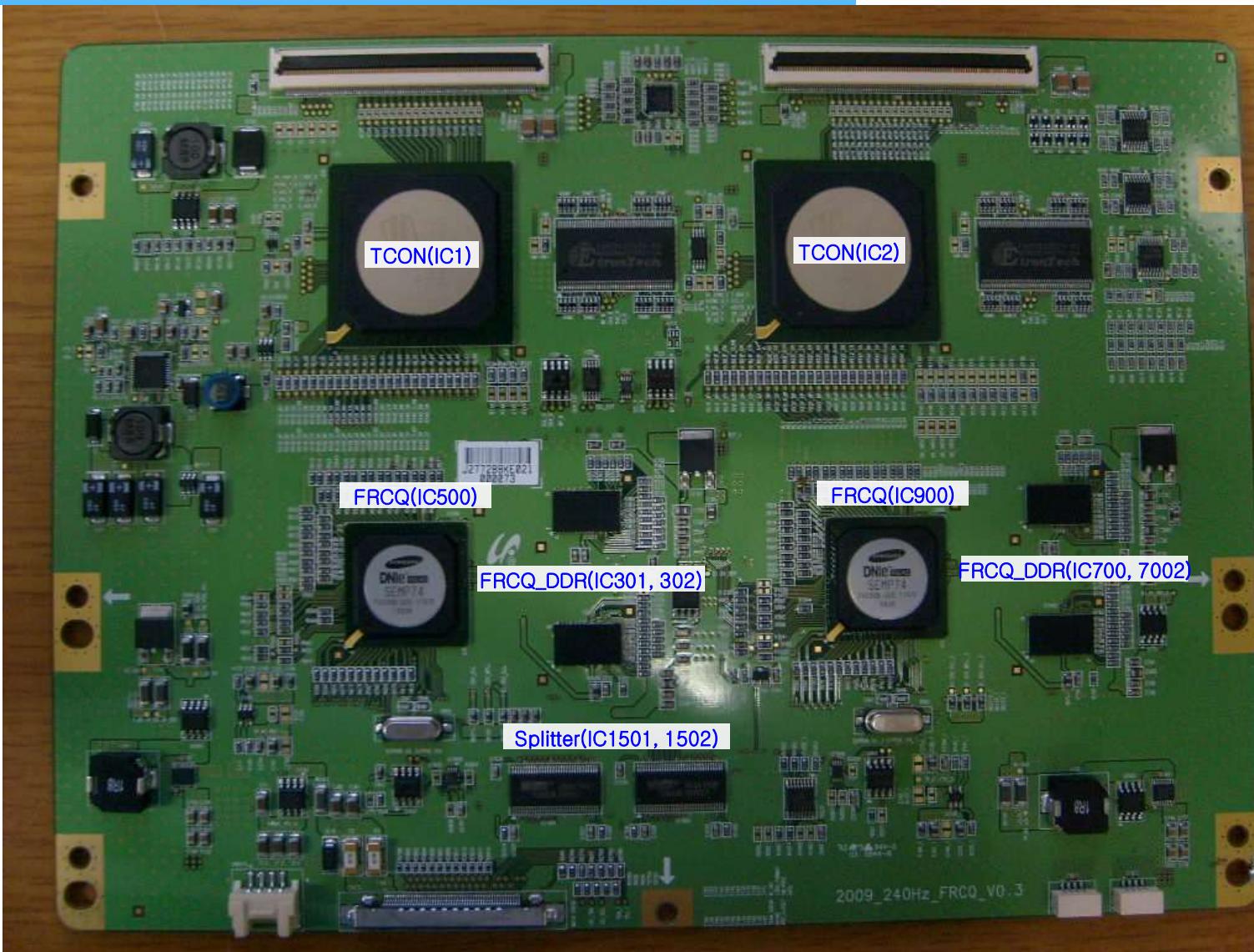
Inside of UB8X

240Hz[block diagram]



Inside of UB8X

240Hz[Assy]



New Function of UB8X

Auto Motion Plus 240Hz

**Removes drag from fast scenes
with a lot of movement to provide a clearer picture.**

Function (OSD)	120Hz FRC	Judder reduction (only 24p source)	Blur reduction
Off	Off (repeat)	Off	Off
Clear	ON (interpolation)	Off	Medium
Standard	ON (interpolation)	Medium	Medium
Smooth	ON (interpolation)	High	High
Custom	Level variable (0~10)		
Demo	Demo (Standard/off)		

* If you enable Auto Motion Plus 120Hz, noise may appear on the screen.
If this occurs, set Auto Motion Plus 120Hz to Off.

TruSurround HD

TruSurround HD VS. TruSurround XT

Product Name	Input Channel Configuration	Output Channel Configuration	Surround Virtualization	TruBass	Dialog Clarity	Definition	Bass Management	Stereo Mode	Headphone Mode
TruSurround	2.0, 4.0 and 5.0	2.0	X					SRS	TruSurround Headphone
TruSurround XT	1.0-6.1	2.0	X	X	X			WOW	TruSurround Headphone
TruSurround HD	1.0-6.1	2.0-3.1	X	X	X	X	X	WOW HD	TruSurround Headphone

Definition

High frequency performance of audio systems that do not use discrete high frequency drivers (tweeters) is frequently limited. The "Definition" processor incorporated into TruSurround HD is designed to overcome these limitations, providing maximum high frequency clarity for all program material.

Sculpted bass response for optimized bass response from small drivers and enclosures

TruSurround HD utilizes patented psychoacoustic techniques to maximize perceived bass response which goes beyond the low frequency limitations of speakers and headphones. The perception of fundamental low frequency tones is restored. The patented process can be tuned to match the specific size and frequency response of the target speakers.

PC Display

D-Sub and HDMI/DVI Input

 When using an HDMI/DVI cable connection, you must use the **HDMI IN 1(DVI)** jack.

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
IBM	640 x 350	31.469	70.086	25.175	+/-
	720 x 400	31.469	70.087	28.322	-/+
MAC	640 x 480	35.000	66.667	30.240	-/-
	832 x 624	49.726	74.551	57.284	-/-
	1152 x 870	68.681	75.062	100.000	-/-
VESA CVT	720 x 576	35.910	59.950	32.750	-/+
	1152 x 864	53.783	59.959	81.750	-/+
	1280 x 720	44.772	59.855	74.500	-/+
	1280 x 720	56.456	74.777	95.750	-/+
	1280 x 960	75.231	74.857	130.000	-/+
VESA DMT	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.861	72.809	31.500	-/-
	640 x 480	37.500	75.000	31.500	-/-
	800 x 600	37.879	60.317	40.000	+/+
	800 x 600	48.077	72.188	50.000	+/+
	800 x 600	46.875	75.000	49.500	+/+

New Function of UB8X

PC Display

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
VESA DMT	1024 x 768	48.363	60.004	65.000	-/-
	1024 x 768	56.476	70.069	75.000	-/-
	1024 x 768	60.023	75.029	78.750	+/+
	1152 x 864	67.500	75.000	108.000	+/+
	1280 x 1024	63.981	60.020	108.000	+/+
	1280 x 1024	79.976	75.025	135.000	+/+
	1280 x 800	49.702	59.810	83.500	-/+
	1280 x 800	62.795	74.934	106.500	-/+
	1280 x 960	60.000	60.000	108.000	+/+
	1360 x 768	47.712	60.015	85.500	+/+
	1440 x 900	55.935	59.887	106.500	-/+
	1440 x 900	70.635	74.984	136.750	-/+
	1680 x 1050	65.290	59.954	146.250	-/+
VESA GTF	1280 x 720	52.500	70.000	89.040	-/+
	1280 x 1024	74.620	70.000	128.943	-/-
VESA DMT / DTV CEA	1920 x 1080p	67.500	60.000	148.500	+/+

PIP Table

Amber(08')

Main	sub	Analog TV	Digital TV
HDMI		O	X
COMP		O	X
PC		O	X
Select sound (Main/Sub)		X	



UB8X(09')

Main	sub	Analog TV	Digital TV
HDMI		O	O
COMP		O	O
PC		O	O
Select sound (Main/Sub)		O	

* **PIP support**

.- You can view PIP screen when the main picture is HDMI1,2,3,4, Component 1 or PC

HDMI/DVI edit name

Amber(08')

Edit Name	Sound Input	Picture mode
PC	Auto	PC setting



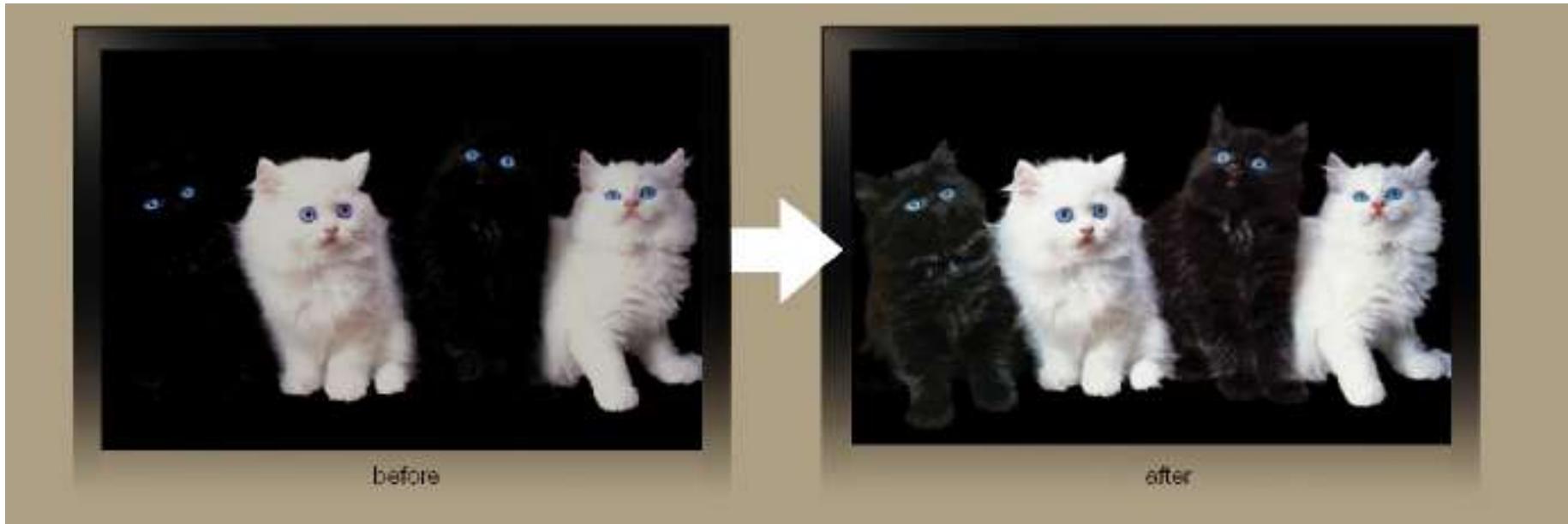
UB8X(09')

Edit Name	Sound Input	Picture mode
PC	Auto	PC setting
DVI	DVI R/L	Nom al setting
DVI PC	DVI R/L	PC setting

* Auto : System judge that source type automatically, and select sound input(HDMI/DVI).

BLU (Back Light Unit) : LED

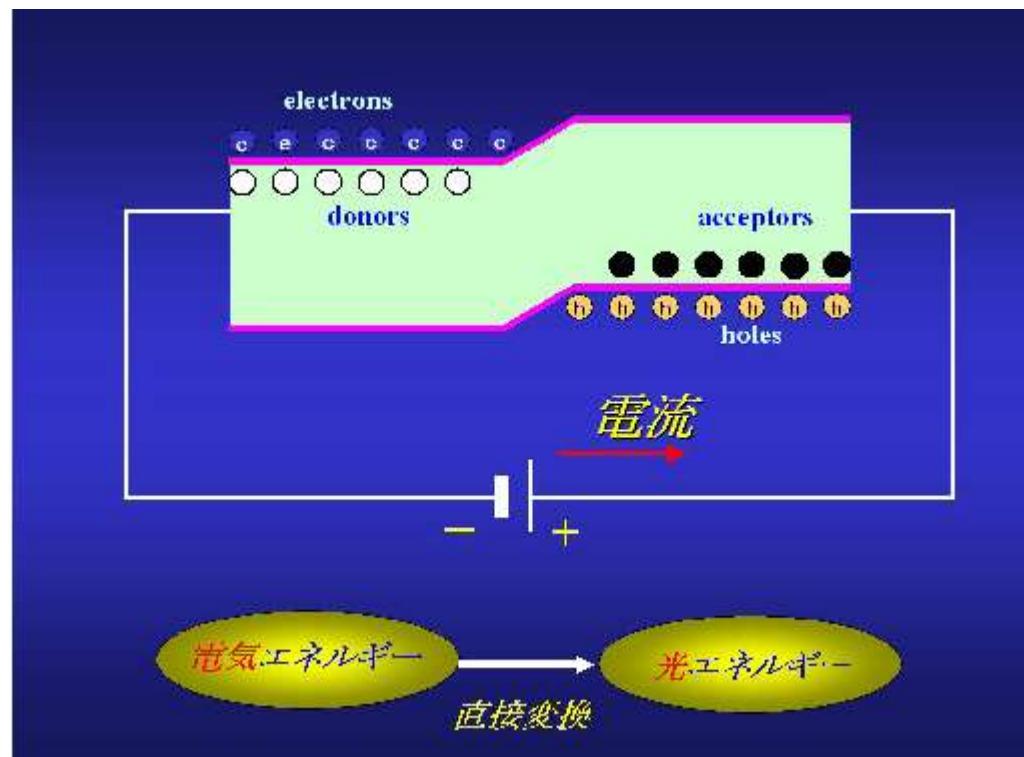
LED Backlight



What is LED?

