

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE / TRAINING MANUAL

AZ3F Chassis

Segment: 3a

ORIGINAL MANUAL ISSUE DATE: 2/2012

Version	Date	Subject
1.0	2/2/2012	Original Manual Release Date.
2.0	2/9/2012	Added Power and Control Block Diagram. Reissue entire manual.
3.0	3/6/2012	Corrected connector on Power and Control Block Diagram. Replaced page 13, 14 and 16. Modified Updates and Adjustments section. Replaced pages 28 and 29.
4.0	5/2/2012	Corrected part number for Support Belt Kit. Replaced page 25. Removed BU adjustment information. (Not required for these models.) Replaced pages 27- 44.
5.0	10/3/2012	Updated Parts List on section 4 Dissassembly/Part Number Information. Replaced pages 19 - 24. Reissue entire manual.

LCD Digital Color TV

SONY®

SERVICE / TRAINING MANUAL

AZ3F Chassis
Segment: 3a



KDL-46HX750

LCD Digital Color TV

SONY®

MODEL LIST

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-40HX750	<i>RM-YD076</i>	<i>LA/MX</i>
KDL-46HX750	<i>RM-YD073</i>	<i>US/CND</i>
KDL-46HX750	<i>RM-YD076</i>	<i>LA/MX</i>
KDL-46HX751	<i>RM-YD076</i>	<i>LA/MX</i>

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-55HX750	<i>RM-YD073</i>	<i>US/CND</i>
KDL-55HX750	<i>RM-YD076</i>	<i>LA/MX</i>
KDL-55HX751	<i>RM-YD073</i>	<i>US/CND</i>
KDL-55HX751	<i>RM-YD076</i>	<i>LA/MX</i>

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CAUTIONS AND WARNINGS

CAUTION!!

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, in case of live chassis.

SAFETY-RELATED COMPONENT WARNING!!

There are critical components used in LCD color TVs that are important for safety. These components are identified with shading and  mark on the schematic diagrams and the parts list. It is essential that these critical parts be replaced only with the part number specified in the parts list to prevent electric shock, fire, or other hazard.

NOTE: Do not modify the original design without obtaining written permission from the manufacturer or you will void the original parts and labor warranty.

ATTENTION!!

For safety reasons, component level repair of the Power Supply Boards and/or the Inverter Boards is prohibited.

ATTENTION!!

Ces instructions de service sont à l'usage du personnel de service qualifié seulement. Pour prévenir le risque de choc électrique, ne pas faire l'entretien autre que celui contenu dans le Mode d'emploi à moins que vous soyez qualifié faire ainsi.

ALERTE!!

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque  sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

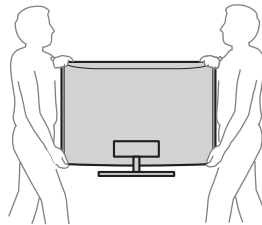
ATTENTION!!

Pour des raisons de sécurité, Interdire de réparer ou remplacer les composants dans les blocs d'alimentation et/ou sur les modules d'inverseur.

CAUTIONS AND WARNINGS

SETTING UP AND CARRYING THE TV

- Disconnect all cables when carrying the TV.
- Carry the TV with the adequate number of people; larger size TVs require two or more people.
- Correct hand placement while carrying the TV is very important for safety and to avoid damage.

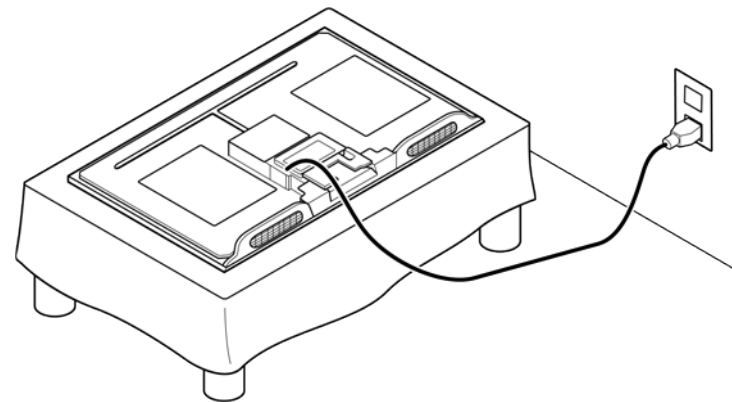


USE CAUTION WHEN HANDLING THE LCD PANEL

When repairing the LCD Panel, be sure you are grounded by using a wrist band.

When installing the LCD Panel on a wall, the LCD Panel must be secured using the 4 mounting holes on the rear cover.

1. Do not press on the panel or frame edge to avoid the risk of electric shock.
2. Do not scratch or press on the panel with any sharp objects.
3. Do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
4. Do not expose the LCD Panel to direct sunlight.
5. Avoid contact with water. It may cause a short circuit within the module.
6. Disconnect the AC power when replacing the backlight or Inverter circuit. (High voltage occurs at the inverter circuit at 650Vrms).
7. Always clean the LCD Panel with a soft cloth material.
8. Use care when handling the wires or connectors of the Inverter circuit. Damaging the wires may cause a short.
9. Protect the panel from ESD to avoid damaging the electronic circuit (C-MOS).
10. During the repair, **DO NOT leave the Power On for more than 1 hour while the TV is face down on a cloth.**



CAUTIONS AND WARNINGS

CLEANING THE LCD PANEL

CAUTION: When cleaning the TV, be sure to unplug the power cord to avoid any chance of electric shock.

Clean the cabinet of the TV with a dry soft cloth.

Wipe the LCD screen gently with a soft cloth.

- ☑ Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.
- ☑ If using a chemically pretreated cloth, please follow the instruction provided on the package.
- ☑ Never use strong solvents such as a thinner, alcohol or benzine for cleaning.
- ☑ Periodic vacuuming of the ventilation openings is recommended to ensure proper ventilation.

- ⊗ **Do Not** use paper towels, any type of abrasive pad, rags, rubber or vinyl materials to clean the screen. Using these materials could easily scratch the screen which may result in permanent damage.
- ⊗ **Do Not** use any cleaning product containing alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, ammonia, benzine, thinner or insecticide. Using any of these harsh cleaners may result in permanent damage to the screen.
- ⊗ **Do Not** spray water or detergent directly onto the TV screen. If liquid drips into the bottom of the screen it may cause a failure.

CAUTIONS AND WARNINGS

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described in “Leakage Test”.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester.
Follow the manufacturers’ instructions provided with the tester.
2. A battery-operated AC milliammeter.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable. (see Figure A)

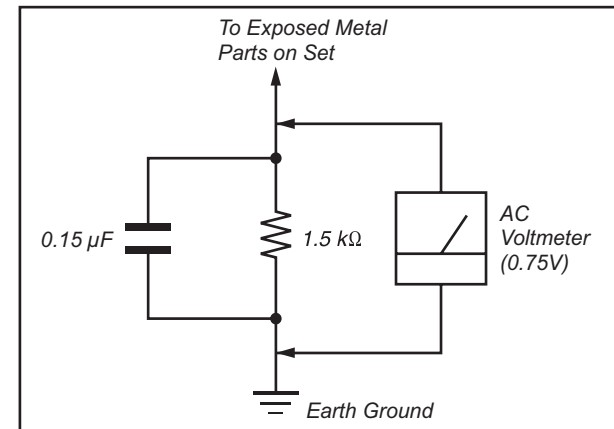


Figure A. Use an AC voltmeter to check AC leakage.

HOW TO FIND A GOOD EARTH GROUND

The cover-plate retaining screw on most AC outlet boxes is at earth ground. Verify the AC outlet box retaining screw ground by connecting a 60W to 100W incandescent (not a neon or fluorescent lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential. (see Figure B)

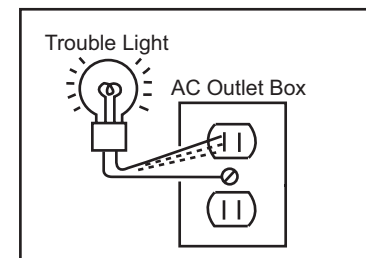


Figure B. Checking for earth ground.

SECTION 1 - FEATURES AND OVERVIEW

FEATURES

The AZ3F chassis is one of several designs for the 2012 model line of Sony Bravia® LCD televisions. This manual covers the following models:

KDL-40HX750

KDL-46HX750

KDL-46HX751

KDL-55HX750

KDL-55HX751

The BRAVIA® HX75x series LED LCD HDTV with 3D have incomparable picture quality and an ultra-thin design

- Brilliant Full HD (1080p) picture quality with Dynamic Edge LED backlight with Frame Dimming
- X-Reality™ Engine that creates crisp detail in each scene
- 4x High Speed 3D Panel with Motionflow™ XR 480
- Dynamic Edge LED backlight for amazing contrast & color
- One-touch access to the Sony Entertainment Network™ and apps¹
- 3D in Full HD 1080p for phenomenal 3D picture quality²
- Stream HD entertainment wirelessly with built-in Wi-Fi®¹
- Skype™ ready¹
- PC and tablet content³ on your TV w/ Intelligent Connect
- Media Remote™ app to control your TV with a smartphone⁴
- Built-in Wi-Fi™ (802.11n) enables you to connect to the TV via Wi-Fi® without using a router³

1. Broadband speed of at least 2.5 Mbps recommended (10 Mbps for HD). Content subject to change and may require fees. Skype requires CMU-BR100 camera sold sep. Subject to Skype's terms and conditions.
2. Requires 3D content, 3D player, HDMI® cable (at least 10.2 Gbps) and 3D active glasses sold separately.
3. Streaming content, copy-protected content and certain formats are not supported.
4. Requires devices connected to the same wireless home network.

SPECIFICATIONS

System	
Television system	NTSC: American TV standard ATSC (8VSB terrestrial): ATSC compliant 8VSB QAM on cable: ANSI/SCTE 07 2000 (Does not include CableCARD functionality)
Channel coverage	Analog terrestrial: 2 - 69 / Digital terrestrial: 2 - 69 Analog Cable: 1 - 135 / Digital Cable: 1 - 135
Panel system	LCD (Liquid Crystal Display) Panel
Speaker output	10 W + 10 W
Input/Output jacks	
CABLE/ANTENNA	75-ohm external terminal for RF inputs
Ⓕ/Ⓖ VIDEO IN 1	Video / Audio input (phono jacks)
Ⓕ/Ⓖ COMPONENT IN	YPbPr (Component Video): 1080p (60 Hz), 1080i (60 Hz), 720p (60 Hz), 480p, 480i Audio input (phono jacks)
Ⓕ VIDEO IN 2	Video input (common phono pin with Y input)
HDMI IN 1/2/3/4	Video (2D): 1080p (30, 60 Hz), 1080/24p, 1080i (60 Hz), 720p (30, 60 Hz), 720/24p, 480p, 480i, PC Formats Video (3D): Frame Packing 1080p (30 Hz), 1080/24p, 1080i (60 Hz), 720p (30, 60 Hz), 720/24p Side-by-Side 1080p (60 Hz), 1080/24p, 1080i (60 Hz), 720p (60 Hz) Over-Under 1080p (30, 60 Hz), 1080/24p, 1080i (60 Hz), 720p (60 Hz) Audio: Two channel linear PCM: 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital Analog audio input (stereo mini jack) (HDMI IN 2 only, common with PC IN) ARC (Audio Return Channel) (HDMI IN 1 only)
Ⓕ AUDIO OUT/Headphones	Stereo mini jack
Ⓕ DIGITAL AUDIO OUT (OPTICAL)	Digital optical jack (Two channel linear PCM, Dolby Digital)
Ⓕ PC IN	Analog RGB (Mini D-sub 15-pin)
Ⓕ PC/HDMI 2 AUDIO IN	Audio input (stereo mini jack) (common with HDMI IN 2)
LAN	10BASE-T/100BASE-TX connector (Connection speed may differ depending on the network environment. 10BASE-T/100BASE-TX communication rate and communication quality are not guaranteed for this TV.)
USB/DLNA	Refer to the i-Manual for supported format.

SECTION 1 - FEATURES AND OVERVIEW

Nombre de modelo	KDL-46BX453	KDL-40BX453	KDL-32BX354 KDL-32BX353
Corriente y otras especificaciones			
Requisitos de alimentación	110-240 V CA, 50/60 Hz		
Consumo energético en uso	196 W	166 W	104 W
en espera	Menos de 0,2 W con 120 V CA y con 240 V CA menos de 0,3 W		
Tamaño de pantalla* (medido diagonalmente) (cm)	46 116,81	40 101,61	31,5 (clase 32) 80,04
Resolución del monitor	1920 puntos (horizontales) × 1080 líneas (verticales)		1366 puntos (horizontales) × 768 líneas (verticales)
Bocina/Gama completa (2) (mm)	40 × 100		
Dimensiones* con soporte (mm)	1112 × 713 × 279	980 × 639 × 231	790 × 534 × 193
sin soporte (mm)	1112 × 675 × 97	980 × 601 × 94	790 × 497 × 91
patrón de los orificios de montaje mural (mm)	300 × 300		200 × 200
tamaño de tornillos de montaje mural (mm)	M6 (8-12 mm)		
Peso* con soporte (kg)	17,2	13,8	9,0
sin soporte (kg)	16,0	12,8	8,4
Accesorios suministrados	Control Remoto RM-YD081 (1) / Pilas tipo AA (2) / Manual de Instrucciones (1) Guía de Configuración Rápida (1) / Manual de Seguridad (1) / Licencia del Software (1) Guía de Ensamble de la Base de Soporte (1) / Soporte de Sobremesa (1 juego) / Tornillos (3)		
Accesorios opcionales	Cables de Conexión / Kit de Correa de Soporte / Soporte de Montaje Mural: SU-WL500		

- La disponibilidad de los accesorios opcionales dependerá de las existencias.
- El diseño y las especificaciones están sujetos a cambios sin previo aviso.

