

SHARP SERVICE MANUAL



No. S81S460LE630U

LCD COLOR TELEVISION

MODELS
 LC-60LE630U/U(A)
 LC-60LE6300U/U(A)/U(B)
 LC-70LE735U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

OUTLINE

This model is based on the LC-60LE632U/LC-70LE732U and partially modified.

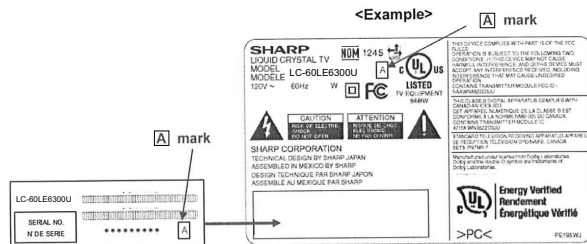
For the contents not covered in this Service Manual, accordingly, please refer to the LC-60LE632U/LC-70LE732U (S31O870LE732U) Service Manual.

(LC-60LE630U(A),6300U(A))

(LC-60LE6300U(B))

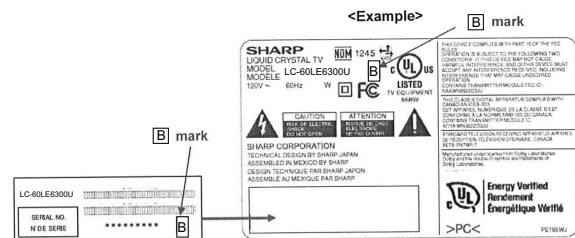
The new model can be identified with the following markings.

• As to the new service Parts, the mark **[A]** is printed on the model label.



The new model can be identified with the following markings.

• As to the new service Parts, the mark **[B]** is printed on the model label.



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Parts Guide

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

OUTLINE, MODIFIED PARTS AND MAJOR SERVICE PARTS

OUTLINE

This model is based on the LC-60LE632U/LC-70LE732U and partially modified.

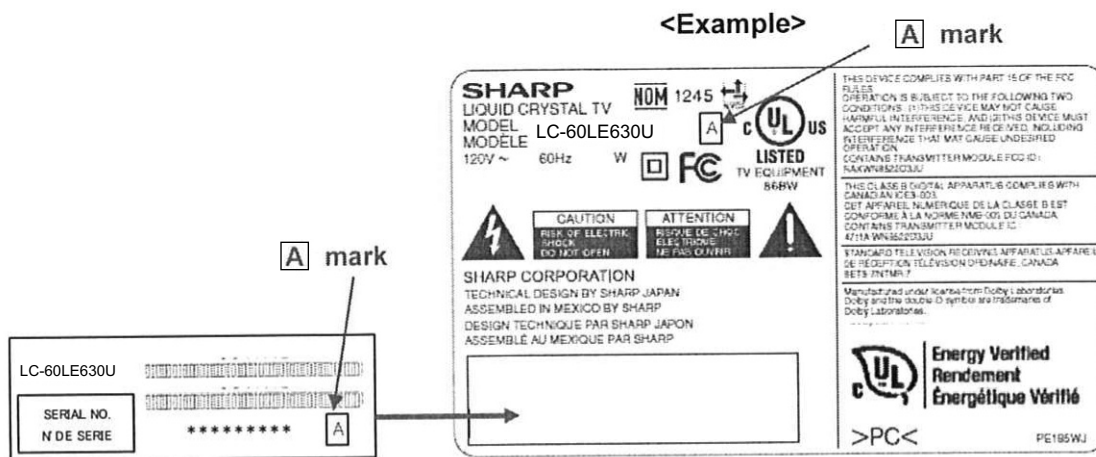
For the contents not covered in this Service Manual, accordingly, please refer to the LC-60LE632U/LC-70LE732U (S31O870LE732U) Service Manual.

The following model label corresponds to this service manual.

(LC-60LE630U(A),6300U(A))

The new model can be identified with the following markings.

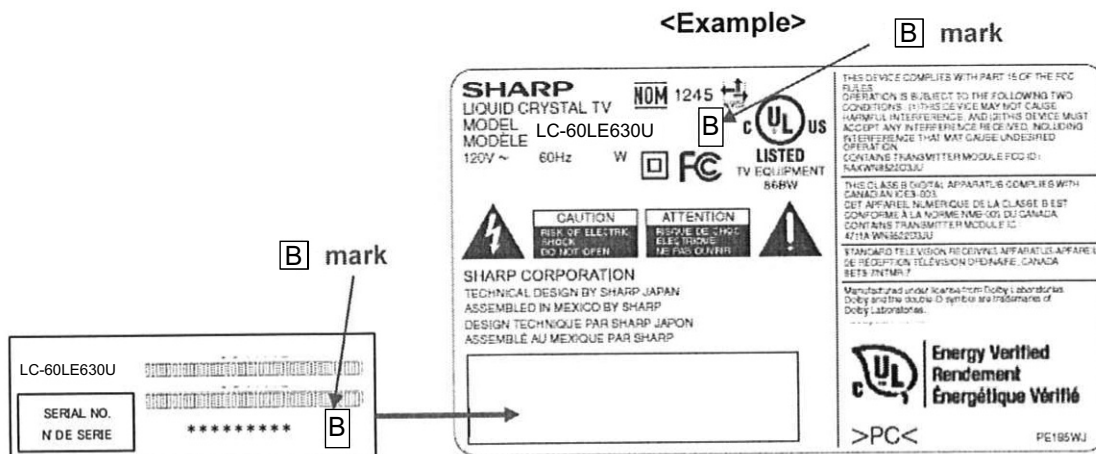
- As to the new service Parts, the mark **A** is printed on the model label.



(LC-60LE6300U(B))

The new model can be identified with the following markings.

- As to the new service Parts, the mark **B** is printed on the model label.



MODIFIED PARTS

Ref. No.	Description	LC-60LE632U LC-70LE732U (S31O870LE732U)	LC-60LE630U/ U(A),6300U/U(A)/U(B) LC-70LE735U (S81S460LE630U)	Interchangeability	Note
PRINTED WIRING BOARD ASSEMBLIES					
N	MAIN Unit (LC-60LE630U/U(A),6300U/U(A)/U(B))	DKEYMF733FM17	DUNTKF905FM01	D	Changed
N	MAIN Unit (LC-70LE735U)	DKEYMF733FM19	DKEYMF733FM26	D	Changed
N	R/C OPC Unit	DUNTKF494FM01	←	—	No changed
N	ICON Unit (LC-60LE630U/U(A),6300U/U(A)/U(B))	DUNTKF770FM02	←	—	No changed
N	ICON Unit (LC-70LE735U)	DUNTKF770FM02	DUNTKF770FM03	D	Changed
N	KEY Unit (LC-60LE630U/U(A),6300U/U(A)/U(B))	DUNTKF800FM50	←	—	No changed
N	KEY Unit (LC-70LE735U)	DUNTKF800FM51	DUNTKF800FM50	D	Changed
N	WiFi Unit (LC-60LE630U/U(A),6300U/U(A)/U(B))	RUNTKA810WJQZ	—	—	Delete
N	WiFi Unit (LC-70LE735U)	RUNTKA810WJQZ	←	—	No changed
N	3D IR EMITTER Unit (LC-70LE735U)	—	RUNTKA819WJQZ	D	Add
N	POWER/DRIVE Unit (LC-60LE630U/U(A))	RUNTKA847WJQZ	←	—	No changed
N	POWER/DRIVE Unit (LC-60LE6300U/U(A))	RUNTKA847WJQZ	RUNTKA847WJZZ	D	Changed
N	POWER/DRIVE Unit (LC-60LE6300U(B))	RUNTKA847WJQZ	RUNTKA847WJN1	D	Changed
N	POWER Unit (LC-70LE735U)	RUNTKA857WJQZ	RDENCA442WJQZ	D	Changed
N	LCD Control Unit (LC-60LE630U/U(A),6300U/ U(A)/U(B))	DUNTKF778FM02	RUNTK4911TPZT	D	Changed
N	LCD Control Unit (LC-70LE735U)	DUNTKF778FM04	RUNTK4909TPYP	D	Changed
N	LED DRIVER Unit (LC-70LE735U)	—	RUNTKA842WJZZ	D	Add
LCD PANEL MODULE					
N	60" LCD Panel Module Unit (LK600D3GW70Z) (LC-60LE630U/6300U)	R1LK600D3GW70Z	←	—	No changed
N	60" LCD Panel Module Unit (LK600D3GW7AZ) (LC-60LE630U(A),6300U(A))	R1LK600D3GW70Z	R1LK600D3GW7AZ	D	Changed
N	60" LCD Panel Module Unit (LK600D3GW7CZ) (LC-60LE6300U(B))	R1LK600D3GW70Z	R1LK600D3GW7CZ	D	Changed
N	70" LCD Panel Module Unit (LK695D3GW20Z) (LC-70LE735U)	R1LK695D3GW30Z	R1LK695D3GW20Z	D	Changed
CABINET AND MECHANICAL PARTS					
	Please refer to a Parts Guide.				
SUPPLIED ACCESSORIES/PACKING PARTS (NOT REPLACEMENT ITEM)					
	Please refer to a Parts Guide.				
SERVICE JIG (USE FOR SERVICING)					
	Please refer to a Parts Guide.				

Interchangeability			
A: Completely interchangeable	OLD = NEW	C: Interchangeable from NEW to OLD	NEW → OLD
B: Interchangeable from OLD to NEW	OLD → NEW	D: Not interchangeable	NEW × OLD

MAJOR SERVICE PARTS**■PWB Unit**

(LC-60LE630U/U(A),6300U/U(A)/U(B))

Ref No.	Parts No.	Description
N	DUNTKF905FM01	MAIN Unit
N	DUNTKF494FM01	R/C, OPC Unit
N	DUNTKF770FM02	ICON Unit
N	DUNTKF800FM50	KEY Unit
N	RUNTKA847WJQZ	POWER Unit (LC-60LE630U/U(A))
N	RUNTKA847WJZZ	POWER Unit (LC-60LE6300U/U(A))
N	RUNTKA847WJN1	POWER Unit (LC-60LE6300U(B))
N	RUNTK4911TPZT	LCD CONTROL Unit

(LC-70LE735U)

Ref No.	Parts No.	Description
N	DKEYMF733FM26	MAIN Unit (*1)
N	DUNTKF494FM01	R/C, OPC Unit
N	DUNTKF770FM03	ICON Unit
N	DUNTKF800FM50	KEY Unit
N	RUNTKA810WJQZ	WiFi Unit
N	RUNTKA819WJQZ	3D IR EMITTER Unit
N	RDENCA442WJQZ	POWER Unit
N	RUNTK4909TPYP	LCD CONTROL Unit
N	RUNTKA842WJZZ	LED DRIVER Unit

NOTE: *1 Replace MAIN PWB Unit (DKEYMF733FM26) in case of IC8401, IC3303 or IC8455 failure.

■OTHER Unit

Ref No.	Parts No.	Description
N	R1LK600D3GW70Z	60" LCD Panel Module Unit (LK600D3GW70Z) (LC-60LE630U/6300U)
N	R1LK600D3GW7AZ	60" LCD Panel Module Unit (LK600D3GW7AZ) (LC-60LE630U(A)/6300U(A))
N	R1LK600D3GW7CZ	60" LCD Panel Module Unit (LK600D3GW7CZ) (LC-60LE6300U(B))
N	R1LK695D3GW20Z	70" LCD Panel Module Unit (LK695D3GW20Z) (LC-70LE735U)

■IC For Exclusive Use Of The Service

Ref No.	Parts No.	Description	Q'ty
IC508	RH-iXD397WJQZS	IC S-24CS02AFJ-TB-G (RGB) (LC-60LE630U/U(A),6300U/U(A)/U(B))	1
IC1503	RH-iXD394WJQZS	IC S-24CS02AFJ-TB-G (HDMI1) (LC-60LE630U/U(A),6300U/U(A)/U(B))	1
IC1504	RH-iXD396WJQZS	IC S-24CS02AFJ-TB-G (HDMI3) (LC-60LE630U/U(A),6300U/U(A)/U(B))	1
IC1505	RH-iXD395WJQZS	IC S-24CS02AFJ-TB-G (HDMI2) (LC-60LE630U/U(A),6300U/U(A)/U(B))	1
IC2001	RH-iXD241WJNBQ	IC R5F21368CNFP (Monitor Microcomputer) (LC-70LE735U)	1

■Service Jigs

Ref No.	Parts No.	Description	Q'ty
N	QCNW-C222WJQZ	Connecting Cord L=1000mm 80pins, LCD Control Unit to LCD Panel Unit	2
N	QCNW-F676WJQZ	Connecting Cord L=1000mm 41pins, MAIN Unit to LCD Control Unit (LW)	1
N	QCNW-M249WJQZ	Connecting Cord L=1000mm, Main to LCD Control Unit (PD) (LC-60LE630U/U(A),6300U/U(A)/U(B))	1
N	QCNW-L214WJQZ	Connecting Cord L=1000mm, 64pins, LCD Control Unit to LCD Panel Unit (LC-70LE735U)	2
N	QCNW-G405WJQZ	Connecting Cord L=1000mm 4pins, POWER Unit to LCD Control Unit (PL) (LC-70LE735U)	1
N	QCNW-L795WJQZ	Connecting Cord L=1000mm 24pins, MAIN Unit to POWER Unit (PD) (LC-70LE735U)	1
N	QCNW-L519WJQZ	Connecting Cord L=1000mm 18pins, LED DRIVER Unit to POWER Unit (LA) (LC-70LE735U)	1

CHAPTER 1. SPECIFICATIONS

[1] SPECIFICATIONS (LC-60LE630U/U(A),6300U/U(A)/U(B))

Item			Model: LC-60LE630U/U(A),6300U/U(A)/U(B)
LCD panel	Size		60" Class (60 ¹ / ₃₂ " Diagonal)
	Resolution		2,073,600 pixels (1,920 × 1,080)
TV Function	TV-standard (CCIR)		American TV Standard ATSC/NTSC System
	Receiving Channel	VHF/UHF	VHF 2-13ch, UHF 14-69ch
		CATV	1-135ch (non-scrambled channel only)
		Digital Terrestrial Broadcast (8VSB)	2-69ch
		Digital cable ¹ (64/256 QAM)	1-135ch (non-scrambled channel only)
	Audio multiplex		BTSC System
Audio out			10W × 2
Terminals	Rear	HDMI 1	HDMI in with HDCP, Audio in (ø 3.5 mm stereo minijack)
		HDMI 2	HDMI in with HDCP
		COMPONENT	COMPONENT in
		PC IN	ANALOG RGB (PC) in (15-pin mini D-sub female connector), Audio in (ø 3.5 mm stereo minijack)
		ANT/CABLE	75 Ω Unbalance, F Type × 1 for Analog (VHF/UHF/CATV) and Digital (AIR/CABLE)
		AUDIO	Audio in (ø 3.5 mm stereo minijack)
		DIGITAL AUDIO OUTPUT	Optical Digital audio output × 1 (PCM/Dolby Digital)
	Side	OUTPUT	Audio out
		HDMI 3	HDMI in with HDCP
		VIDEO	AV in
SERVICE			Software update
OSD language			English/French/Spanish
Power Requirement			AC 120 V, 60 Hz
Power Consumption			180 W (0.2 W Standby with AC 120 V)
Weight	TV + stand		71.7 lbs./32.5 kg
	TV only		65.1 lbs./29.5 kg
Dimension ² (W × H × D)	TV + stand		54 ²⁹ / ₆₄ × 34 ¹⁹ / ₆₄ × 13 ¹ / ₈ inch
	TV only		54 ²⁹ / ₆₄ × 33 × 2 ²⁷ / ₃₂ inch
Operating temperature			+32°F to +104°F (0°C to +40°C)

^{*1} Emergency alert messages via Cable are unreceivable.

^{*2} The dimensional drawings are shown on the Spanish operation manual.

The width include the operation buttons.

- As part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
 - Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the Liquid Crystal panel to malfunction.
- Storage temperature: -4°F to +140°F (-20°C to +60°C)

[2] SPECIFICATIONS (LC-70LE735U)

Item			Model: LC-70LE735U
LCD panel	Size		70" Class (69 ¹ / ₂ " Diagonal)
	Resolution		2,073,600 pixels (1,920 × 1,080)
TV Function	TV-standard (CCIR)		American TV Standard ATSC/NTSC System
	Receiving Channel	VHF/UHF	VHF 2-13ch, UHF 14-69ch
		CATV	1-135ch (non-scrambled channel only)
		Digital Terrestrial Broadcast (8VSB)	2-69ch
		Digital cable ¹ (64/256 QAM)	1-135ch (non-scrambled channel only)
Audio multiplex		BTSC System	
Audio out			10W × 2
Terminals	Back panel vertical inputs	HDMI 1	HDMI in with HDCP, Audio in (Ø 3.5 mm stereo jack)
		HDMI 2	HDMI in with HDCP
		HDMI 3	HDMI in with HDCP
		HDMI 4	HDMI in with HDCP
		AUDIO OUT	Audio out (Ø 3.5 mm stereo jack)
		USB 1	Photo/Music/Video mode, Software update
	Back panel surface inputs	COMPONENT	COMPONENT in
		VIDEO 1	AV in
		VIDEO 2	AV in
		PC IN	ANALOG RGB (PC) in (15-pin mini D-sub female connector), Audio in (Ø 3.5 mm stereo jack)
		RS-232C	9-pin D-sub male connector
	Back panel horizontal inputs	ANT/CABLE	75 Ω Unbalance, F Type × 1 for Analog (VHF/UHF/CATV) and Digital (AIR/CABLE)
		AUDIO IN	Audio in (Ø 3.5 mm stereo jack)
		DIGITAL AUDIO OUTPUT	Optical Digital audio output × 1 (PCM/Dolby Digital)
		ETHERNET	Network connector
	USB 2		Photo/Music/Video mode, Software update
OSD language			English/French/Spanish
Power Requirement			AC 120 V, 60 Hz
Power Consumption			252 W (0.1 W Standby with AC 120 V)
Weight	TV + stand		99.2 lbs./45.0 kg
	TV only		93.7 lbs./42.5 kg
Dimension ² (W × H × D)	TV + stand		63 ¹ / ₂ × 39 ⁴⁵ / ₆₄ × 13 ¹ / ₈ inch
	TV only		63 ¹ / ₂ × 38 ²⁵ / ₆₄ × 3 ¹ / ₂ inch
Operating temperature			+32°F to +104°F (0°C to +40°C)

¹ Emergency alert messages via Cable are unreceivable.

² The dimensional drawings are shown on the inside back cover.

- As part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Cautions regarding use in high and low temperature environments

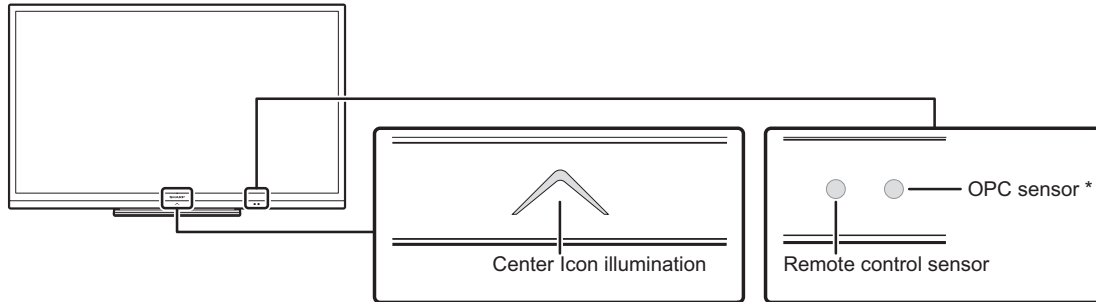
- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the front panel to malfunction.
Storage temperature: -4°F to +140°F (-20°C to +60°C)

CHAPTER 2. OPERATION MANUAL

[1] OPERATION MANUAL (LC-60LE630U/U(A),6300U/U(A)/U(B))

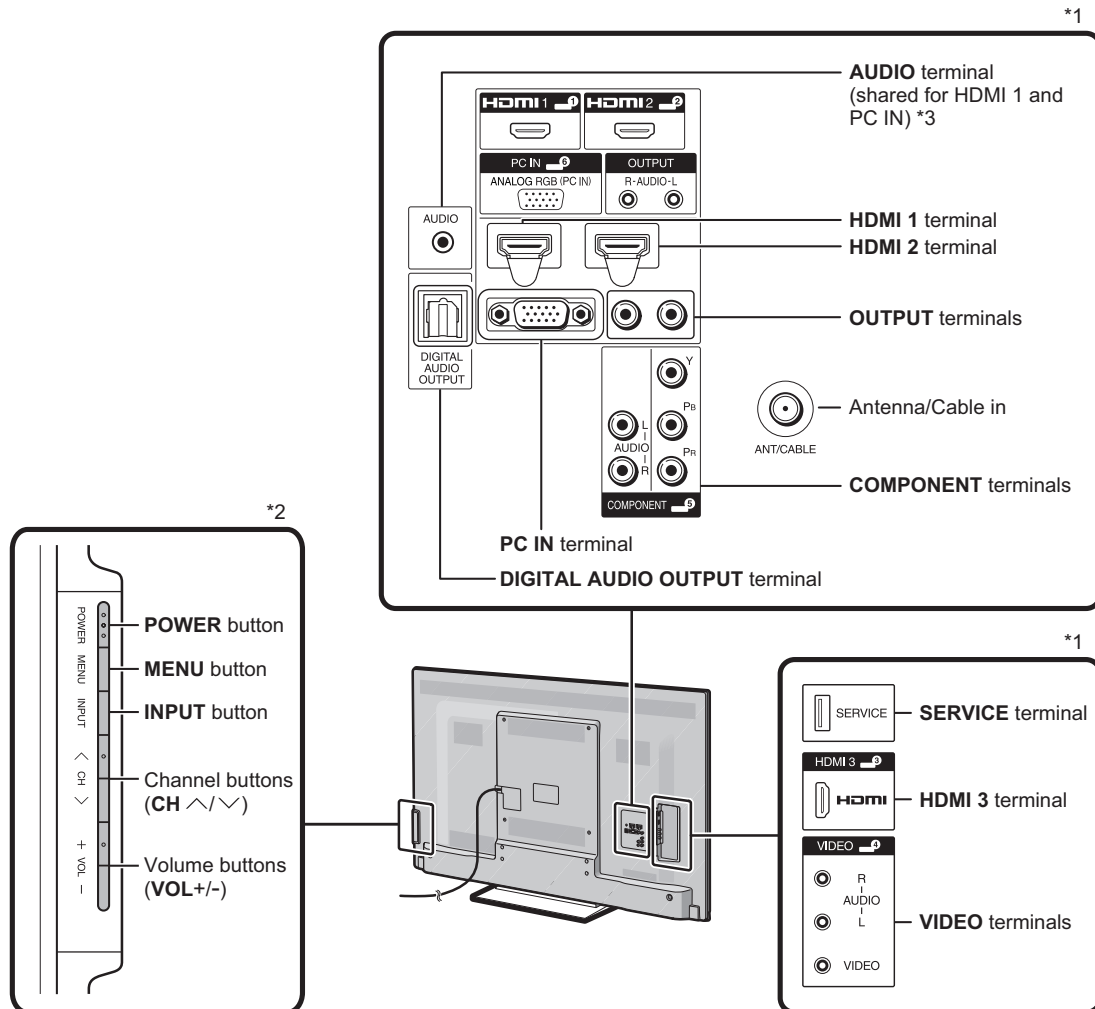
Part Names

TV (Front)



* OPC: Optical Picture Control

TV (Rear/Side)

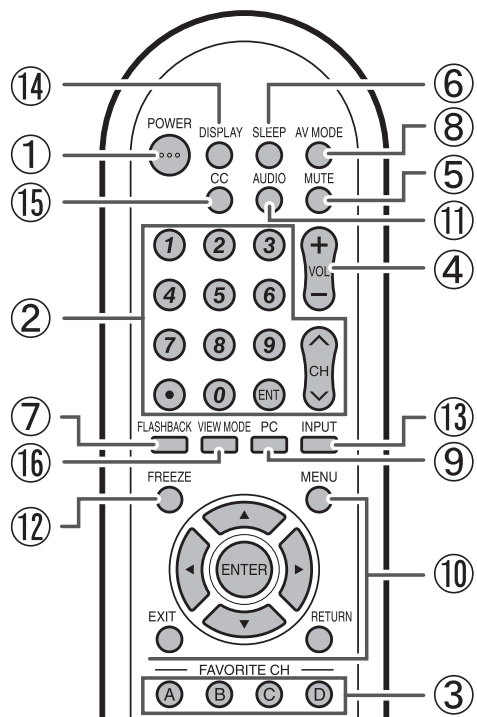


*1 External equipment connection.