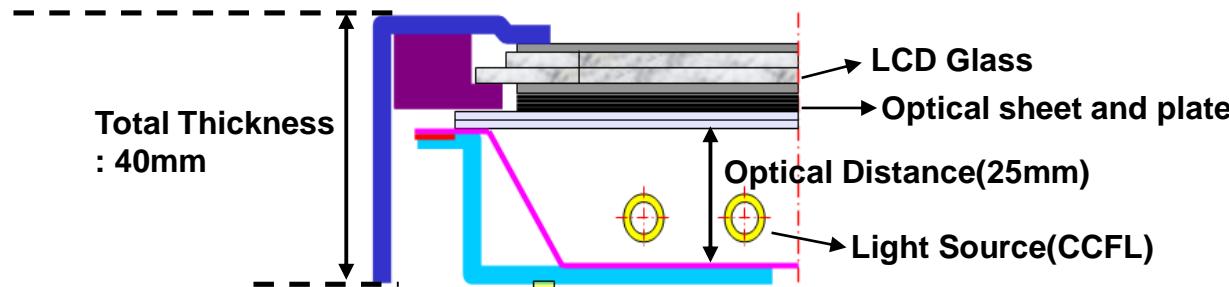
■ PN semiconductor that electrical energy is changed to light energy.

- Light Energy emission by a potential difference of P,N pole
- Low power consumption , semi-permanent , eco-frendly, fast reponse time

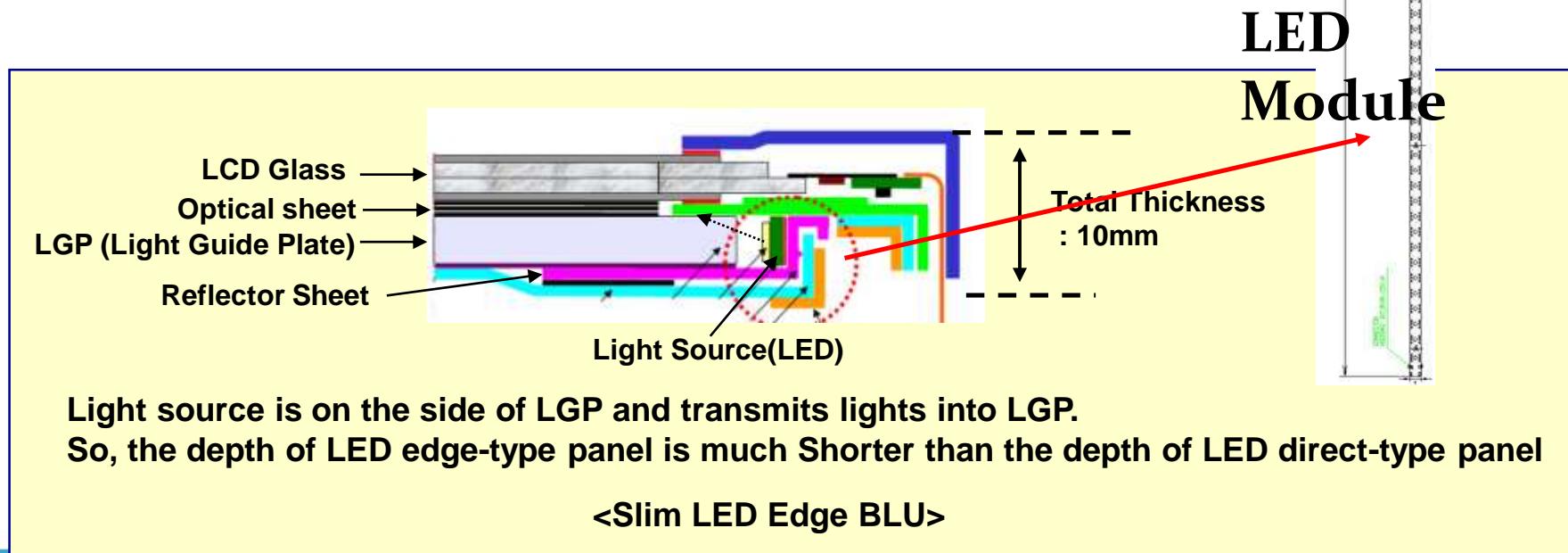


Design Concept of Slim LED Edge BLU

✓ Comparison of Slim LED BLU and Conventional CCFL BLU



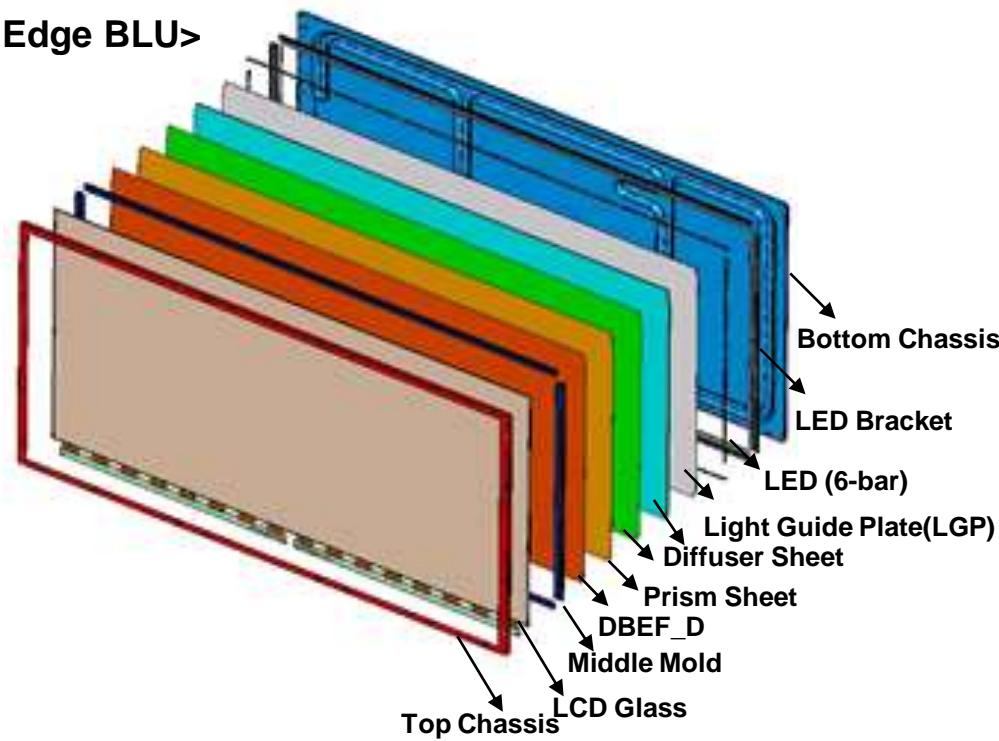
<Cross Section Conventional LCD TV>



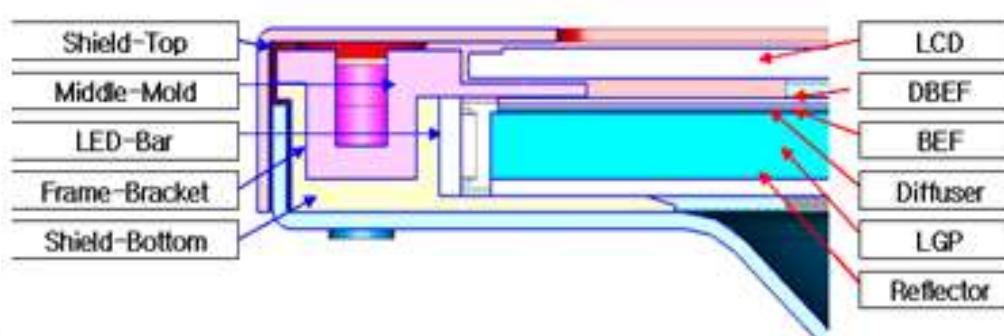
<Slim LED Edge BLU>

Detail Drawing

<Components of Slim LED Edge BLU>



<Cross-Section Diagram>

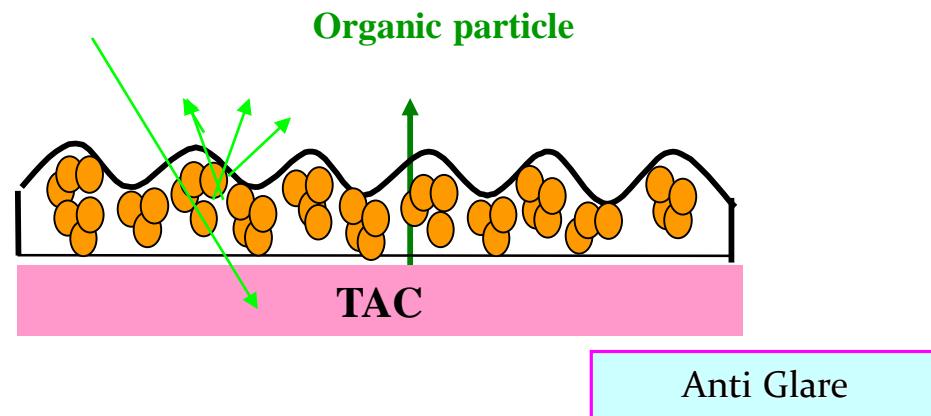
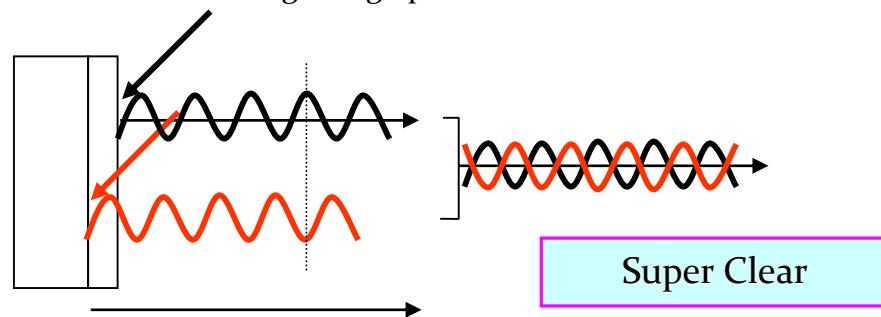


Super Clear II

- ◆ Low refractive index Anti-Reflection Coating
- ◆ High picture quality by improving



- ◆ Anti-Glare & Low Reflection processing
 - Purpose : Offset interference occurrence by changing phase difference of light returning in surface
 - Method : Coating or Sputtering as layers that have different refractive index
 - Shortcoming : High price

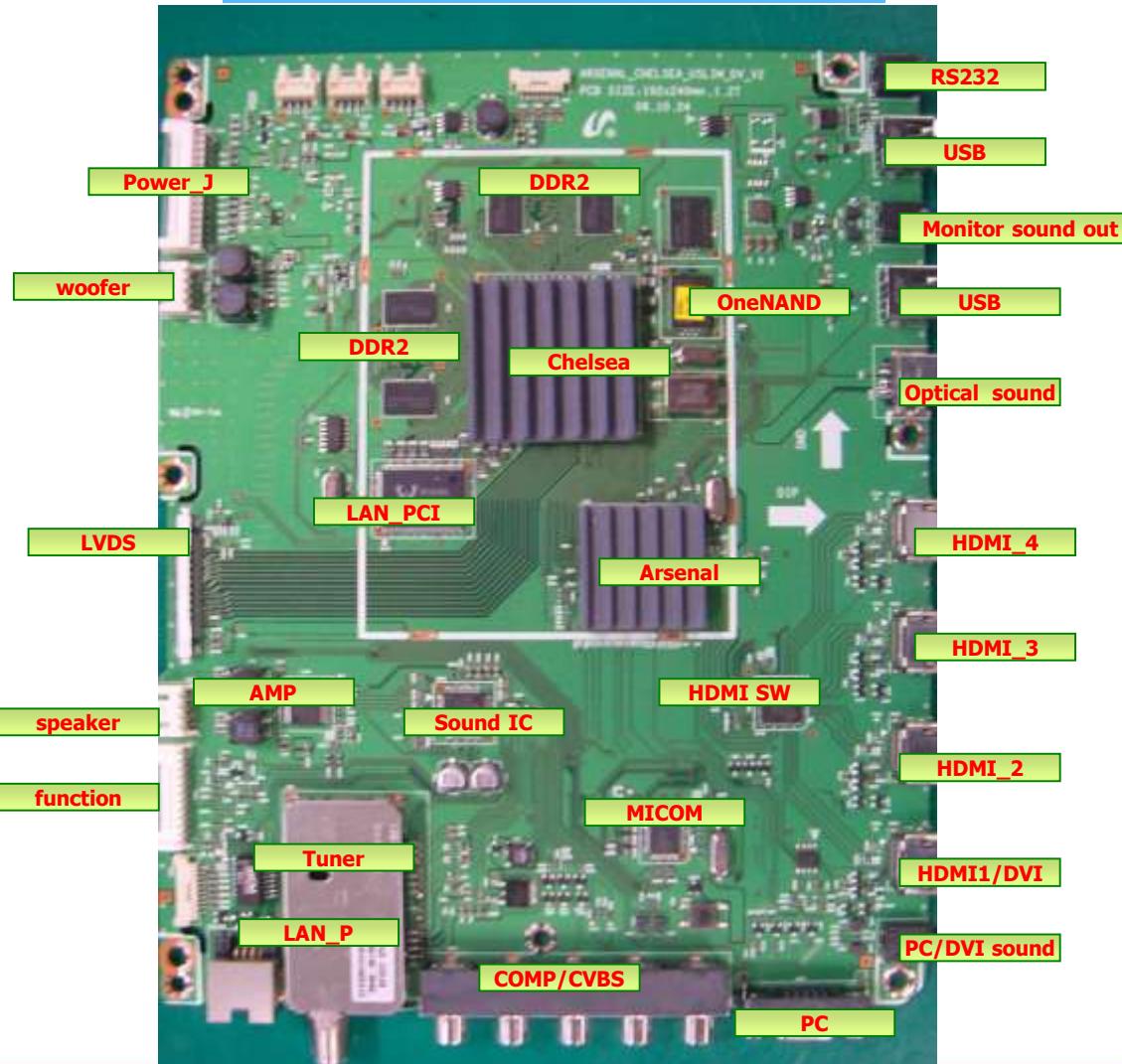


BOARD DESCRIPTION



MAIN BOARD LAYOUT

Model : 40"/46"/55"