* Las dimensiones y la masa son valores aproximados.

CHECKING THE ACCESSORIES

- ─ Remote control (1)*¹
- ─ Size AAA batteries (2)
- ─ Table-Top Stand (1)*²
- ─ Fixing screws for Table-Top Stand (M5 × 16) (3)
- ─ Assembling screws for Table-Top Stand (M5 x 16) (4)
- ─ 3D Glasses (battery included) (2) (KDL-46HX751/55HX751 only)
- ─ Pouch for 3D Glasses (2) (KDL-46HX751/55HX751 only)
- ─ Operating Instructions (this manual) and other documents

*¹ Please refer to the model name printed on the remote control.

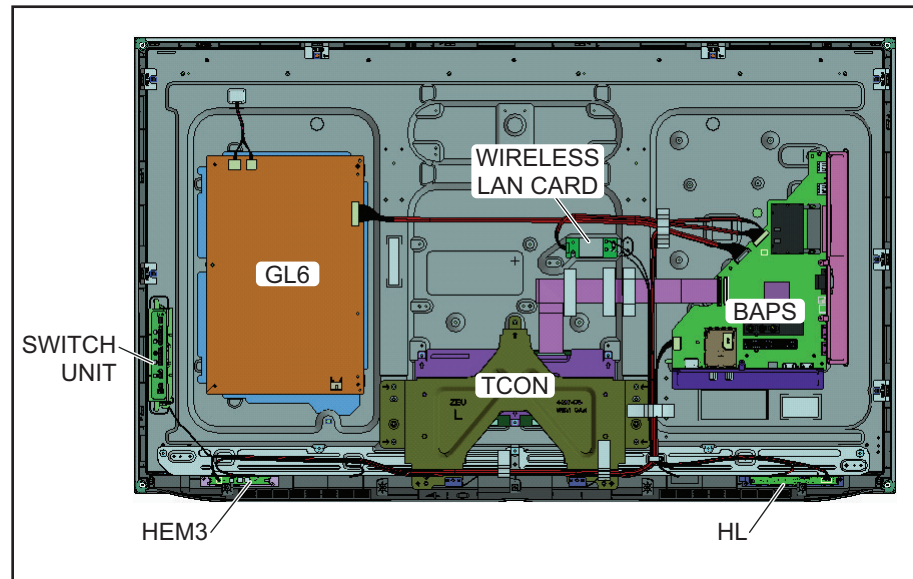
*² Assembling the Table-Top Stand is required. Refer to the supplied Table-Top Stand leaflet to assemble the Table-Top Stand.

SECTION 1 - FEATURES AND OVERVIEW

CHASSIS OVERVIEW

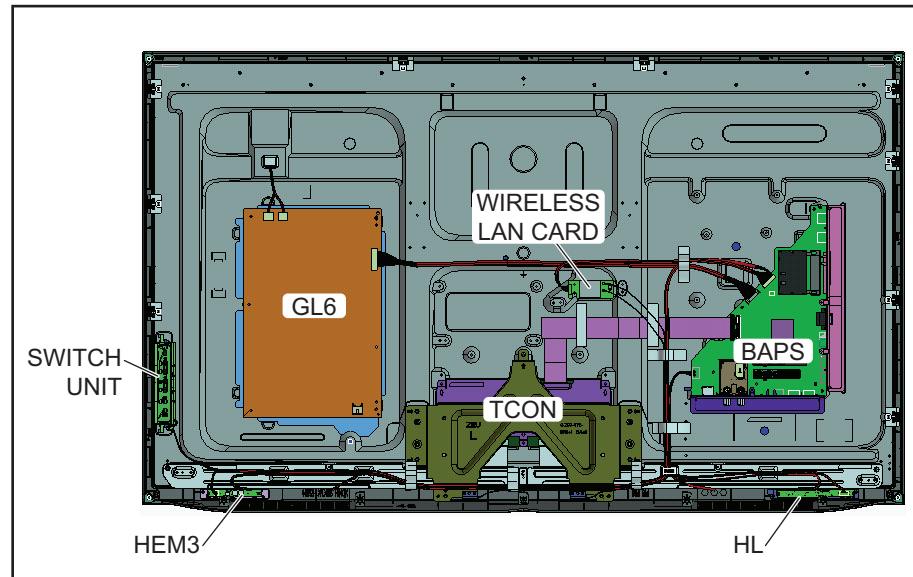
The primary circuits in the AZ3F chassis consist of a Main Board (BAPS Board), Power Supply Board (GL6 Board for the 40" and 46" models, and GL7 Board for the 55" models), the IR Board (HL Board), the 3D IR Emitter (HEM3 Board), the Wireless LAN Card, the Switch Unit, and the LCD Panel assembly which includes the TCON Board.

NOTE: For connector part number information, refer to ["Connectors" on page 23](#). For Wire Dressing information, refer to ["Wire Dressing" on page 25](#).

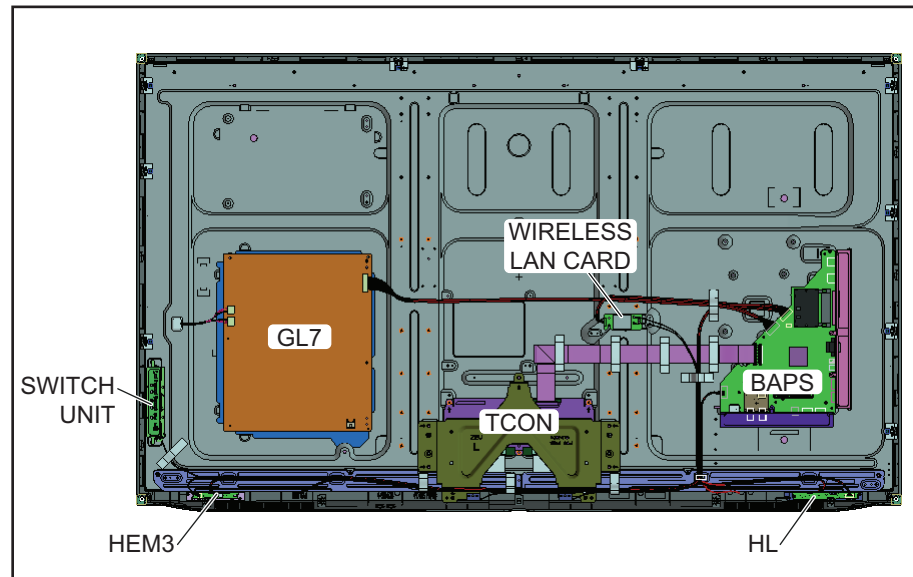


BOARD LAYOUT FOR KDL-40HX750 ONLY

SECTION 1 - FEATURES AND OVERVIEW



BOARD LAYOUT FOR KDL-46HX750/46HX751 ONLY



BOARD LAYOUT FOR KDL-55HX750/55HX751 ONLY

SECTION 1 - FEATURES AND OVERVIEW

OVERALL CIRCUIT DESCRIPTION

The [“Block Diagram” on page 11](#) provides an overview of the AZ3F chassis. The following are descriptions of the boards and their functions.

MAIN BOARD

Common to all models the Main Board, designated as the BAPS Board, contains the TV control, video, and audio processing circuitry. All these functions are accomplished using the X-Reality Processor IC9000.

TUNER

The tuner is a combination ATSC/NTSC unit. It can receive traditional analog NTSC signals via cable or terrestrial along with ATSC digital signals via terrestrial (8VSB) or cable (64 or 256 QAM).

X-REALITY PROCESSOR

IC9000 performs the majority of the necessary audio and video processing on the Main Board.

TV Microprocessor: The CPU internal to the X-Reality processor controls all aspects of the television functions. Input from the user along with monitoring of critical circuits is also performed by this CPU.

Digital Audio and Video Decoder: The MPEG2 and Digital Dolby audio streams are received from the tuner for decompression. All video sources which are not native 1920 X 1080p 60HZ are scaled to this resolution. Digital audio content is output to the class D amplifier for processing and amplification.

HDMI Input and Switching: The customer can select the HDMI1, HDMI2, HDMI3, HDMI4 input via the HDMI switch IC5500. Each HDMI input contains a common EDI NVM (internal to IC5500) to provide display information data to any device connected via the HDMI inputs.

LVDS Transmitter: Integrated into IC9000 is a Low Voltage Differential Signaling (LVDS) transmitter. This circuit converts the 8-bit parallel RGB video information into a set of high speed serial lines for noise-free transmission to the TCON Board circuits located internally to the LCD Panel.

Scan Converter: Signal processing circuit that performs resolution conversion (aspect ratio) and interlaced to progressive scan (IP) conversion.

AUDIO AMPLIFIER

The main speaker audio amplifier (IC4601) and sub-woofer amplifier (IC4701) amplifies the digital audio output of the X-Reality processor and sends it to the speakers.

TEMPERATURE SENSOR

The temperature sensor detects over-temperature conditions on the Main Board, LCD Panel, or ambient room temperature and sends the shutdown signal to the processor.

POWER SUPPLY BOARD

There are different Power Supply Boards used in the models in this manual. The type of board depends on the size of LCD Panel. They are:

- GL6 Board (40" and 46" models)
- GL7 Board (55" models)

There are 3 distinct sections on the power supply:

Standby Supply: Continuously operational as long as AC power is applied, the standby supply generates 3.3V for the circuits requiring power while the unit is turned off. An unregulated 19V line is present to provide power to the main relay, PFC and main power supply at turn-on.

Main Supply: Once the power supply receives a power-on command from the CPU on the Main Board, the main switching supply is turned on to provide a regulated 12V source and Audio 12V.

Converter: Generates the B+ and B- voltages for the LED backlights.

IR BOARD

Designated as the HL Board, the IR Board contains the power, standby, and timer LED's that are located on this board along with the IR Remote Receiver and light level sensor.

SECTION 1 - FEATURES AND OVERVIEW

3D IR EMITTER BOARD

Designated as the HEM3 Board, this board is the internal 3D IR Emitter to synchronize the 3D shutter glasses.

WIRELESS LAN CARD

The wireless transmit/receive circuits are located on this board to communicate with a wireless network.

SWITCH UNIT

This board contains the power, channel and volume up/down, and menu buttons.

LCD PANEL ASSEMBLY

The LCD Panel Assembly includes the LCD Panel, TCON Board and LED Backlight system.

The LCD Panel contains the actual liquid crystals, color filters and polarizers. The liquid crystals are manipulated by the applied voltage to pass a specific amount of light - from the backlite - depending on the level of voltage applied.

The TCON performs all the control, timing, charge and discharge functions driving the operation of the LCD Panel.

A new LCD Panel Assembly will include the following items:

- LCD Panel
- TCON Board
- LED Backlighting Components (varies)

TCON BOARD

The TCON Board communicates between the LCD Panel and the microprocessor on the Main Board.

NOTE: The TCON Board is not available as a replacement part for all models. To determine if the TCON Board is available as a replacement part, refer to the LCD Panels Manual.

SECTION 2 - TROUBLESHOOTING

OVERVIEW

This chapter provides information regarding the Self Diagnosis feature in our TVs.

UPDATING THE SOFTWARE

The Self Diagnosis function is designed to provide information regarding the problem with the TV, however, there are several issues that may be resolved by updating the TV software to the latest version. Always check the Sony Authorized Servicer Portal at <http://www.sony.com/asp> for any issues that are software related. Most symptoms that are correctable by software updates involve communications issues with other devices or minor glitches in the operation of a specific function. Below is a list of some of the symptoms that may be corrected with a software update:

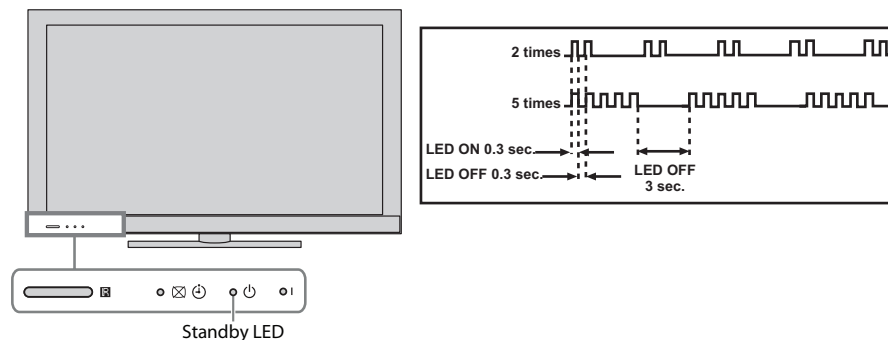
- Fluctuations in picture brightness
- Intermittent picture freezing or noise
- Problems with certain inputs (especially HDMI)
- Intermittent or distorted audio
- Erratic remote control operation
- TV turns on and off by itself
- Loss of color
- Internet connectivity (internet models only)
- Certain features not working correctly (photo or video file viewing)

SELF DIAGNOSIS FUNCTION

Critical voltages and circuit operations are monitored by the CPU on the Main Board. If an error is detected the Self Diagnosis function in the TV will force the TV to shut down by the CPU. The monitored circuit in which the fault occurred will automatically cause the CPU to blink the Standby LED in groups of repeating sequences. The number of times the Standby LED blinks indicates the possible cause of the problem.