*2 Button operations.

*3 PC Audio Select function.

Direct Button Operation



① POWER

You can turn on the TV or put it on standby by pressing **POWER** on the TV or on the remote control unit.

② Changing Channels

You can change channels by pressing **CH** \wedge/\vee or **0-9**, \bullet (DOT).

Examples:

To select a 1 or 2-digit channel number (e.g., Channel 5):
Press **5** \rightarrow **ENT**.

To select a 3-digit channel number (e.g., Channel 115):
Press **1** \rightarrow **1** \rightarrow **5** \rightarrow **ENT**.

To select a 4-digit channel number (e.g., Channel 22.1):
Press **2** \rightarrow **2** \rightarrow \bullet (DOT) \rightarrow **1** \rightarrow **ENT**.

NOTE

- When selecting a 1-digit channel number, it is not necessary to press **0** before the number.
- When you enter **0-9** only, channel selection will be made if there is no operation within a few seconds.
- If you push "0" by itself, nothing will happen.
- Complete the above steps within a few seconds.
- When you enter **0-9** and \bullet (DOT), channel selection will be made if there is no operation within a few seconds.

③ FAVORITE CH

You can select 4 preset favorite channels in 4 different categories.

Press **A, B, C** or **D**.

- While watching the TV, you can toggle the selected channels by pressing **A, B, C** and **D**.

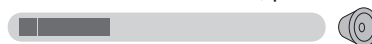
NOTE

- Details of favorite channel settings.

④ Changing Volume

You can change the volume by pressing **VOL+/-** on the TV or on the remote control unit.

- To increase the volume, press **VOL+**.
- To decrease the volume, press **VOL-**.



Audio status

Output device	Output Select	
	Fixed	Variable
Speaker	Variable sound	Mute

- When "Output Select" is set to "Variable", the indicator on the screen changes as shown below.



NOTE

- Details on the Output Select function.

⑤ MUTE

Mutes the current sound output.

Press **MUTE**.

- " \otimes " will be displayed on the screen for 30 minutes, and the sound is silenced.

NOTE

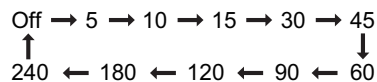
- Within 30 minutes of pressing **MUTE**, mute can be canceled by pressing **VOL+/-** or **MUTE**.
- Mute will be canceled after 30 minutes have passed. However, the TV will not suddenly output a loud sound as the volume level is set to 0 automatically.

⑥ Sleep Timer

Allows you to set a time when the TV automatically switches to standby.

Press **SLEEP**.

- The remaining time displays when the sleep timer has been set.
- Each time you press **SLEEP**, the remaining time switches as shown below.



- When set, the time automatically starts counting down.
- If you want to adjust the sleep timer, you can press **SLEEP** twice then change the time setting.
- When it is 5 minutes before the time expires, the remaining time will start to keep appearing every minute.

NOTE

- Select "Off" by pressing **SLEEP** to cancel the sleep timer.
- The TV will enter standby when the remaining time reaches 0.

⑦ FLASHBACK

Press **FLASHBACK** to switch to the previously tuned channel.

- Press **FLASHBACK** again to switch back to the currently tuned channel.

NOTE

- FLASHBACK** will not work if no channel has been changed after the TV is turned on.
- This function is available only when the input source is TV.

Direct Button Operation

⑧ AV MODE

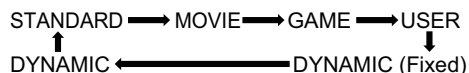
AV Mode gives you several viewing options to choose from to best match the surrounding environment of the TV, which can vary due to factors like room brightness, type of program watched or the type of image input from external equipment.

Press **AV MODE**. Current AV Mode displays.

- Press **AV MODE** again before the mode displayed on the screen disappears. The mode changes as shown below:

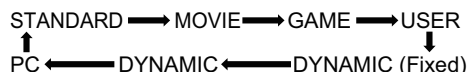
Example:

When the input source is TV, VIDEO or COMPONENT terminals



Example:

When the input source is HDMI 1, 2 or 3 terminals



Example:

When the input source is PC IN terminal



STANDARD: For a highly defined image in a normal lighting.

MOVIE: For a movie.

GAME: Lowers image brightness for easier viewing.

PC: For PC.

USER: Allows the user to customize settings as desired. You can set the mode for each input source.

DYNAMIC (Fixed): Changes the image and sound settings to the factory preset values. No adjustments are allowed.

DYNAMIC: For a clear-cut image emphasizing high contrast, useful for sports viewing.

NOTE

- You can select a different AV Mode item for each input mode. (For example, select STANDARD for TV input and DYNAMIC for COMPONENT.)
- When you play games, "GAME" is recommended for AV Mode.

⑨ PC

Allows you to gain quick access to PC mode. Press **PC**.

⑩ Operating On-Screen Display Menu

You can operate the on-screen display menu by using the following buttons.

MENU: Displays the menu screen.

▲/▼/◀/▶, ENTER: Select a desired item on the screen.

RETURN: Returns to the previous menu screen.

EXIT: Turns off the menu screen.

NOTE

- For operating the on-screen display menu, see "Menu Operation Buttons".

⑪ AUDIO

■ MTS/SAP stereo mode

The TV has a feature that allows reception of sound other than the main audio for the program. This feature is called Multi-channel Television Sound (MTS). The TV with MTS can receive mono sound, stereo sound and Secondary Audio Programs (SAP). The SAP feature allows a TV station to broadcast other information, which could be audio in another language or something completely different like weather information.

You can enjoy Hi-Fi stereo sound or SAP broadcasts where available.

- Stereo broadcasts:** View programs like live sporting events, shows and concerts in dynamic stereo sound.
- SAP broadcasts:** Receive TV broadcasts in either MAIN or SAP sound. MAIN sound: The normal program soundtrack (either in mono or stereo). SAP sound: Listen to a second language, supplementary commentary or other information. (SAP is mono sound.)

If stereo sound is difficult to hear.

- Obtain a clearer sound by manually switching to fixed mono-sound mode.

You can change MTS as shown below to match the television broadcast signal.

Press **AUDIO** to toggle between audio modes.

Examples: when receiving MTS and SAP

STEREO mode: STEREO ↔ MONO

STEREO + SAP mode: STEREO → SAP → MONO

MONO mode: MONO

■ Digital broadcasting audio mode

The types of audio transmitted in a digital broadcast include SURROUND as well as MONO and STEREO. In addition, it is possible for multiple audio tracks to accompany a single video track.

1 Press **AUDIO**.

- A list of selectable audio is displayed.

2 Press **▲/▼** to select audio.

NOTE

- MTS only operates while in TV mode.

Direct Button Operation

⑫ FREEZE

Allows you to capture and freeze a moving image that you are watching.

Press **FREEZE**.

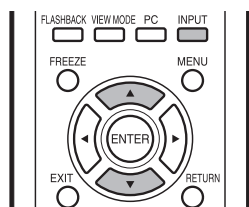
- A moving image is captured.
- Press **FREEZE** again to cancel the function.

NOTE

- When this function is not available, "No displaying still image available." will display.
- The still image automatically goes out after 30 minutes.
- If you are using the freeze function and a broadcast activates the V-CHIP BLOCK, the freeze function will be canceled and a V-CHIP BLOCK message will appear.

⑬ INPUT

To view external source images, select the input source by pressing **INPUT** on the remote control unit or on the TV.

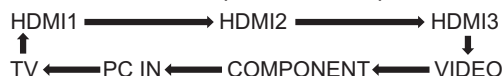


1 Press **INPUT**.

- A list of selectable sources appears.

2 Press **INPUT** again or press ▲/▼ to select the input source.

- Each time **INPUT** is pressed, the input source toggles.



- An image from the selected source automatically displays.
- If the corresponding input is not plugged in, you cannot change the input. Be sure to connect the equipment beforehand.

NOTE

- External equipment connection.
- Press **PC** to switch to an image from the PC.

⑭ DISPLAY

Displays channel information being viewed.

Press **DISPLAY**.

⑮ Closed Captions and Digital Closed Captions

Your TV is equipped with an internal Closed Caption decoder. It allows you to view conversations, narration and sound effects as subtitles on your TV. Closed Captions are available on some TV programs and on some VHS home video tapes at the discretion of the program provider.

Digital Closed Caption service is a new caption service available only on digital TV programs (also at the discretion of the service provider). It is a more flexible system than the original Closed Caption system, because it allows for a variety of caption sizes and font styles. When the Digital Closed Caption service is in use, it will be indicated by the appearance of DTVCC.

Not all programs and VHS videotapes offer closed captions. Please look for the "CC" symbol to ensure that captions will be shown.

In the Closed Caption system, there can be more than one caption service provided. Each is identified by its own number. The "CC1", "CC2", "CC3" and "CC4" services display subtitles of TV programs superimposed over the program's picture.

In the Closed Caption system, the TEXT1, TEXT2, TEXT3 or TEXT4 services display text that is unrelated to the program being viewed (e.g., weather or news). These services are also superimposed over the program currently being viewed.

Press **CC**.

On: Displays the closed caption.

Off: Does not display the closed caption.

NOTE

- You can adjust the closed caption screen appearance to your preference.



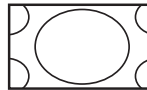
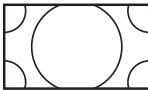
Direct Button Operation

16 VIEW MODE

You can select the screen size.

Press **VIEW MODE** to toggle between view modes.

■ For HD programs

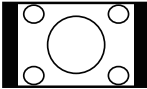
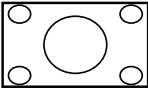
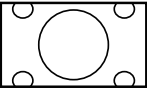
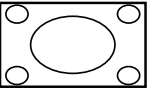
Stretch	Dot by Dot (Full Screen)	S.Stretch (Smart stretch)	Zoom
 <p>Suitable for viewing wide-screen 1.78:1 aspect ratio program, stretch mode will still show very thin black bands at the top and bottom of the screen.</p>	 <p>Dot by Dot (1080i/p only): Detects the resolution of the signal and displays an image with the same number of pixels on the screen. Full Screen (720p only): You can select "Full Screen" only when receiving a 720p signal.</p>	 <p>Suitable for stretching 4:3 programs to fill the screen.</p>	 <p>Suitable for viewing wide-screen 2.35:1 aspect-ratio programs in full screen.</p>

NOTE

- When using Dot by Dot or Full Screen, it is possible to see noise or bars around different outer portions of the screen. Please change view mode to correct this.

■ For 4:3 programs

Example: Screen size images

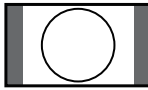
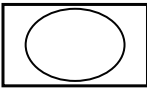
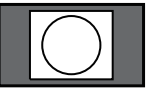
Side Bar	S.Stretch (Smart stretch)	Zoom	Stretch
 <p>Suitable for viewing conventional 4:3 programs in their normal format.</p>	 <p>Suitable for stretching 4:3 programs to fill the screen.</p>	 <p>Suitable for viewing wide-screen 2.35:1 anamorphic DVDs in full screen.</p>	 <p>This mode is useful for 1.78:1 DVDs. When viewing 1.85:1 DVDs, stretch mode will still show very thin black bands at the top and bottom of the screen.</p>

■ For PC input mode

NOTE

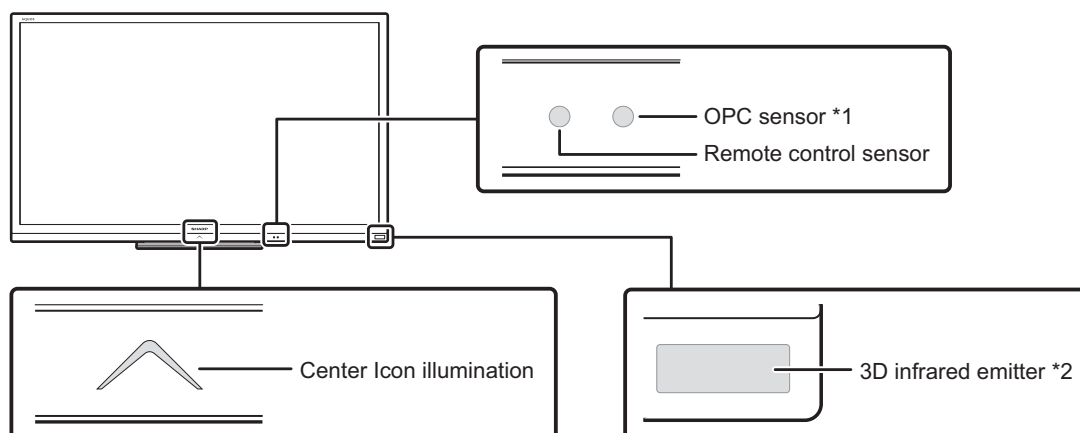
- Connect the PC before making adjustments.
- Selectable screen size may vary with input signal type.

Example: Screen size images

Normal	Stretch	Dot by Dot
 <p>Keeps the original aspect ratio in a full screen display.</p>	 <p>An image fully fills the screen.</p>	 <p>Detects the resolution of the signal and displays an image with the same number of pixels on the screen.</p>

Part Names

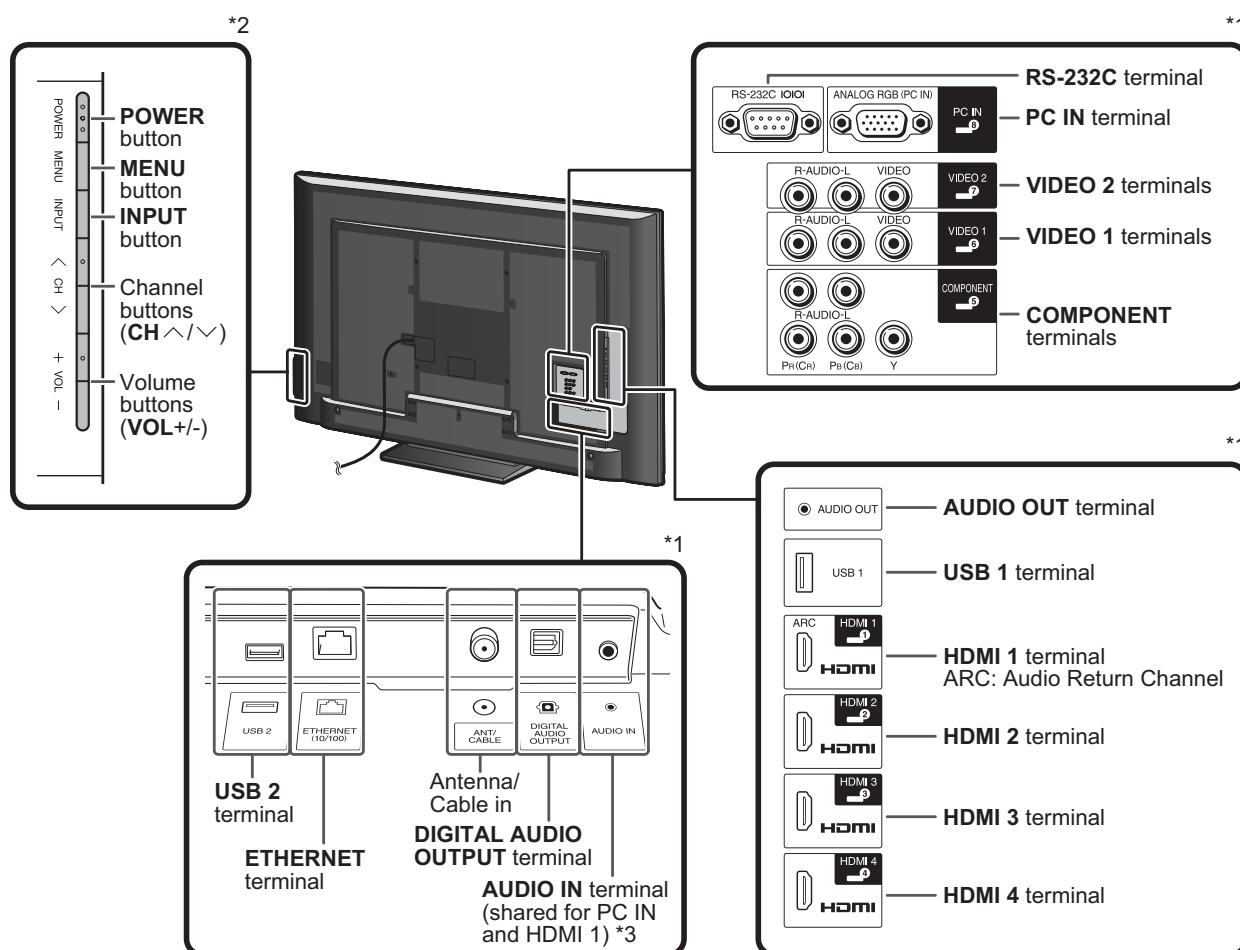
TV (Front)



*1 OPC: Optical Picture Control

*2 This panel emits the infrared signal towards the 3D Glasses you wear when you view 3D images.
 Do not place anything between the 3D infrared emitter on the TV and the infrared receiver on the 3D Glasses.

TV (Rear/Side)

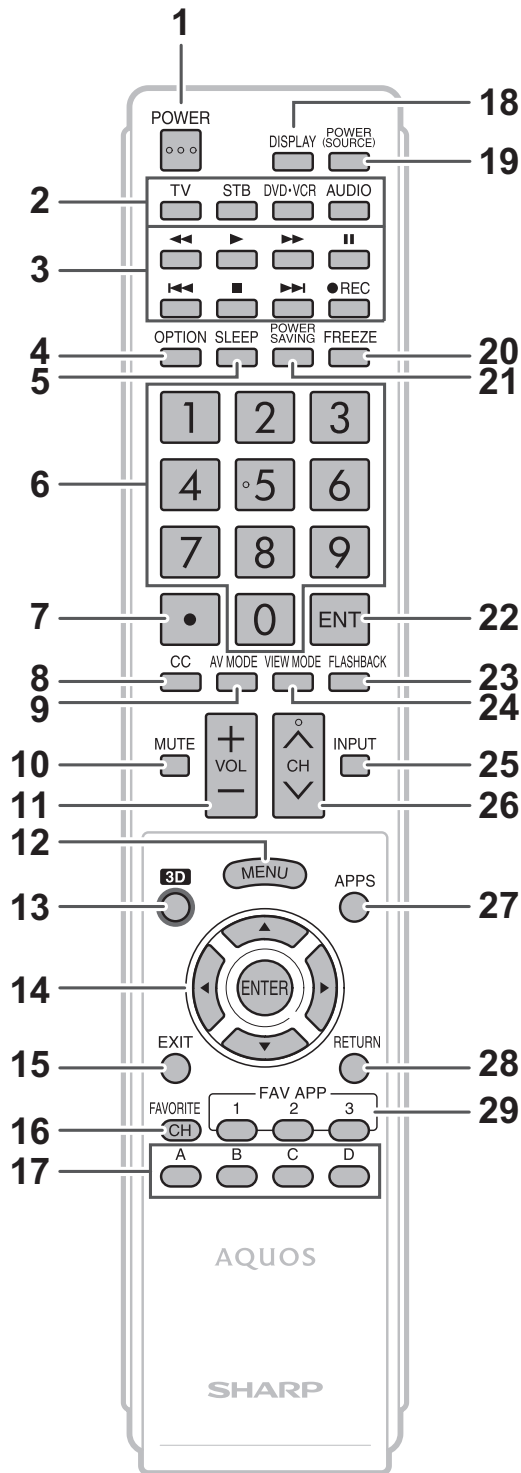


*1 External equipment connection.