Main board connector pin map

CN201(to Power board)

1	NC	2	NC
3	NC	4	NC
5	PWM_OUT	6	GND
7	INVERTER_ON	8	NC
9	B12V	10	B12V
11	B12V	12	GND
13	GND	14	GND
15	BSV	16	BSV
17	BSV	18	BSV
19	GND	20	GND
21	GND	22	GND
23	B1VS	24	B12VS
25	GND	26	GND
27	ASV	28	GND
29	SW_PWR	30	HSYNC

CN1002(to T-CON)

1	GND	27	RE[0]+
2	GND	28	GND
3	SW_PVCC	29	RO[4]+
4	FRC_RESET	30	RO[4]-
5	SDA	31	RO[3]+
6	SCL	32	RO[3]-
7	LVDS opt	33	GND
8	H-Sync Out	34	ROCLK+
9	Panel_WB	35	ROCLK-
10	T_Con Check	36	GND
11	NC	37	RO[2]+
12	NC	38	RO[2]-
13	GND	39	RO[1]+
14	RE[4]+	40	RO[1]-
15	RE[4]-	41	RO[0]+
16	RE[2]+	42	RO[0]-
17	RE[2]-	43	GND
18	GND	44	GND
19	RECLK+	45	GND
20	RECLK-	46	NC
21	GND	47	Panel_VCC
22	RE[2]+	48	Panel_VCC
23	RE[2]-	49	Panel_VCC
24	RE[1]+	50	Panel_VCC
25	RE[1]-	51	Panel_VCC
26	RE[0]+		

CN1501-1(to woofer)

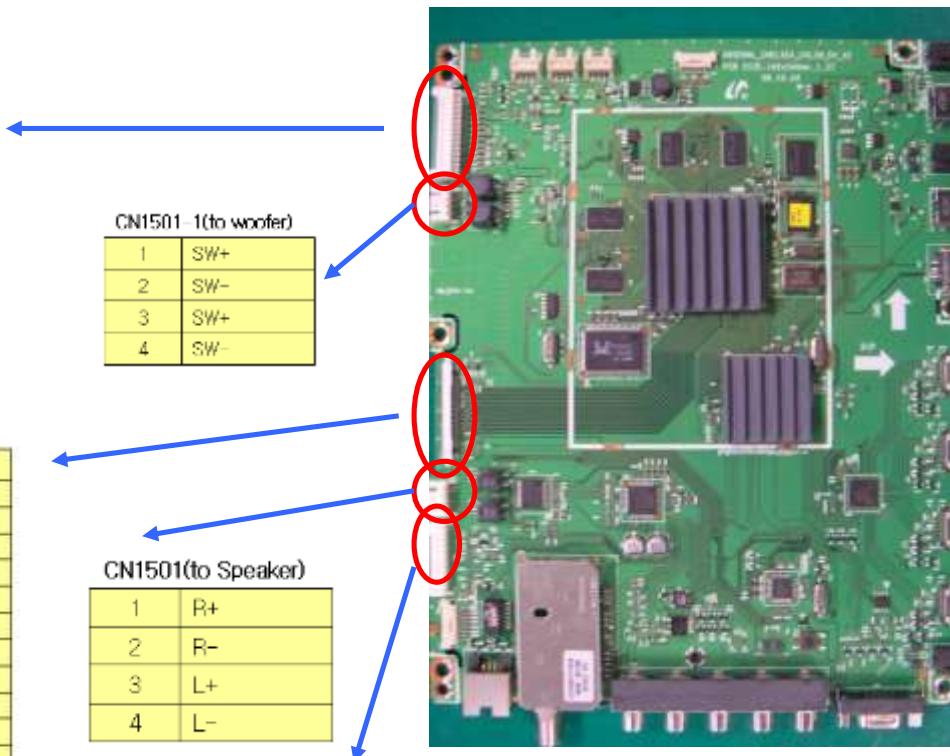
1	SW+
2	SW-
3	SW+
4	SW-

CN1501(to Speaker)

1	R+
2	R-
3	L+
4	L-

CN1601(to Function/IR)

1	IR	7	KEKY2
2	GND	8	NCL
3	A3.3V	9	A5V
4	LED_INDICAT	10	NC
5	BUZZER	11	LED_CTRL
6	KEY1	12	BSV



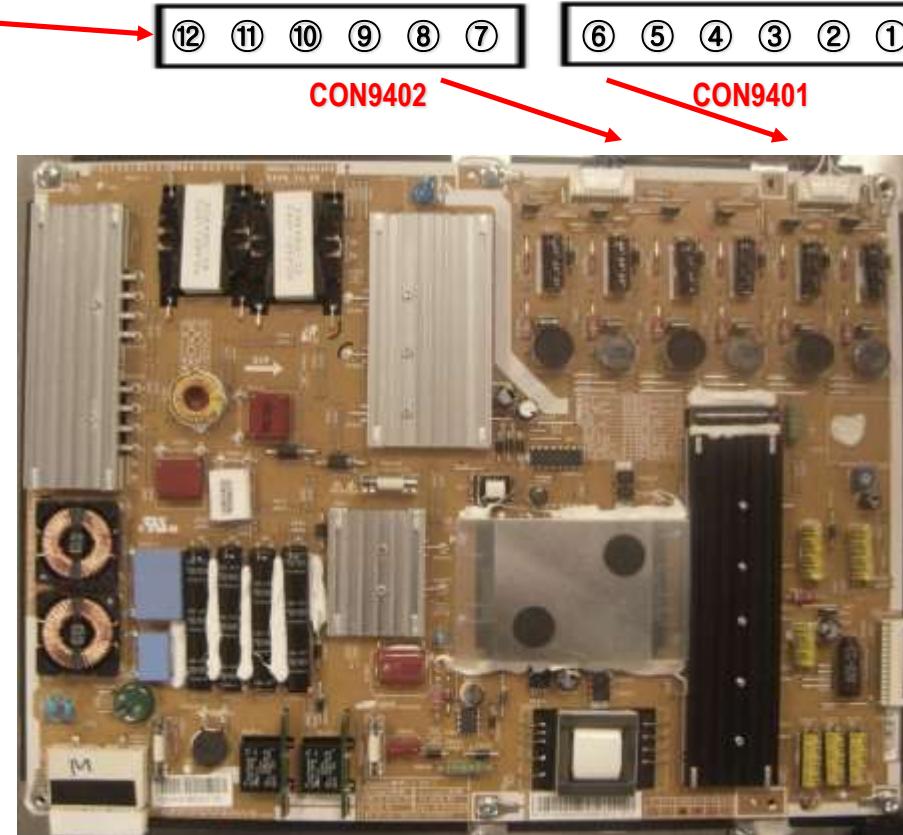
SMPS BOARD LAYOUT

Model : 40,46

PIN #	Signal
1	Ch1+
2	Ch1-
3	Ch2+
4	Ch2-
5	Ch3+
6	Ch3-
7	Ch4+
8	Ch4-
9	Ch5+
10	Ch5-
11	Ch6+
12	Ch6-

(CN802S)

PIN #	Signal
1	AC_L
2	F/G
3	AC_N



Description	Pin no	Description
Power-On/Off	1	2
ST-BY(5.2V)	3	4
GND_Vamp	5	6
Vamp Sound	7	8
GND_5.3V	9	10
GND_5.3V	11	12
5.3V	13	14
5.3V	15	16
GND_12V	17	18
12V	19	20
12V	21	22
BL ON/OFF	23	24
E-PWM	25	26
Det.(5V)	27	28
N.C.	29	30
		N.C.

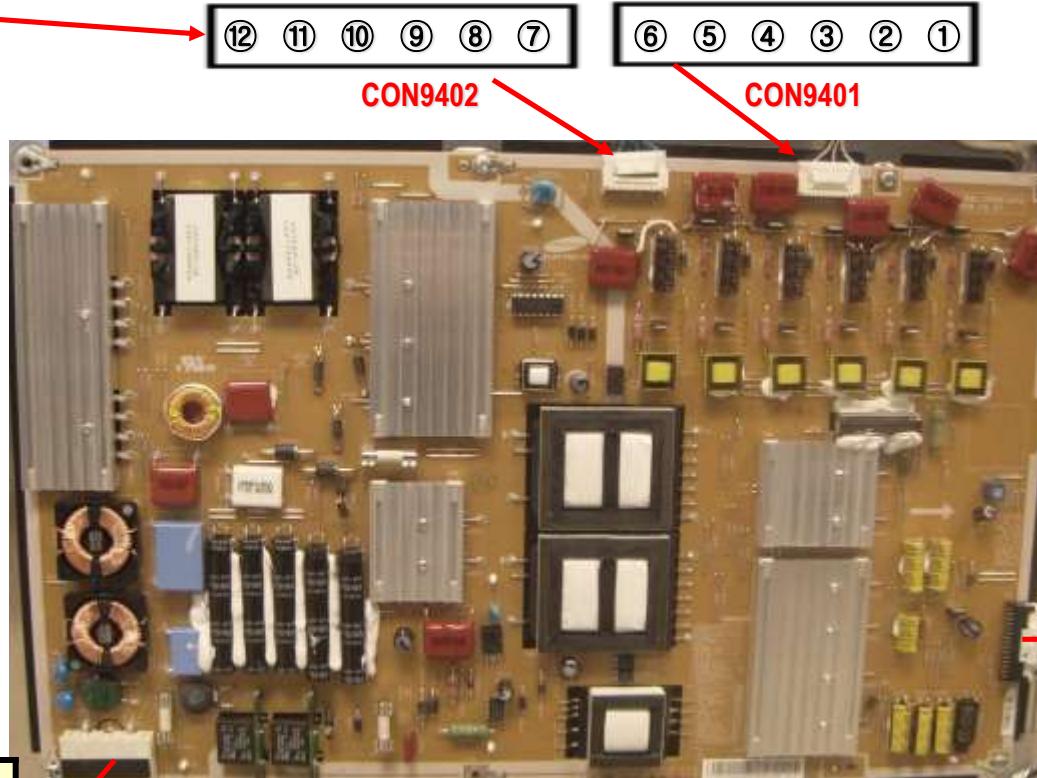
SMPS BOARD LAYOUT

Model : 55

PIN #	Signal
1	Ch1+
2	Ch1-
3	Ch2+
4	Ch2-
5	Ch3+
6	Ch3-
7	Ch4+
8	Ch4-
9	Ch5+
10	Ch5-
11	Ch6+
12	Ch6-

(CN802S)

PIN #	Signal
1	AC_L
2	F/G
3	AC_N



Description	Pin no	Description
Power - On/Off	1 2	H-Sync
ST-BY(5.2V)	3 4	GND_STBY(5.2V)
GND_Vamp	5 6	GND_Vamp
Vamp Sound	7 8	Vamp Sound
GND_5.3V	9 10	GND_5.3V
GND_5.3V	11 12	GND_5.3V
5.3V	13 14	5.3V
5.3V	15 16	5.3V
GND_12V	17 18	GND_12V
12V	19 20	GND_12V
12V	21 22	12V
BL ON/OFF	23 24	I-PWM
E-PWM	25 26	GND
Det.(5V)	27 28	Inverter err.
N.C.	29 30	N.C.

Main board connector pin map

CN201(to Power board)

1	NC	2	NC
3	NC	4	NC
5	PWM_OUT	6	GND
7	INVERTER_ON	8	NC
9	B12V	10	B12V
11	B12V	12	GND
13	GND	14	GND
15	B5V	16	B5V
17	B5V	18	B5V
19	GND	20	GND
21	GND	22	GND
23	B1VS	24	B12VS
25	GND	26	GND
27	A5V	28	GND
29	SW_PWR	30	H SYNC

CN1691(to Function/IR)

1	A3.3V
2	ZIGBEE_RESET
3	RDB_HOTEL
4	GND
5	TDB_HOTEL
6	POWER_DET

Main board connector pin map

CN1002(to T-CON)

1	GND	27	RE[0]-
2	GND	28	GND
3	SW_PVCC	29	RO[4]+
4	FRC_RESET	30	RO[4]-
5	SDA	31	RO[3]+
6	SCL	32	RO[3]-
7	LVDS opt	33	GND
8	H-Sync Out	34	ROCLK+
9	Panel_WP	35	ROCLK-
10	T_Con Check	36	GND
11	NC	37	RO[2]+
12	NC	38	RO[2]-
13	GND	39	RO[1]+
14	RE[4]+	40	RO[1]-
15	RE[4]-	41	RO[0]+
16	RE[3]+	42	RO[0]-
17	RE[3]-	43	GND
18	GND	44	GND
19	RECLK+	45	GND
20	RECLK-	46	NC
21	GND	47	Panel_VCC
22	RE[2]+	48	Panel_VCC
23	RE[2]-	49	Panel_VCC
24	RE[1]+	50	Panel_VCC
25	RE[1]-	51	Panel_VCC
26	RE[0]+		

CN1501(to Speaker)

1	R+
2	R-
3	L+
4	L-

CN1501-1(to Speaker)

1	SW+
2	SW-
3	SW+
4	SW-

CN1601(to Function/IR)

1	IR	7	KEKY2
2	GND	8	NCL
3	A3.3V	9	A5V
4	LED_INDICAT	10	NC
5	BUZZER	11	LED_CTRL
6	KEY1	12	B5V

PIP Table

PIP MAIN	TV Analog	TV Digital	COMP	HDMI 1,2,3,4	Digital	PC
TV Analog	X	X	X	X	X	X
TV Digital	X	X	X	X	X	X
Video	X	X	X	X	X	X
HDMI 1,2,3,4	O	O	X	X	X	X
COMP	O	O	X	X	X	X
PC	O	O	X	X	X	X