Not all of the available protect codes are used in every model. For example, models that don't have the local dimming feature do not use the 4X blink error as this circuit is found in models that are backlit with fluorescent lamps. The information in this section provides guidance in locating the possible component causing the shutdown.

STANDBY LED BLINK COUNT



LED DISPLAY & BLINK COUNT

SECTION 2 - TROUBLESHOOTING

VIEWING THE SELF CHECK DIAGNOSIS HISTORY

When an error is detected, the Self Check screen records the date(s) and the number of times the error occurred. This is helpful in confirming past occurrences of an error, and for determining if an error is intermittent when the customer is not sure what is causing the television to shut down. If the screen displays a "0", no error has occurred.

1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel **5** → Volume **-** → **POWER**

NOTE: This differs from accessing Service Adjustments Mode (Volume +).

StandBy LED Blink Count	Diagnosis Item	Date and Time Display*	Error Count (00-99)
00	RESERVED	00	00
00	RESERVED	00	00
002	MAIN_POWE	00	00
003	DC_ALERT	00	00
003	AUD_PROT	00	00
003	HDMI_EQ	00	00
003	TU_DEMOD	00	00
004	VLED	00	00
004	LD_ERR	00	00
005	HFR_ERR	00	00
005	TCON_ERR	120123132522 120123113645	02
005	P_ID-ERR	00	00
006	BACKLITE	00	00
007	TEMP_ERR	00	00
007	FAN_ERR	00	00
010	EMITTER	00	00
101	VPC_WDT	00	00
102	MEPS_WDT	00	00
103	HOST_WDT	00	00
104	STBY_WDT	00	00
00345	000333	06789	

Panel operation time by hour (MAX:65535)
Boot count (MAX:65535)
Total operation time by hour (MAX:65535)

*Format of Error History = YYMMDDhhmmss example 120123132522= Jan 23, 2012 13:25:22 (1:25:22PM)
NOTE: date and time must be set for this to work

SAMPLE SELF CHECK DIAGNOSIS PAGE

SECTION 2 - TROUBLESHOOTING

2X Blink - Main Power Error

A loss of REG12V from the power supply triggers this protect event. The usual cause is a failure of the main switching supply. In some instances, excessive loading on the secondary supply lines can cause the switching regulator to stop, or fail again, if a replacement board is installed.

3X Blink- DC Regulator/Audio Error/HDMI/Tuner

Several items are monitored on the Main Board. Any error detected in the following circuits will cause the television to shut down and generate a 3X error:

- Loss of regulated B+ circuits
- Audio amplifier failure
- HDMI equalizer IC
- Tuner demodulator circuits

In most cases, replacement of the Main Board will remedy a 3X error.

4X Blink – Balancer Error

NOT USED IN THIS MODEL SERIES.

5X Blink - TCON Error

The 5X blink protection mode indicates a communications error between the TCON Board and the X-Reality Microprocessor on the Main Board. If the TCON is available for replacement, replace the TCON. If the TCON is not available, the LCD Panel must be replaced since the TCON circuit is part of the LCD Panel Assembly. In rare cases a loose or defective LVDS cable could also be the cause.

6X Blink - Converter System Failure

An open LED in the backlight strings will cause an over-voltage condition in the converter circuits. The symptom will be a momentary appearance of the backlights (Sony logo may appear) followed by a 6X shutdown. Replacement of the LCD Panel is required to remedy this condition.

If the converter fails to generate voltage for the LED backlights, the low-voltage protection circuits are activated and the television will shut down with a 6X error. Replacement of the Power Supply Board should remedy this condition.

7X Blink - Temperature Failure

If the temperature inside the television becomes excessive, the temperature sensor (located on the Main Board) notifies the TV to shut down and display a 7X error. Excessive temperature errors will always occur when the TV has been running a while and can be caused by excessive ambient heat or improper ventilation of the television.

If the television shuts down immediately, this can be caused by a defective temperature sensing IC or failure of the communications bus between the IC and the microprocessor. Replacement of the Main Board is necessary.

8X Blink – Not listed in Self Check

The 8X blink code is mainly used during TV software development. Look in TV's service Self Check for error code history and notice at the bottom of the list WDT (Watch Dog Timer) error codes, in particular notice 103 HOST_WDT. If this error code appears, check for any additional documentation on the Sony ESI site.

10X Blink – IR Sync Transmitter Failure

A failure of the infrared sync transmitter circuits on the HEM3 Board will cause a 10X error and replacement of this board will usually rectify the problem. In rare cases, the Main Board could be the source of the failure.

SECTION 2 - TROUBLESHOOTING

TRIAGE CHART

Use this general Triage Chart to determine what may possibly be causing the error before going out to the customers location.

1. Confirm the symptom from the customer.
2. Select that symptom from the chart.
3. Bring the primary component listed for that symptom.
4. Follow the associated flowcharts in the Training Manual to isolate the board.
5. Chart Color Code.

● RED DOT: (Primary) Most likely defective part.

▲ BLUE Triangle: (Secondary) Possible defective part.

Board Reference	Protection Modes							3D	LAN	Power	Video				Audio
	2X	3X	4X	5X	6X	7X	8X	10X	No WIFI	Dead set	No Video	Whole Screen Distortion	Isolated Area Distortion	No 3D	No Audio
Main Board		●				●*	▲		▲	▲	▲	●		●	●
Power Supply	●				●					●					
HL															
HEM3								●							
LCD Panel					▲								●		
TCON				●							●	▲	▲		
SERVICE BULLETIN							●								
SOFTWARE UPDATE							●								
WLAN									●						

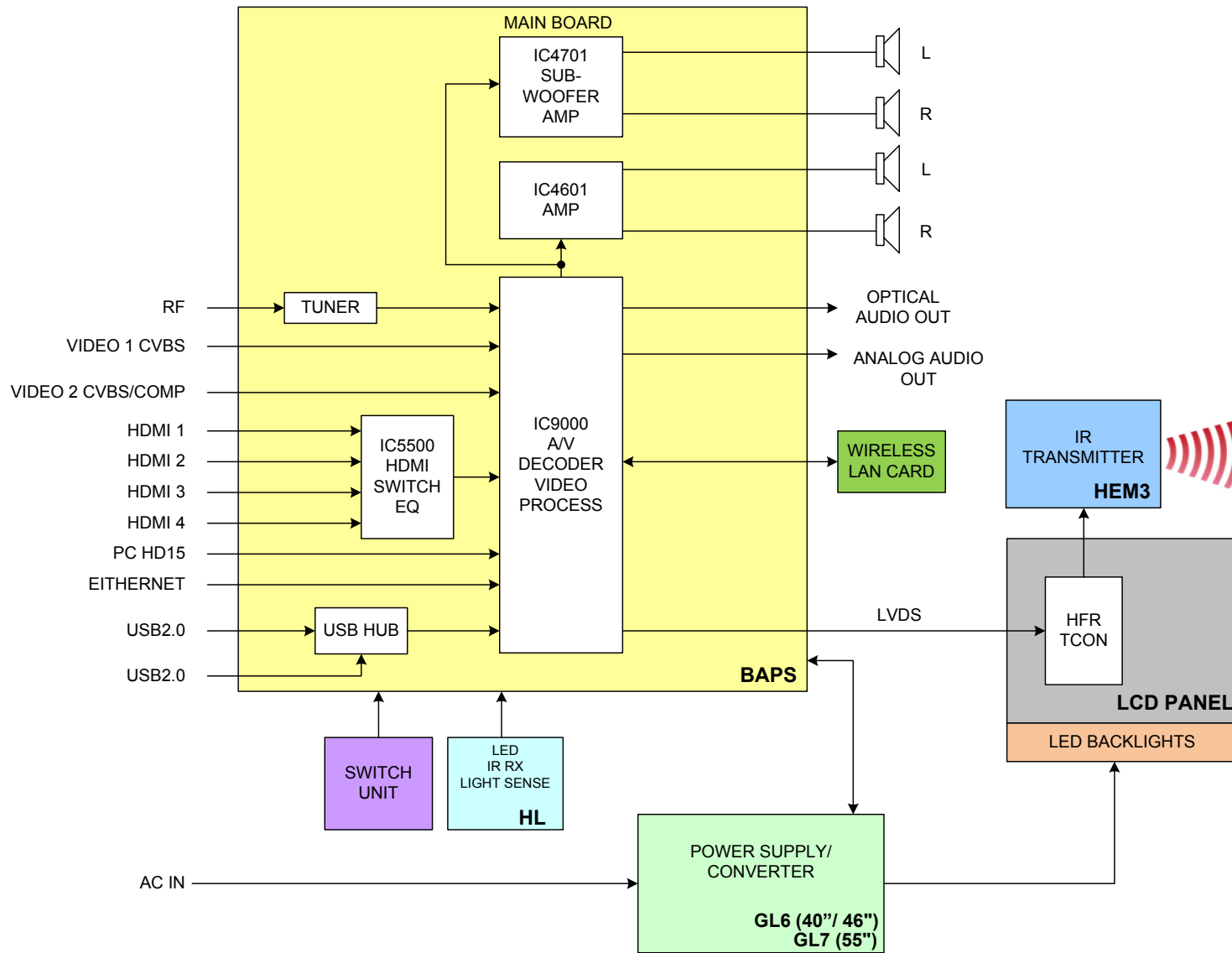
***NOTE:** REFER TO LCD PANELS SERVICE MANUAL IN REFERENCE LIBRARY DATABASE FOR CORRECT REPLACEMENT PARTS BASED ON SERIAL NUMBER.

●* Immediate Shutdown After Power ON & 7X

To access the most recent version of the Triage documents for the models listed in this manual, login into the Sony Authorized Servicer Portal at:
<http://www.sony.com/asp>.