*2 Button operations.

*3 Details on the Audio Select function.

Remote Control Unit



NOTE

- When using the remote control unit, point it at the TV.

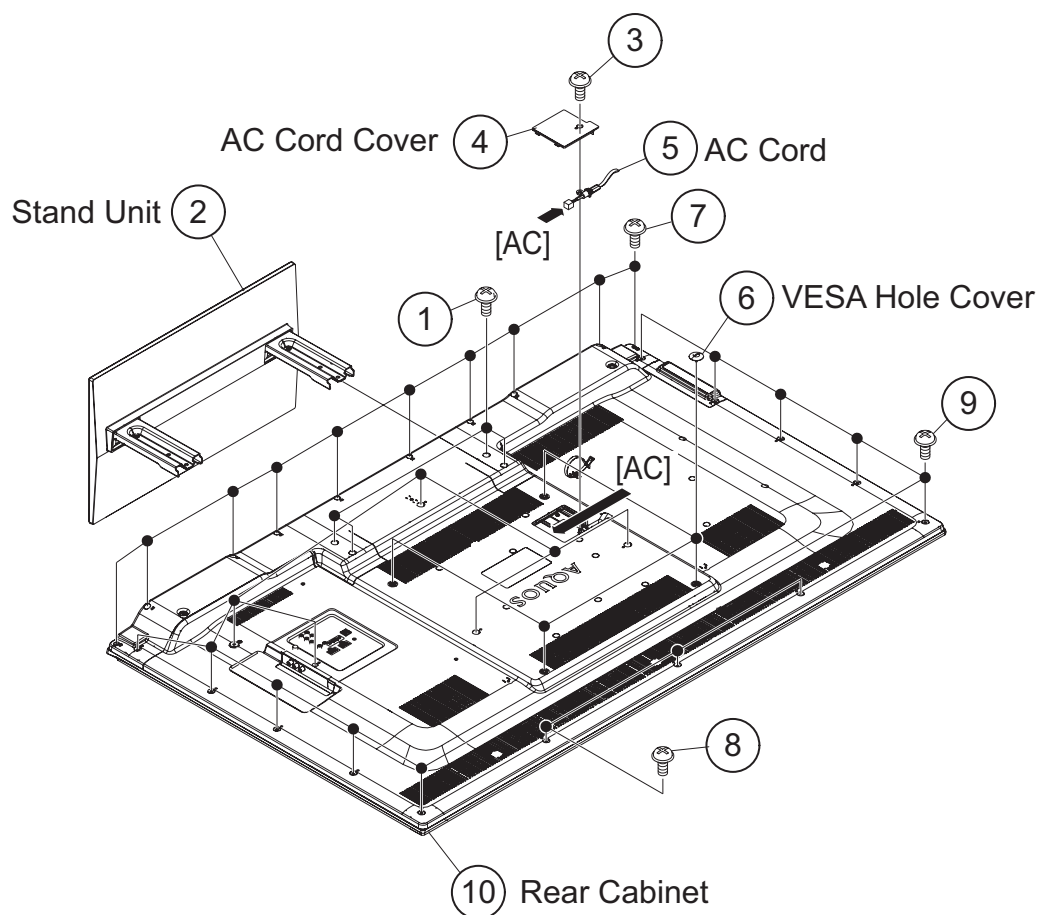
- POWER:** Switch the TV power on or enter standby.
- TV, STB, DVD-VCR, AUDIO:** Switches the remote control for TV, STB, DVD, BD, VCR and AUDIO operation.
* To enter the code registration mode, you need to press an appropriate button (**STB, DVD-VCR** or **AUDIO**) and **DISPLAY** at the same time.
- External equipment operational buttons:** Operate the external equipment.
- OPTION:** Display the Link Operation Menu screen. This button will function only when AQUOS LINK is used.
- SLEEP:** Set the sleep timer.
- 0-9:** Set the channel.
- (DOT)**
- CC:** Display captions from a closed-caption source.
- AV MODE:** Select an audio or video setting.
- MUTE:** Mute the sound.
- VOL +/-:** Set the volume.
- MENU:** Display the menu screen.
- 3D:** Select between 3D and 2D image viewing.
- ▲/▼/◀/▶, ENTER:** Select a desired item on the screen.
- EXIT:** Turn off the menu screen.
- FAVORITE CH:** Set the favorite channels.
- A, B, C, D:** Select 4 preset favorite channels in 4 different categories.
While watching, you can toggle the selected channels by pressing **A, B, C** and **D**.
- DISPLAY:** Display the channel information.
- POWER (SOURCE):** Turns the power of the external equipment on and off.
- FREEZE:** Set the still image. Press again to return to normal screen.
- POWER SAVING:** Select Power Saving settings.
- ENT:** Jumps to a channel after selecting with the **0-9** buttons.
- FLASHBACK:** Return to the previous channel or external input mode.
- VIEW MODE:** Select the screen size.
- INPUT:** Select a TV input source. (TV, HDMI1, HDMI2, HDMI3, HDMI4, COMPONENT, VIDEO1, VIDEO2, PC IN, Home Network (DLNA), USB)
- CH ▲/▼ :** Select the channel.
- APPS:** Display the application window.
- RETURN:** Return to the previous menu screen.
- FAV APP 1, 2, 3:** You can assign your favorite applications to these buttons.

CHAPTER 3. REMOVING OF MAJOR PARTS

[1] REMOVING OF MAJOR PARTS (LC-60LE630U/U(A),6300U/U(A)/U(B))

1. Removing of Stand Unit and Rear Cabinet.

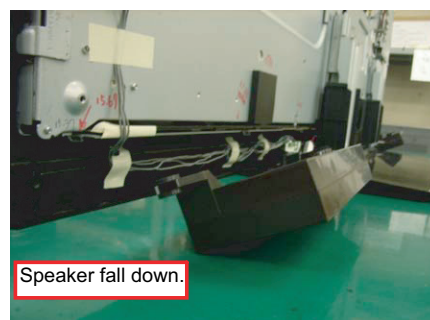
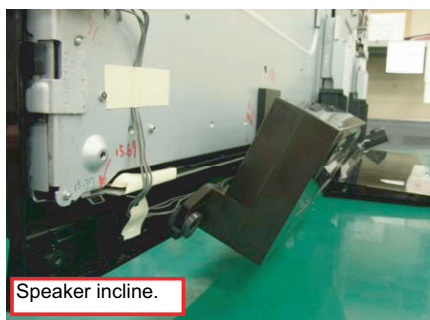
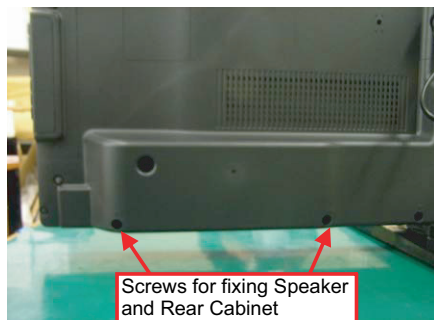
1. Remove the 4 lock screws ① and detach the Stand Unit ②.
2. Remove the 1 lock screw ③ and detach the AC Cord Cover ④.
3. Disconnect AC wire and detach the AC Cord ⑤.
4. Remove the 4 VESA Hole Covers ⑥, 10 lock screws ⑦, 3 lock screws ⑧ and 15 lock screws ⑨ and detach the Rear Cabinet ⑩.



[Precaution when removing the rear cabinet]

If the rear cabinet is removed with the set upright, the speakers may fall; it results in connector disconnection. Therefore, never remove the rear cabinet with the set upright.

Be sure to remove the rear cabinet with the screen side down.



[Precaution when mounting the rear cabinet]

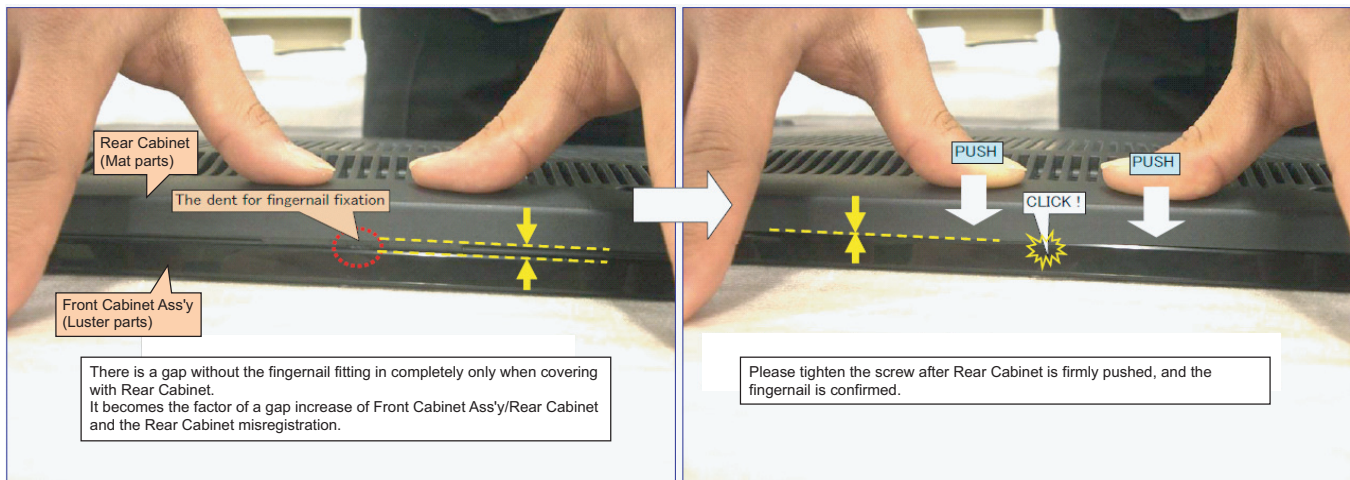
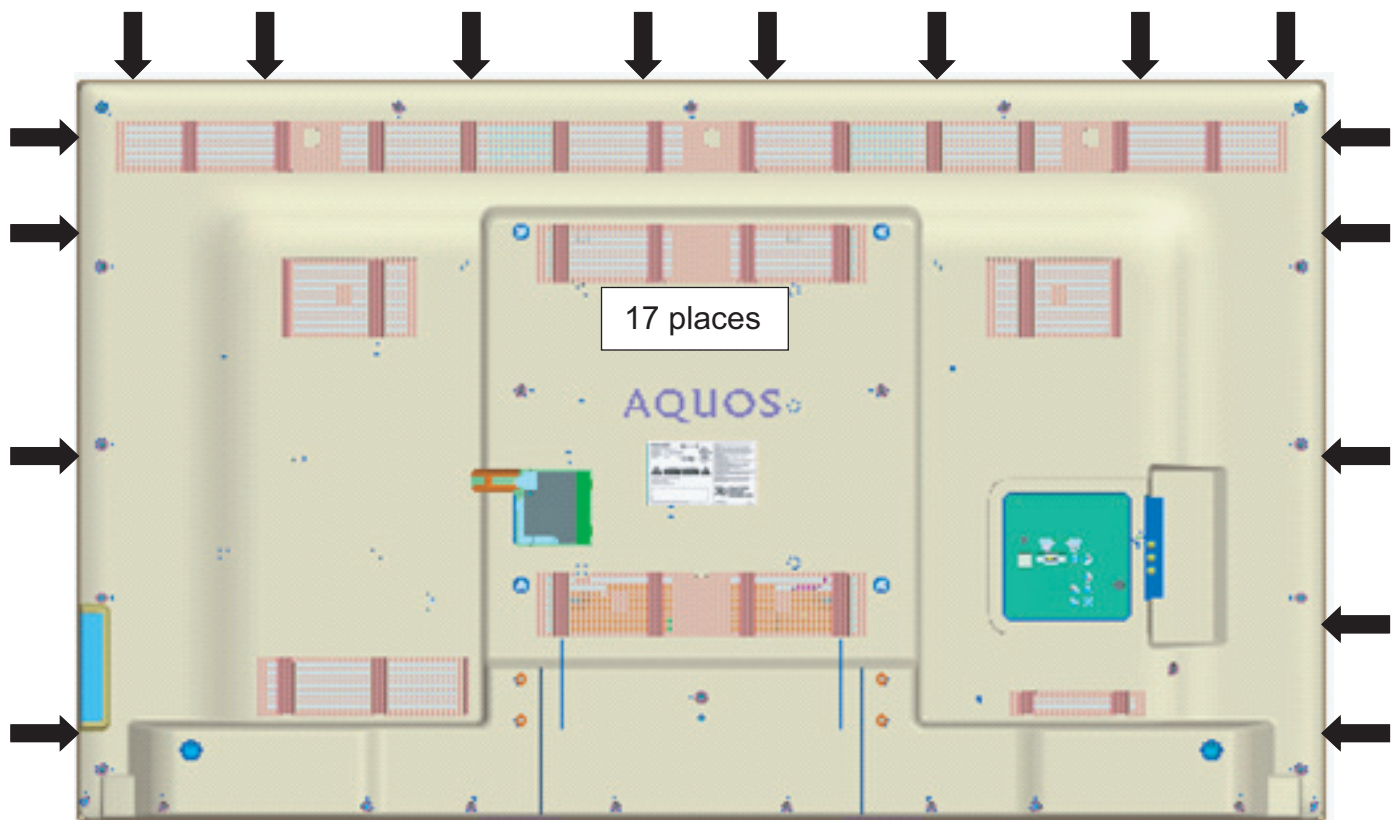
Put the speakers in place with the screen side down, and attach the rear cabinet.

Since the speakers are fixed by the rear cabinet, they cannot be fixed without the rear cabinet.

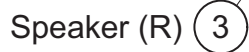
[Precautions when fixing the Rear Cabinet]

When fixing the Rear Cabinet, be careful not to catch the backlight LED harness, speaker harness and other harnesses in it.

- The hooks on the external wall of the Rear Cabinet are fitted in the Front Cabinet Ass'y. After putting the Rear Cabinet in place, fit the hooks securely; then tighten the screws.

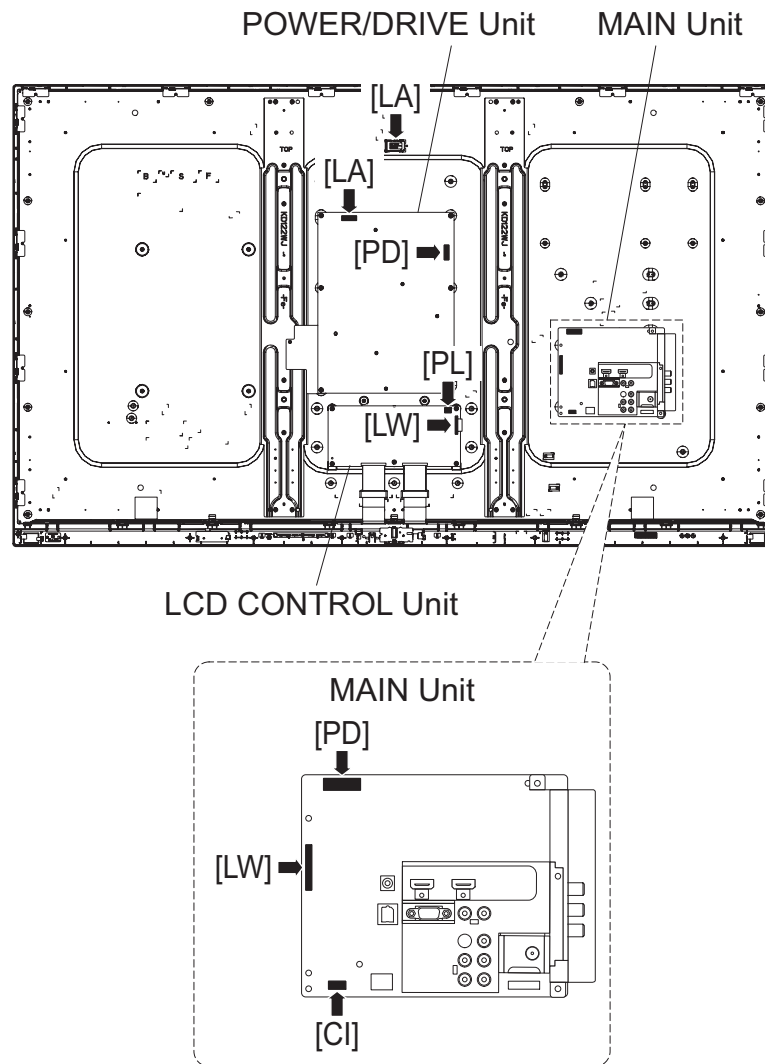
(Work method of Rear Cabinet fixation)**(Front Cabinet Ass'y/Rear Cabinet fingernail fixation place)**

- ## MAIN Unit



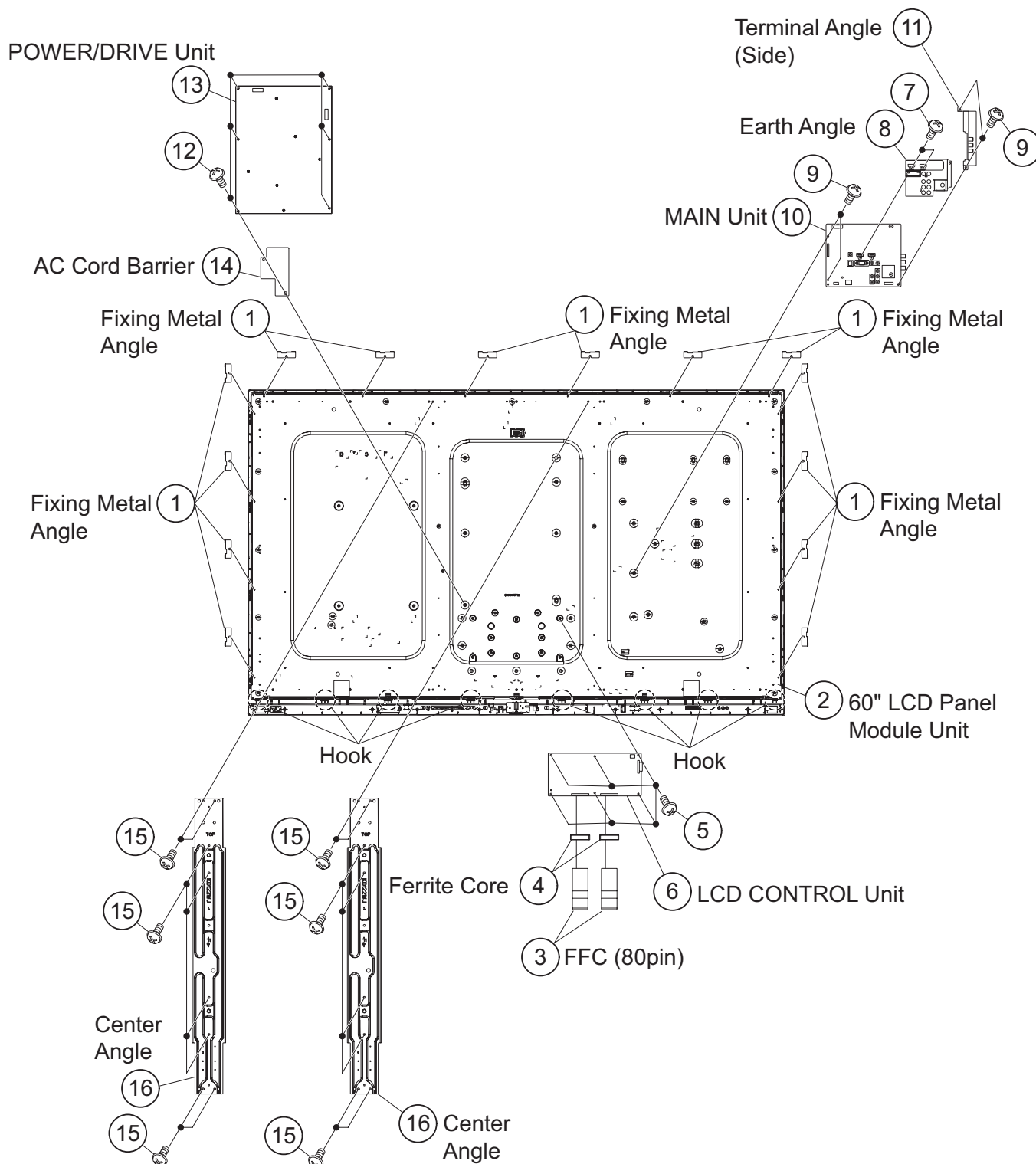
3. Removing of Connectors

1. Disconnect the following connectors from the MAIN Unit. (PD, LW, CI)
2. Disconnect the following connectors from the POWER/DRIVE Unit. (PD, LA)
3. Disconnect the following connectors from the LCD CONTROL Unit. (LW, PL)



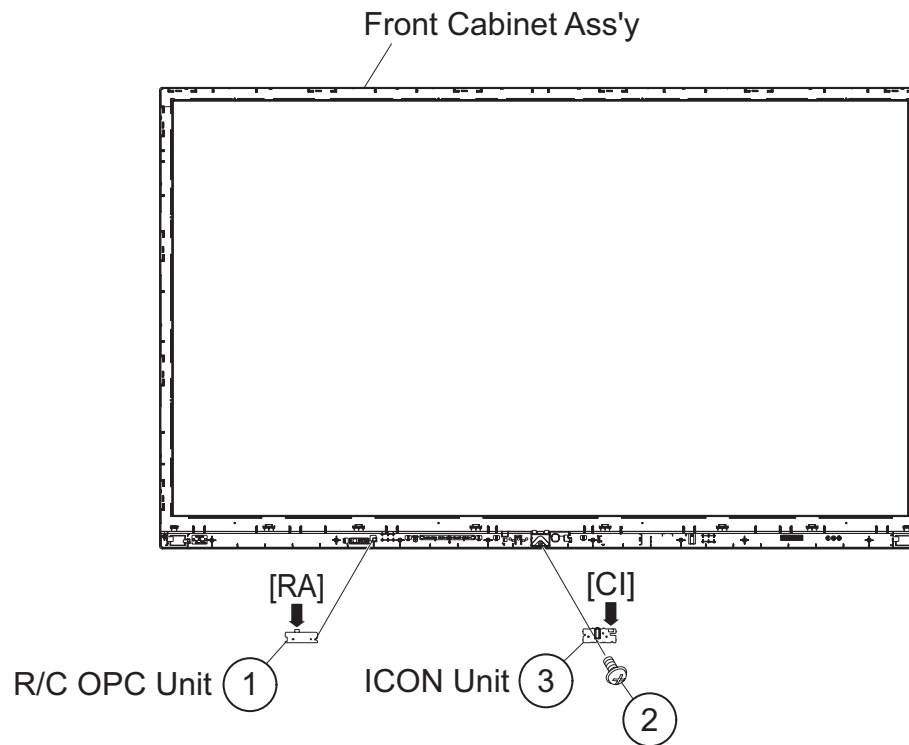
4. Removing of 60" LCD Panel Module Unit, LCD CONTROL Unit, MAIN Unit, POWER/DRIVE Unit.