O : PIP support

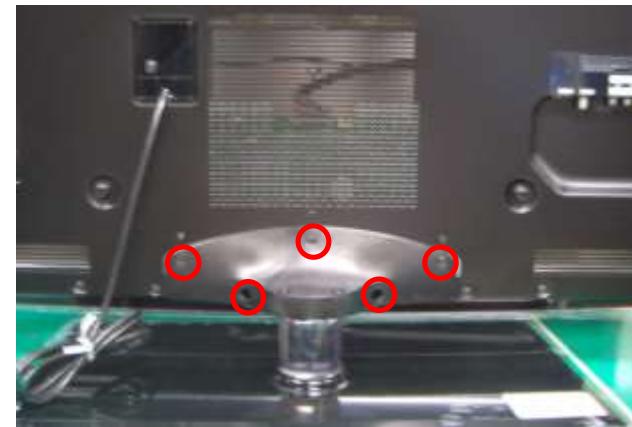
- You can view TV broadcasts on the PIP screen (sub-picture) when the main picture is from an external device connected to HDMI, Component or PC



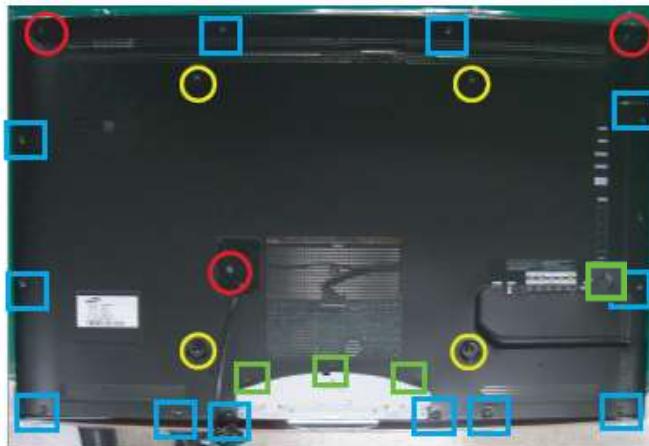
Disassembly

Disassembly UB8X

1. Place TV face down on cushioned table.
Remove screws from the Stand.



2. Remove the screws of rear-cover



40"



46"/55"



Disassembly

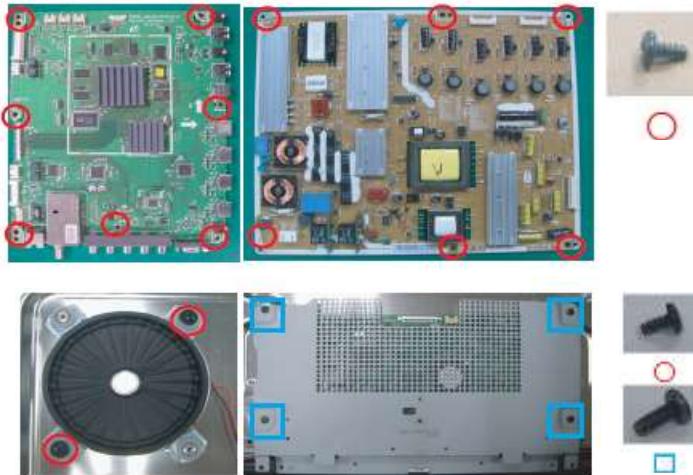
3. Lift up the rear-cover.



4. Remove 30pin cable. LVDS cable. Woofer. Disconnect other cables from Main board and SMPS board .

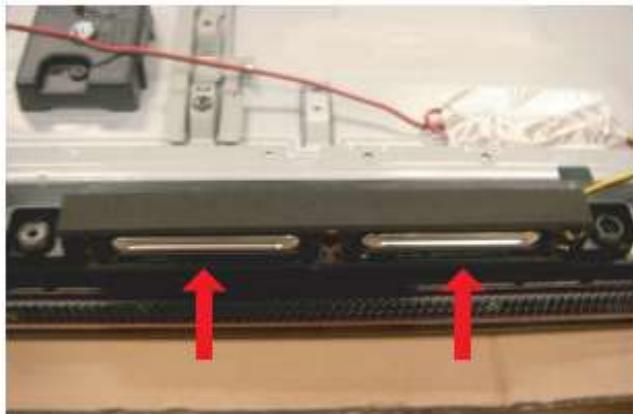


5. Remove the screws of main board , SMPS, Stand bracket

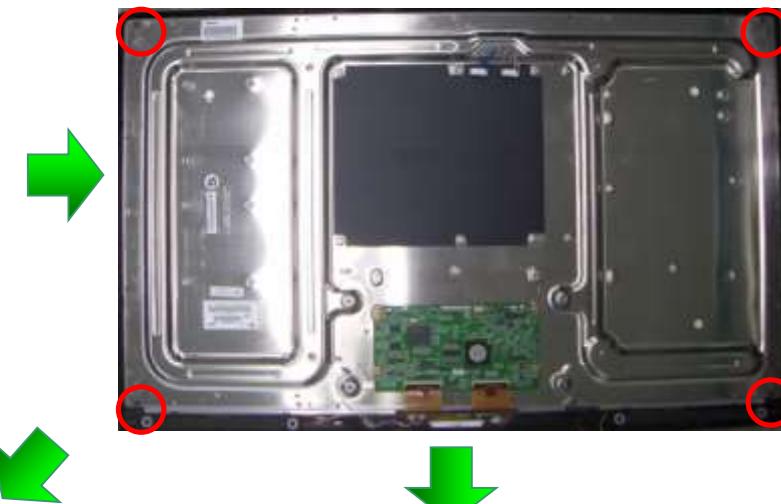


Disassembly

6. Remove the speakers



7. Remove the screws on Panel.



Trouble Shooting



Check List for Initial operation

- . Power cord in to the set
- . Power switch on
- . You can sound SMPS relay
 - * If you can't sound, check the STB_5V appear at BD229 in main board
- . Back-light on
 - * If back-light not on, check the main board power line
And check the dimming cable
- . Picture on or display the banner
 - * If display is nothing, check the LVDS cable
And LVDS clk/data line

Inform to change the Assembly

- Check the Side-Lable Ver. in set (important)
- Order to the item with Side-Lable Ver.
- If you change the item, see the service-bulletin
for setting the factory option.

Trouble Shooting

Panel or Main?

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.

Check the power input to the Main Board.



<- There are so many pictures that have problems .

If you have occasions like Dot error, scratch, line defect .

Because of a defective panel.

Otherwise follow below explanation.

FRC

Check the internal patterns from both the FBE3 and FRCQ options.

**Go to the factory mode(mute 1-8-2 power on when TV is "standby on")
control -> Test pattern**

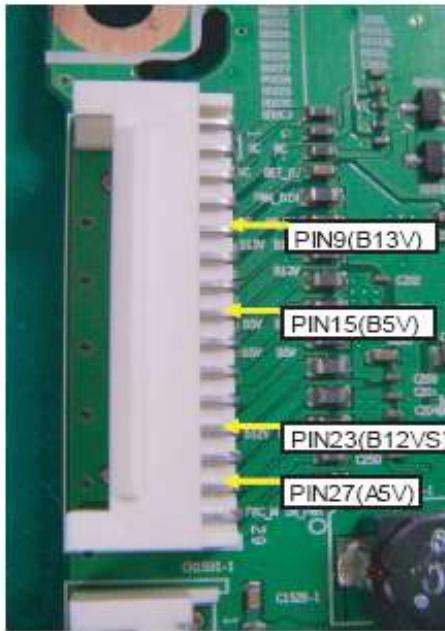
**Select FBE Pattern Sel -> check the internal patterns by using left, right direction key.
-> If you can't see normal pictures, change the main board.**

Go to upper menu by pushing menu key.

**Select FRC PATT_AfterDDR , check the internal pattern by using left, right direction key .
-> If you can't see normal pictures , change the T-con board**

Trouble Shooting

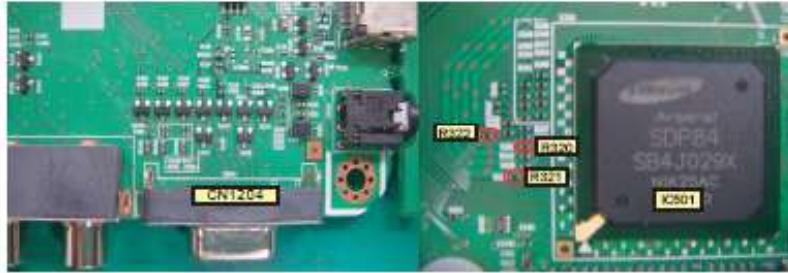
No power



Symptom	<ul style="list-style-type: none">The PD board relay does not work when connecting the power cord.The units appears to be dead.
Major checkpoints	<p>The PD relay does not work when connecting the power cord if the cables are improperly connected or the Main Board or PD is not functioning. In this case, check the following:</p> <ul style="list-style-type: none">- Check the internal cable connection status inside the unit.- Check the fuses of each part.- Check the output voltage of PD.- Replace the Main Board.
Caution	Make sure to disconnect the power before working on the PD board
Diagnostics	<pre>graph TD; A[When power on, check the sound of relay on?] -- No --> B[Check a connection power cable. P/N: BN96-009873A]; A -- Yes --> C[Does proper Stand-By DC A5V appear at the PIN 27 of CN201?]; C -- No --> D[Change the Main Power assembly 40" / 46" : BN44-00269A 55" : BN44-00271A]; C -- Yes --> E[Does proper Main DC B12VS, B5V,B13V appear at the the PIN23, PIN15, PIN9 of CN201?]; E -- No --> F[Change the IC202 or the Main Assy]; E -- Yes --> G[Does proper DC A3.3V appear at the Pin5 of IC202?]; G -- No --> H[Change the IC205, IC208, IC210 or the Main Assy]; G -- Yes --> I[Does proper DC B3.3V appear at 1pin of IC208 and IC210, B9V appear at 3pin of IC205?]; I -- No --> J[Change the IC203, 207 or the Main Assy]; I -- Yes --> K[Does proper chelsea core 1.2V, 1.8V appear at C246, C236?]; K -- No --> L[Check a other function (No picture part) Replace a LCD Panel 40" : BN07-00700B 46" : BN07-00701B 55" : BN07-00702B]; K -- Yes --> M[A power is supplied to panel appear at C1019L?]; M -- No --> L;</pre>

Trouble Shooting

No Video (analog PC)

Symptom	- Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the PC source - Check the IC601(chelsea) - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Caution	Make sure to disconnect the power before working on the PD board
Diagnostics	 <pre>graph TD; A[No video] -- Yes --> B[Check the PC source and check the connection of DSUB?]; B -- No --> C[Input an analog PC signal. Check the connected cable.]; B -- Yes --> D[① Does the signal appear at pin1,2,3,13,14 (R,G,B,H,V) of CN1204?]; D -- No --> E[PC cable. Change the PC cable. Change the main PCB assembly.]; D -- Yes --> F[② Does the digital data appear at output of IC601?]; F -- No --> G[Change the IC601 or the main PCB assembly.]; F -- Yes --> H[Check the LVDS cable? Replace the LCD panel?]; H -- No --> I[Please, contact Tech support.]; H -- Yes --> J[Please, contact Tech support.]</pre>

Trouble Shooting

No Video
(analog PC)

① ②

PC Input (V-Sync, H-Sync)



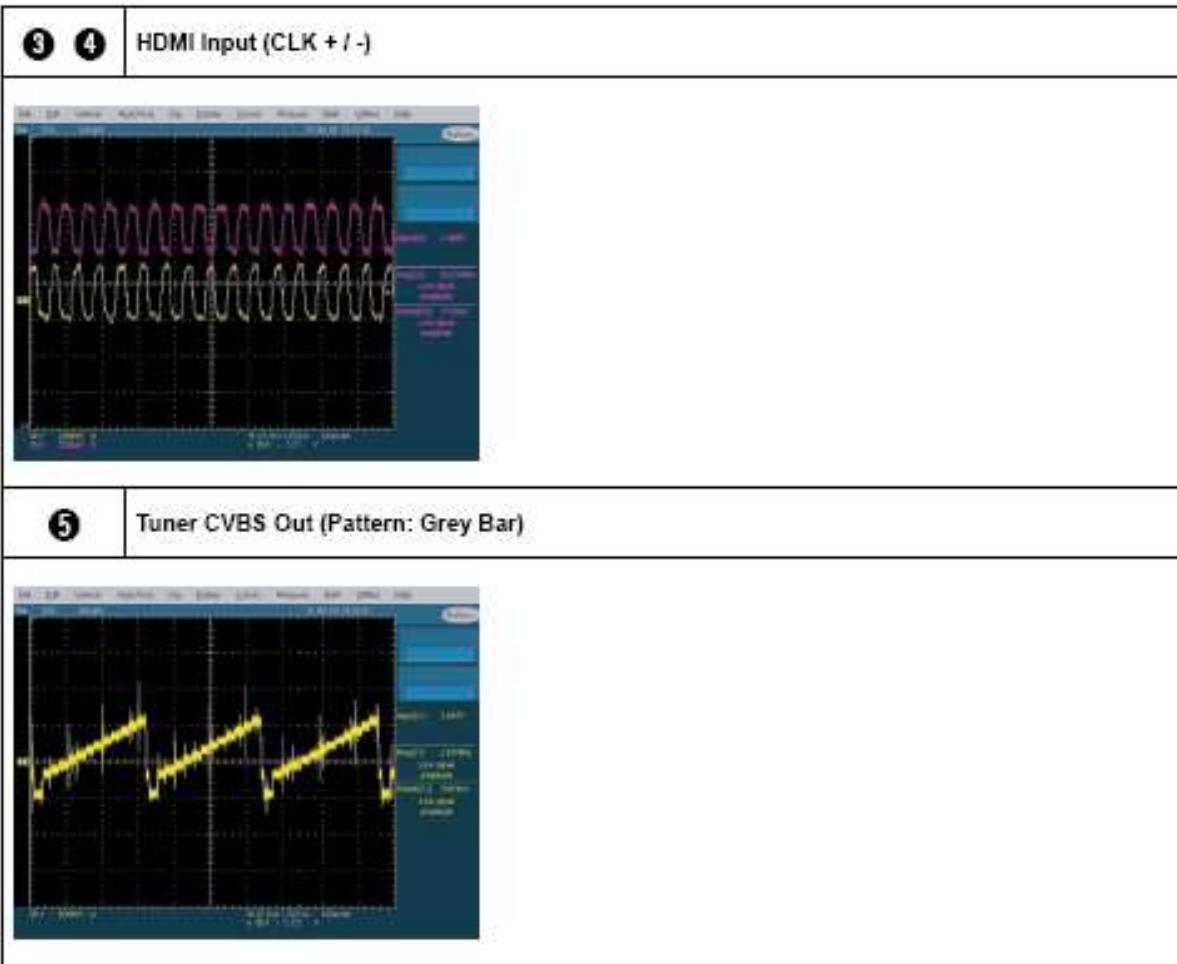
Trouble Shooting

No Video (HDMI)