SECTION 3 - FLOW CHARTS AND DIAGRAMS

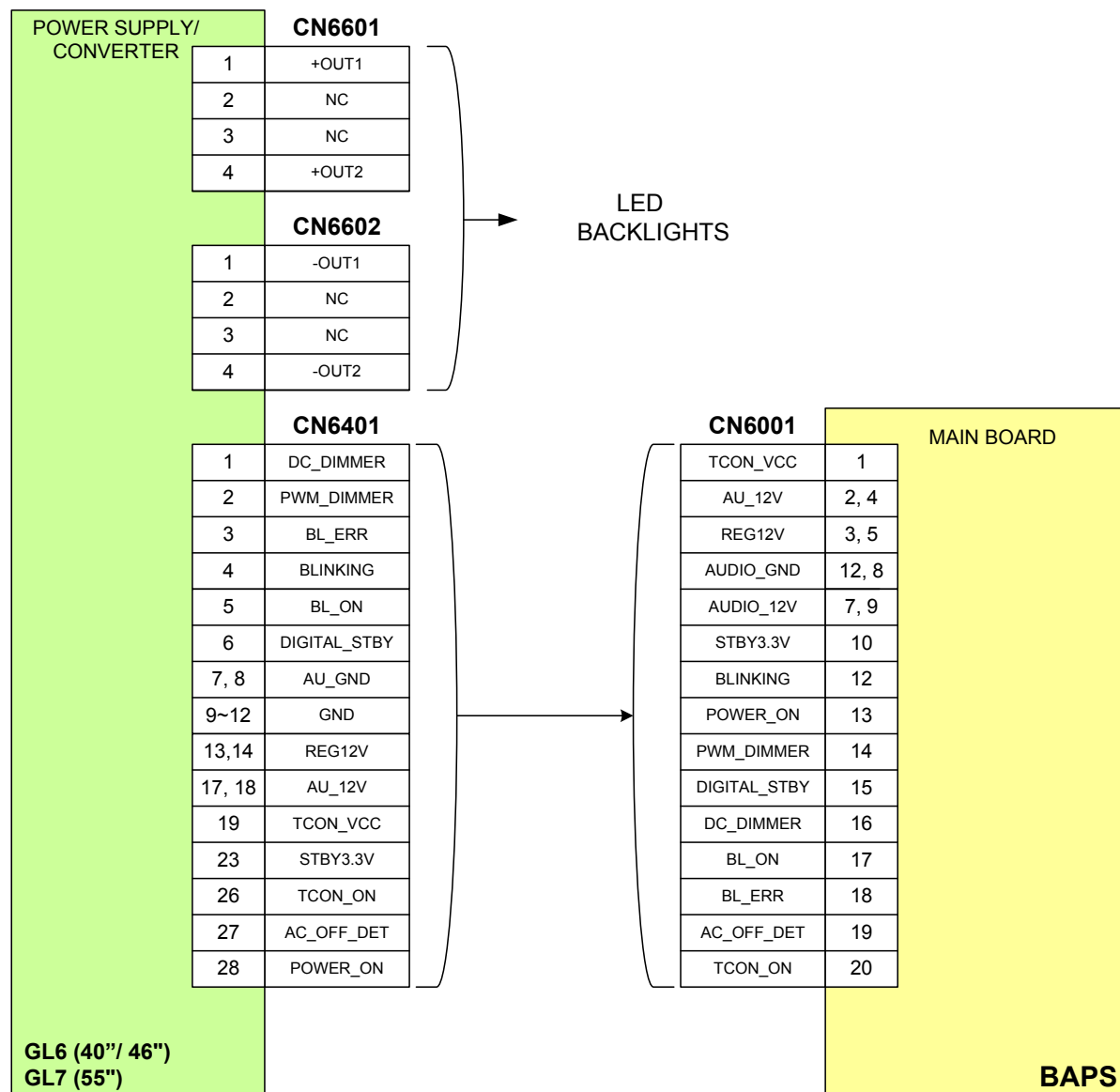
BLOCK DIAGRAM



OVERALL BLOCK DIAGRAM

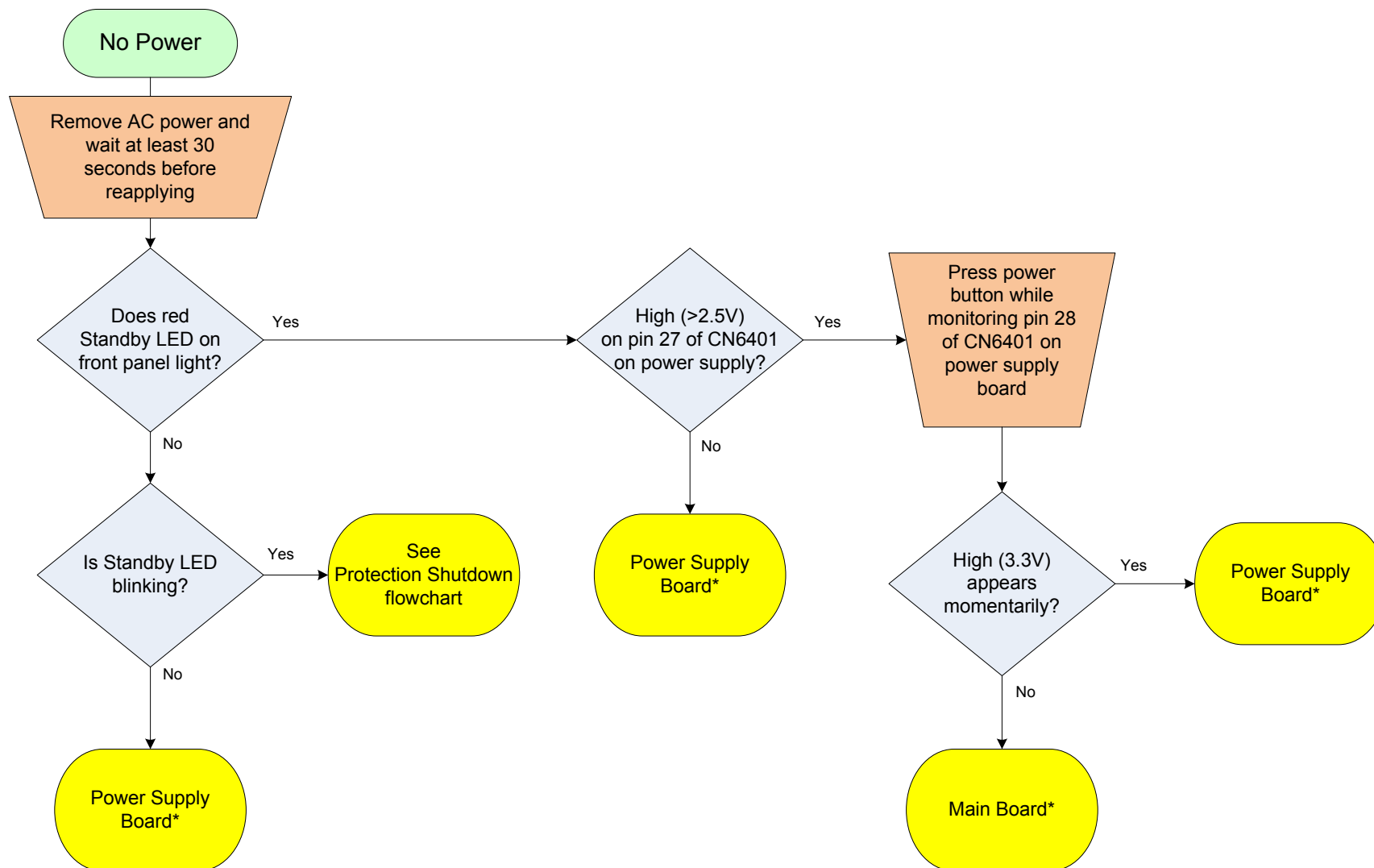
SECTION 3 - FLOW CHARTS AND DIAGRAMS

NO POWER



POWER AND CONTROL BLOCK DIAGRAM

SECTION 3 - FLOW CHARTS AND DIAGRAMS

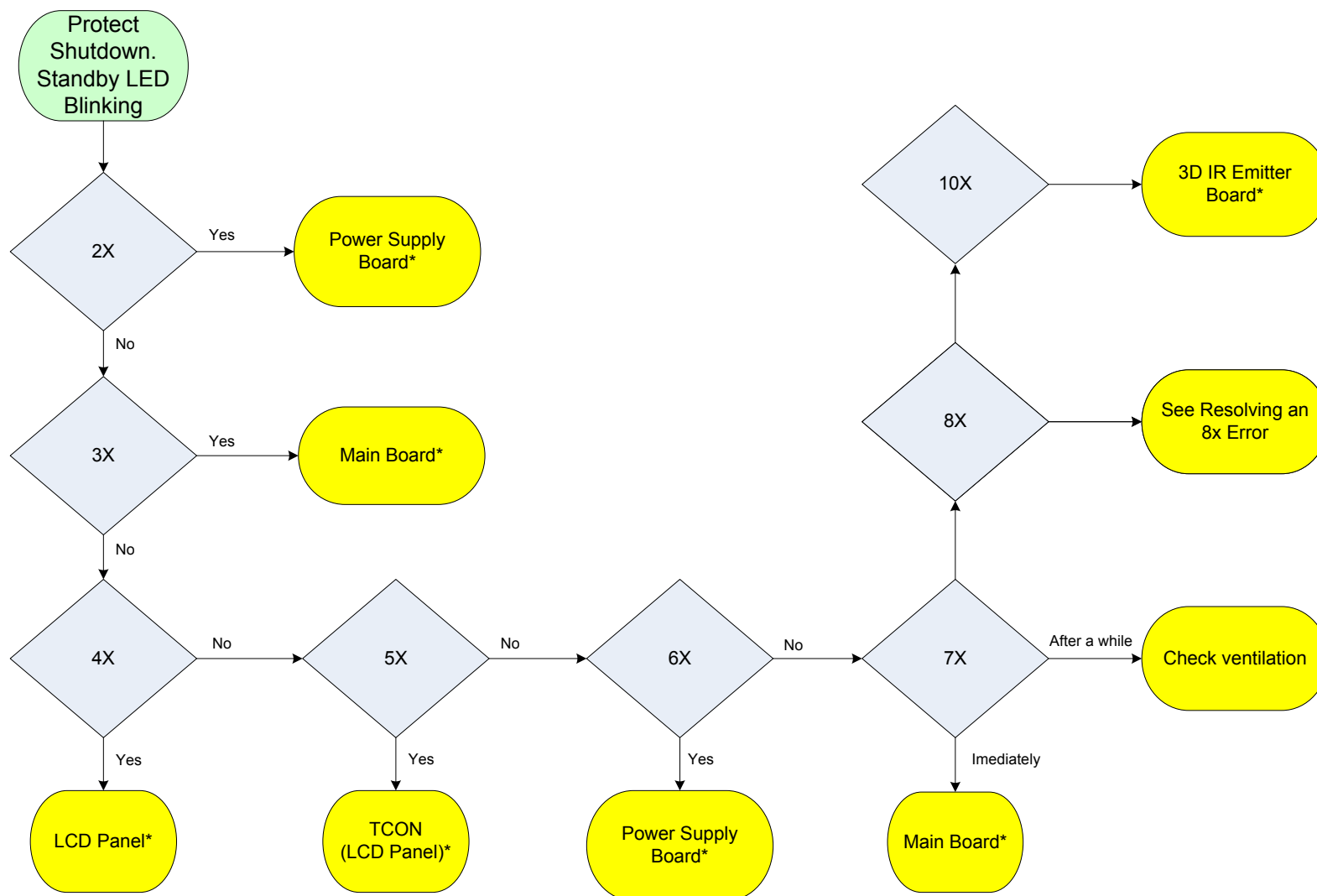


NO POWER FLOWCHART

*For Part Number information, refer to ["Section 4 - Disassembly/Part Number Information" on page 18](#).

SECTION 3 - FLOW CHARTS AND DIAGRAMS

STANDBY LED BLINKING

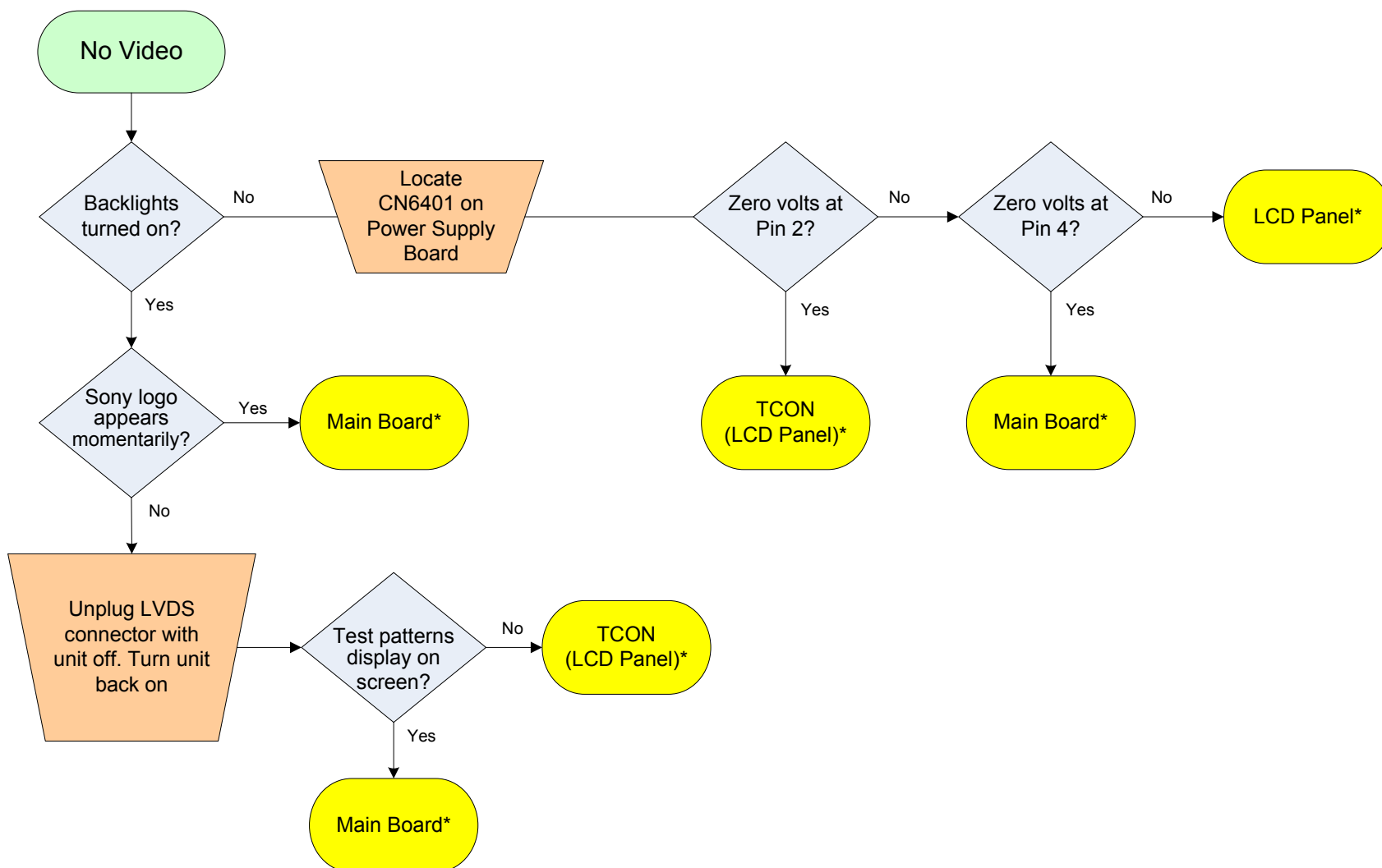


PROTECTION SHUTDOWN FLOWCHART

*For Part Number information, refer to ["Section 4 - Disassembly/Part Number Information" on page 18.](#)