1. Detach the 14 Fixing Metal Angles ①.
2. Remove the 8 Hooks and detach the 60" LCD Panel Module Unit ②.
3. Remove the 2 FFCs (80pin) ③, 2 Ferrite Cores ④ and 6 lock screws ⑤ and detach the LCD CONTROL Unit ⑥.
4. Remove the 2 lock screws ⑦ and detach the Earth Angle ⑧.
5. Remove the 4 lock screws ⑨ and detach the MAIN Unit ⑩ and Terminal Angle (Side) ⑪.
6. Remove the 6 lock screws ⑫ and detach the POWER/DRIVE Unit ⑬ and AC Cord Barrier ⑭.
7. Remove the 16 lock screws ⑮ and detach the 2 Center Angles ⑯.



5. Removing of R/C OPC Unit, ICON Unit.

1. Detach the R/C OPC Unit ①.
2. Disconnect the RA wire.
3. Remove the 1 lock screw ② and detach the ICON Unit ③.
4. Disconnect the CI wire.



CHAPTER 4. ADJUSTMENT

[1] ADJUSTMENT PROCEDURE (LC-60LE630U/U(A),6300U/U(A)/U(B))

The adjustment values are set to the optimum conditions at the factory before shipping. If a value should become improper or an adjustment is required due to part replacement, make an adjustment according to the following procedure.

1. After replacement of any PWB unit and/or IC for repair, please note the following.

- When replacing the following units, make sure to prepare the new units loaded with updated software.

MAIN Unit: DUNTKF905FM01

2. Upgrading of microprocessor software

CAUTION: Never "POWER OFF" the unit when software upgrade is ongoing.

Otherwise the system may be damaged beyond recovery.

2.1. Software version upgrade

The model employs the following software.

- Main software

The main software can be upgraded by using a general-purpose USB Memory.

The followings are the procedures for upgrading.

2.2. Main software version upgrade

2.2.1 Get ready before you start

- USB Memory of 128MB or higher capacity.
- PC running on Windows 98/98SE/ME/2000/XP operating system.
- USB Memory reader/writer or PC with a USB port.
- The file system of a USB memory is FAT. (FAT32 is not applied)
- Use the USB memory without other functions. (Lock and memory reader...etc)

2.2.2 Preparations

To upgrade the main software, it is necessary to get ready the USB Memory for version upgrade before you start.

Follow the steps below and create the USB Memory for version upgrade.

1. Copy the file JAS_DTV_US_P101_Vx.xx_AP.BIN for version upgrade to the root directory (folder) of the USB Memory.

NOTE: In the USB Memory drive, do not store other folders or unrelated files, or more than one file for version upgrade.

Now the USB Memory for version upgrade is ready.

2.2.3 How to upgrade the software

1. Unplug the AC cord.
2. Insert the USB Memory for version upgrade (prepared as above) into the service socket located Right side of Main Board terminals, upper HDMI3 terminal.
3. Plug in the AC cord with power button pressed down after 5 seconds, releases the power button.
4. After a few seconds, EMBLEM LED will blink on and off.
No display on the LCD screen. (Black screen)
5. Upon completion of the upgrade process, EMBLEM LED will blink on and off quickly.

NOTE: If the EMBLEM LED doesn't come to blink on and off quickly within 70 seconds (ex. the unit was automatically rebooted on the way), the upgrade is failure.

- In the case of a failure, repeat the upgrade process. If the process repeatedly fails, it is likely that the hardware need fixing.

6. Unplug the AC cord and remove the USB Memory for version upgrade.

7. Now the software version upgrade is complete.

NOTE: When you are done with the software version upgrade, start the set, go to the top page of the adjustment process screen and check the main software version information.

3. Entering and exiting the adjustment process mode

1) Before entering the adjustment process mode, the AV position RESET in the video adjustment menu.

2) While holding down the "VOL (-)" and "INPUT" keys at a time, plug in the AC cord of the main unit to turn on the power.

The letter "<K>" appears on the screen.

3) Next, hold down the "VOL (-)" and "CH (V)" keys at a time.

(The "VOL (-)" and "CH (V)" keys should be pressed and held until the display appears.)

Multiple lines of white characters appearing on the display indicate that the unit is now in the adjustment process mode.

When you fail to enter the adjustment process mode (the display is the same as normal startup), retry the procedure.

4) To exit the adjustment process mode after the adjustment is done, unplug the AC cord from the outlet to make a forced shutdown. (When the power was turned off with the remote controller, once unplug the AC cord and plug it again. In this case, wait 10 seconds or so before plugging.)

CAUTION: Use due care in handling the information described here lest your users should know how to enter the adjustment process mode. If the settings are tampered in this mode, unrecoverable system damage may result.

4. Remote controller key operation in adjustment process mode

Remote controller key	Main unit key	Function
CH (V / ^)	CH (V / ^)	Moving an item (line) by one (UP/DOWN)
VOL (+/-)	VOL (+/-)	Changing a selected item setting (+1/ -1)
Cursor (UP/DOWN)	_____	Turing a page (PREVIOUS/NEXT)
Cursor (LEFT/RIGHT)	_____	Changing a selected line setting (+10/ -10)
INPUT	_____	Input switching (toggle switching)
ENTER	_____	Executing a function

*Input mode is switched automatically when relevant adjustment is started so far as the necessary input signal is available.

5. List of adjustment process mode menu

Page	Line	Item	Description	Remarks
1	1	Main Version	Main software version	BL: boot loader version
	2	Check Sum	Flash check sum	
	3	PANEL Version		
	4	TEMP SENSOR		
	5	NORMAL STANDBY CAUSE	Normal standby cause	
	6	ERROR STANDBY CAUSE	Error standby cause	
2	1	Factory Init	Initialization to factory settings	Not available
	2	Inch Setting	Inch size	
	3	Public Mode	Public mode	
	4	Operation Acutime	Accumulated operation time	
	5	RESET	Reset	
3	1	RF-AGC ADJ		Not available
	2	TUNER ADJ		Not available
	3	PAL ADJ		Not available
	4	RF AGC		Not available
	5	TUNER Level		Not available
	6	CVBS Level		Not available
	7	VIF		Not available
	8	VIDEO AGC		Not available
4	1	COMP SD ADJ	Component 15K picture level adjustment	
	2	Y OFFSET		
	3	Cb OFFSET		
	4	Cr OFFSET		
	5	Y GAIN		
	6	Cb GAIN		
	7	Cr GAIN		
	8	RESET ADJUSTMENT	Reset	
5	1	COMP HD ADJ	Component 33K picture level adjustment	
	2	Y OFFSET		
	3	Pb OFFSET		
	4	Pr OFFSET		
	5	Y GAIN		
	6	Pb GAIN		
	7	Pr GAIN		
	8	RESET ADJUSTMENT	Reset	

Page	Line	Item	Description	Remarks
6	1	RGB ADJ	Analog RGB picture level adjustment	
	2	G OFFSET		
	3	B OFFSET		
	4	R OFFSET		
	5	G GAIN		
	6	B GAIN		
	7	R GAIN		
	8	RESET ADJUSTMENT	Reset	
7	1	IN POINT LOW_D	Adjustment point1 at Dynamic mode	
	2	IN POINT HIGH_D	Adjustment point2 at Dynamic mode	
	3	R LEVEL LOW_D	WB adjustment Point 1, R adjustment value at Dynamic mode	
	4	G LEVEL LOW_D	WB adjustment Point 1, G adjustment value at Dynamic mode	
	5	B LEVEL LOW_D	WB adjustment Point 1, B adjustment value at Dynamic mode	
	6	R LEVEL HIGH_D	WB adjustment Point 2, R adjustment value at Dynamic mode	
	7	G LEVEL HIGH_D	WB adjustment Point 2, G adjustment value at Dynamic mode	
	8	B LEVEL HIGH_D	WB adjustment Point 2, B adjustment value at Dynamic mode	
	9	R LEVEL MAX_D	WB adjustment Point Max., R adjustment value at Dynamic mode	
	10	G LEVEL MAX_D	WB adjustment Point Max., G adjustment value at Dynamic mode	
	11	B LEVEL MAX_D	WB adjustment Point Max., B adjustment value at Dynamic mode	
8	1	IN POINT LOW	Adjustment point1	
	2	IN POINT HIGH	Adjustment point2	
	3	R LEVEL LOW	WB adjustment Point 1, R adjustment value	
	4	G LEVEL LOW	WB adjustment Point 1, G adjustment value	
	5	B LEVEL LOW	WB adjustment Point 1, B adjustment value	
	6	R LEVEL HIGH	WB adjustment Point 2, R adjustment value	
	7	G LEVEL HIGH	WB adjustment Point 2, G adjustment value	
	8	B LEVEL HIGH	WB adjustment Point 2, B adjustment value	
	9	R LEVEL MAX	WB adjustment Point Max., R adjustment value	
	10	G LEVEL MAX	WB adjustment Point Max., G adjustment value	
	11	B LEVEL MAX	WB adjustment Point Max., B adjustment value	
	12	ADJ DATA STORE	Execute	
	13	RESET ADJUSTMENT	Reset	
9	1	EEP CLEAR	Clear all setting data of flash memory	
	2	AUTO INSTALLATION SW		
	3	STANDBY CAUSE RESET	Reset STANDBY CAUSE	
	4	DESTINATION	Destination of factory Initialization	
	5	L ERR RESET	Number of termination due to lamp error and Reset	
	6	L ERR STOP	Stop the detection of amp error detection	
	7	TEMP CAUTION	Threshold level of temperature caution	
	8	TEMP SHUTDOWN	Threshold level of temperature protection	
10	1	VCOM ADJ		Not available
	2	TEST PATTERN	Test pattern	
	3	DIMMER	DIMMER setting (64)	

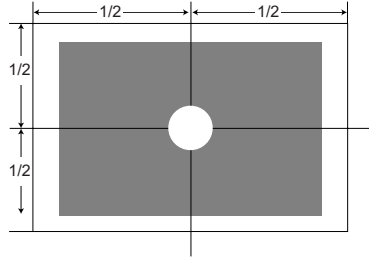
6. Writing the microprocessor software

6.1. Writing the main microprocessor software and monitor microprocessor software (Main PWB: QPWBXF905WJZZ)

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Writing the software	Checker process Checking the file version Checking the USB memory	1) Connect the USB memory to J501 (TL514-517). 2) Set the PWB correctly and apply the specified voltage to it; then write the software on it. 3) After confirming the completion of the writing operation, turn off the power. 4) File name JAS_DTV_US_P101_Vx.xxx_AP.BIN (x.xxx software version) CAUTION: When the USB memory is not inserted or reading error occurs, nothing is written.

7. Signal adjustment

7.1. LCD section adjustment [LCD module adjustment]

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Opposite bias adjustment (LCD module adjustment item)	Adjustment in the center position of the panel	1) Enter the process mode using the process adjustment remote control. 2) Select [VCOM ADJ] using the Channel \swarrow/\nearrow keys on the remote control. 3) Press the Enter key to check that the pattern for adjustment is displayed. 4) Make adjustment so that the flicker located in the center of the screen is minimized using the Volume +/- keys on the remote control. 5) If the optimum condition is obtained in step 4, press the Enter key to turn off the pattern. CAUTION: * Make adjustment with no ANT signal (since the brightness is changed by the active backlight). [Adjustment position] <div style="text-align: center;">  </div>

7.2. Image adjustment

7.2.1 Device check

■ Before adjustment, check that the adjustment jig and signal source are set for Sharp LCD US.


■ Signal generator level adjustment check (Adjust to the standard value level.)

- 15K component signal: Y level: 0.714Vp-p \pm 0.02Vp-p (Pedestal to white)
PB/PR level: 0.7Vp-p \pm 0.02Vp-p
- 33K component signal: Y level: 0.7Vp-p \pm 0.02Vp-p (Pedestal to white)
PB/PR level: 0.7Vp-p \pm 0.02Vp-p
- Analog RGB: RGB level: 0.7Vp-p \pm 0.02Vp-p (Pedestal to white)


7.2.2 Process mode

	Adjustment point	Adjustment conditions	Adjustment procedure
	Process mode		Enter the process adjustment mode using the process adjustment remote control.

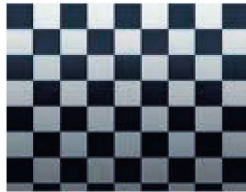
7.2.3 Component 15K signal adjustment

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting	480i signal 100% Full Field Color Bar	<ul style="list-style-type: none"> Send the 100% color bar signal to the component input.  <p>480i 100% color bar</p> <p>↑ 100% white ↑ 0% black</p>
2	Automatic adjustment execution		Point the cursor to [COMP SD ADJ] and press the [Enter] key. The adjustment is complete when [OK] is displayed.

7.2.4 Component 33K signal adjustment

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting	1080i signal 100% Full Field Color Bar	<ul style="list-style-type: none"> Send the 100% color bar signal to the component input.  <p>1080i 100% color bar</p> <p>↑ 100% white ↑ 0% black</p>
2	Automatic adjustment execution		Point the cursor to [COMP HD ADJ] and press the [Enter] key. The adjustment is complete when [OK] is displayed.

7.2.5 Analog RGB signal adjustment

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting	XGA signal 100% Checkerd Pattern Please Make Sure SYNC is OFF	<ul style="list-style-type: none"> Send the 100% checker signal to the analog RGB input. Be sure to set to SYNC=OFF. 
2	Automatic adjustment execution		Point the cursor to [RGB ADJ] and press the [Enter] key. The adjustment is complete when [OK] is displayed.

8. White balance adjustment

8.1. White balance adjustment

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting		1) Set the unit to the following conditions. AV MODE: [DYNAMIC] Backlight: +16 Active Contrast: OFF Aging Time: Min. 15 minutes 2) Connect the unit with the white balance adjustment jig.
2	Automatic adjustment execution	[Command] Process mode KRSW0001 KKT10037 Setting KY0F0000 OSDS0001 SBSL0016 Multi-point adjustment mode FACT0001 MSET0000 Point 2 WBI20200 MG2G**** MG2B**** MG2R**** Point 1 WBI10040 MG1G**** MG1B**** MG1R**** Point 2 (Doubling) WCI20200 MH2G**** MH2B**** MH2R**** Point 1 (Doubling) WCI10040 MH1G**** MH1B**** MH1R**** MAX value MGMR**** MGMG**** MGMB**** MAX value (Doubling) MHMR**** MHMG**** MHMB**** Writing MSET0003 FACT0000	[Adjustment procedure] 1) Send the "monitor adjustment process" code using the remote control. 2) Set the point 2 to the specified gradation, specify the strongest color as the fixed color, and adjust the RGB so that it becomes the standard value through negative adjustment. 3) Set the point 1 to the specified gradation, set the G correction value (640 x G value of point 2/3200) and adjust the RB so that it becomes the standard value. 4) Calculate the MAX RGB values. (For entry, see 11 below.) $G_{max} = G_{max_d} = 4800 * G_{high} / 3200$ $R_{max} = R_{max_d} = G_{max} + R_{high} - G_{high}$ $B_{max} = B_{max_d} = G_{max} + B_{high} - G_{high}$ (4080 when R_{max} , G_{max} and B_{max} exceed 4080 by calculating them) 5) Calculate the tilt between the MAX point and the point 2. $R_{ahigh} = (R_{max} - R_{high}) / (4080 - 3200)$ $G_{ahigh} = (G_{max} - G_{high}) / (4080 - 3200)$ $B_{ahigh} = (B_{max} - B_{high}) / (4080 - 3200)$ 6) Calculate the correction value for doubling the point 2. $\Delta R_{high} = R_{ahigh} \times (3510 - 3200)$ $\Delta G_{high} = G_{ahigh} \times (3510 - 3200)$ $\Delta B_{high} = B_{ahigh} \times (3510 - 3200)$ 7) Calculate the RGB values after doubling the point 2. $R_{high_d} = R_{high} + \Delta R_{high}$ $G_{high_d} = G_{high} + \Delta G_{high}$ $B_{high_d} = B_{high} + \Delta B_{high}$ 8) Calculate the tilt between the point 2 and the point 1. $R_{alow} = (R_{high} - R_{low}) / (3200 - 640)$ $G_{alow} = (G_{high} - G_{low}) / (3200 - 640)$ $B_{alow} = (B_{high} - B_{low}) / (3200 - 640)$ 9) Calculate the correction value for doubling the point 1. $\Delta R_{low} = R_{alow} \times (717 - 640)$ $\Delta G_{low} = G_{alow} \times (717 - 640)$ $\Delta B_{low} = B_{alow} \times (717 - 640)$ 10) Calculate the RGB values after doubling the point 1. $R_{low_d} = R_{low} + \Delta R_{low}$ $G_{low_d} = G_{low} + \Delta G_{low}$ $B_{low_d} = B_{low} + \Delta B_{low}$ 11) Enter the MAX RGB values. 12) Enter the RGB values after doubling the MAX values. $R_{max_d} = R_{max}$ $G_{max_d} = G_{max}$ $B_{max_d} = B_{max}$ 13) Write the adjustment values using the MSET0003 command and turn off the AC power.

	Adjustment point	Adjustment conditions	Adjustment procedure			
			[Adjustment value] * According to the "Standard settings" submitted by the Technical Department [LC-32D49U] teaching set [Adjustment standard value] Measuring instrument: [Minolta CA-210] Technical measuring instrument			
				Level	Reference value	Adjustment spec
			Point 2	3200	X=0.272 y=0.277	±0.0020
			Point 1	640	X=0.272 y=0.277	±0.0080
						Inspection spec
						±0.0040
						±0.0160

9. Key writing

9.1. EDID writing (Main PWB: QPWBXF905WJZZ)

	Adjustment point	Adjustment conditions	Adjustment procedure
1	HDMI EDID writing (Main PWB)	Inspection mode File version check	1) Write the EDID date for HDMI on IC1503/IC1504/IC1505 mounted on the main PWB using the checker. IC1503 (HDMI1) TL1522 ... I2C SDA TL1519 ... I2C SCL TL1507 ... 5V TL1510 ... GND TL1516 ... write protection (H: WP, L: write enable) IC1505 (HDMI2) TL1524 ... I2C SDA TL1521 ... I2C SCL TL1509 ... 5V TL1512 ... GND TL1518 ... write protection (H: WP, L: write enable) IC1504 (HDMI3) TL1523 ... I2C SDA TL1520 ... I2C SCL TL1508 ... 5V TL1511 ... GND TL1517 ... write protection (H: WP, L: write enable) 2) Write the data before being inspected by the checker.
2	Analog RGB EDID writing (Main PWB)	Inspection mode File version check	1) Write the EDID date for analog RGB on IC508 mounted on the main PWB using the checker. IC508 TL503 ... I2C SDA TL502 ... I2C SCL TL567 ... 5V TL560 ... GND TL568 ... write protection (H: WP, L: write enable) 2) Write the data before being inspected by the checker.

9.2. DIMMER setting (Main PWB: QPWBXF905WJZZ)

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting	[Command] Process mode KRSW0001 KKT10037 Setting FACT0001 LDIM00**	1) Type in the left commands, and enter the duty value into ** of LDIM00**. (For the suffix B only, enter 80; for other panels, enter 64.)

10. Factory setting

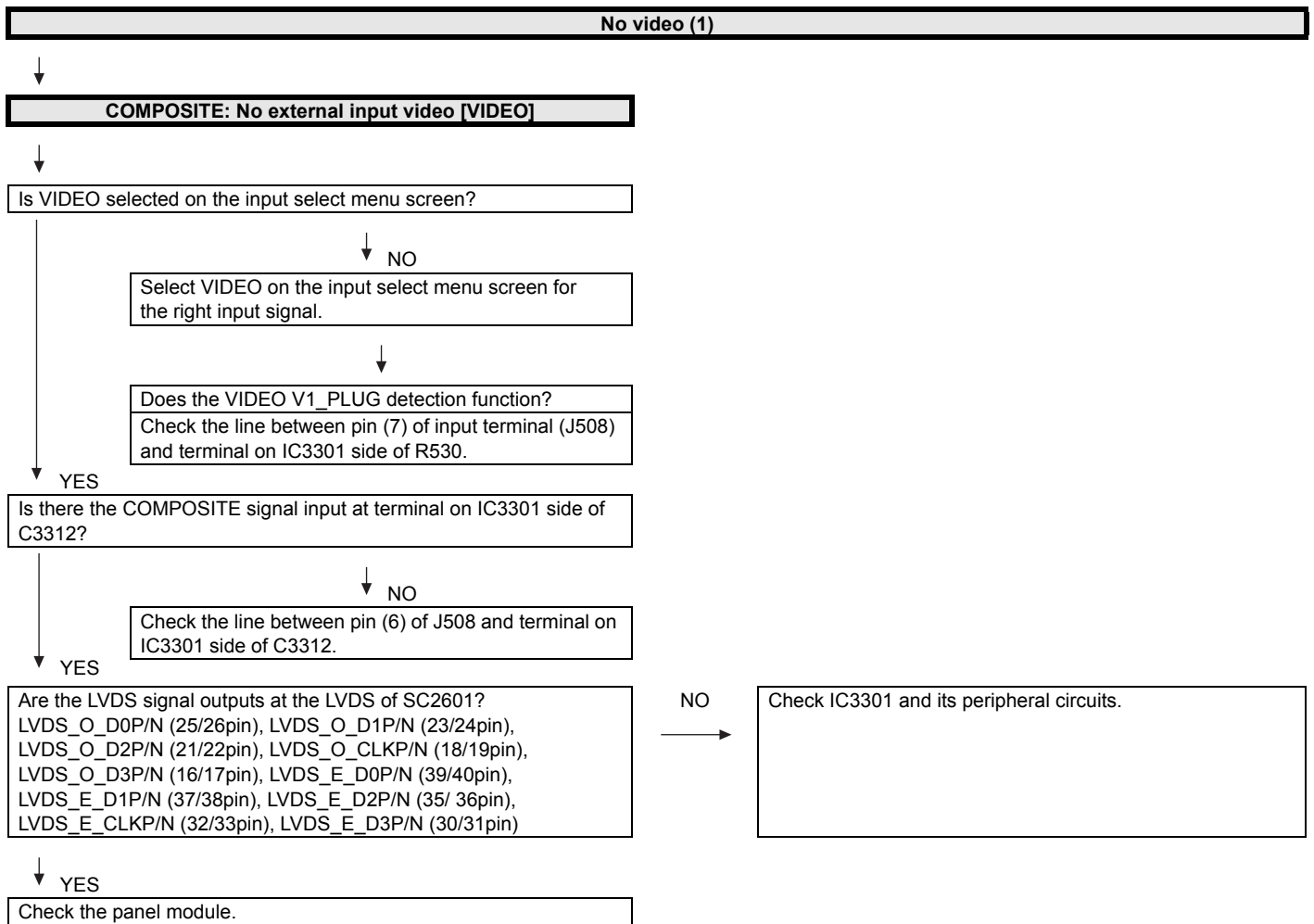
After completing the factory setting, pull out the AC cord to complete the setting.