Symptom	- Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the HDMI source - Check the IC601(chelsea) - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Caution	Make sure to disconnect the power before working on the PD board
Diagnostics	 <pre>graph TD; A[No video] -- Yes --> B[Check the HDMI source and check the connection of HDMI cable?]; B -- No --> C[Input an HDMI signal. Check the connected cable.]; B -- Yes --> D[① Does the signal appear at IC1401 pin2~12(HDMI1), pin14~24(HDMI2), pin27~37(HDMI3), pin39~49(HDMI4)?]; D -- No --> E[Change the HDMI cable, Change the main PCB assembly.]; D -- Yes --> F[② Does the digital data appear at output of IC1401 pin89~90(HDMI output)?]; F -- No --> G[Change the IC1401 or the main PCB assembly]; F -- Yes --> H[③ Does the digital data appear at pin 14~42 of CN1002?]; H -- No --> I[Change the IC601 or the main PCB assembly]; H -- Yes --> J[Check the LVDS cable? Check the T-con board? Replace the LCD panel?]; J -- No --> K[Please, contact Tech support]</pre>

Trouble Shooting

No Video (HDMI)



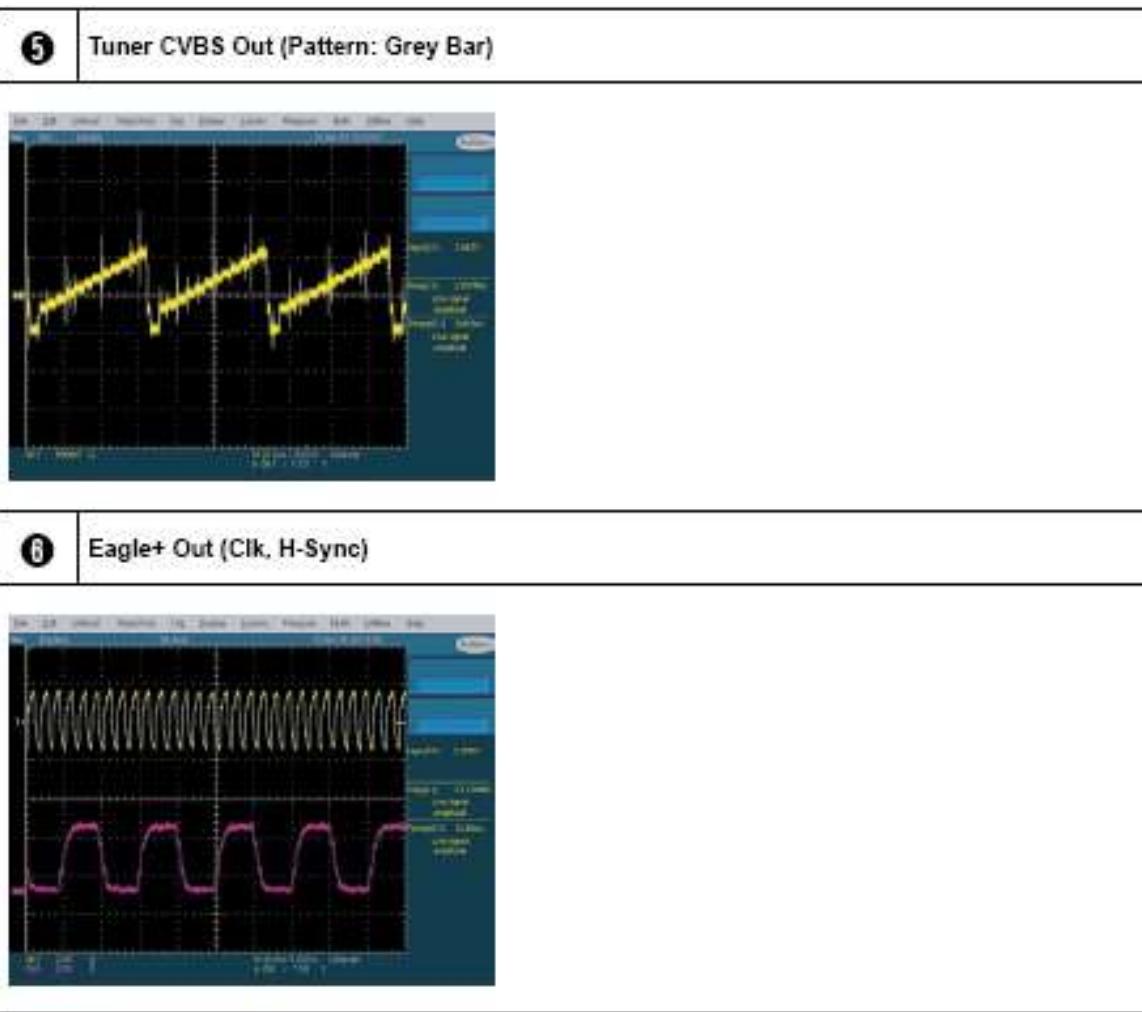
Trouble Shooting

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 Chelsea - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Caution	Make sure to disconnect the power before working on the PD board
Diagnostics	 <pre>graph TD; A[No video] -- Yes --> B[Check the RF source and check the connection of RF cable?]; B -- No --> C[Input the RF signal. Check the connected cable.]; B -- Yes --> D{① Does the signal appear at pin8 of TU501?}; D -- No --> E[Change the TU501 or the main PCB assembly.]; D -- Yes --> F{② Does the digital data appear at pin14~42 of CN1002?}; F -- No --> G[Change the IC801 or the main PCB assembly]; F -- Yes --> H[Check the LVDS cable? Replace the LCD panel?]; H -- No --> I[Please, contact Tech support.]</pre>

Trouble Shooting

No Video
(tuner_CVBS)



Trouble Shooting

No Video (Tuner DTV)

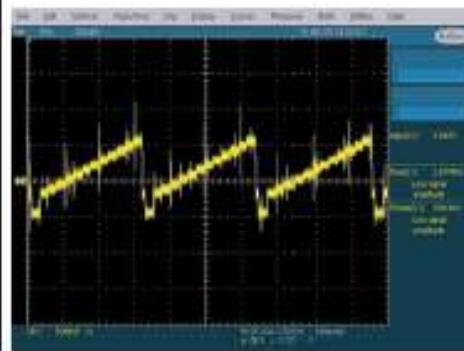
Symptom	<ul style="list-style-type: none">- Audio is normal but no picture is displayed on the screen.
Major checkpoints	<ul style="list-style-type: none">- Check the DTV source- Check the Chelsea- This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Caution	Make sure to disconnect the power before working on the PD board.
Diagnostics	 <pre>graph TD; A[No video] -- Yes --> B[Check the RF source and check the connection of RF cable?]; B -- No --> C[Input the RF signal. Check the connected cable.]; B -- Yes --> D{Does the digital data appear at pin15, 16 of TU501?}; D -- No --> E[Change the TU501 or the main PCB assembly]; D -- Yes --> F{Does the digital data appear at pin14~42 of CN1002?}; F -- No --> G[Change the IC601 or the main PCB assembly]; F -- Yes --> H[Check the LVDS cable? Replace the LCD panel?]; H -- No --> I[Please, contact Tech support.]</pre>

Trouble Shooting

No Video
(Tuner DTV)

5

Tuner CVBS Out (Pattern: Grey Bar)



7

TS DATA Out (Clik, Data [0])



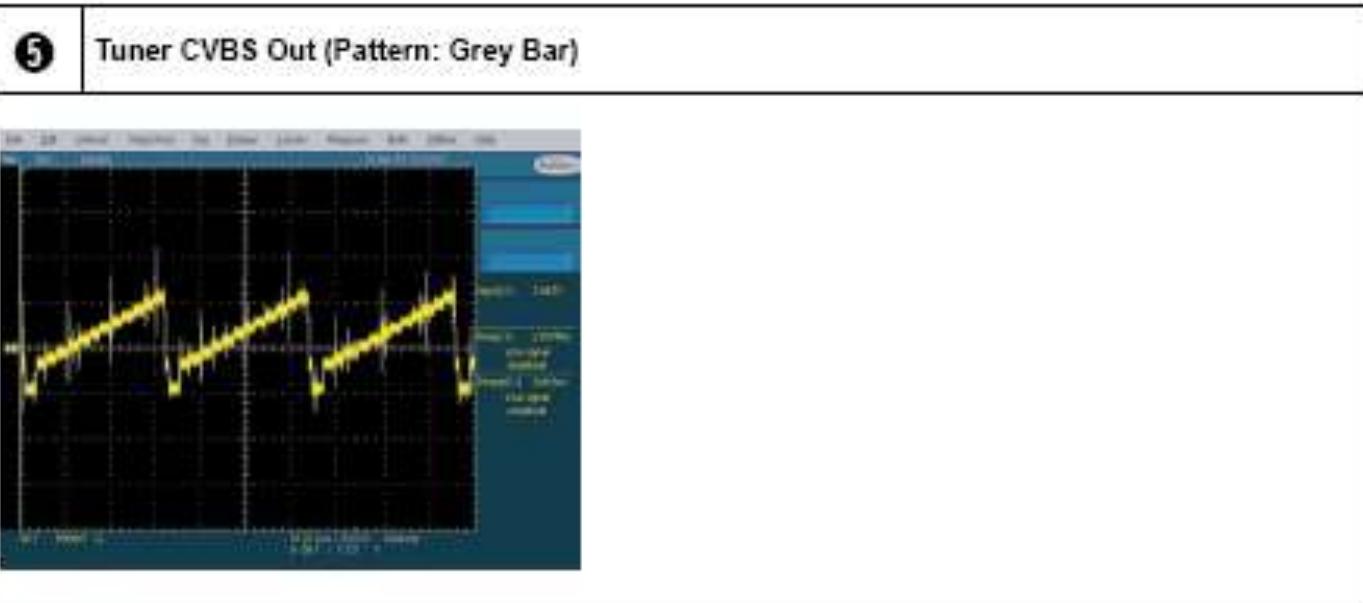
Trouble Shooting

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.
Caution	Make sure to disconnect the power before working on the PD board.
Diagnostics	 <pre>graph TD; A[No video] -- Yes --> B[Check the video source and check the connection of video cable?]; B -- No --> C[Input a video signal, Check the connected cable.]; B -- Yes --> D{⑤ Does the signal appear at R1341?}; D -- No --> E[Change the CN1303 or the main PCB assy]; D -- Yes --> F{⑥ Does the digital data appear at pin14~42 of CN1002?}; F -- No --> G[Change the IC601 or the main PCB assembly]; F -- Yes --> H[Check the LVDS cable? Replace the LCD panel?]; H -- No --> I[Please, contact Tech support];</pre>

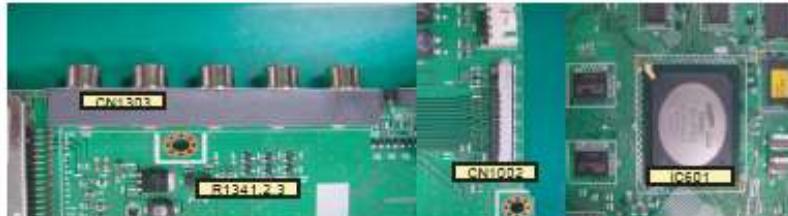
Trouble Shooting

No Video
(Video CVBS)



Trouble Shooting

No Video (Component)

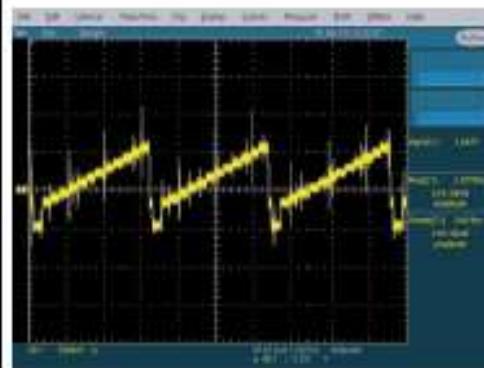
Symptom	- Audio is normal but no picture is displayed on the screen.
Major checkpoints	- Check the Component source - Check the Chelsea - This may happen when the LVDS cable connecting the Main Board and the Panel is disconnected.
Caution	Make sure to disconnect the power before working on the PD board.
Diagnostics	 <pre>graph TD; A[No video] -- Yes --> B[Check component source and check the connection of component cable?]; B -- No --> C[Input a component signal. Check the connected cable.]; B -- Yes --> D[① Does the signal appear at R1341, R1342, R1342(Y, Pb, Pr)?]; D -- No --> E[Change the CN1303 or the main PCB assy]; D -- Yes --> F[② Does the digital data appear at R336, R347(Rout), R348, R359(Gout), R324, R335(Bout)?]; F -- No --> G[Change the IC501 or the main PCB assembly]; F -- Yes --> H[③ Does the digital data appear at pin14~42 of CN1002?]; H -- No --> I[Change the IC601 or the main PCB assembly]; H -- Yes --> J[Check the LVDS cable? Replace the LCD panel?]; J -- No --> K[Please, contact Tech support]</pre>

Trouble Shooting

No Video
(Component)