SECTION 3 - FLOW CHARTS AND DIAGRAMS

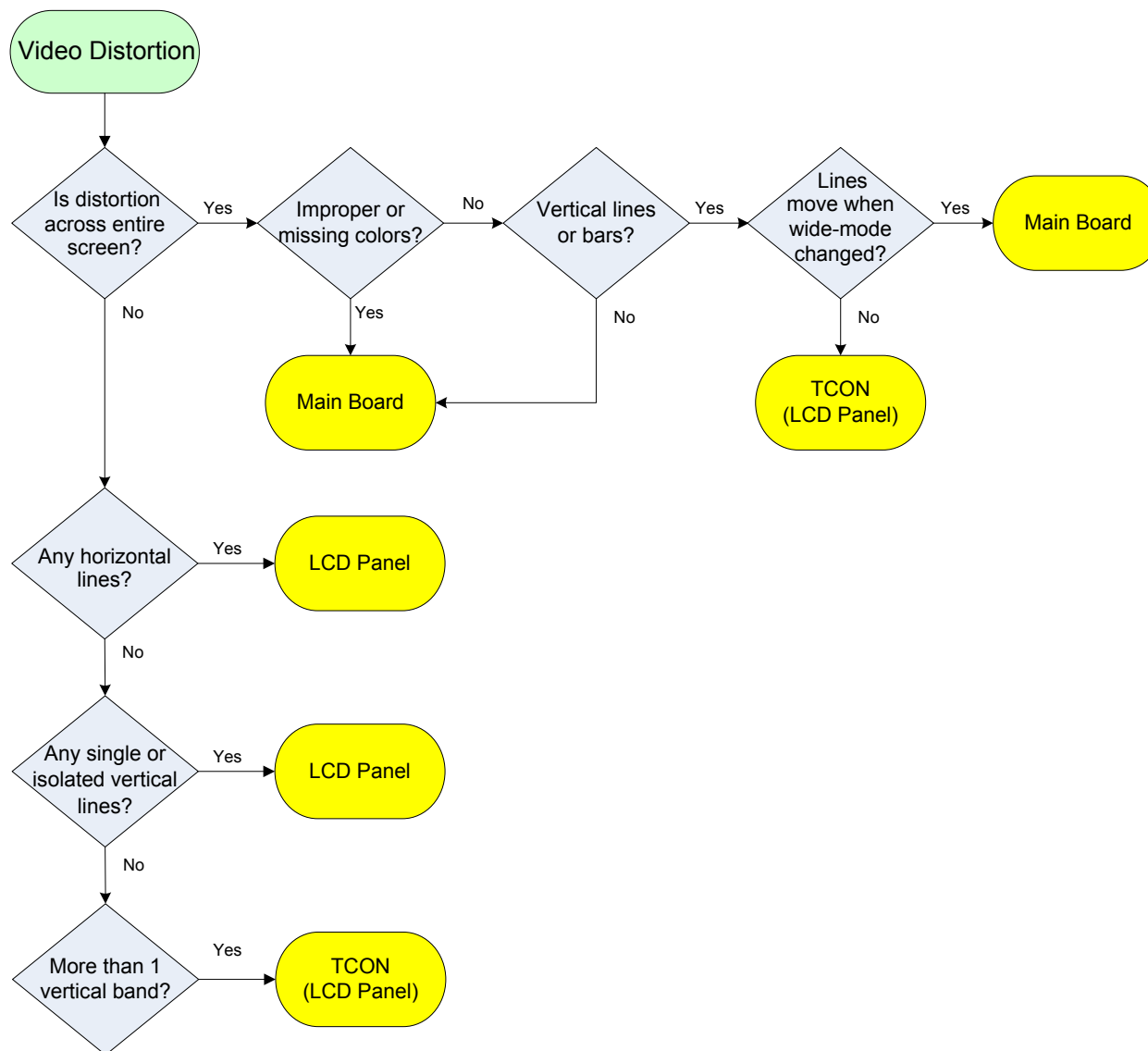
NO PICTURE



NO VIDEO FLOWCHART

*For Part Number information, refer to ["Section 4 - Disassembly/Part Number Information" on page 18.](#)

SECTION 3 - FLOW CHARTS AND DIAGRAMS

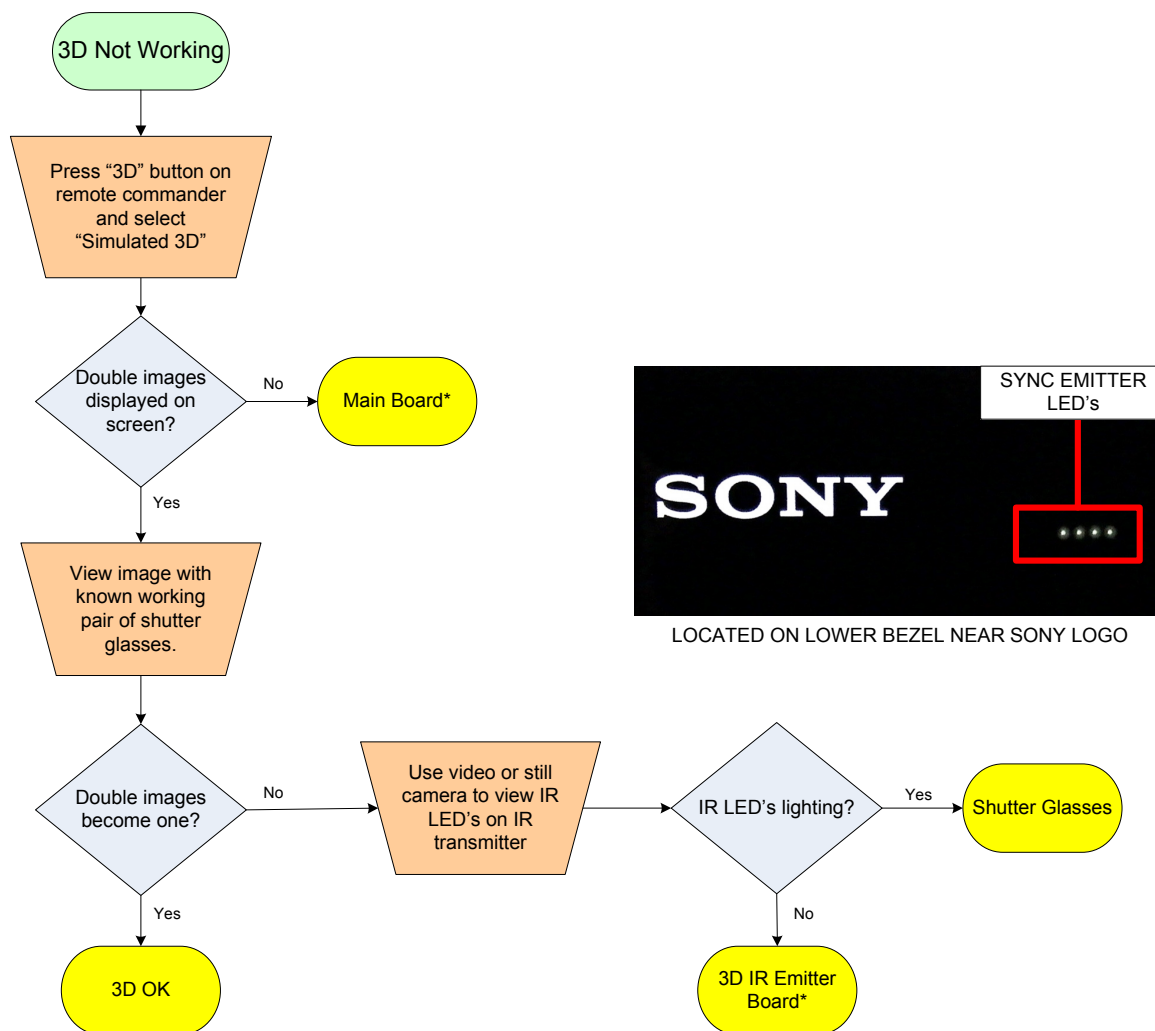


VIDEO DISTORTION

*For Part Number information, refer to ["Section 4 - Disassembly/Part Number Information" on page 18.](#)

SECTION 3 - FLOW CHARTS AND DIAGRAMS

NO 3D VIEWING



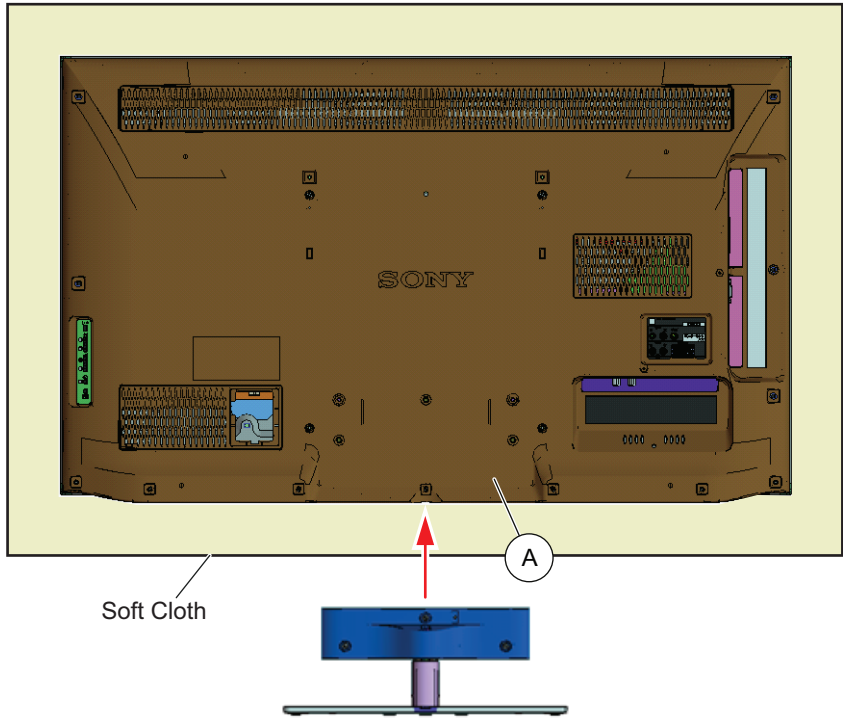
NO 3D FLOWCHART

*For Part Number information, refer to ["Section 4 - Disassembly/Part Number Information" on page 18.](#)

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

TABLE-TOP STAND REMOVAL

- Ⓐ Remove 3 screws from the Table-Top Stand, then lift up the TV and gently place it face down onto a soft cloth.



Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

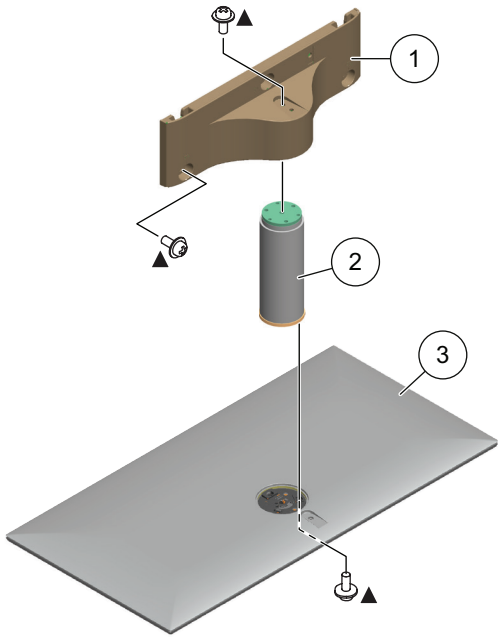
* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

(Check the Sony Authorized Servicer Portal at <http://www.sony.com/asp> website for any additional service related issues)

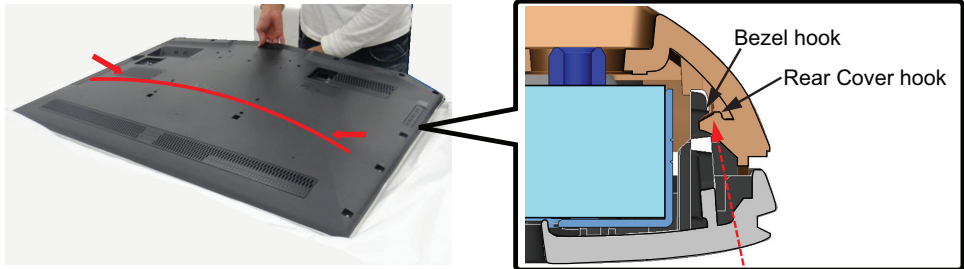


REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
1	4-415-187-01	HEAD PACKING (ML9)			4-421-427-01	SCREW, +PSW M5X16 LOCK (SCREWS TO ATTACH TABLE-TOP STAND TO LCD TV)	
2	4-298-271-01	NECK TP (M)				For product protection and safety reasons, Sony strongly recommends that you use the screws provided with the TV.	
3	4-415-121-01	STAND, BASE TPF (ML) (KDL-40HX750 ONLY)				CAUTION: These screws cannot be used to secure the TV to the Wall Mount Brackets.	
3	4-415-114-01	STAND, BASE TPF (L) (KDL-46HX750/46HX751 ONLY)					
3	4-415-112-01	STAND, BASE TPF (LL) (KDL-55HX750/55HX751 ONLY)					

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

REAR COVER REMOVAL

CAUTION:
Hold down the Rear Cover as shown in the steps below to avoid deforming or damaging the hooks in the Rear Cover and Bezel.
The portion of the Rear Cover near the Switch Unit is very fragile. When lifting this section, support the area to avoid breaking the cover.

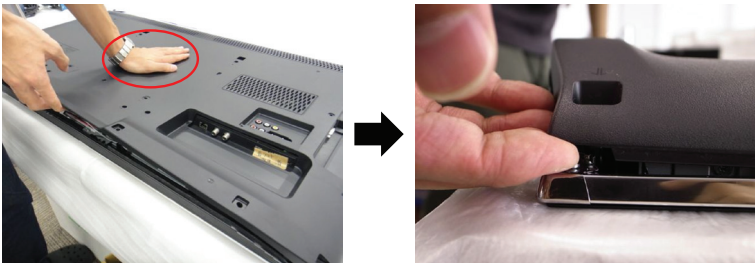


Trying to remove the Rear Cover as shown in this illustration will break the hooks securing it to the Bezel.

- Ⓐ To avoid damaging the AC Power Supply Cord, remove the screw from the AC Cover and disconnect the AC Power Cord.
- Ⓑ Remove the remaining screws from the Rear Cover.
19 from KDL-40HX750 Only
21 from KDL-46HX750/46HX751 Only
21 from KDL-55HX750/55HX751 Only



- Ⓒ Gently hold down the Rear Cover from the center, then carefully start to lift the Rear Cover from the bottom to create clearance between the Bezel and the Rear Cover.