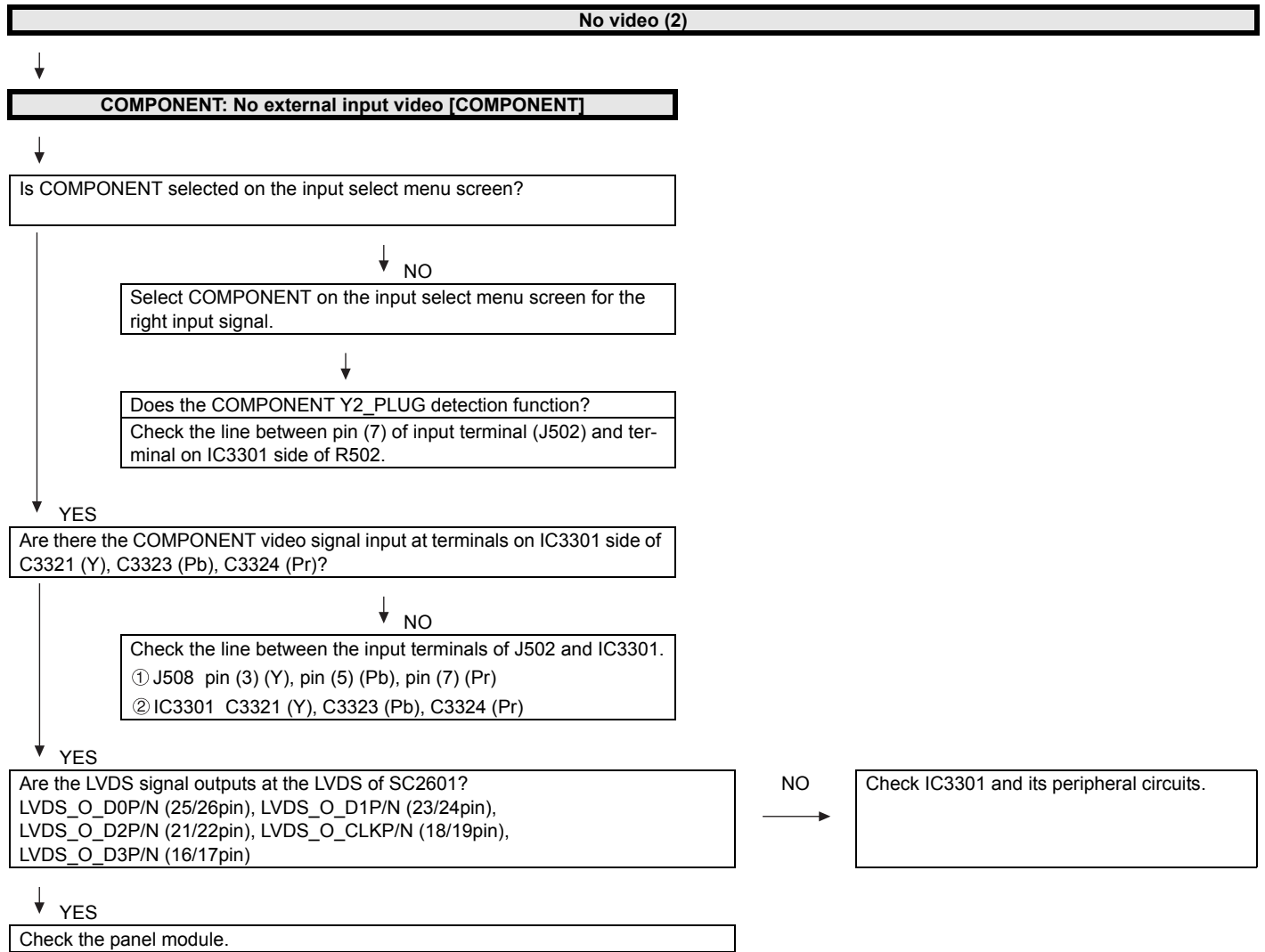
CAUTION: Do not turn on the power after completing the factory setting. If the power is turned on, configure the factory setting again.

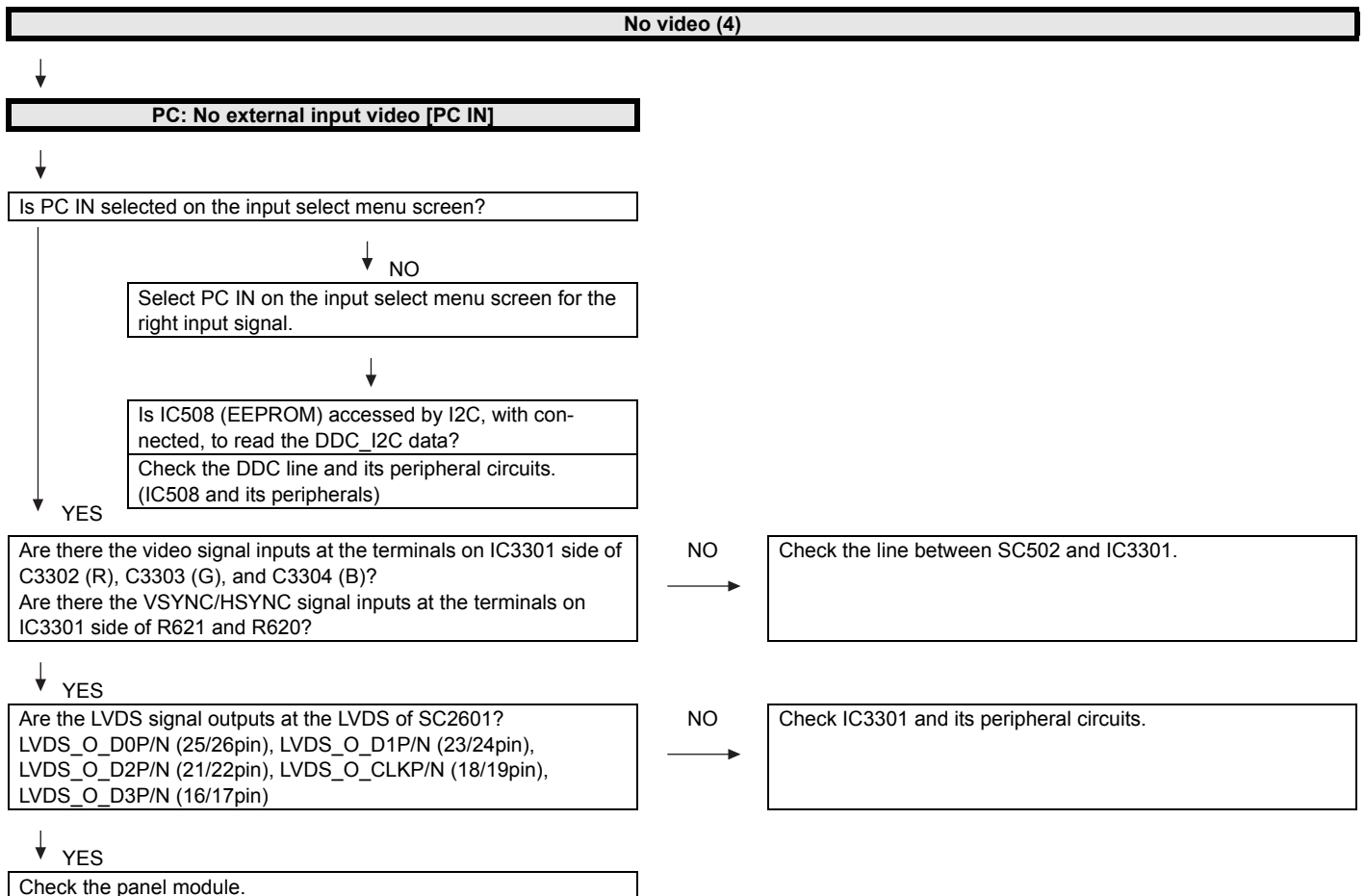
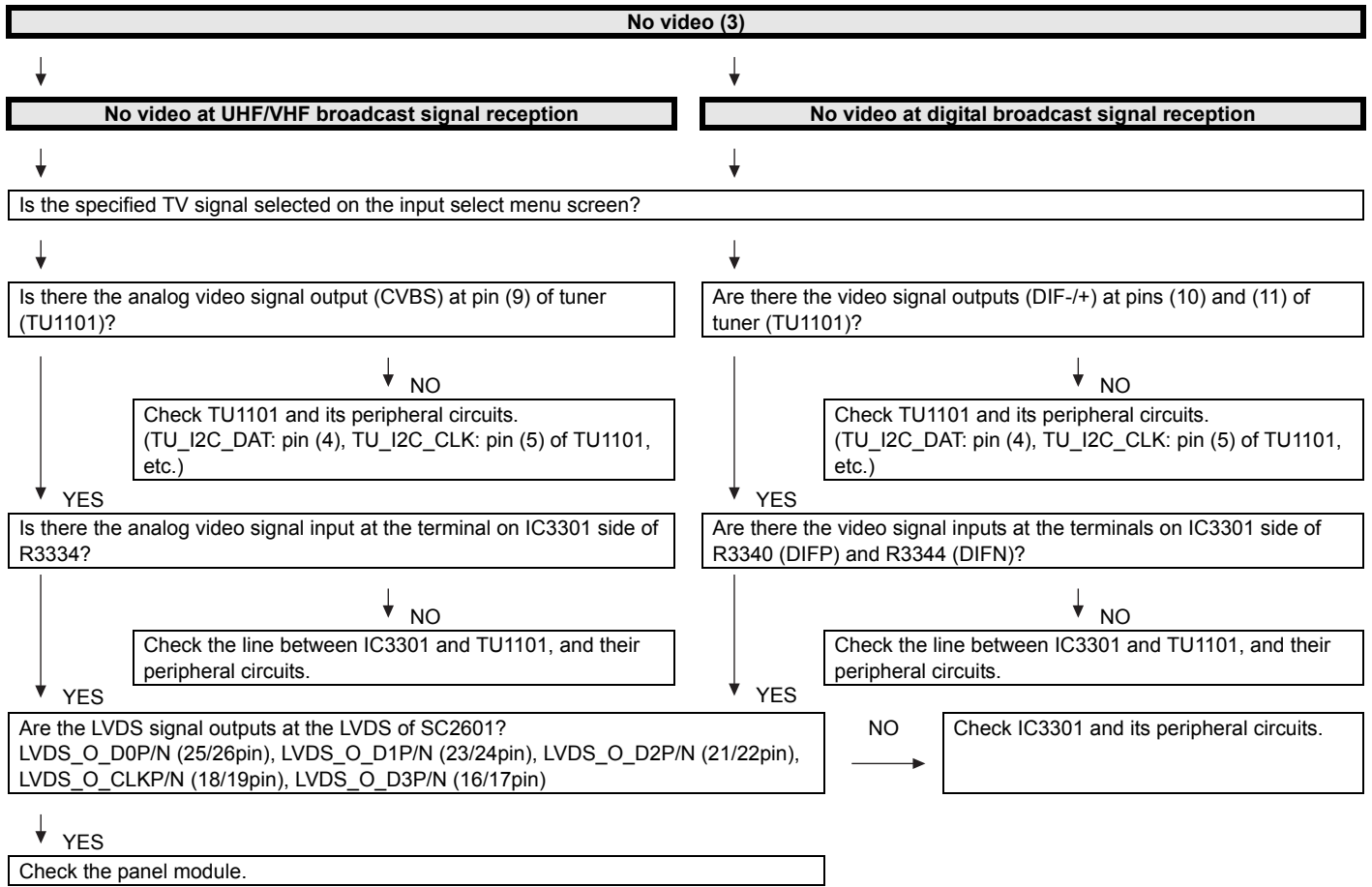
	Adjustment point	Adjustment conditions	Adjustment procedure
1	Factory setting	Complete the setting by pulling out the AC cord.	<ul style="list-style-type: none"> Place the cursor over the item "Factory Init" and press the ENTER key. Adjustment is complete when the green screen is displayed. Turn off the AC power. <p>Be sure to check that US is displayed in the item "Factory Init".</p> <p>The following items are initialized when configuring the factory setting.</p> <ol style="list-style-type: none"> 1) User set value 2) Channel data (broadcasting frequency, etc.) 3) Operating time 4) Password setting value 5) V-CHIP block setting value

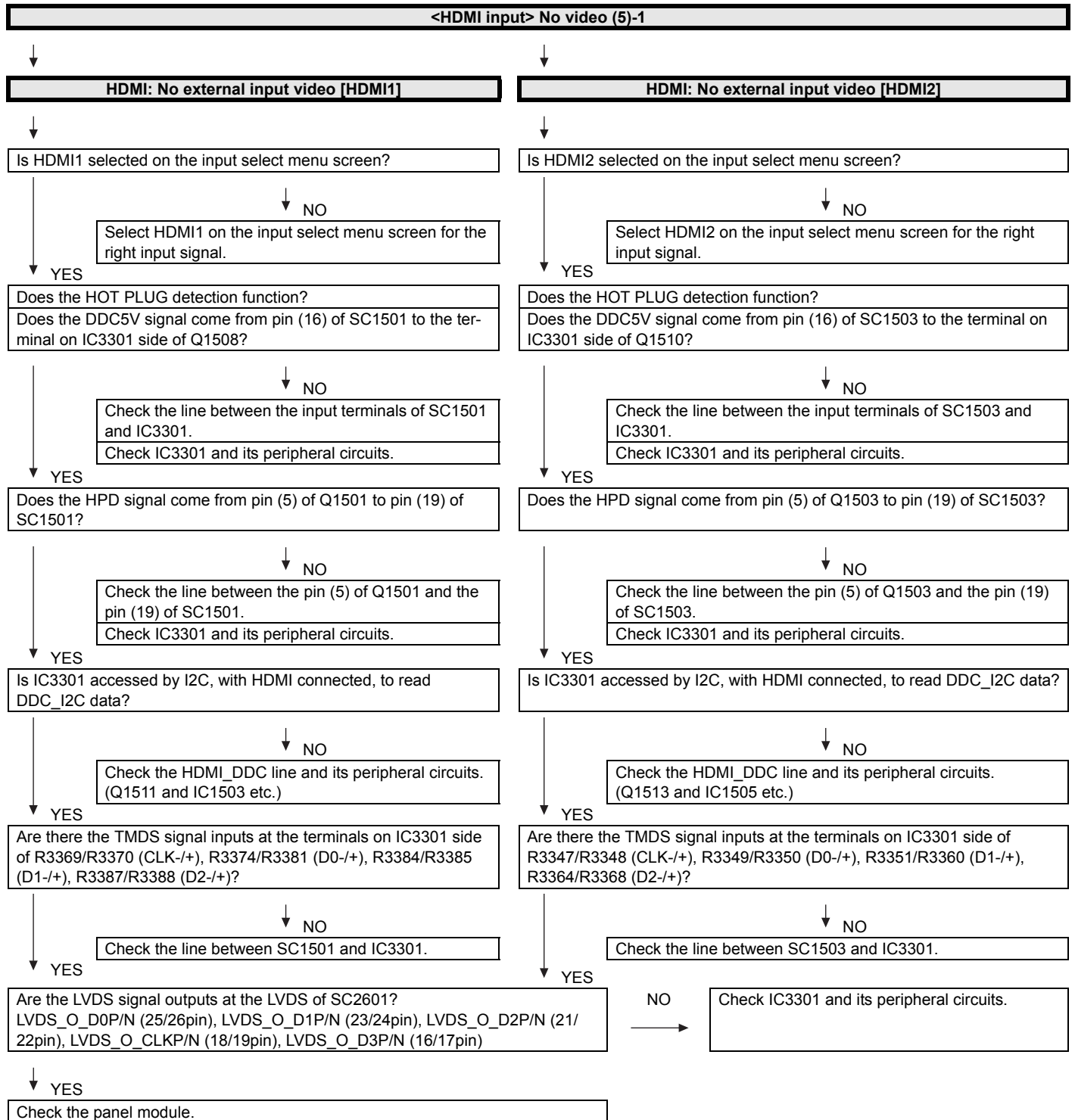
11. Software version

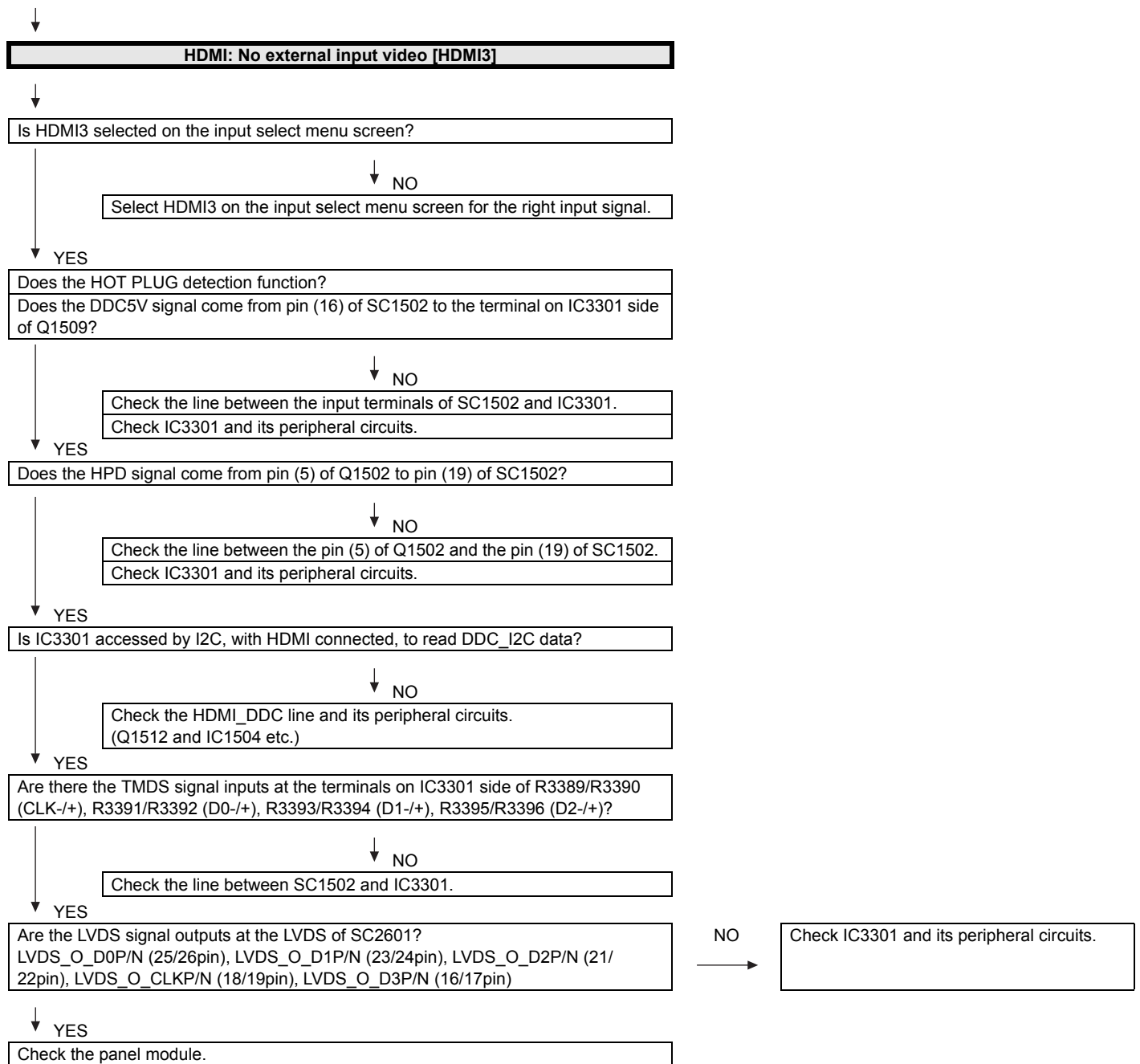
1. Main microcomputer
2. EDID data
3. (Reference: File name in the Technical Department)
 - For HDMI
 - IC1503 (HDMI1): 60LE630U_hdmi_fullhd_port1_vl.bin
 - IC1505 (HDMI2): 60LE630U_hdmi_fullhd_port2_vl.bin
 - IC1504 (HDMI3): 60LE630U_hdmi_fullhd_port3_vl.bin
 - For Analog RGB
 - IC508: 60LE630U_dsub_fullhd_256.vl.bin