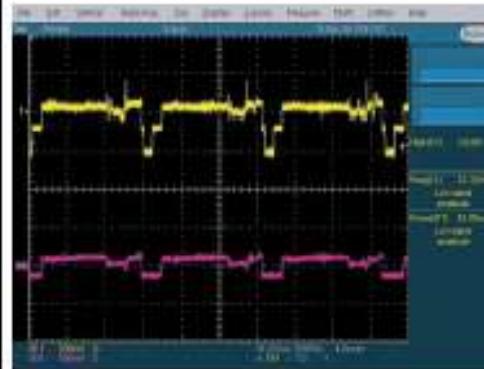
⑤

Tuner CVBS Out (Pattern: Grey Bar)



⑨

Component Input (Y/Pb)



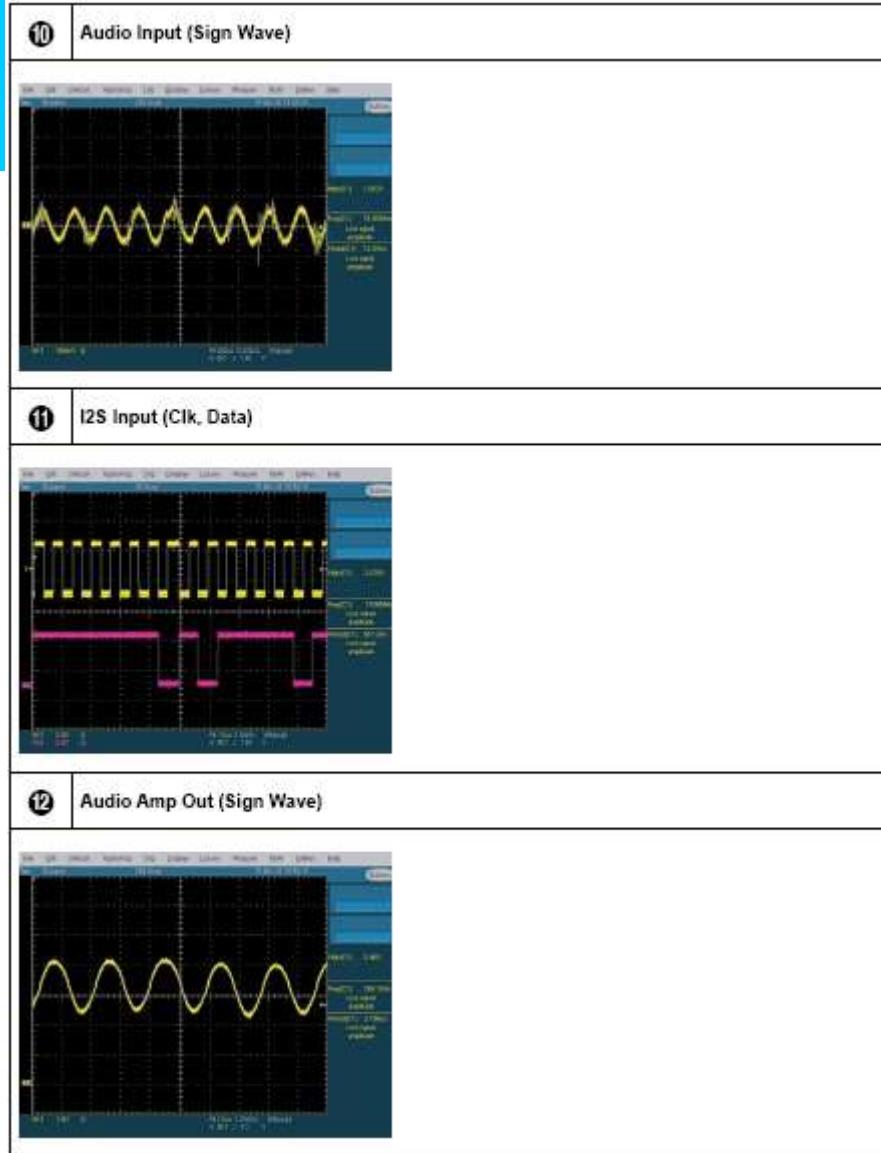
Trouble Shooting

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..
Caution	Make sure to disconnect the power before working on the PD board.
Diagnostics	 <pre>graph TD; A[No sound] -- Yes --> B[Check the sound source and check the connection of sound cable?]; B -- No --> C[Input a sound signal. Check the connected cable.]; B -- Yes --> D{① Does the signal appear at RA1307?}; D -- No --> E[Change the CN1303 or the main PCB assy]; D -- Yes --> F{② Does the digital data appear at pin27,28,29 of IC1502?}; F -- No --> G[Change IC1501 or the main PCB assembly]; F -- Yes --> H{③ Does the signal appear at pin1~4 of CN1501?}; H -- No --> I[Change IC1502 or the main PCB assembly]; H -- Yes --> J[Check the LVDS cable? Replace the speaker?]; J -- No --> K[Please, contact Tech support]</pre>

Trouble Shooting

No Sound



Trouble Shooting

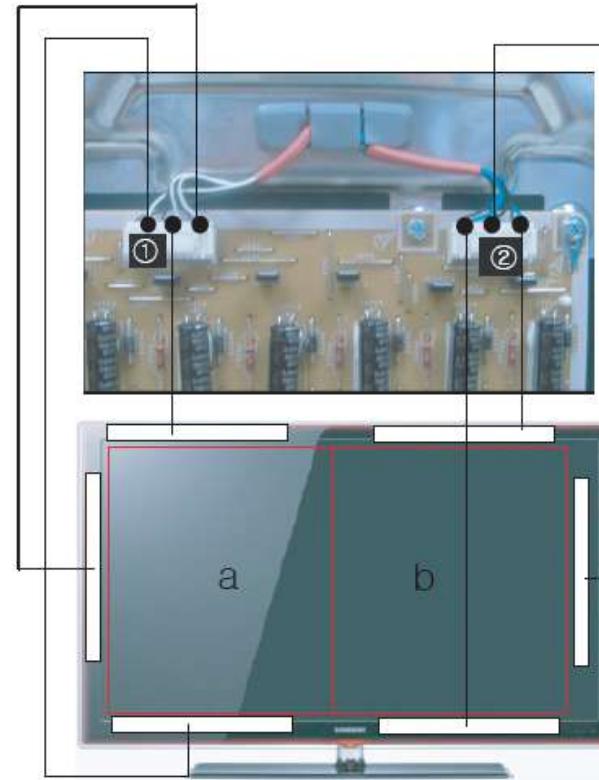
Reference

Output CNT which run Edge Led
(Is unrelated even if right and left changes)

When you see the screen in front of TV,
If the left side (a) has a problem, Connect ②,
cable at the ① position, in case of normal picture,
change LED panel.
In case of abnormal picture, check power board.

If the left side (b) has a problem,
Connect ① cable at the ② position,
in case of normal picture, change LED panel .
In case of abnormal picture, check power board.

Refer to the picture for matching each LED part of
connector .
however, when pull out pair pins in connector, there
is hardly different So We recommend to change (①)
itself or (②) itself.



Trouble Shooting

Reference

Connecting a PC

Using the D-sub cable

1. Connect a D-Sub Cable between PC IN [PC] connector on the TV and the PC output connector on your computer.
2. Connect a PC Audio Cable between the PC IN [AUDIO] jack on the TV and the Audio Out jack of the sound card on your computer.



Using the HDMI/DVI Cable

1. Connect an HDMI/DVI cable between the HDMI1/DVI jack on the TV and the PC output jack on your computer.
2. Connect a PC audio cable between the PC in [AUDIO] jack on the TV and the Audio Out jack of the sound card on you computer.
3. In case of Connecting a 3.5 mm Stereo mini-plug/2RCA Cable from the Audio Out jack of the sound card on your computer. Use 'BN39-001154G(serprate sale)'.

Connecting a DVI

1. Connect an HDMI/DVI cable between the HDMI1/DVI jack on the TV and the PC output jack on your device.

2. Connect a DVI audio cable between the DVI in [AUDIO] jack on the TV and the Audio Out jack of the sound on you Device .
In case of Connecting a 3.5 mm Stereo mini-plug/2RCA Cable from the Audio Out jack of the sound on your device . Use 'BN39-001154G(serprate sale) or other similar cable

* Each PC has a different back panel configuration.

* When connecting a PC, match the color of the connection terminal to the cable, and PC sound cable from sound card on your computer.

* When using an HDMI1/DVI cable connection, you must use the HDMI IN 1 terminal and DVI sound cable from your DVI device.

Trouble Shooting

Reference

- ☒ The TV may not output sound and pictures may be displayed with abnormal color when DVD / Blu-ray player / Cable Box / Satellite receiver (Set-Top Box) supporting HDMI versions older than 1.3 are connected. When connecting an older HDMI cable and there is no sound, connect the HDMI cable to the **HDMI IN 1(DVI)** jack and the audio cables to the **PC/DVI AUDIO IN** jacks on the back of the TV. If this happens, contact the company that provided the DVD / Blu-ray player / Cable Box / Satellite receiver (Set-Top Box) to confirm the HDMI version, then request an upgrade.
- ☒ HDMI cables that are not 1.3 may cause annoying flicker or no screen display.
- ☒ Use the **HDMI IN 1(DVI)** jack for DVI connection to an external device. Use a DVI to HDMI cable or DVI-HDMI adapter (DVI to HDMI) for video connection and the **PC/DVI AUDIO IN** jacks for audio. When using an HDMI / DVI cable connection, you must use the **HDMI IN 1(DVI)** jack.



Trouble Shooting

DO after changing assembly

- Adjust Panel option, and install EDID data in Factory mode

<Factory menu>

Option
ADC/WB
Control
Expert
Advanced
T-CHEAUSC-XXXX
T-CHEAUS5-XXXX
SDAL-4.2.18-0069
RPS Version : 10_64_512_10 T-CHEAUSC
2008-11-20
FRCQ_FW : 0489, CONFIG : 4300
Type : 40A U11
LNUA_U1LBE650
EDID SUCCESS
CALIB : AVX COMP X PC X HDMI/X
Option : 2432 0100 0
Factory Data ver : 164
DTP-AP-COMP-060-01
DTP-HIGH-0054
TUB-USB-1G 2008-11-18-01
DTP-BP-0064-03
Date of purchase : 12/3/2008



Option	Factory Reset
Type	46A2UF0E
Model	UB7000
TUNER	SEC_Custom
Region	USA
DDR	0
Light Effect	ON
Media Link Type	America
PDP GROUP	...

Check Point

Model : UB8000

Type : 40" : 40A2UF0E

46" : 46A2UF0E

55" : 55A2UF0E

Option
ADC/WB
Control
Expert
Advanced
T-CHEAUSC-XXXX
T-CHEAUS5-XXXX
SDAL-4.2.18-0069
RPS Version : 10_64_512_10 T-CHEAUSC
2008-11-20
FRCQ_FW : 0489, CONFIG : 4300
Type : 40A U11
LNUA_U1LBE650
EDID SUCCESS
CALIB : AVX COMP X PC X HDMI/X
Option : 2432 0100 0
Factory Data ver : 164
DTP-AP-COMP-060-01
DTP-HIGH-0054
TUB-USB-1G 2008-11-18-01
DTP-BP-0064-03
Date of purchase : 12/3/2008



EDID
Sub Option
PDP Option
Hotel Option
Shop Option
SOUND
Config Option
Test Pattern



① EDID on -> ② EDID WRITE ALL

EDID	EDID ON/OFF	ON
	EDID WRITE ALL	Success
	EDID WRITE PC	Success
	EDID WRITE HDMI	Success
	EDID WRITE HDMI1	...
	EDID WRITE HDMI2	...
	EDID WRITE HDMI3	...
	EDID WRITE HDMI4	...
	EDID 1.2 PORT	None

Trouble Shooting

Factory mode

Entering Factory Mode

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

- If you do not have Factory remote - control



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: POWER OFF-MUTE-1-8-2-POWER ON 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

6. Buttons operations within 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

Press the 0 button four times on advanced to enter hidden menu

5. Initial SERVICE MODE DISPLAY State

Option

ADC/WB

Control

Expert

Advanced

T-CHE8AUSC-0025

T-CHE8AUSS-0520

SDAL-4.2.34-0102

RFSI12_2G_64_512-13 T-CHE8AUSC

2008-12-22

FRCQ FW : 04D4, CONFIG : 4800

Type L 46A2UF0E

Model: UN46B8000

EDID OK

CALIV : AV 0 COMP 0 PC 0 HDMI 0

Option : 7532 0110

Factory Data Ver : 202

DTP-AP-COMP-084

DTP-HIIG-0076

TLIB US3 2G 2008-12-12-01

DTP-BP-0087

Date of purchase : XX/XX/2009

Trouble Shooting

Factory mode

Main: Opton, Mode : CDTV, RES :480i

Factory Reset	
Type	46A2UF0E
Model	UB8000
TUNER	SEC_Custom
Region	USA
DDR	0
Light Effect	ON
Media Link Type	America
PDP GROUP	...