- Ⓓ Gently hold down the Rear Cover as shown in the steps below, then grasp the inside bottom corner and carefully lift the Rear Cover to release the hooks.



- Ⓔ Lift the Rear Cover from the bottom and push forward to release the top hooks.

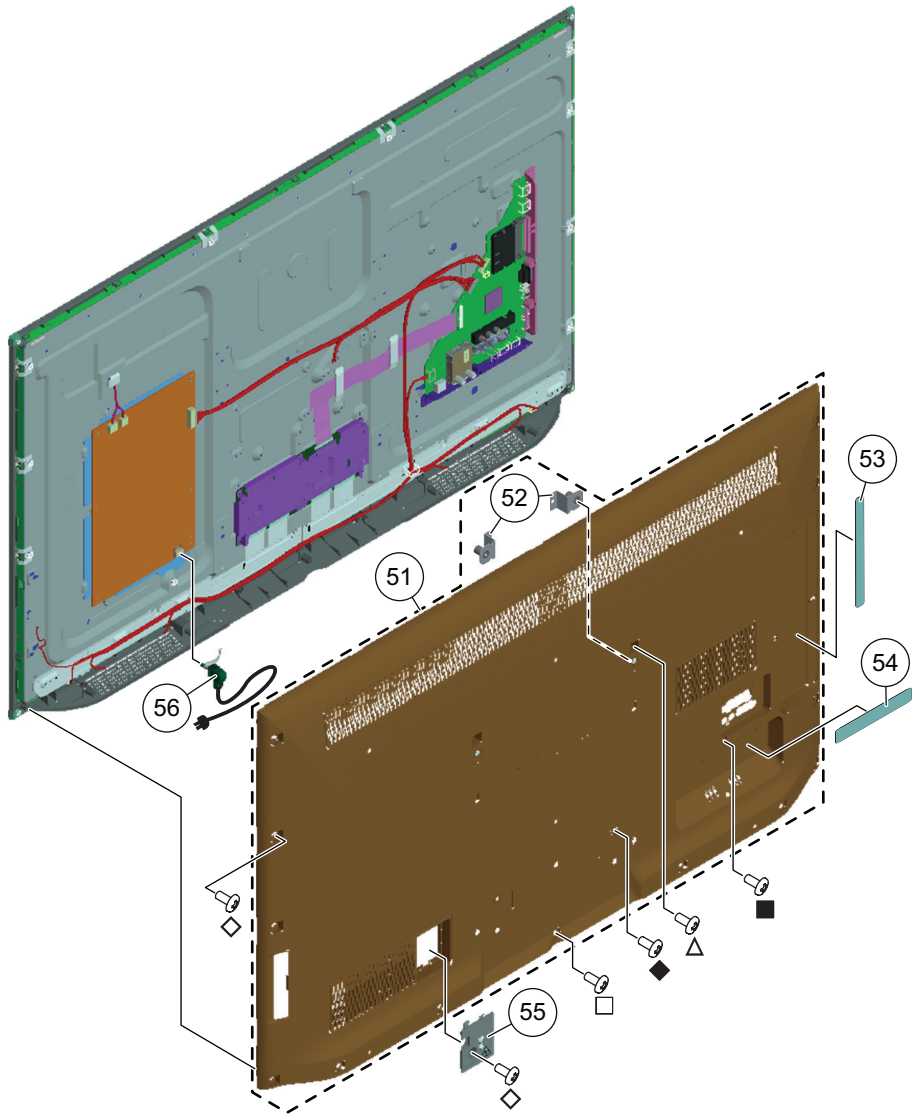


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

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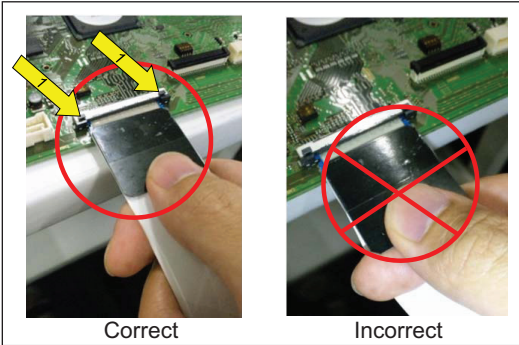
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
51	4-415-489-41	REAR COVER (40 ZEÜ) A (KDL-40HX750 ONLY)	[52]	55	4-299-528-01	AC COVER	
51	4-415-492-41	REAR COVER (46 ZEÜ) A (KDL-46HX750/46HX751 ONLY)	[52]		56	1-839-696-11	CORD, POWER (WITH CONNECTOR)
51	4-415-494-41	REAR COVER (55 ZEÜ) A (KDL-55HX750/55HX751 ONLY)	[52]		4-159-298-01	SCREW, +PSW M4X10	
52	4-299-526-01	BRACKET, VESA			7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
53	4-400-428-01	LABEL, SIDE TERMINAL			2-580-639-01	SCREW, +BVTP 4X12 TYPE2 IT-3	
54	4-400-433-01	LABEL, UNDER TERMINAL			4-400-043-01	JOINT, SCREW	
		ORDER THIS PART WHEN REPLACING THE REAR COVER				(SCREWS USED WHEN STAND IS ATTACHED - NOT USED WITH WALL MOUNTS)	
		ORDER THIS PART WHEN REPLACING THE REAR COVER			4-256-393-01	SCREW, +PSW M3X6 W12	

HANDLING THE LVDS FFC CONNECTOR

Several models use a LVDS FFC Connector from the Main Board to the TCON Board. Currently there are three different types of connectors that are used.

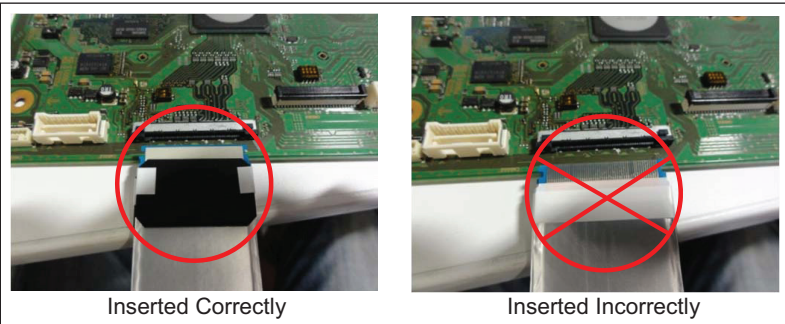
CAUTION:

Refer to the illustration below when disconnecting or connecting the LVDS FFC Connector. Regardless of the connector type, DO NOT remove the LVDS FFC Connector by the reinforcement tab only.



CAUTION:

The LVDS FFC Connector can be inserted into the Main Board upside down. If it is inserted upside down, the pins on the LVDS FFC Connector will short-circuit and damage the board.



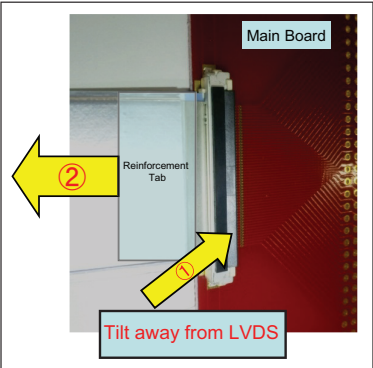
DISCONNECTING THE LVDS FFC CONNECTOR

CAUTION:

Regardless of the connector type, DO NOT remove the LVDS FFC Connector by the reinforcement tab only.

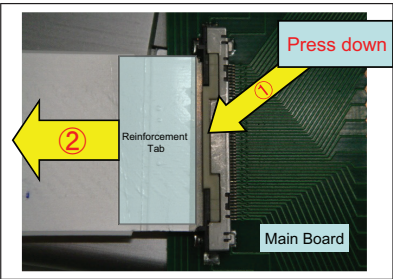
CONNECTOR TYPE 1

1. Slightly tilt the Main Board connector release away from the LVDS FFC Connector.
2. Gently wiggle the LVDS FFC Connector to detach it from the Main Board.



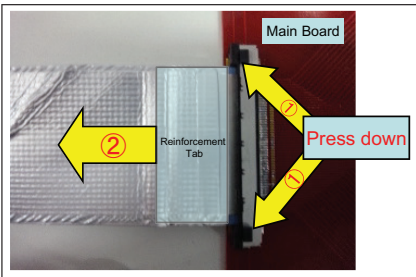
CONNECTOR TYPE 2

1. Gently press down on the release tab of the Main Board connector.
2. Correctly holding onto the LVDS FFC Connector, pull out the connector while continuing to hold down the release tab of the Main Board connector.



CONNECTOR TYPE 3

1. Gently press down on the 2 release tabs of the Main Board connector.
2. Correctly holding onto the LVDS FFC Connector, pull out the connector while continuing to hold down the release tabs of the Main Board connector.



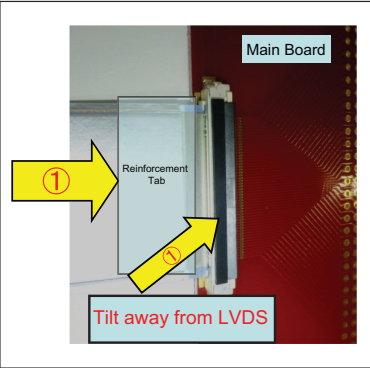
CONNECTING THE LVDS FFC CONNECTOR

CAUTION:

DO NOT insert the LVDS FFC Connector into the Main Board upside down.

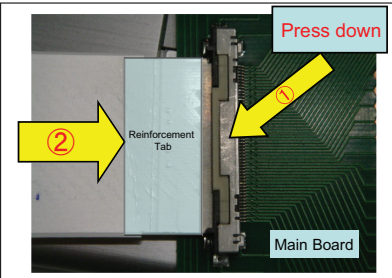
CONNECTOR TYPE 1

1. While holding onto the LVDS FFC Connector, gently tilt the Main Board connector release towards the Main Board then slide the LVDS FFC Connector straight in.



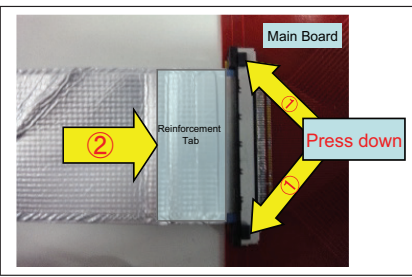
CONNECTOR TYPE 2

1. Gently press down on the release tab of the Main Board connector.
2. Holding onto the entire LVDS FFC Connector, insert the LVDS FFC Connector into the Main Board connector.



CONNECTOR TYPE 3

1. Gently press down on the 2 release tabs of the Main Board connector.
2. Holding onto the entire LVDS FFC Connector, insert the LVDS FFC Connector into the Main Board connector.

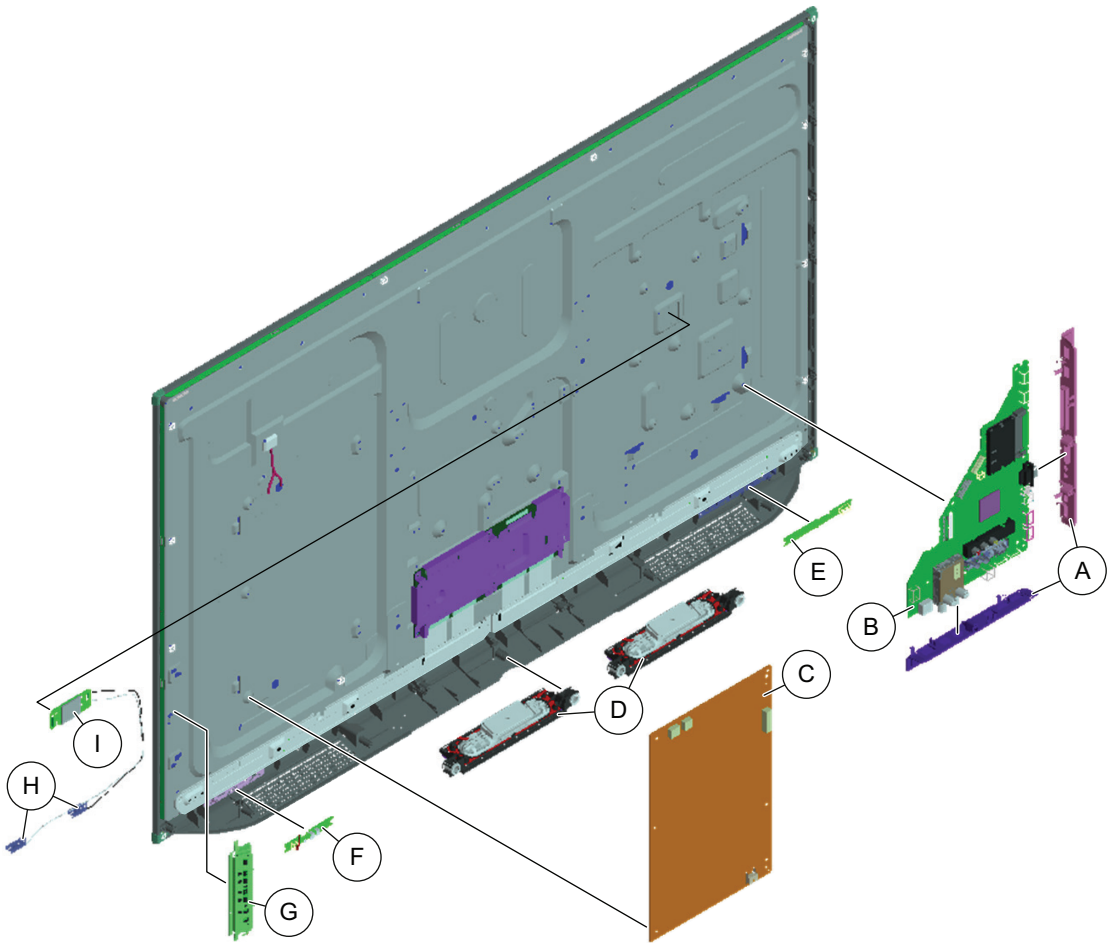


SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

CHASSIS ASSEMBLY REMOVAL

NOTE: Refer to "Handling the LVDS FFC Connector" on page 20 to disconnect the LVDS Connector.