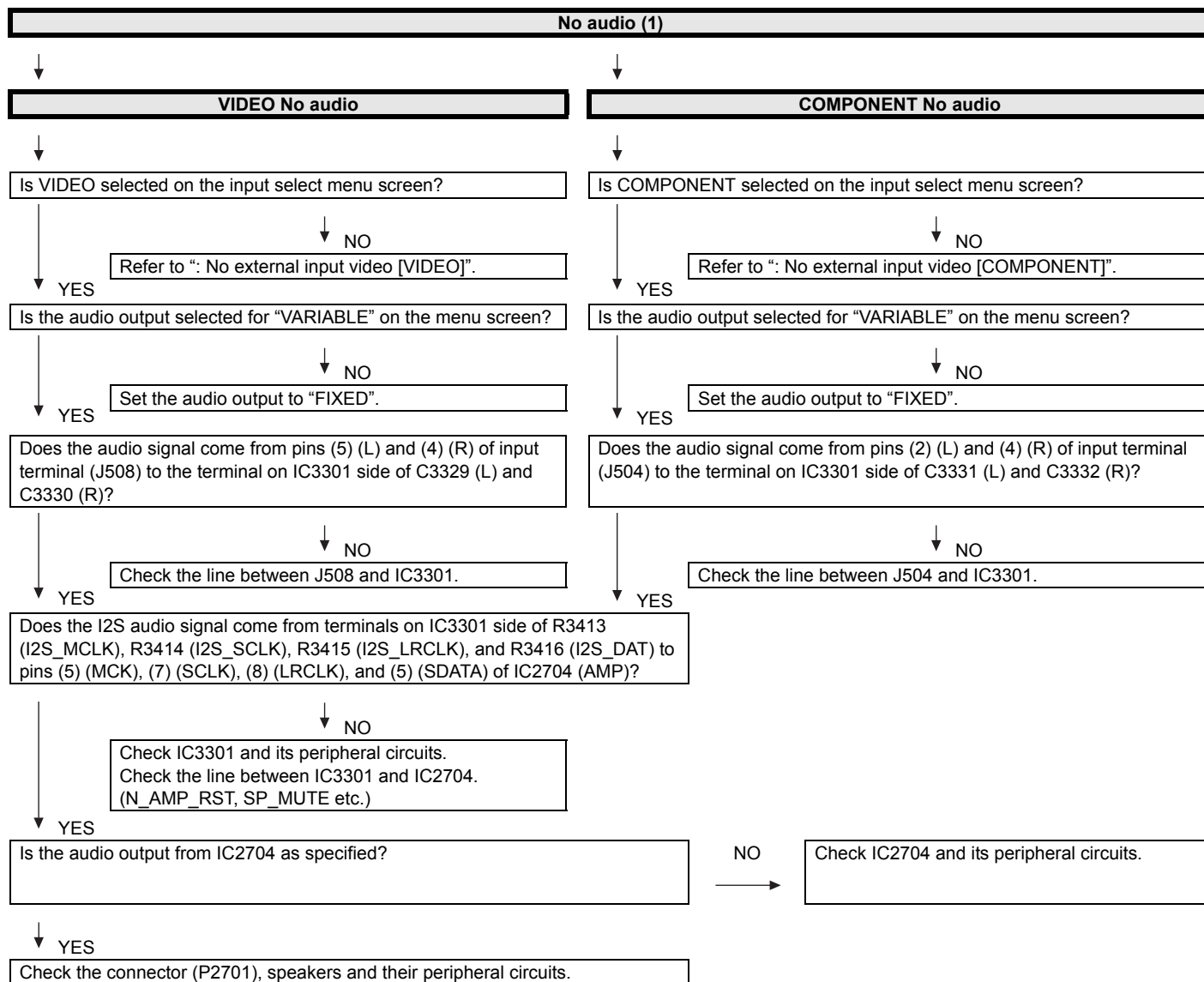
CHAPTER 5. TROUBLESHOOTING TABLE**[1] TROUBLESHOOTING TABLE (LC-60LE630U/U(A),6300U/U(A)/U(B))**

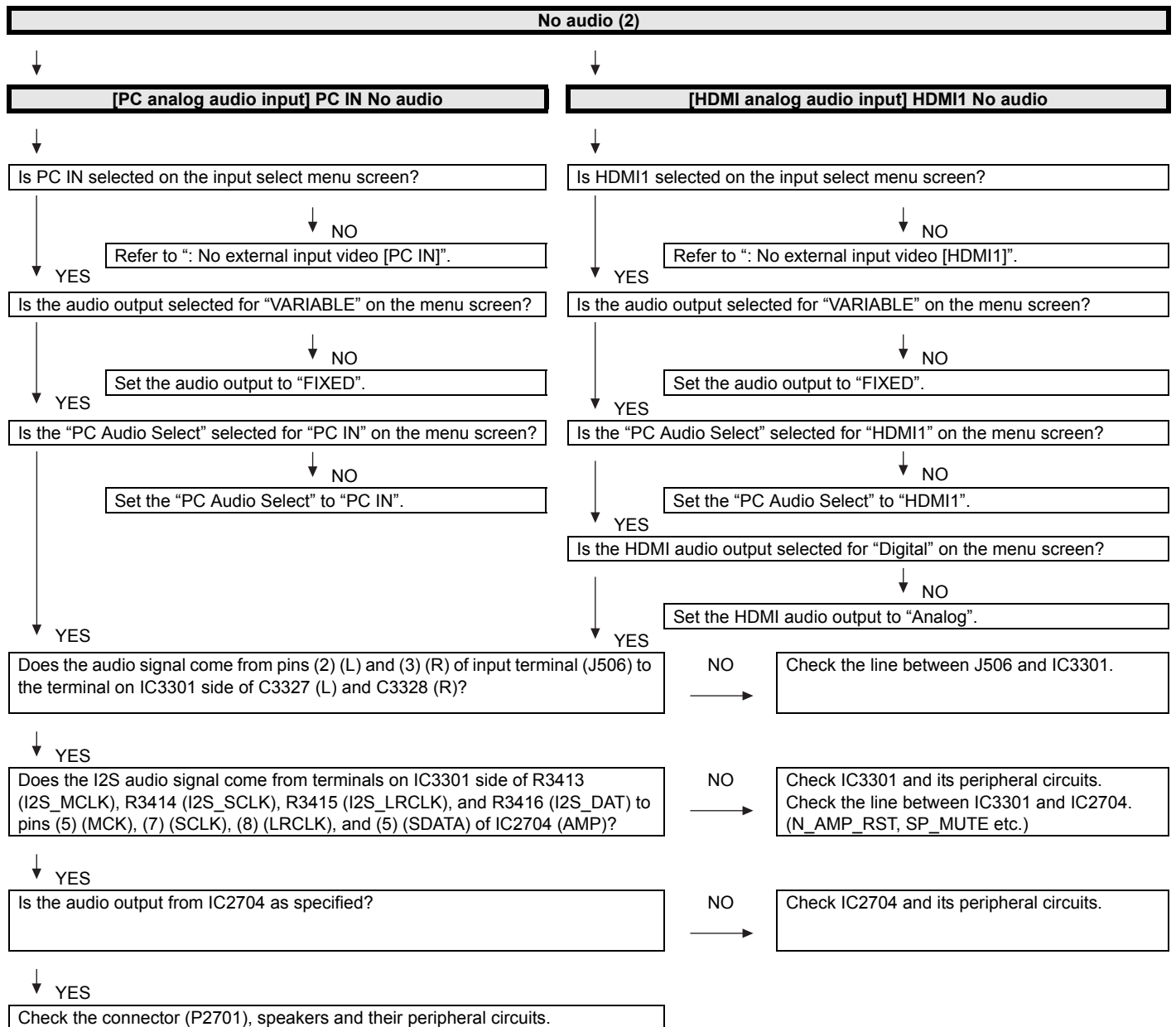


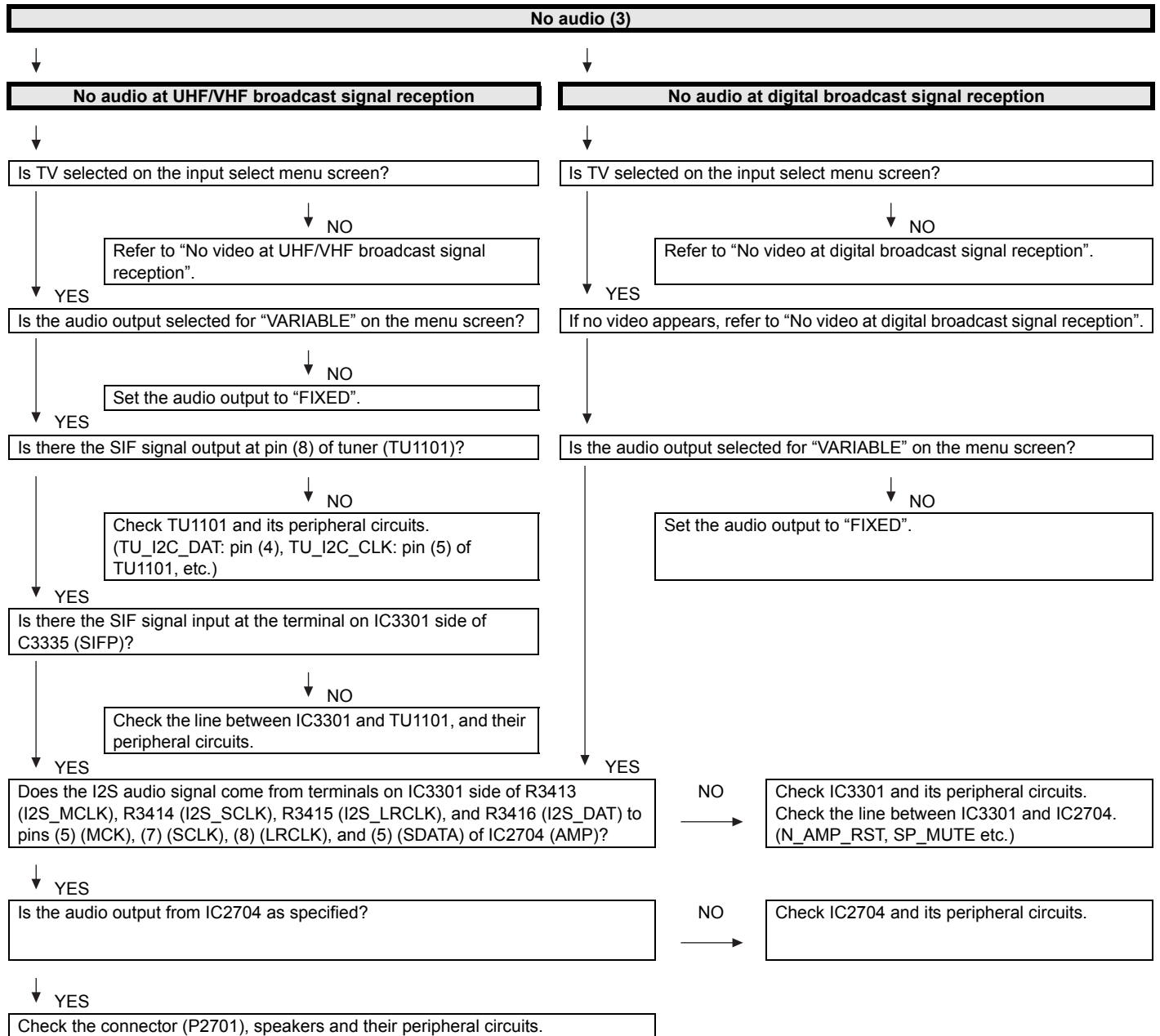


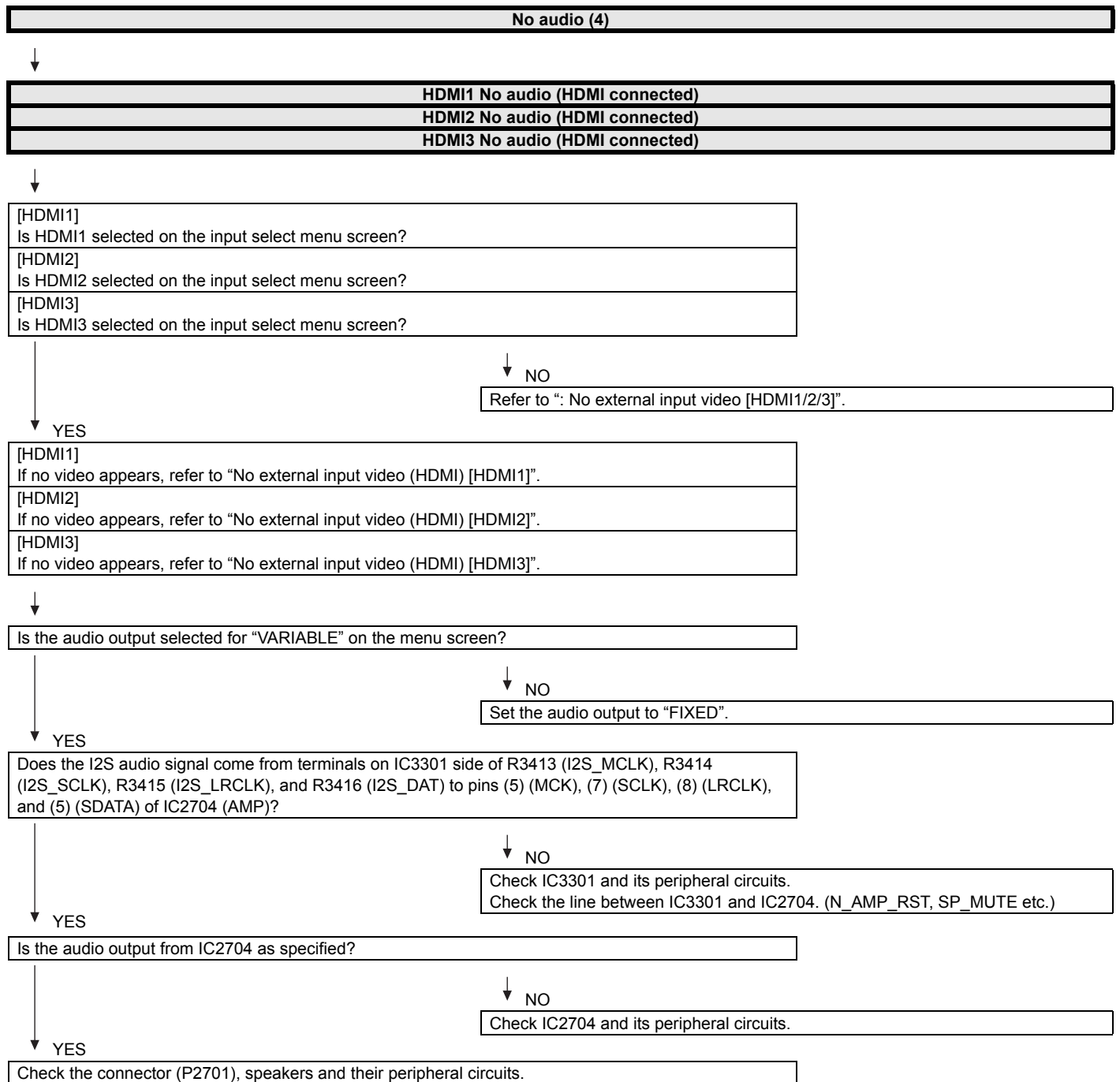


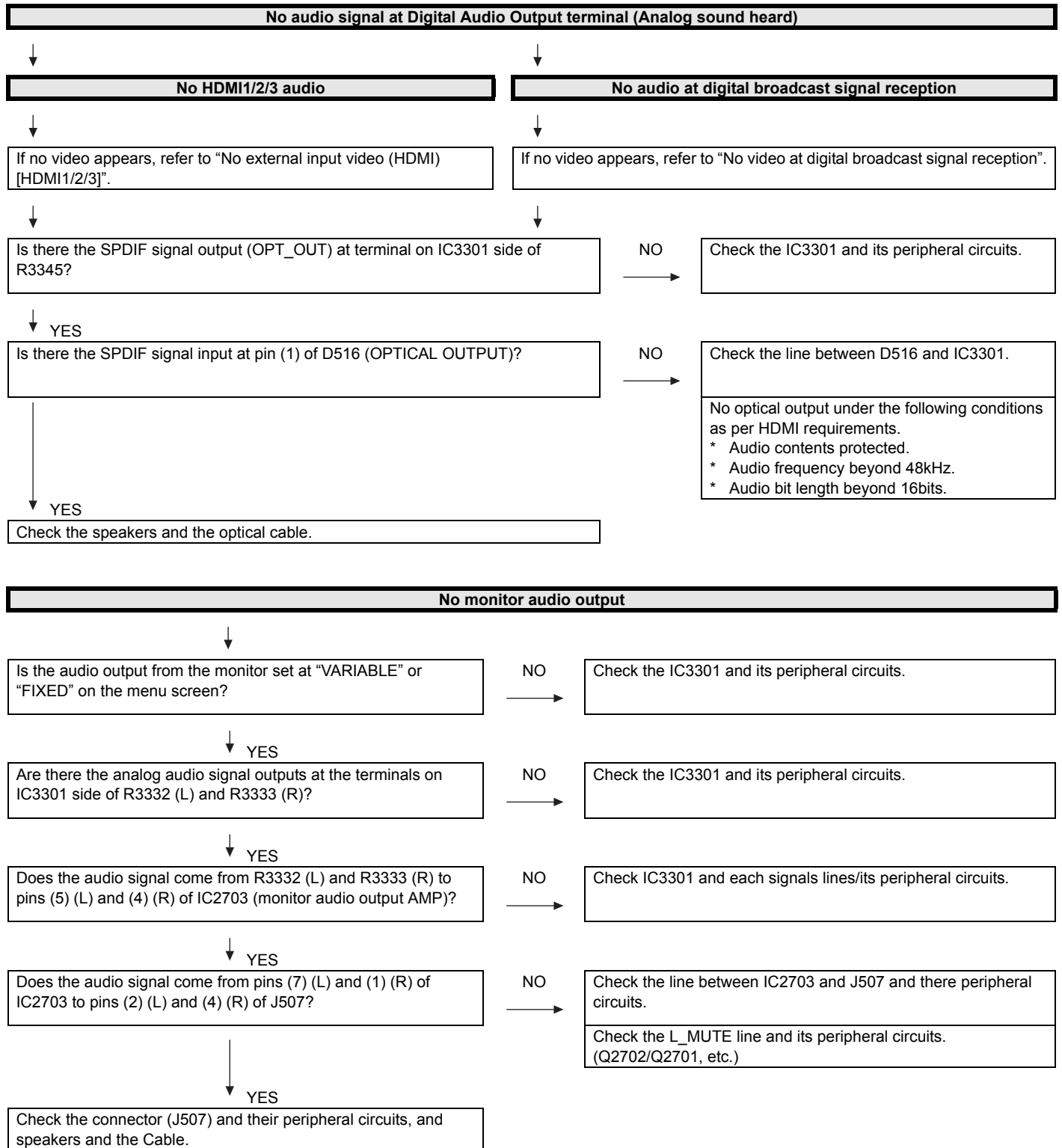















LED flashing timing chart for error notification.