Type | 46A2UF0E/55A2UF0E

Trouble Shooting

Factory mode(ADC/WB)

ADC

AV Calibration	Success
Comp Calibration	Success
PC Calibration	Success
HDMI Calibration	Success

ADC Target

1st_AV_Low	64	1st_PC_B_High	...	2nd_COMP_Delta	1
1st_AV_High	880	1st_PC_Delta	1	2nd_PC_R_Low	4
1st_AV_Delta	1	2nd_AV_R_Low	4	2nd_PC_G_Low	4
1st_COMP_Y_Low	64	2nd_AV_G_Low	4	2nd_PC_B_Low	4
1st_COMP_Cb_Low	...	2nd_AV_B_Low	4	2nd_PC_R_High	940
1st_COMP_Cr_Low	...	2nd_AV_R_High	940	2nd_PC_G_High	940
1st_COMP_Y_High	940	2nd_AV_G_High	940	2nd_PC_B_High	940
1st_COMP_Cb_High	...	2nd_AV_B_High	940	2nd_PC_Delta	1
1st_COMP_Cr_High	...	2nd_AV_Delta	1	2nd_HDMRL_Low	4
1st_COMP_Delta	1	2nd_COMP_R_Low	4	2nd_HDMLG_Low	4
1st_PC_R_Low	16	2nd_COMP_G_Low	4	2nd_HDMLB_Low	4
1st_PC_G_Low	...	2nd_COMP_B_Low	4	2nd_HDMRL_High	940
1st_PC_B_Low	...	2nd_COMP_R_High	940	2nd_HDMLG_High	940
1st_PC_R_High	1004	2nd_COMP_G_High	940	2nd_HDMLB_High	940
1st_PC_G_High	...	2nd_COMP_B_High	940	2nd_HDMLDelta	1

ADC Result

1st_Y_GH	128
1st_Y_GL	128
1st_Cb_BH	128
1st_Cb_BL	128
1st_Cr_RH	128
1st_Cr_RL	128
2nd_R_L	131
2nd_G_L	131
2nd_B_L	131
2nd_R_H	67
2nd_G_H	67
2nd_B_H	67

White Balance

Sub Brightness	128
R-Offset	512
G-Offset	512
B-Offset	512
Sub Contrast	128
R-Gain	512
G-Gain	512
B-Gain	512
Movie R-Offset	...
Movie B-Offset	...
Movie R-Gain	...
Movie B-Gain	...

Trouble Shooting

Factory mode(control)

EDID

EDID ON/OFF	ON
EDID WRITE ALL	Success
EDID WRITE PC	Success
EDID WRITE HDMI	Success
EDID WRITE HDMI EDID WRITE HDMI1 EDID WRITE HDMI2 EDID WRITE HDMI3 EDID WRITE HDMI4	...
EDID 1.2 PORT	None

Sub Option

RF Mute Time	600ms	TOOLS Support	9	ND ADJ Support	ON	Checksum	0x0000
SUB U-COM	OFF	LNA Support	0	24Px4 Support	OFF	View Log	
RS-232 Jack	UART	Wiselink WithOut DB	with DB	Power Indicator Support	ON	Font Data Viewer	
Watchdog	ON	WiseLink Movie	ON	BD Wise Support	ON		
WD COUNT	0	WiseLink DLNA	ON	RF Remocon Support	OFF		
SSC ON/Off	ON	WiseLink Write	ON	OTA Duration Test	OFF		
SSC MRR	2	NETWORK Support	Wireless	Alternate Del	OFF		
SSC MFR	2	High Devi	OFF	OTN Server Type	operating		
SSC QLC	4	Carrier Mute	ON	OTN Test Server	OFF		
Gamma	0.95	Volume Curve	ASIA_SA	OTN Support	ON		
PANEL DISPLAY TIME	43Hr	PWM MAX	256	OTN Reset			
Dimm Type	EXT	DVOUT CD	0	OTN Duration	OFF		
LVDS FORMAT	VESA	CVBS CD	0	OTN Fail Test	OFF		
Language	...	EDID Jack Ident	OFF	IIC BUS STOP	OFF		
UI COLOR	RED	Info Link Server Type	operating	Visual Test	Disable		

Trouble Shooting

Factory mode(control)

Hotel Option	Shop Opton
HOTEL MODE	OFF
POWER ON CHANNEL	...
POWER ON BAND	...
POWER ON VOLUME	...
MIN VOLUME	...
MAX VOLUME	...
PANEL BUTTON LOCK	...
POWER ON SOURCE	...
Sound	
SAP High Threshold	0x1ah
SAP Low Threshold	0x9h
Speaker Delay Normal	0x59h
Auxout Delay Normal	0x59h
Spdif Delay Normal	0x0h
Speaker Delay Game	0x28h
Auxout Delay Game	0x28h
Spdif Delay Game	0x0h
STA Amp Vol.	0x28h
STA Post Scale	0x65fh
STA Speaker EQ	ON
STA Sub Woofer	2
Mono to Stereo Thld	0X08H
Stereo to Mono Thld	0X04h
Pilot Level High Thld	0X30h

Trouble Shooting

Factory mode(control/Expert)

Config Option

Num of ATV	1	HDMI/DVI SEL	1	HDMI CTS Thld	7
Num of DTV	1	Indicator Led	ON	HDMI CTS Cnt1	1
Num of AV	1	Wall Mount	OFF	TMDS_EQ2_Boost	1
Num of SVIDEO	0	Chelsea HV Flip	ON	TMDS_EQ2_Gain	0
Num of COMP	1	Num of DISPLAY	2	TMDS_PLL_Loop	3
Num of HDMI	4	HDMI AV MUTE TIME	40	TMDS_CPREG_BLEED	1
Num of PC	1	DVI/HDMI SOUND	Auto	HDMI EQ HDMI SWitch	AUTO SILO287
Num of SCART	0	HDMI HOT PLUG	Disable		
Num of DVI	0	HOT PLUG OFF HOLD TIME	1200ms		
Num of OPTICAL Link	0	HDMI FLT CNT SIG	100ms		
Num of MEDIA	1	HDMI FLT CNT LOS	600ms		
Num of PANEL KEY	6	UNSTABLE BAN CNT	2500ms		
Num of USB Port	2	HDMI Err Cnt	2		
MFT Offset	62.5	HDMI ROBIN	ON		
Select LCD/PDP	LCD	HDMI Callback	OFF		

Test Pattern	FPE Pattern Sel	0
	FRC PATT_BeforeDDR	0
	FRC PATT_AfterDDR	0
	LOGIC Pattern Sel	...

Expert

N/D ADJ	OFF
Source	...

Trouble Shooting

Factory mode(Advanced)

Press the 0 button four times on advanced to enter hidden menu

FBE3		WB Movie		EPA Standard	
		Skin-Enable			
BM_slope1	19	Skin-UV	128	Standard Contrast	95
BM_slope2	36	FBE Sub color	138	Standard Brightness	45
BM_slope3	56	M-Skin-UV		Standard Sharpness	50
BM_slope4	75	M-Sub Color		Standard Color	50
BM_start	68			Standard Tint	0
BM_start_max	110			Standard Backlight	5
Lfunc_basis	70				
Hfunc_basis	80				
Mean_Offset1	30				
Mean_Offset2	235				
Mean_Slope	112				
ACR_Offset	10				
ACR_th1	10				
ACR_th2	110				
		WB Movie	OFF	W2_Roffset	...
		W/B MOVIE ON/OFF	...	W2_Boffset	...
		MODE	...	W3_Rgain	...
		Color Tone	...	W3_Bgain	...
		MSub Brightness	...	W3_Roffset	...
		MSub Contrast	...	W3_Boffset	...
		N_Rgain	...	Movie Contrast	...
		N_Bgain	...	Movie Bright	...
		N_Roffset	...	Movie Color	...
		N_Boffset	...	Movie Sharpness	...
		W1_Rgain	...	Movie Tint	...
		W1_Bgain	...	Movie Backlight	...
		W1_Roffset	...	Movie Gamma	...
		W1_Boffset	...	M_Sub_Gamma	...
		W2_Rgain	...		
		W2_Bgain	...		

Trouble Shooting

Factory mode(Advanced)

CH_VDEC			
AGC_mode	1	CTL_level	15
Gain_VCR	0	ST_Beg_NTSC	0
Y_Gain_Man	880	VS_Slice_Leve l	4
Saturation	128	HS_Slice_Leve l	3
Hue	0	FB_Delay_adj	0
Y_Shape_sel	13	RGB_Delay_a dj	0
Y_Shape_SCM	29	h_pk_gain	0
C_Shape_sel	4	v_pk_gain	0
C_Shape_SCM	4	h_pk_band	0
If_lir	0	2d_pk_gain	0
If_filt_sel	6	2d_pk_band	1
LTI_en	OFF	slice_mod_fin e	0
LTI_level	100	scm_fdet_lv	150
CTL_en	OFF	bl_range	3
SCM_STLEN	OFF		

AR_ADC			
RED_CUTOFF	0		
GREEN_CUTOFF	0		
BLUE_CUTOFF	0		
RED_GAIN	0		
GREEN_GAIN	0		
BLUE_GAIN	0		
PHASE	0		
SOG_BW	7		
SSC_PC	6		
RGB_DLY	0		

CH_DP			
MNR	OFF	MJC_DBG	0
DCR	OFF	MB_STEPS	72
SD2HD_DCR	OFF	LIMIT_MV_STEP	80
SD2HD_DE	OFF	GLOBAL_FALLBA CK	48
SD2HD_SCL	OFF	LOCAL_FALLBAC K	5
SD2HD_LT1	OFF		
SD2HD_NARS	0		
SD2HD_DUR	50		
SD2HD_Metric	213		
Coring_ON_OFF	OFF		
SD_CSC	7094		
HD_CSC	7438		
M_SD_CSC	7094		
M_HD_CSC	7438		
PC_SD_CSC	7094		

YC_Delay

V_Delay_adj	0
U_Delay_adj	0

Trouble Shooting

Factory mode(Advanced)

NR	Sharpness				Sharpness_LNA			
OFF_Y	8	HIGH_Y	90		Pre_GainH1	10	SD_LTIH	16
OFF_C	4	HIGH_C	18		Pre_GainH2	15	SD_LTIV	24
OFF_Noise_bias	4	HIGH_Noise_bias	4		Pre_GainH3	10	PRE_CORING	32
OFF_YMAX	128	HIGH_YMAX	160		Post_GainH1	10	POST_CORING_H	32
OFF_FADER	200	HIGH_FADER	190		Post_GainH2	15	POST_CORING_V	32
LOW_Y	70				Post_GainH3	10	Pre_TOT	32
LOW_C	16				Post_GainV1	40	Post_TOT	32
LOW_Noise_bias	4				Post_GainV2	50	SP Sub Color	59
LOW_YMAX	140				Post_GainV3	40		
LOW_FADER	200				CTLGain	15		
MED_Y	80				Pre_LTIH	4		
MED_C	18				SD_TH	100		
MED_Noise_bias	4				HD_TH	132		
MED_YMAX	150				NORMAL_LTIH	8		
MED_FADER	192				NORMAL_LTIV	4		

Trouble Shooting

Factory mode(Advanced)

FRCQ Option

SSC_OnOff	ON	X_HaloSizSensF	32
SSC_Width	96	Film_Low_SD	31
SSC_Freq	240	Film_Medium_SD	6
FMD_Demo	0	Film_High_SD	0
CSB Vertical	ON	Film_Low_HD	31
CSB Horizontal	ON	Film_Medium_HD	6
X_VStabStatVid	7	Film_High_HD	0
X_VStabStatF	0	Video_Judder_Low	10
X_VStabCorF	8	Video_Judder_Med	5
X_VStabSensF	48	Video_Judder_High	0
X_HaloSizStatVid	7	Hangup Detection	ON
X_HaloSizStatF	0	Q LVDS Sequence	0-1-2-3
X_HaloSizCorF	12	Q LVDS Format	JEIDA
		Q LVDS bit width	10bit

FRCQ Fallback

SensD_Film_Low	31	V_Len_Slope_Video	1
SensD_Film_Medium	31		
SensD_Film_High	31		
Rel_Start_Film	20		
Rel_Slope_Film	3		
H_Len_Start_Film	127		
H_Len_Slope_Film	1		
V_Len_Start_Film	40		
V_Len_Slope_Film	1		
SensD_Video	0		
Rel_Start_Video	20		
Rel_Slope_Video	1		
H_Len_Start_Video	127		
H_Len_Slope_Video	1		
V_Len_Start_Video	40		

PQ Others

7.5 IRE NTSC	...
7.5 IRE OFFSET	...
HDMI 48Hz Enable HDMI Black Level	OFF Normal

EEPROM RESET

EER RESET	
NVR All Clear	OFF

DDR margin

A CTRL_OFFSET_0_3	0x41410202
A CTRL_OFFSET_D	0x42
A CTRL_OFFSET_0_3 B CTRL_OFFSET_D	0x41410101 0x42

Compatibility problem

HDMI

1. Symptoms : Star noise

Trouble shooting : Factory mode -> Control -> Config option
-> HDMI EQ Change

2. Symptoms : Can not detect HDMI devices.

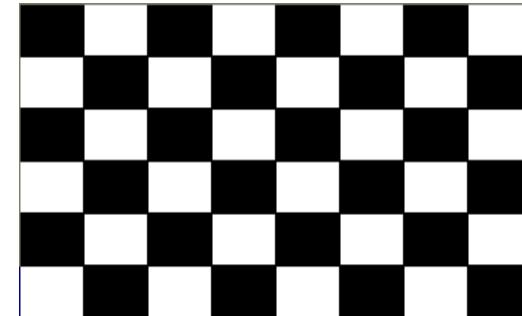
Trouble shooting : Factory mode -> Control -> Config option
-> HDMI Hot Plug : Disable
(Defalt value of HDMI Hot Plug is 'Enable')

Adjustment (Calibration → White Balance)