- (A) Detach the Side Bracket and Bottom Bracket from the BAPS Board.
- (B) Remove screws and disconnect Connectors from the BAPS Board.
- (C) Remove screws and disconnect Connectors from GL6/GL7 Board.
- (D) Slide-out Left and Right Speakers, then disconnect Connectors.
- (E) Release clips and disconnect the Connector from HL Board.
- (F) Release clips and disconnect the Connector from HEM3 Board.
- (G) Lift up the Switch Unit and disconnect the Connector.
- (H) Remove screws from the Antennas.
- (I) Remove screws from the Wireless LAN Card.

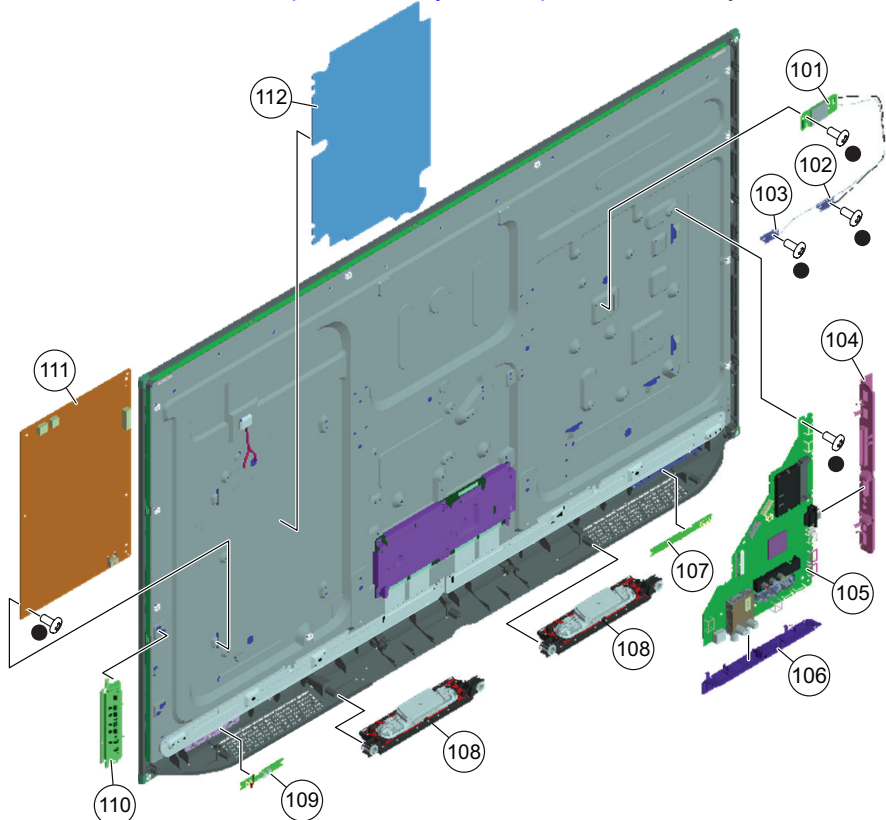


NOTE: The components identified by shading and mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

NOTE: The components identified by a red outline and a mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

(Check the Sony Authorized Servicer Portal at <http://www.sony.com/asp> website for any additional service related issues)

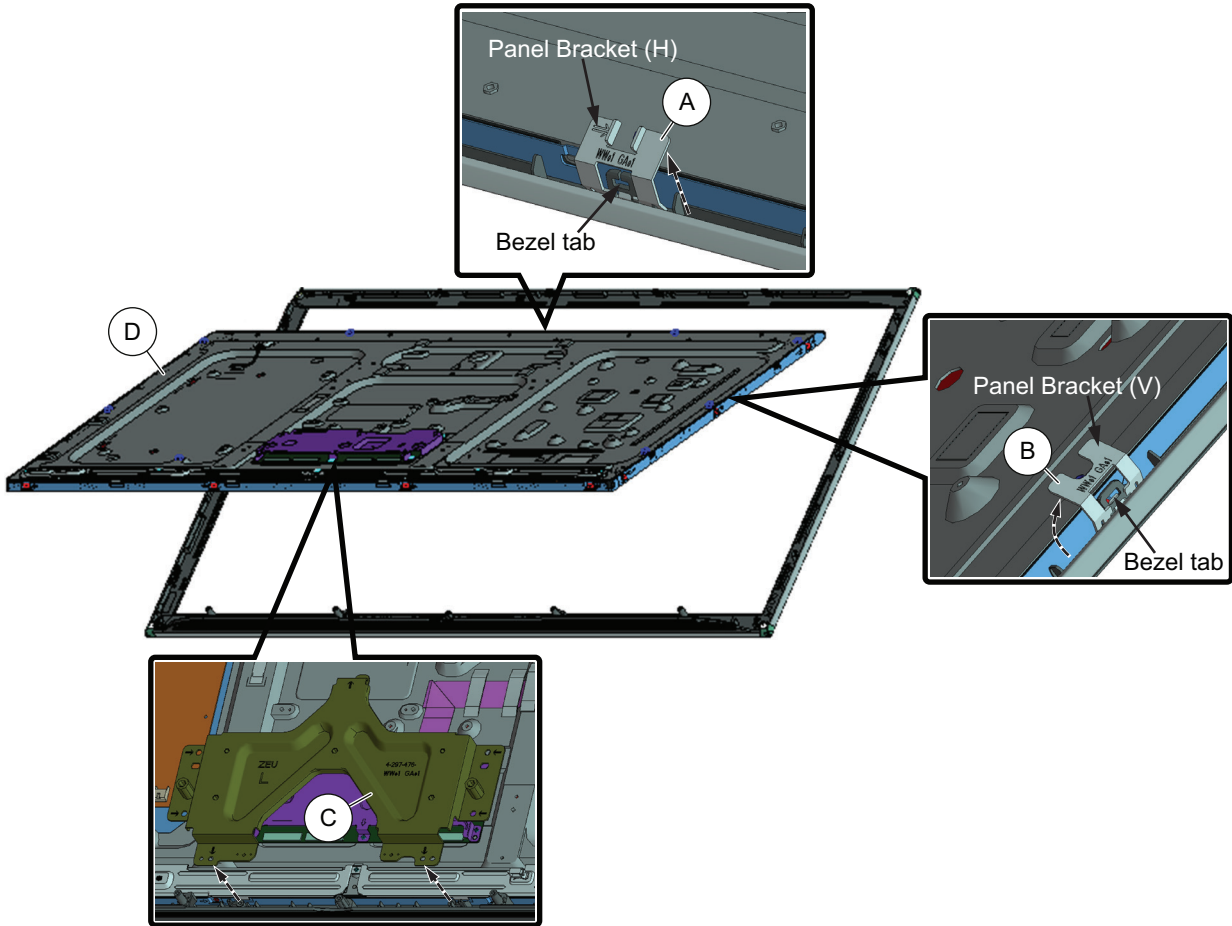


REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
101	1-458-353-33	WIRELESS LAN CARD		105	A-1875-754-A	BAPS BOARD, COMPLETE	
102	1-754-812-11	ANTENNA				(US/CND MODELS ONLY)	
		(KDL-40HX750 ONLY)				AFTER REPLACING THE MAIN BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION	
102	1-754-750-11	ANTENNA		106	4-299-499-01	BRACKET, UNDER (MOLD)	
		(KDL-46HX750/46HX751 ONLY)		107	A-1865-304-A	HL BOARD, MOUNTED	
102	1-754-751-11	ANTENNA		108	1-858-715-11	LOUDSPEAKER (3X15CM)	
		(KDL-55HX750/55HX751 ONLY)		109	A-1865-308-A	HEM3 BOARD, MOUNTED	
103	1-754-813-11	ANTENNA		110	1-489-983-11	SWITCH UNIT	
		(KDL-40HX750 ONLY)					
103	1-754-817-11	ANTENNA		111	1-474-377-21	GL6 BOARD, COMPLETE	
		(KDL-46HX750/46HX751 ONLY)				(KDL-40HX750/46HX750/46HX751 ONLY)	
103	1-754-820-11	ANTENNA		111	1-474-376-11	GL7 BOARD, COMPLETE	
		(KDL-55HX750/55HX751 ONLY)				(KDL-55HX750/55HX751 ONLY)	
104	4-299-495-01	BRACKET, SIDE (MOLD)		112	4-297-996-01	SHEET, INSULATION (GL6)	
						(KDL-40HX750/46HX750/46HX751 ONLY)	
105	A-1868-413-A	BAPS BOARD, COMPLETE				ORDER THIS PART WHEN REPLACING THE LCD PANEL	
		(LA/MX MODELS ONLY)		112	4-297-995-01	SHEET, INSULATION (GL7)	
		AFTER REPLACING THE MAIN BOARD, YOU MUST UPDATE THE SOFTWARE TO THE LATEST VERSION				(KDL-55HX750/55HX751 ONLY)	
						ORDER THIS PART WHEN REPLACING THE LCD PANEL	
				●	2-990-421-41	SCREW (+PSW) (M3X6)	

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

LCD PANEL ASSEMBLY REMOVAL

- (A) Remove screws, then press the Bezel tabs and lift up the Panel Brackets (H).
- (B) Press the Bezel tabs and tilt up the Panel Brackets (V).
- (C) Remove the screws and lift up the Bottom Frame.
- (D) Gently lift up the LCD Panel.



CLEANING THE LCD PANEL

CAUTION: When cleaning the TV, be sure to unplug the power cord to avoid any chance of electric shock.

Clean the cabinet of the TV with a dry soft cloth, and wipe the LCD screen gently with a soft cloth.

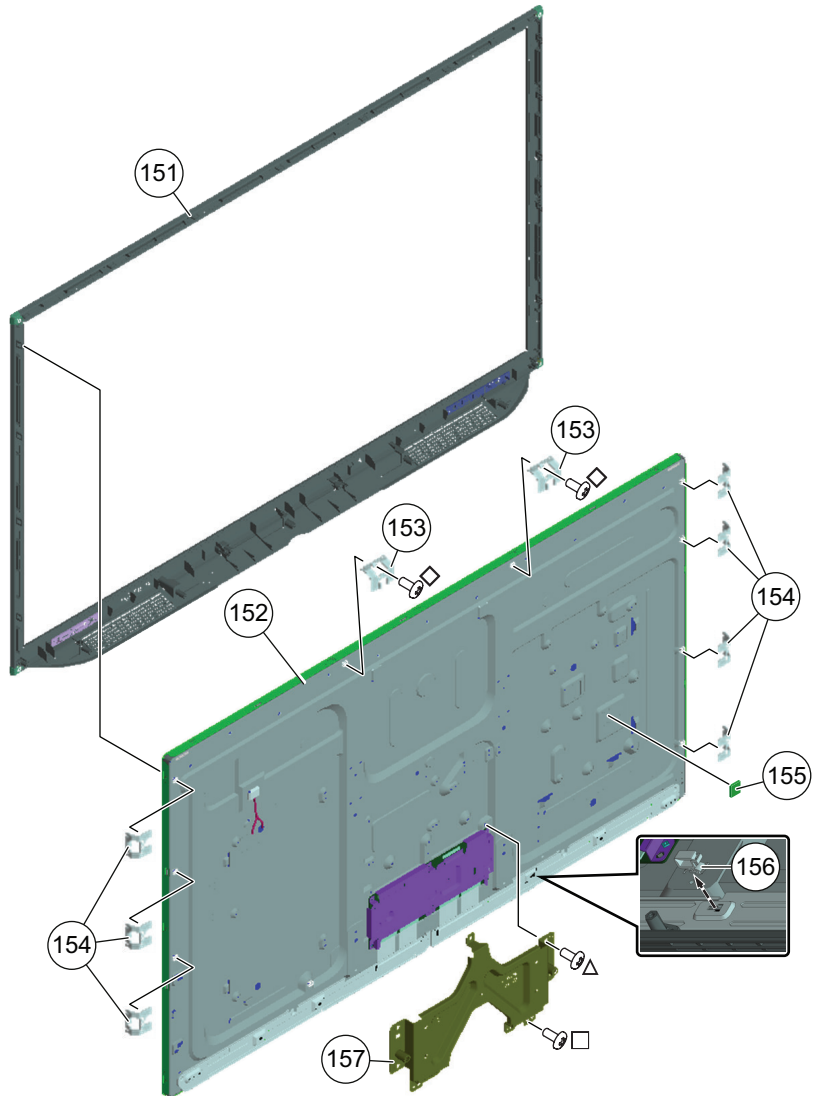
- Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.
- If using a chemically pretreated cloth, please follow the instruction provided on the package.
- Never use strong solvents such as a thinner, alcohol or benzine for cleaning.
- Periodic vacuuming of the ventilation openings is recommended to ensure proper ventilation.
- Do Not use paper towels, any type of abrasive pad, rags, rubber or vinyl materials to clean the screen. Using these materials could easily scratch the screen which may result in permanent damage.
- Do Not use any cleaning product containing alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, ammonia, benzine, thinner or insecticide. Using any of these harsh cleaners may result in permanent damage to the screen.
- Do Not spray water or detergent directly onto the TV screen. If liquid drips into the bottom of the screen it may cause a failure.