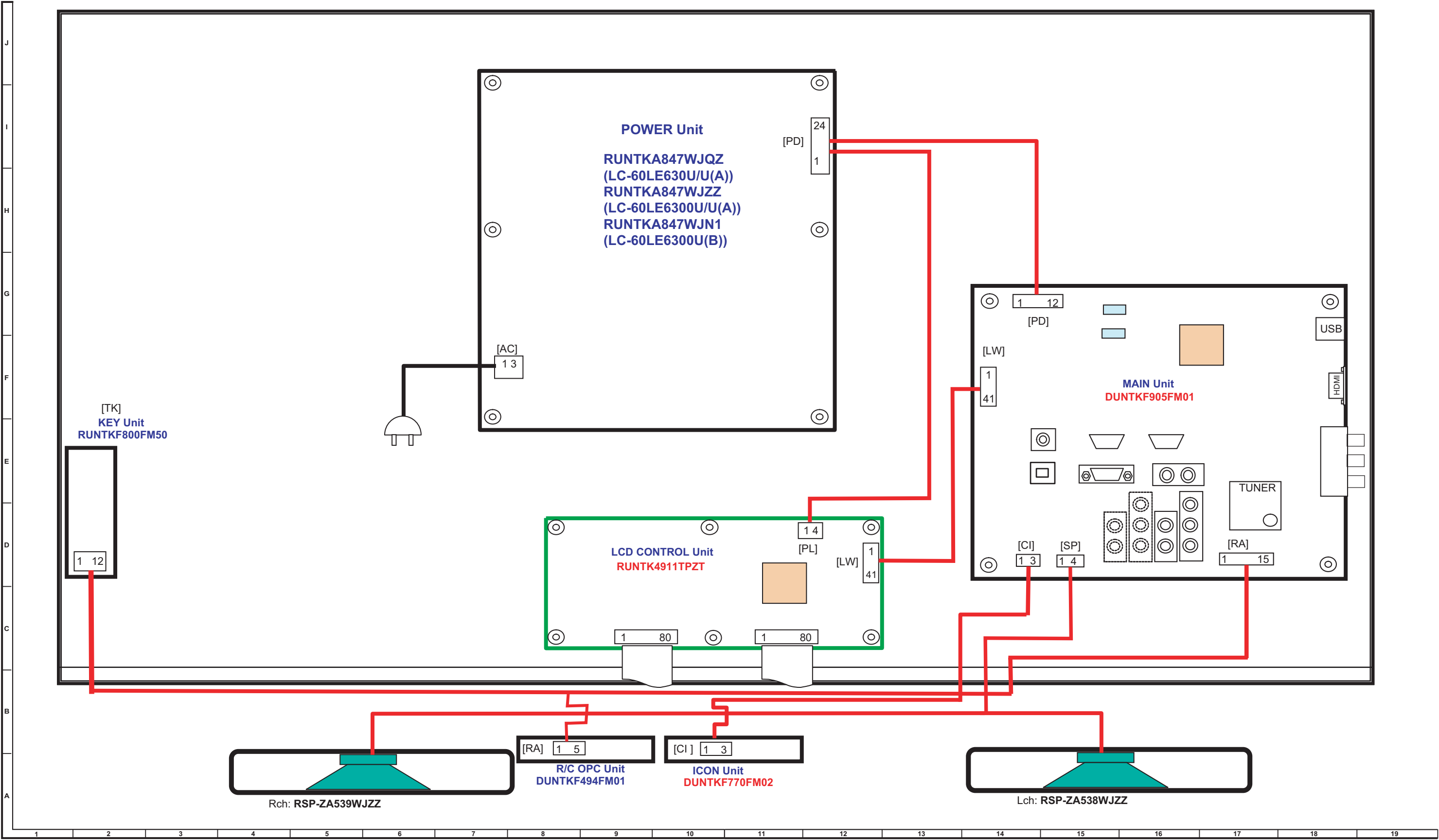


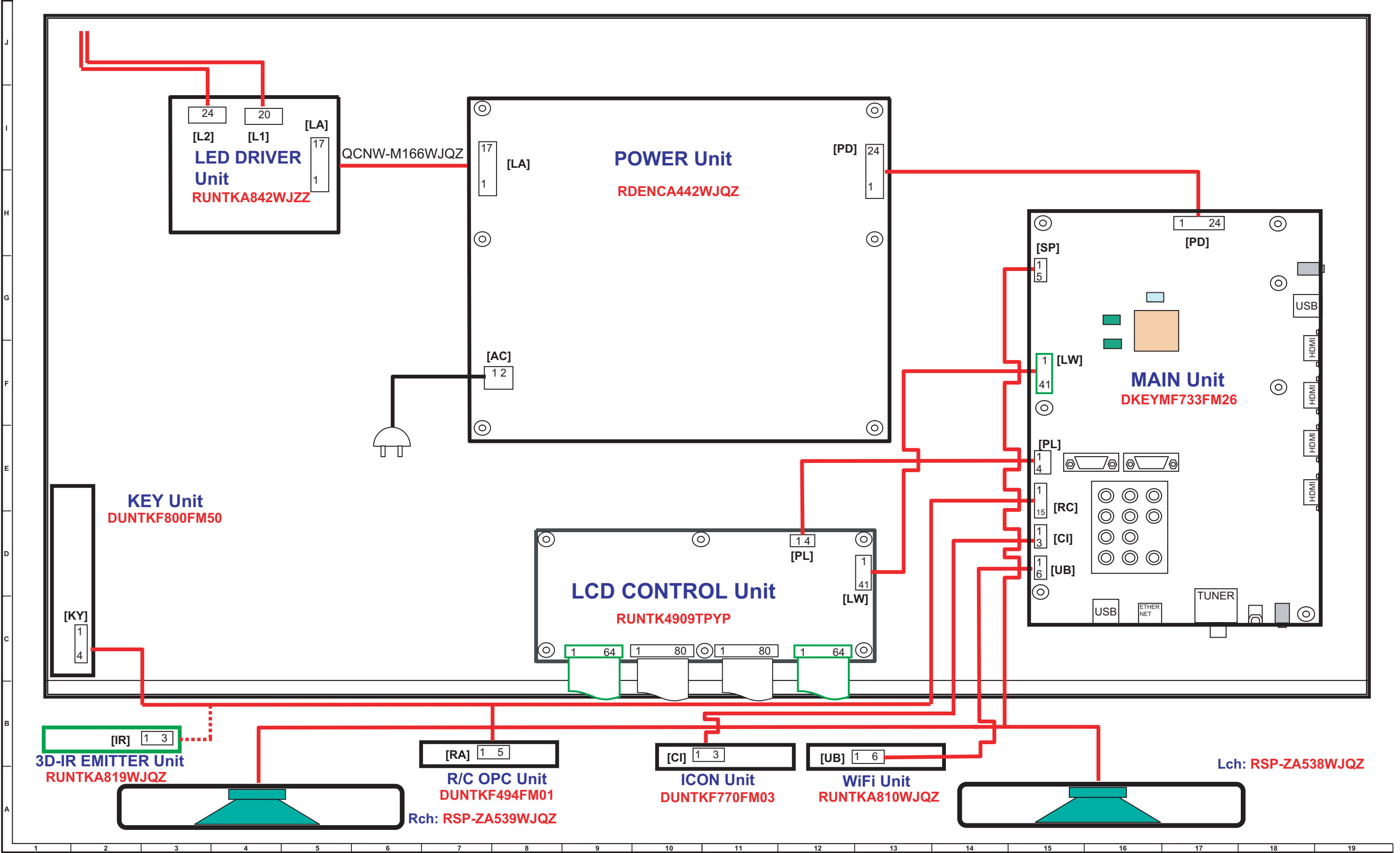
1) Power red/green LED

Error type	Power red/green LED operation (1 cycle)	Pins are microprocessor pins.
Lamp error Flashes once: Fast	[Power red LED] H: On  L: Off	Judged by the ERR_PNL port. Confirmed after 10 consecutive detections at 500 ms intervals (detected only when the backlight is on). [Released] • Execute AC_ON with [INPUT] and [VOL-DOWN] on the unit down. Then execute the function of "L ERR RESET" in the adjustment process mode menu. • Continuous illumination for 15 minutes. NOTE: After five detection counts, the lamp cannot be activated.
Temperature error Flashes 4 times	[Power green LED] H: On  L: Off	Judged by monitoring temperature with the temperature sensor. When the panel temperature is 58°C or more, caution is displayed. If the panel temperature is 60°C or more, error standby is activated. [Released] Reduce the value of TEMP CAUTION (temperature caution threshold) and TEMP SHUTDOWN (temperature protection threshold) in the adjustment process mode menu.
Error Type Panel power error Flash 2 times	H: On  L: Off	Judged panel power supply by the DET_POW_port. Conformed after 2 consecutive detections at 16mS intervals.

CHAPTER 6. OVERALL WIRING/SYSTEM BLOCK DIAGRAM

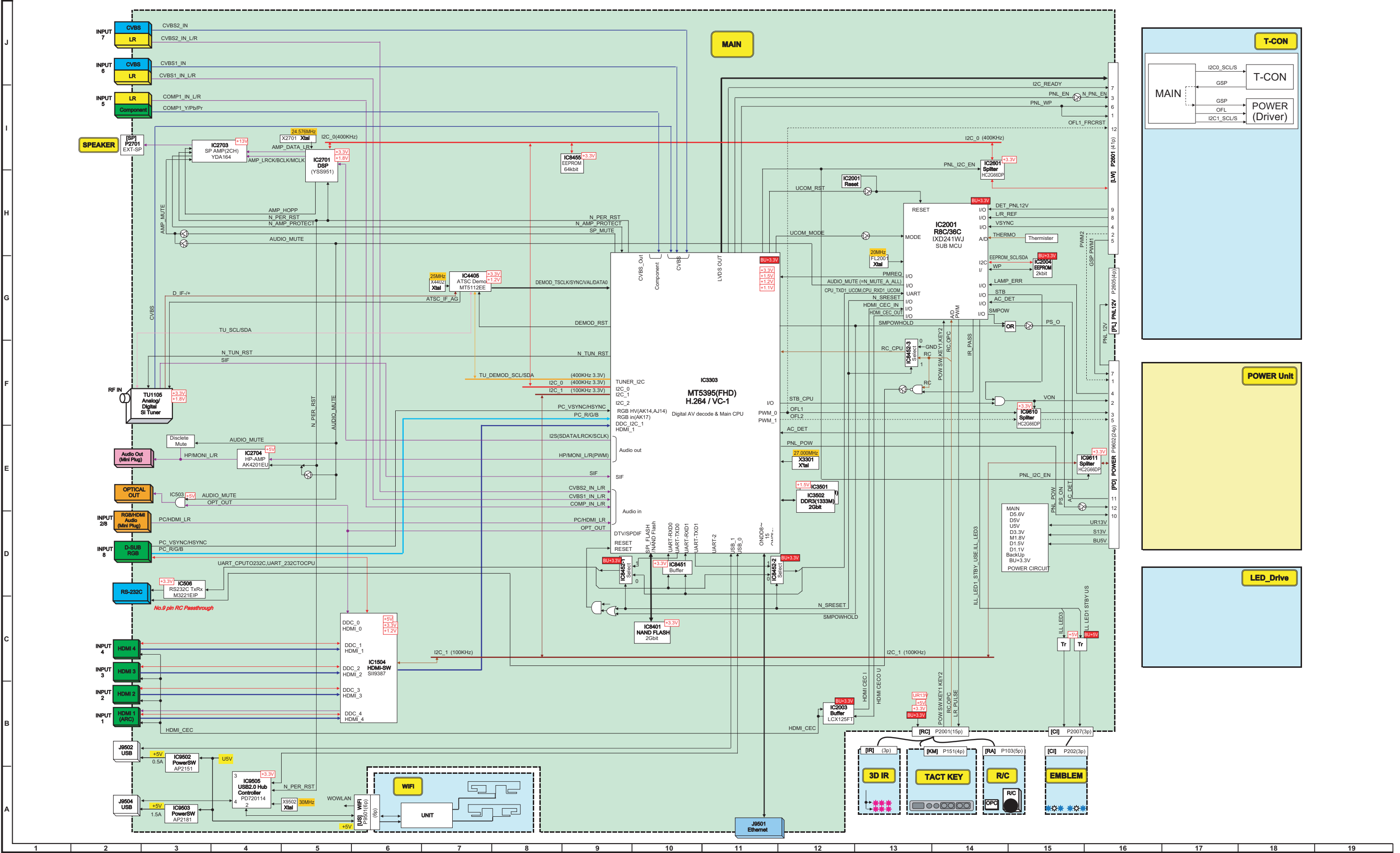
[1] OVERALL WIRING DIAGRAM (LC-60LE630U/U(A),6300U/U(A)/U(B))







LC-60LE630U/U(A),6300U/U(A)/U(B),LC-70LE735U
[4] SYSTEM BLOCK DIAGRAM (LC-70LE735U)



SHARP PARTS GUIDE

No. S81S460LE630U



LCD COLOR TELEVISION

LC-60LE630U
LC-60LE630U(A)
LC-60LE6300U
LC-60LE6300U(A)
LC-60LE6300U(B)
LC-70LE735U

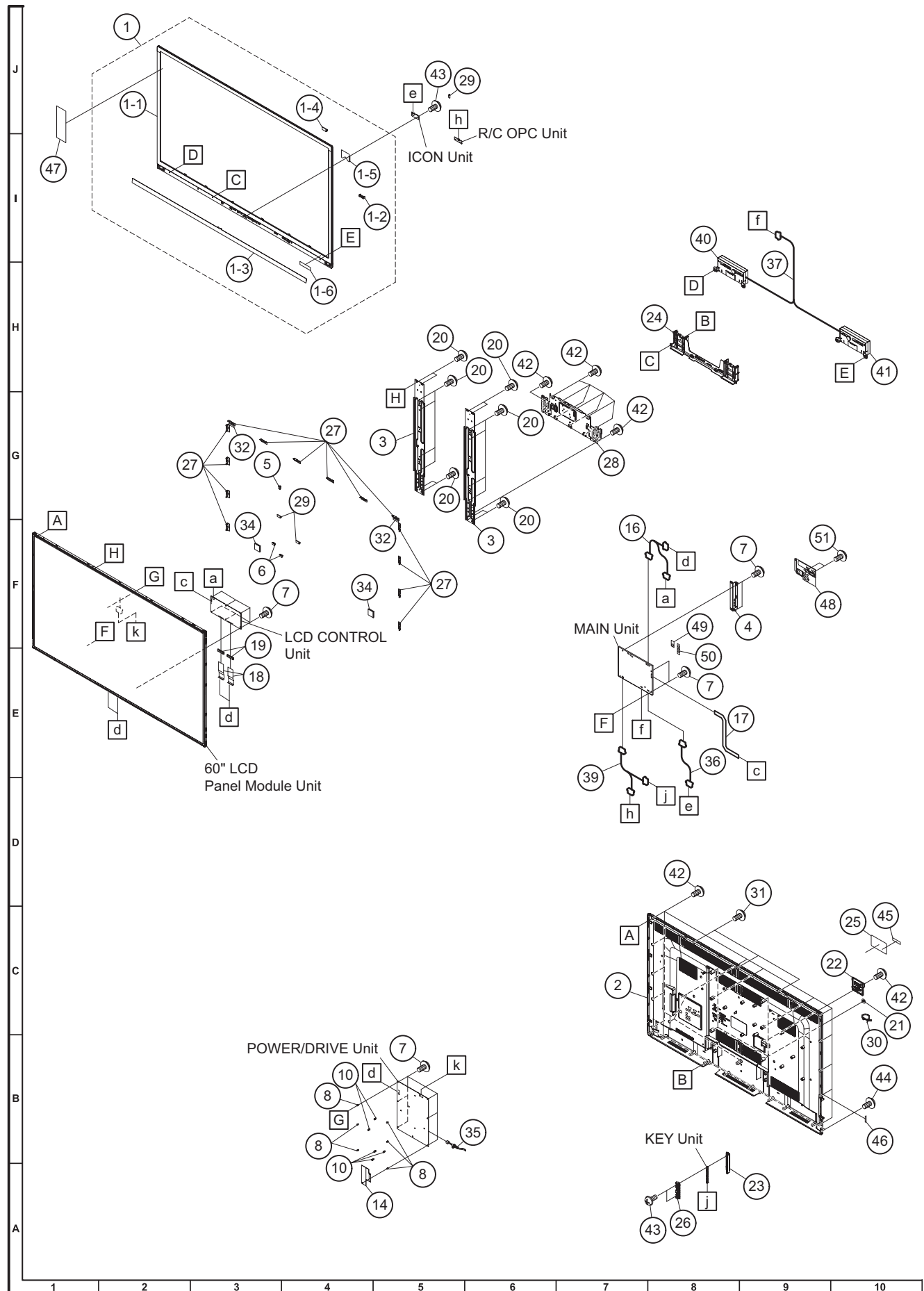
MODELS

CONTENTS

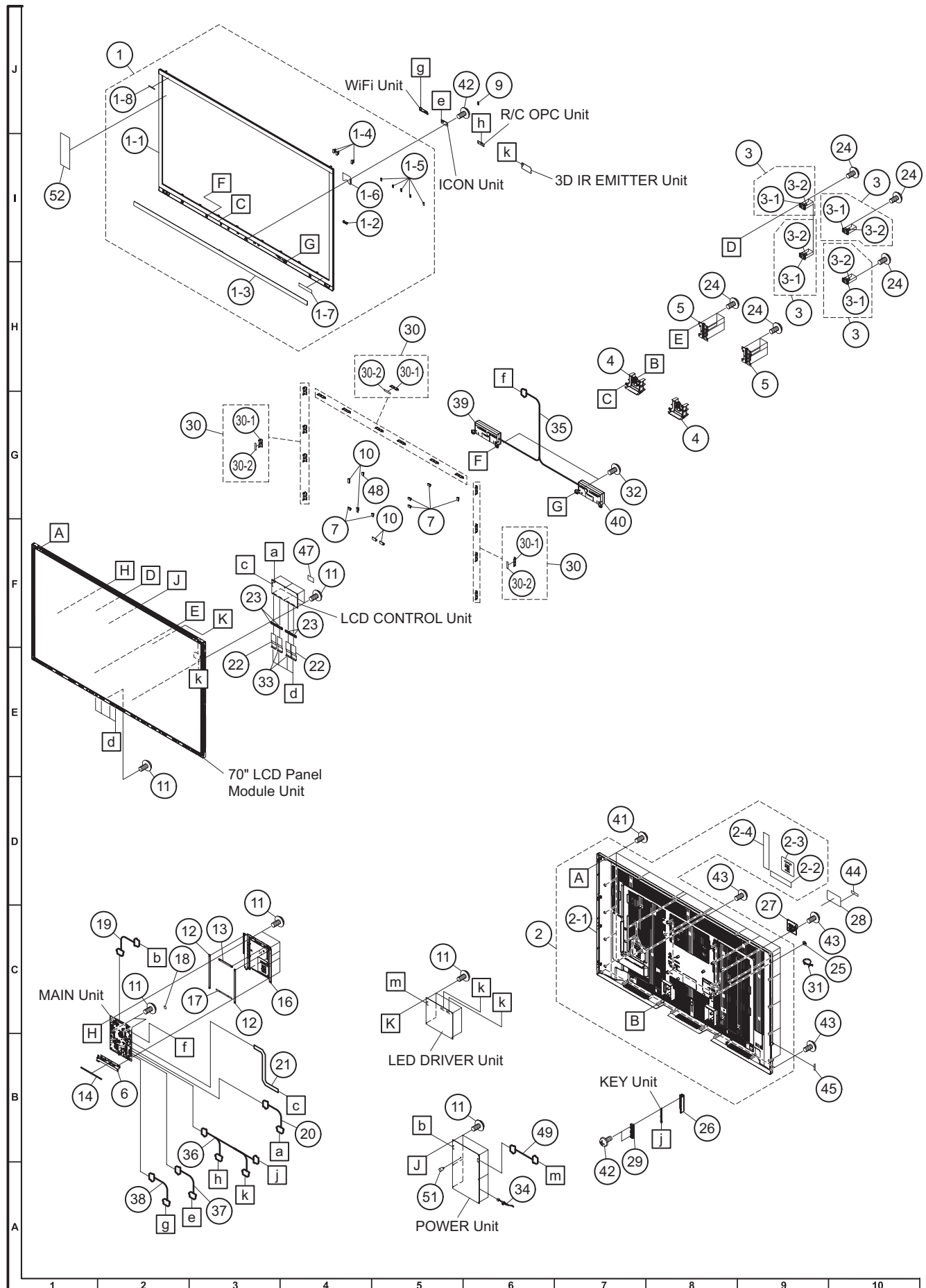
- | | |
|---|---|
| [1] PRINTED WIRING BOARD
ASSEMBLIES (LC-60LE630U/
U(A),6300U/U(A)/U(B)) | [5] CABINET PARTS (LC-70LE735U) |
| [2] PRINTED WIRING BOARD
ASSEMBLIES (LC-70LE735U) | [6] SUPPLIED ACCESSORIES/
PACKING PARTS (LC-60LE630U/
U(A),6300U/U(A)/U(B)) |
| [3] LCD PANEL MODULE UNIT | [7] SUPPLIED ACCESSORIES/
PACKING PARTS (LC-70LE735U) |
| [4] CABINET PARTS (LC-60LE630U/
U(A),6300U/U(A)/U(B)) | [8] SERVICE JIGS (USE FOR
SERVICING) |

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

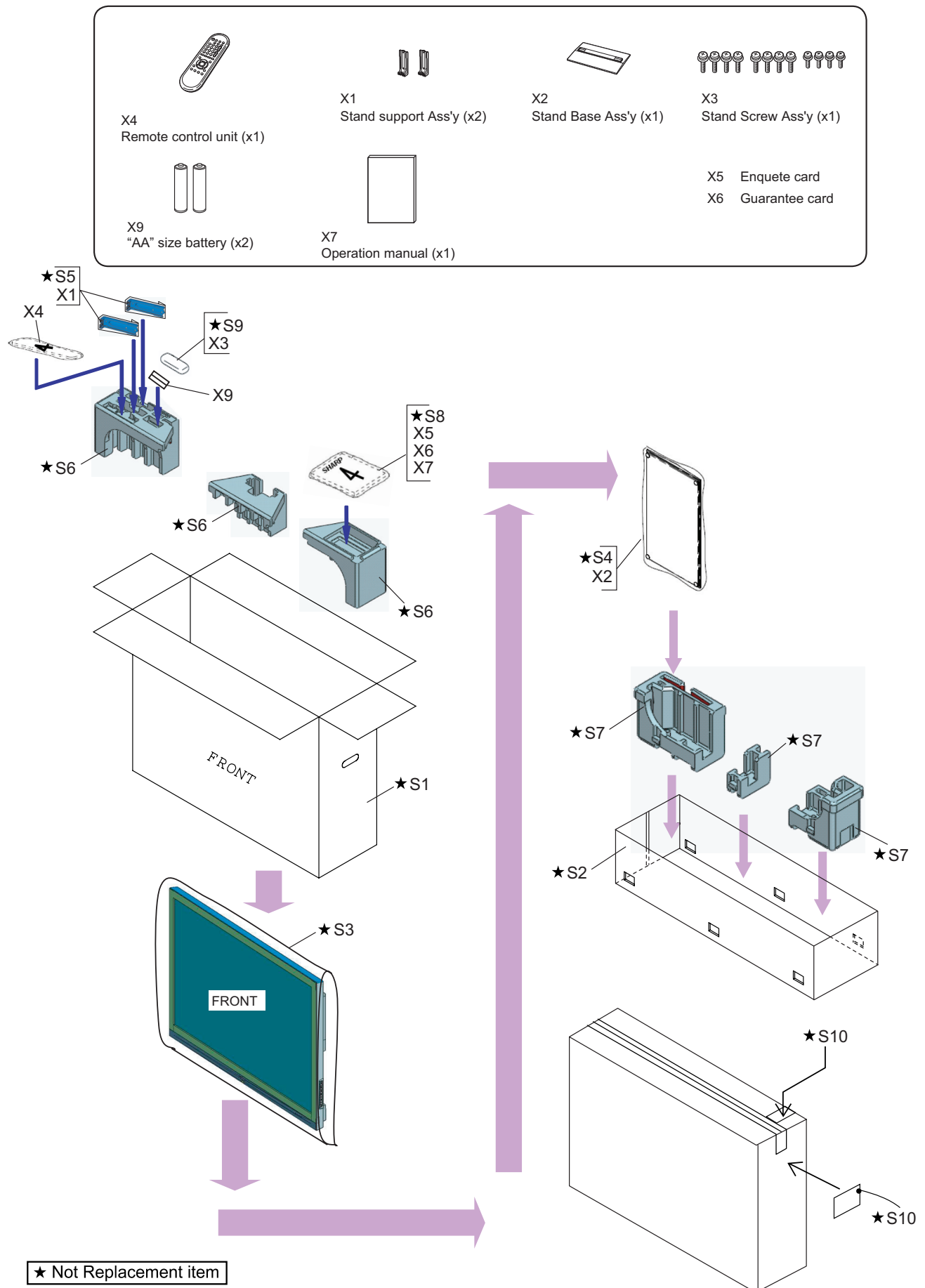
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[1] PRINTED WIRING BOARD ASSEMBLIES (LC-60LE630U/U(A),6300U/U(A)/U(B))					
N	DUNTKF905FM01		N	X	MAIN Unit
N	DUNTKF494FM01	AG	N	X	R/C OPC Unit
N	DUNTKF770FM02	AE	N	X	ICON Unit
N	DUNTKF800FM50	AF	N	X	KEY Unit
△	N	RUNTKA847WJQZ	BM	X	POWER/DRIVE Unit (LC-60LE630U/U(A))
△	N	RUNTKA847WJZZ		X	POWER/DRIVE Unit (LC-60LE6300U/U(A))
△	N	RUNTKA847WJN1		X	POWER/DRIVE Unit (LC-60LE6300U(B))
N	RUNTK4911TPZT		N	X	LCD CONTROL Unit
[2] PRINTED WIRING BOARD ASSEMBLIES (LC-70LE735U)					
N	DKEYMF733FM26		N	X	MAIN Unit
N	DUNTKF494FM01	AG	N	X	R/C OPC Unit
N	DUNTKF770FM03	AG	N	X	ICON Unit
N	DUNTKF800FM50		N	X	KEY Unit
N	RUNTKA810WJQZ			X	WiFi Unit
N	RUNTKA819WJQZ			X	3D IR EMITTER Unit
△	N	RDENCA442WJQZ		X	POWER Unit
N	RUNTK4909TPYP		N	X	LCD CONTROL Unit
N	RUNTKA842WJZZ			X	LED DRIVER Unit
[3] LCD PANEL MODULE UNIT					
N	R1LK600D3GW70Z			X	60" LCD Panel Module Unit (LK600D3GW70Z) (LC-60LE630U/6300U)
N	R1LK600D3GW7AZ			X	60" LCD Panel Module Unit (LK600D3GW7AZ) (LC-60LE630U(A)/6300U(A))
N	R1LK600D3GW7CZ			X	60" LCD Panel Module Unit (LK600D3GW7CZ) (LC-60LE6300U(B))
N	R1LK695D3GW20Z		N	X	70" LCD Panel Module Unit (LK695D3GW20Z) (LC-70LE735U)