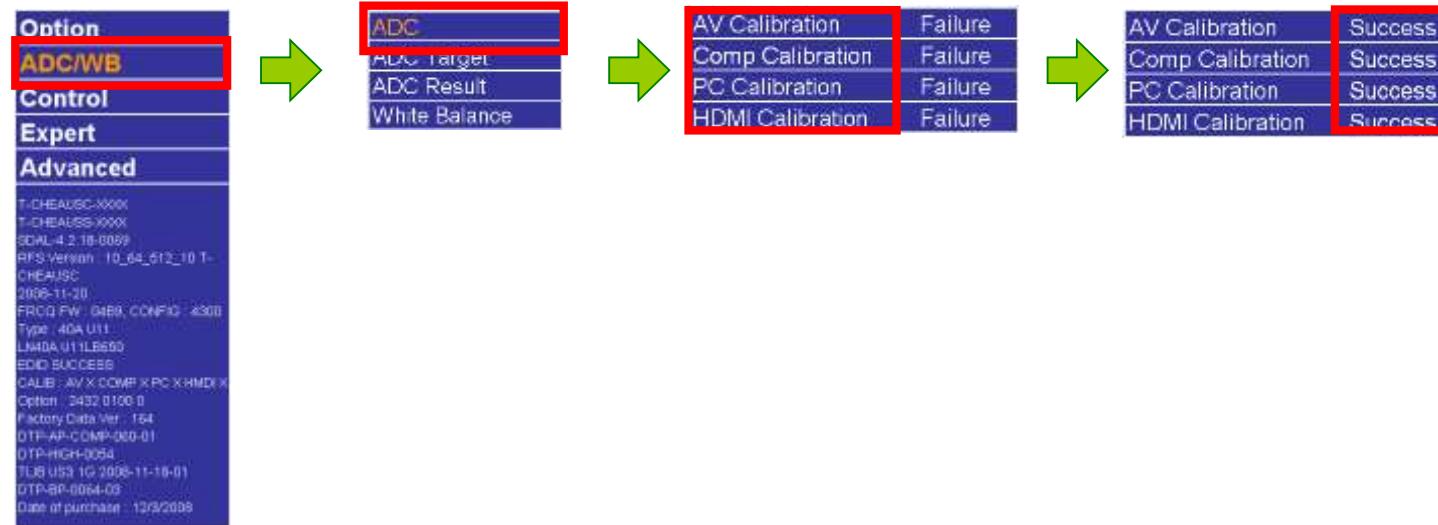
Calibration

Pattern : MIK K-7256 #24 'Chessboard Pattern'
Set Aging time : 60min↑

- HDMI Calibration (Time #6, 720p)
- COMP Calibration (Time #6, 720p)
- CVBS Calibration (Time #3, NTSC-J)
- PC Calibration (Time #21, 1024*768)



<Factory menu>



White balance

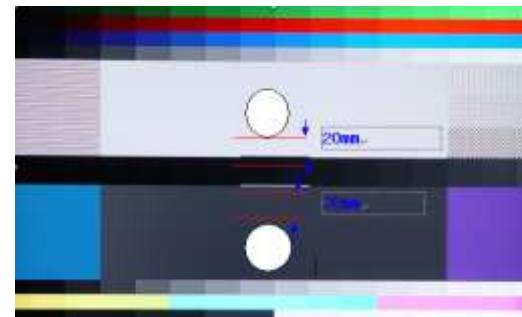
Adjustment (Calibration → White Balance)

White Balance

Test : CA-210

Pattern : MIK K-7256 #92 'Flat W/B Pattern'

Set Aging time : 60min↑



<Factory menu>

Option
ADC/WB
Control
Expert
Advanced
T-CHEAUUSC-XXXX
T-CHEAUSS-XXXX
SDAL-4.2.1B-BB89
RFS Version : 10_64_512_10 T-CHEAUUSC
2008-11-20
FRCQ_Fw : 0489, CONFIG : 4300
Type : 40A_U11
LNMDA_U11LB650
EDID SUCCESS
CALIB : AV_X COMP_X PC_X HDMI_X
Option : 2432_0100_0
Factory Data Ver : 164
DTP_AP_C_CMP_000-01
DTP_HIGH-0054
TDB_US3_1G_2008-11-18-01
DTP_BP-0064-09
Date of purchase : 13/3/2008

ADC
ADC Target
ADC Result
White Balance

Sub Brightness	128
R_Offset	512
G_Offset	512
B_Offset	512
Sub Contrast	128
R_Gain	512
G_Gain	512
B_Gain	512
Movie R_Offset	...
Movie B_Offset	...
Movie R_Gain	...
Movie B_Gain	...

<Adjustment value>

40inch

P-Mode	Mesurement (CA-210)			
	x	y	Y	T(K) / MPCD
[Dynamic Cool1]	H/L	272	278	66.5 fL (Sub_CT:133 Fix)
				12,000 (±0)
	L/L	272	278	4.9 fL (Sub_Brt:128 Fix)
				12,000 (±0)
[Movie Warm2]	H/L	306	327	- (Sub_CT:Fix)
				6,500 (+6)
				Comp
	L/L	306	327	- (Sub_Brt:Fix)
				6,500 (+6)
				Movie Gamma:OFF

Important Spec.

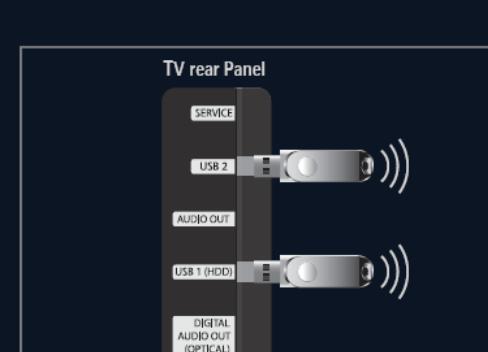
SUB-CONTRAST: 133, Gamma: 0.95

USB Download

Software Upgrade

Samsung may offer upgrades for TV's firmware in the future. Please contact the Samsung call center at 1-800-SAMSUNG (726-7864) to receive information about downloading upgrades.

- Current Version shows version of the software being installed in the TV.
- Alternative Software shows the previous version that can be replaced.
- Software is represented as 'Year/Month/Day_Version'. The more recent the date, the newer the software version. Installing the latest version is recommended.



BY USB

Insert a USB drive containing the firmware upgrade into TV. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete (The new version will have a higher number than the older version). When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.



By online

■ By Online

Upgrades the software using the Internet.

▣ First, configure your network. For detailed procedures on using the Network Setting, refer to the ‘Setting the Network’ instructions.

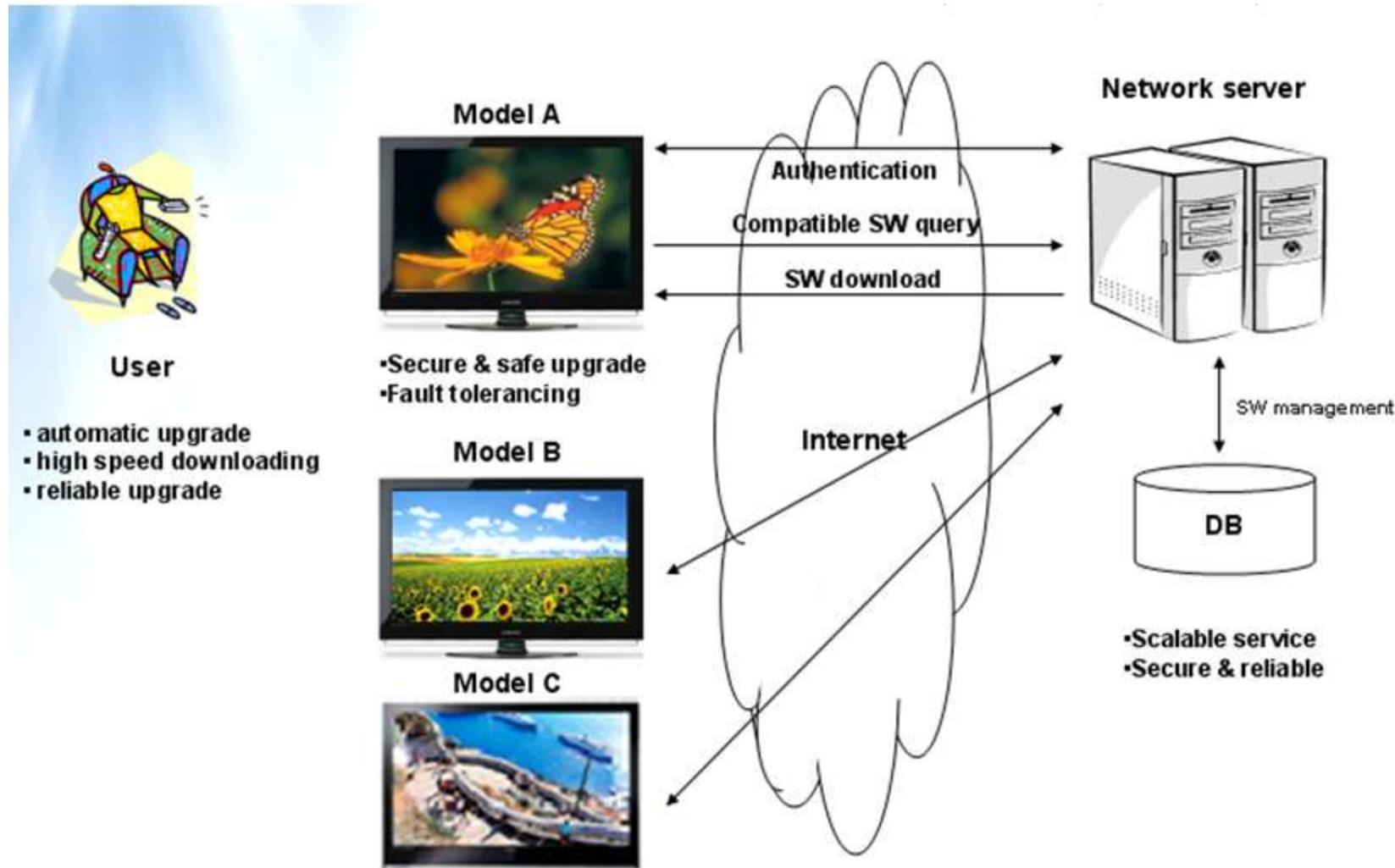
▣ If the internet connection doesn’t operate properly, connection can be broken. please retry downloading. If the problem still happens, download by USB and upgrade.

■ Alternative Software

If Alternative Software is existing, this menu will be activated. You can change the software to previous version.

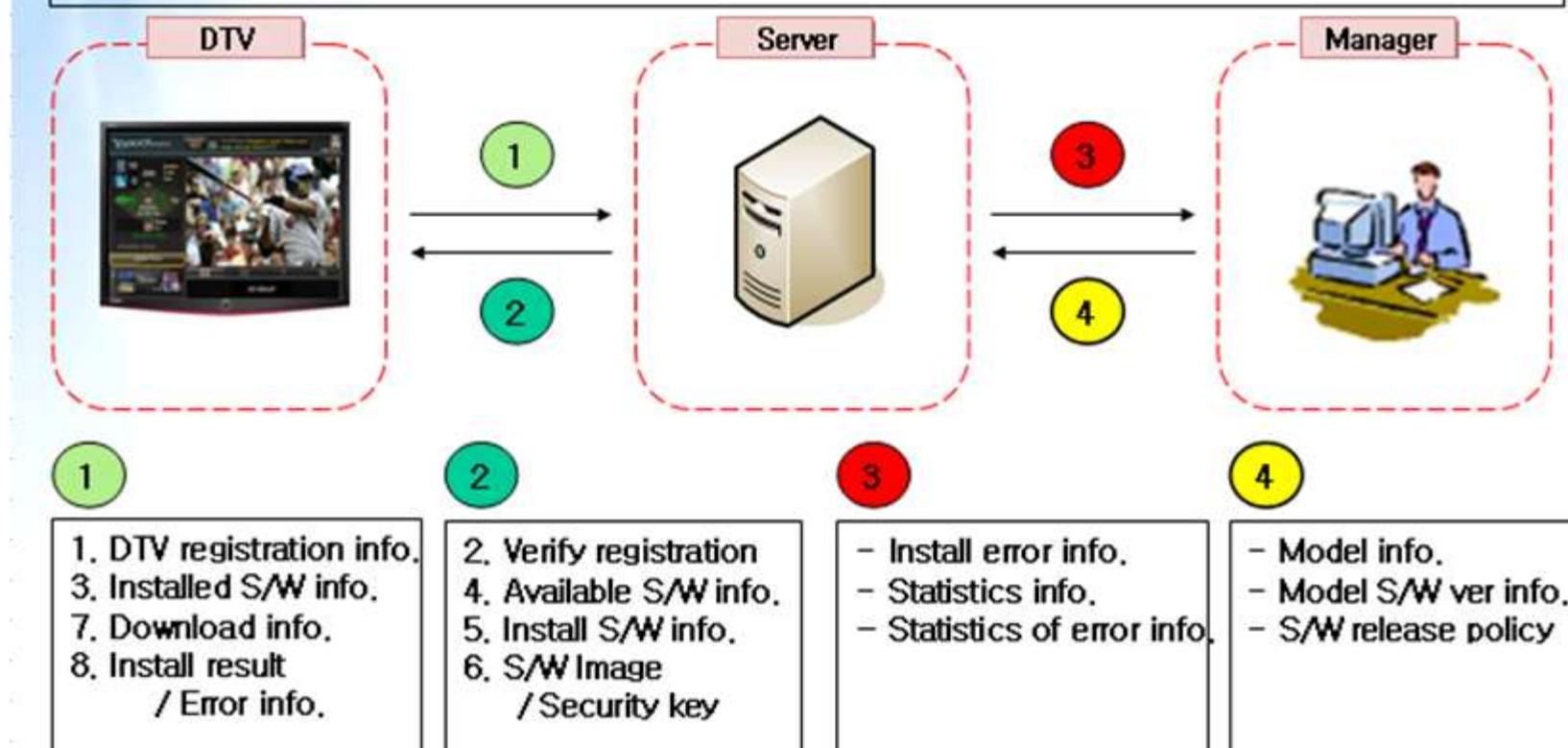
▣ If software was changed, existing software is displayed.

▣ You can change current software to alternative software by ‘Alternative Software’.



■ Purpose of OTN

because of variable contents and devices, TV software will be more and more complicate. So it is necessary that TV software is updated real time.



Initializaiton & necessary actions

- . You can easilly reset them after the upgrade
- . In the Factory mode,
 - option ->Factory reset -> Press enter of Remocon.
 - > power on
 - You can easily see the initial screen of TV
- . What are your necessary actions after changing Assembly?
 1. Check the main picture.
 2. in the factory mode,
 - option -> Model setting(UB8000)
 - option -> Type (46A2UF0E , 55A2UF0E)
 3. Check software Version then download or reset set