[4] CABINET PARTS (LC-60LE630U/U(A),6300U/U(A)/U(B))

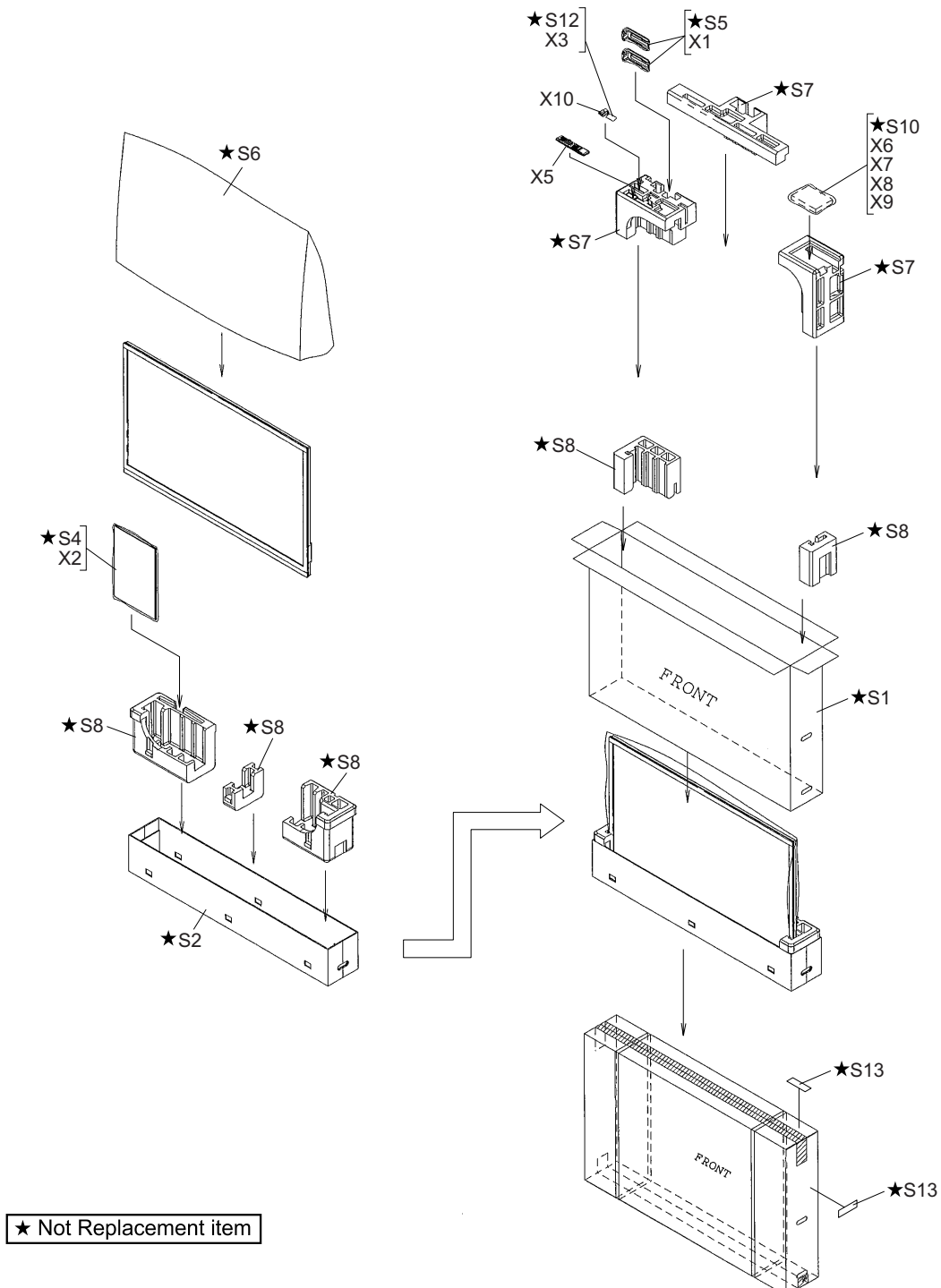
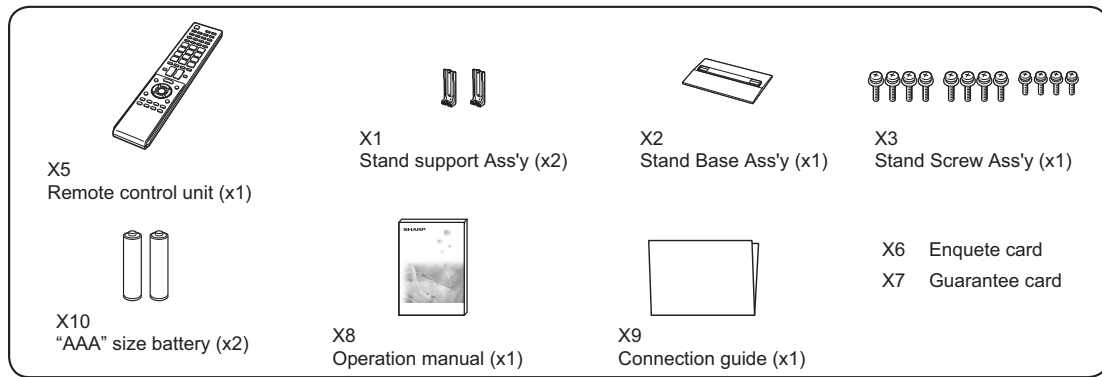
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[4] CABINET PARTS (LC-60LE630U/U(A),6300U/U(A)/U(B))					
1	CCABAC748WJ33		N	X	Front Cabinet Ass'y (LC-60LE630U/U(A))
1	CCABAC748WJ34		N	X	Front Cabinet Ass'y (LC-60LE6300U/U(A)/U(B))
1-1	Not available	-		-	Front Cabinet
1-2	Not available	-		-	R/C OPC Cover
1-3	HDECQB607WJ3C		N	X	Front Decoration (LC-60LE630U/U(A))
1-3	HDECQB607WJ3D		N	X	Front Decoration (LC-60LE6300U/U(A)/U(B))
1-4	LHLDWA133WJKZ	AC		J	Wire Holder
1-5	Not available	-		-	Sheet
1-6	TLABZC966WJZZ		N	X	DOLBY-ENE Label
2	GCABBC003WJ3A		N	X	Rear Cabinet
3	LANGKD122WJM2			J	Center Angle, x2
4	LANGKD341WJFW		N	X	Terminal Angle (Side)
5	LHLDWA133WJKZ	AC		J	Wire Holder
6	LHLDWA138WJKZ	AC		J	Wire Holder, x2
7	LX-BZA207WJF7	AA		J	Screw, x16
8	NSFTZA459WJF7	AC		J	Tray Shaft, x6
10	PSPANAO44WJKZ	AB		J	POWER PWB Spacer, x5
14	PZETKA595WJKZ			J	AC Cord Barrier
16	QCNW-M106WJQZ		N	X	Connecting Cord (PD)
17	QCNW-M144WJQZ		N	X	Connecting Cord (LW)
18	QCNWN2731TPZZ	AF		J	FFC (80pin), x2
19	RCORFA061WJZZ	AG		J	Ferrite Core, x2
20	XBPS830P06WS0	AA		J	Screw, x16
21	GCOVAC576WJKZ	AC		J	VESA Hole Cover, x4
22	GCOVAD981WJ3A			J	AC Cord Cover
23	GCOVAE060WJ3A			J	Key Button Cover
24	GCOVAE130WJ3A			J	Bottom Cover
25	HINDPE297WJSA		N	X	Model Label (LC-60LE630U)
25	HINDPE341WJSA		N	X	Model Label (LC-60LE630U(A))
25	HINDPE412WJSA		N	X	Model Label (LC-60LE6300U)
25	HINDPE413WJSA		N	X	Model Label (LC-60LE6300U(A))
25	HINDPE434WJSA		N	X	Model Label (LC-60LE6300U(B))
26	JBTN-A912WJ3A			J	Key Button
27	LANGKD127WJFW	AD		J	Fixing Metal Angle, x14
28	LANGKD265WJFW			J	Fixing Metal Angle
29	LHLDWA175WJUJ	AC		J	Wire Holder, x3
30	LHLDWA303WJKA	AE		J	Cable Clamp
31	LX-BZA401WJN1	AC		J	Screw, x3
32	PSPAKA486WJKZ	AD		J	Spacer, x2
34	PSPAZC777WJZZ		N	X	Spacer, x2
35	QACCDAA084WJPZ			J	AC Cord
36	QCNW-M107WJQZ		N	X	Connecting Cord (CI)
37	QCNW-M108WJQZ		N	X	Connecting Cord (SP)
39	QCNW-L938WJQZ			J	Connecting Cord (RA)
40	RSP-ZA538WJQZ			J	Speaker (L)
41	RSP-ZA539WJQZ			J	Speaker (R)
42	XBPS830P06WS0	AA		J	Screw, x35
43	XEBS830P08000	AA		J	Screw, x3
44	XEBS830P12000	AA		J	Screw, x10
45	TLABNB037WJZZ			J	Serial Label (Back)
46	Not available	-	N	-	Serial Label (Side)
47	HINDPE319WJZZ		N	X	ENERGY GUIDE Label (LC-60LE630U/U(A))
47	HINDPE414WJZZ		N	X	ENERGY GUIDE Label (LC-60LE6300U/U(A)/U(B))
48	LANGKD342WJFW		N	X	Earth Angle
49	PMLT-A681WJQZ			J	Gasket (Tuner)
50	PSPA7C730WJKZ			J	Spacer
51	XBPS830P06000	AA		J	Screw, x2

[5] CABINET PARTS (LC-70LE735U)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[5] CABINET PARTS (LC-70LE735U)					
1	CCABAC768WJ34		N	X	Front Cabinet Ass'y
1-1	Not available	-		-	Front Cabinet
1-2	Not available	-		-	R/C OPC Cover
1-3	HDECQB633WJ3A		N	X	Front Decoration
1-4	LHLDWA124WJKZ	AC		J	Wire Holder, x3
1-5	LHLDWA175WJUJ	AC		J	Wire Holder, x5
1-6	Not available	-		-	Sheet
1-7	TLABZC778WJZZ			J	WiFi Label
1-8	TLABZC636WJZZ			J	Quattron Label
2	CCABBB968WJ31			J	Rear Cabinet Ass'y
2-1	Not available	-	N	-	Rear Cabinet
2-2	HINDPE031WJSA			J	Terminal Indicator (Bottom)
2-3	HINDPE034WJSA			J	Terminal Indicator (Back)
2-4	HINDPE116WJSA			J	Terminal Indicator (Side)
3	CANGKD289WJ31			J	VESA Angle Ass'y, x4
3-1	Not available	-	N	-	VESA Angle
3-2	Not available	-	N	-	VESA Shaft
4	GCOVAE164WJ3A			J	Bottom Cover, x2
5	LANGKD290WJ3W			J	Stand Angle, x2
6	LANGKD292WJ3W			J	Terminal Angle (Bottom)
7	LHLDWA124WJKZ	AC		J	Wire Holder, x6
9	LHLDWA175WJUJ	AC		J	Wire Holder
10	LHLDWA176WJUJ	AC		J	Wire Holder, x4
11	LX-BZA207WJF7	AA		J	Screw, x24
12	PMLT-A678WJQZ			J	Gasket, x2
13	PMLT-A679WJQZ			J	Gasket
14	PMLT-A680WJQZ			J	Gasket
16	PSLDMB762WJ3W			J	Shield (MAIN Unit)
17	PSPA ZC740WJZZ			J	Spacer
18	PSPA ZC741WJKZ			J	Spacer
19	QCNW-M029WJQZ			J	Connecting Cord (PD)
20	QCNW-M031WJQZ			J	Connecting Cord (PL)
21	QCNW-M168WJQZ		N	X	Connecting Cord (LW)
22	QCNWN2731TPZZ	AF		J	FFC (80pin), x2
23	RCORFA061WJZZ	AG		J	Ferrite Core, x4
24	XBPS830P06WS0	AA		J	Screw, x28
25	GCOVAC576WJKZ	AC		J	VESA Hole Cover, x4
26	GCOVAE162WJ3A			J	Key Button Cover
27	GCOVAE163WJ3A			J	AC Cord Cover
28	HINDPE267WJSA		N	X	Model Label
29	JBTN-A912WJ3A			J	Key Button
30	CANGKD291WJ31			J	Fixing Metal Angle Ass'y, x14
30-1	Not available	-	N	-	Fixing Metal Angle
30-2	Not available	-	N	-	Spacer
31	LHLDWA303WJKA	AE		J	Cable Tie
32	LX-EZA069WJF7	AB		J	Screw, x2
33	QCNWN2732TPZZ	AF		J	FFC (64pin), x2
34	QACCD A084WJPZ			J	AC Cord
35	QCNW-M030WJQZ			J	Connecting Cord (SP)
36	QCNW-M167WJQZ		N	X	Connecting Cord (RC)
37	QCNW-M034WJQZ			J	Connecting Cord (CI)
38	QCNW-M035WJQZ			J	Connecting Cord (UB)
39	RSP-ZA538WJQZ			J	Speaker (L)
40	RSP-ZA539WJQZ			J	Speaker (R)
41	XBPS830P06WS0	AA		J	Screw, x21
42	XEBS830P08000	AA		J	Screw, x3
43	XEBS830P12000	AA		J	Screw, x10
44	TLABNB037WJZZ			J	Serial Label (Back)
45	Not available	-	N	-	Serial Label (Side)
47	PSPA ZC782WJKZ		N	X	Spacer
48	LHLDWA151WJKZ	AB		J	Wire Holder
49	QCNW-M166WJQZ			J	Connecting Cord (LA)
51	PSPAN A044WJKZ	AB		J	PWB Spacer
52	HINDPE366WJZZ		N	X	ENERGY GUIDE Label

[6] SUPPLIED ACCESSORIES/PACKING PARTS (LC-60LE630U/U(A),6300U/U(A)/U(B))

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[6] SUPPLIED ACCESSORIES/PACKING PARTS (LC-60LE630U/U(A),6300U/U(A)/U(B))					
X1	CANGKD276WJ01			J	Stand Support Ass'y, x2
X2	CDAi-A778WJ31			J	Stand Base Ass'y
X3	CSAKKA011WJ01			J	Stand Screw Ass'y
X4	RRMCGA667WJSA			X	Remote Control
X5	TCAD EA243WJZZ			J	Enquete Card
X6	Not available	-		-	Guarantee Card
X7	TiNS-F234WJZZ		N	X	Operation Manual (E) (LC-60LE630U/U(A))
X7	TiNS-F313WJZZ		N	X	Operation Manual (E) (LC-60LE6300U/U(A)/U(B))
X7	TiNS-F235WJZZ		N	X	Operation Manual (F) (LC-60LE630U/U(A))
X7	TiNS-F314WJZZ		N	X	Operation Manual (F) (LC-60LE6300U/U(A)/U(B))
X7	TiNS-F236WJZZ		N	X	Operation Manual (S) (LC-60LE630U/U(A))
X7	TiNS-F315WJZZ		N	X	Operation Manual (S) (LC-60LE6300U/U(A)/U(B))
X9	Not available	-		-	"AAA" size battery, x2
S1	SPAKCG446WJZZ	-	N	-	Packing Case (LC-60LE630U/U(A)) (NOT REPLACEMENT ITEM)
S1	SPAKCG519WJZZ	-	N	-	Packing Case (LC-60LE6300U/U(A)/U(B)) (NOT REPLACEMENT ITEM)
S2	SPAKCF960WJZZ	-		-	Packing Case (Bottom) (NOT REPLACEMENT ITEM)
S3	SPAKPB427WJZZ	-		-	Wrapping Paper (NOT REPLACEMENT ITEM)
S4	SPAKPB722WJZZ	-	N	-	Wrapping Paper (Stand) (NOT REPLACEMENT ITEM)
S5	SPAKPB723WJZZ	-	N	-	Wrapping Paper (Support) (NOT REPLACEMENT ITEM)
S6	SPAKXD367WJZZ	-		-	Packing Add. (Top) (NOT REPLACEMENT ITEM)
S7	SPAKXD368WJZZ	-		-	Packing Add. (Bottom) (NOT REPLACEMENT ITEM)
S8	SSAKA0101GJZZ	-		-	Polyethylene Bag (NOT REPLACEMENT ITEM)
S9	SSAKKA011WJZZ	-	N	-	Polyethylene Bag (NOT REPLACEMENT ITEM)
S10	TLABKA009WJZZ	-		-	Case No. Label (NOT REPLACEMENT ITEM)

[7] SUPPLIED ACCESSORIES/PACKING PARTS (LC-70LE735U)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[7] SUPPLIED ACCESSORIES/PACKING PARTS (LC-70LE735U)					
X1	CANGKD276WJ01			J	Stand Support Ass'y, x2
X2	CDAi-A778WJ31			J	Stand Base Ass'y
X3	CSAKKA011WJ01			J	Stand Screw Ass'y
X5	RRMCGA936WJSA			X	Remote Control
X6	TCADAE243WJZZ			J	Enquete Card
X7	Not available	-		-	Guarantee Card
X8	TINS-F207WJZZ		N	X	Operation Manual
X9	TMAN-A043WJZZ			J	Connection Guide
X10	Not available	-		-	"AAA" size battery, x2
S1	SPAKCG413WJZZ	-	N	-	Packing Case (NOT REPLACEMENT ITEM)
S2	SPAKCG317WJZZ	-		-	Packing Case (Bottom) (NOT REPLACEMENT ITEM)
S4	SPAKPB722WJZZ	-	N	-	Wrapping Paper (Stand) (NOT REPLACEMENT ITEM)
S5	SPAKPB723WJZZ	-	N	-	Wrapping Paper (Support) (NOT REPLACEMENT ITEM)
S6	SPAKPB733WJZZ	-		-	Wrapping Paper (NOT REPLACEMENT ITEM)
S7	SPAKXD394WJZZ	-		-	Packing Add. (Top) (NOT REPLACEMENT ITEM)
S8	SPAKXD395WJZZ	-		-	Packing Add. (Bottom) (NOT REPLACEMENT ITEM)
S10	SSAKA0101GJZZ	-		-	Polyethylene Bag (NOT REPLACEMENT ITEM)
S12	SSAKKA011WJZZ	-	N	-	Polyethylene Bag (NOT REPLACEMENT ITEM)
S13	TLABKA009WJZZ	-		-	Case No. Label (NOT REPLACEMENT ITEM)
[8] SERVICE JIGS (USE FOR SERVICING)					
N	QCNW-C222WJQZ	AW		J	Connecting Cord L=1000mm 80pins, LCD Control Unit to LCD Panel Unit, x2
N	QCNW-F676WJQZ	BH		J	Connecting Cord L=1000mm 41pins, MAIN Unit to LCD Control Unit (LW)
N	QCNW-M249WJQZ		N	J	Connecting Cord L=1000mm, Main to LCD Control Unit (PD) (LC-60LE630U/U(A),6300U/U(A)/U(B))
N	QCNW-L214WJQZ	AV		J	Connecting Cord L=1000mm, 64pins, LCD Control Unit to LCD Panel Unit, x2 (LC-70LE735U)
N	QCNW-G405WJQZ	AP		J	Connecting Cord L=1000mm 4pins, POWER Unit to LCD Control Unit (PL) (LC-70LE735U)
N	QCNW-L795WJQZ	BC		J	Connecting Cord L=1000mm 24pins, MAIN Unit to POWER Unit (PD) (LC-70LE735U)
N	QCNW-L519WJQZ		N	J	Connecting Cord L=1000mm 18pins, LED DRIVER Unit to POWER Unit (LA) (LC-70LE735U)

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