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

NOTE: The components identified by a red outline and a  mark contain confidential information. Specific instructions must be adhered to whenever these components are repaired and/or replaced. See Appendix A: Encryption Key Components in the back of this manual.

(Check the Sony Authorized Servicer Portal at <http://www.sony.com/asp> website for any additional service related issues)



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
151	4-414-803-01	BEZEL (40 ZE2) A (KDL-40HX750 ONLY)		153	4-299-512-01	BRACKET, PANEL (H)	
151	4-414-790-01	BEZEL (46 ZE2) A (KDL-46HX750 ONLY)		154	4-299-509-01	BRACKET, PANEL (V)	
151	4-414-790-11	BEZEL (46 ZE2) A (KDL-46HX751 ONLY)		155	4-300-810-01	SHEET, THERMAL (ATREYU)	
151	4-414-782-01	BEZEL (55 ZE2) A (KDL-55HX750 ONLY)		156	4-262-708-03	CLAMPER, CABLE	
151	4-414-782-11	BEZEL (55 ZE2) A (KDL-55HX751 ONLY)		157	4-299-522-01	FRAME, BOTTOM (L)	
152	NA	LCD PANEL		NOTE: THIS PART IS NOT INCLUDED WITH THE LCD PANEL			
		FOR ALL LCD PANEL AND TCON BOARD PART NUMBER INFORMATION REFER TO THE LCD PANELS SERVICE MANUAL			4-159-298-01	SCREW, +PSW M4X10	
					2-580-639-01	SCREW, +BVTP 4X12 TYPE2 IT-3	
					4-256-393-01	SCREW, +PSW M3X6 W12	

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

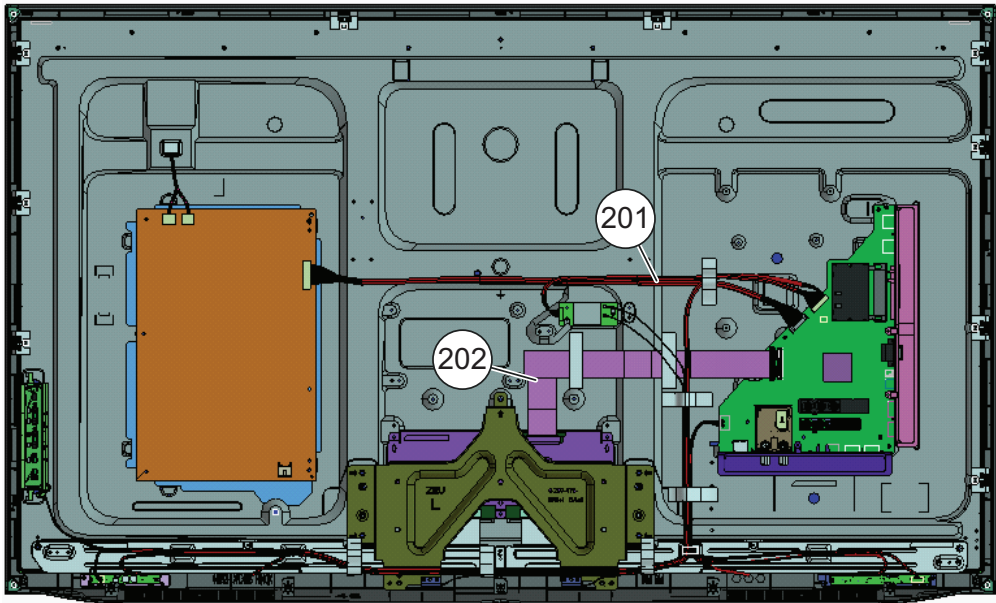
NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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CONNECTORS



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
201	1-910-105-48	3A 40 HARNESS ASSEMBLY (KDL-40HX750 ONLY)		202	1-910-105-84	(LVDS FFC) 3A 40 FLEXIBLE FLAT CABLE 51P (KDL-40HX750 ONLY)	
201	1-910-105-51	3A 46 HARNESS ASSEMBLY (KDL-46HX750/46HX751 ONLY)		202	1-910-105-85	(LVDS FFC) 3A 46 FLEXIBLE FLAT CABLE 51P (KDL-46HX750/46HX751 ONLY)	
201	1-910-105-54	3A 55 HARNESS ASSEMBLY (KDL-55HX750/55HX751 ONLY)		202	1-910-105-86	(LVDS FFC) 3A 55 FLEXIBLE FLAT CABLE 51P (KDL-55HX750/55HX751 ONLY)	

SCREWS

KDL-40HX750

	P/N	DESCRIPTION	REMARKS	TOTAL
▲	4-421-427-01	SCREW, +PSW M5X16 LOCK	TABLE-TOP STAND to TV(3), HEAD to NECK(1), BASE to NECK(3)	7
△	4-159-298-01	SCREW, +PSW M4X10	RC(2), BTM FRM to PNL(5)	7
■	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	SIDEJACK(1), UNDERJACK(1), TERMINAL(1), VESA to RC(2)	5
□	2-580-639-01	SCREW, +BVTP 4X12 TYPE2 IT-3	RC(7), BTM FRM to BZL(2)	9
◆	4-400-043-01	JOINT, SCREW	RC(2)	2
◇	4-256-393-01	SCREW, +PSW M3X6 W12	RC(5), AC(1), PNL BRKTS(2)	8
●	2-990-421-41	SCREW (+PSW) (M3X6)	BAPS(6), GL6(5), WIFI(2), WIFI ANT(2)	15

KDL-46HX750/46HX751

	P/N	DESCRIPTION	REMARKS	TOTAL
▲	4-421-427-01	SCREW, +PSW M5X16 LOCK	TABLE-TOP STAND to TV(3), HEAD to NECK(1), BASE to NECK(3)	7
△	4-159-298-01	SCREW, +PSW M4X10	RC(2), BTM FRM to PNL(5)	7
■	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	SIDEJACK(1), UNDERJACK(1), TERMINAL(1), VESA to RC(2)	5
□	2-580-639-01	SCREW, +BVTP 4X12 TYPE2 IT-3	RC(7), BTM FRM to BZL(2)	9
◆	4-400-043-01	JOINT, SCREW	RC(2)	2
◇	4-256-393-01	SCREW, +PSW M3X6 W12	RC(7), AC(1), PNL BRKTS(2)	10
●	2-990-421-41	SCREW (+PSW) (M3X6)	BAPS(6), GL6(5), WIFI(2), WIFI ANT(2)	15

KDL-55HX750/55HX751

	P/N	DESCRIPTION	REMARKS	TOTAL
▲	4-421-427-01	SCREW, +PSW M5X16 LOCK	TABLE-TOP STAND to TV(3), HEAD to NECK(1), BASE to NECK(3)	7
△	4-159-298-01	SCREW, +PSW M4X10	RC(2), BTM FRM to PNL(5)	7
■	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	SIDEJACK(1), UNDERJACK(1), TERMINAL(1), VESA to RC(2)	5
□	2-580-639-01	SCREW, +BVTP 4X12 TYPE2 IT-3	RC(7), BTM FRM to BZL(2)	9
◆	4-400-043-01	JOINT, SCREW	RC(2)	2
◇	4-256-393-01	SCREW, +PSW M3X6 W12	RC(7), AC(1), PNL BRKTS(2)	10
●	2-990-421-41	SCREW (+PSW) (M3X6)	BAPS(6), GL7(5), WIFI(2), WIFI ANT(2)	15

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

ACCESSORIES AND PACKAGING

PART NO.	DESCRIPTION
1-458-391-11	3D GLASSES (KDL-46HX751/ 55HX751 ONLY)
4-408-779-01	BAG, SCREW A (M) Contains the following screws:
4-421-427-01	SCREW, +PSW M5X16 LOCK (SCREWS TO ATTACH HEAD BRACKET AND STAND BASE TO NECK) (SCREWS TO ATTACH TABLE-TOP STAND TO LCD TV) <i>For product protection and safety reasons, Sony strongly recommends that you use the screws provided with the TV.</i> <i>CAUTION: These screws cannot be used to secure the TV to the Wall Mount Brackets.</i>
3-299-071-05	FLYER, SAFETY
4-416-693-31	MANUAL, INSTRUCTION (SPANISH VERSION) (KDL-40HX750 ONLY)
4-411-895-11	MANUAL, INSTRUCTION (ENGLISH VERSION) (ALL MODELS EXCEPT KDL-40HX750)
4-411-895-21	MANUAL, INSTRUCTION (FRENCH VERSION) (ALL MODELS EXCEPT KDL-40HX750)
4-411-895-31	MANUAL, INSTRUCTION (SPANISH VERSION) (ALL MODELS EXCEPT KDL-40HX750)
4-270-765-71	MANUAL (3D GLASSES) (KDL-46HX751/55HX751 ONLY)
4-415-215-12	SUPPLEMENT (STAND INSTALLATION)

MISCELLANEOUS

PART NO.	DESCRIPTION
4-262-708-03	CLAMPER, CABLE (KDL-40HX750 ONLY)
4-408-119-01	CUSHION (PWB G)
7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3
7-685-133-11	SCREW +P 2.6X6 TYPE2

PART NO.	DESCRIPTION
4-424-815-11	LABEL, MX ENERGY (3A) (KDL-40HX750 FOR LA/MX MODELS ONLY)
4-424-815-21	LABEL, MX ENERGY (3A) (KDL-46HX750/46HX751 FOR LA/MX MODELS ONLY)
4-424-815-31	LABEL, MX ENERGY (3A) (KDL-55HX750/55HX751 FOR LA/MX MODELS ONLY)
4-425-017-01	NOSE PAD (L) (KDL-46HX750 ONLY)
4-425-016-01	NOSE PAD (M) (KDL-46HX750 ONLY)
1-458-531-11	POLARIZER ADAPTER (KDL-46HX750 ONLY)
4-300-810-01	SHEET, THERMAL (ATREYU)
4-298-004-01	SPACER (B)
7-600-031-96	TAPE (3M 1350FW-1) 15MMX66M WHT

OPTIONAL ACCESSORIES

THE 3D GLASSES LISTED BELOW ARE AVAILABLE THROUGH THE SONY STORE WEBSITE. USE THE DESCRIPTION TO LOCATE THE PART AND PRICING INFORMATION

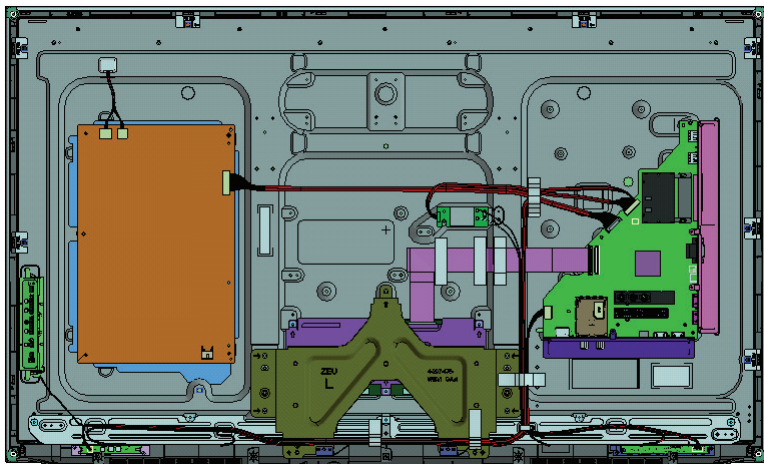
PART NO.	DESCRIPTION
1-458-391-11	3D GLASSES
4-414-470-01	SUPPORT BELT KIT

REMOTE COMMANDER

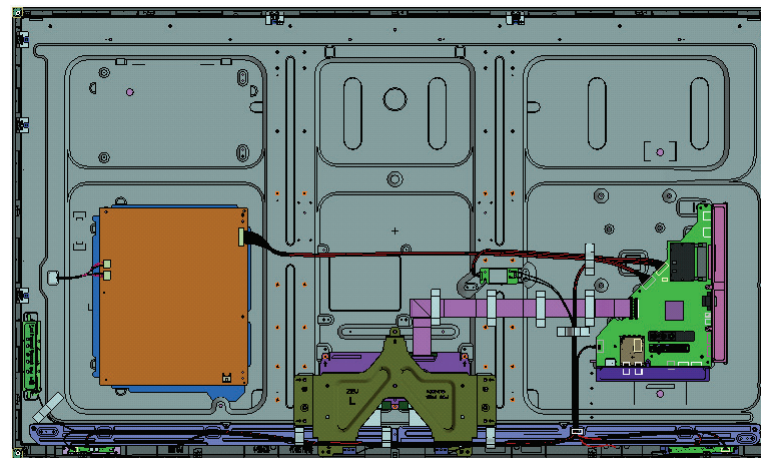
PART NO.	DESCRIPTION
1-489-998-11	REMOTE COMMANDER (RM-YD073) (FOR US/CND MODELS ONLY)
1-489-999-11	REMOTE COMMANDER (RM-YD076) (FOR LA/MX MODELS ONLY)

SECTION 4 - DISASSEMBLY/PART NUMBER INFORMATION

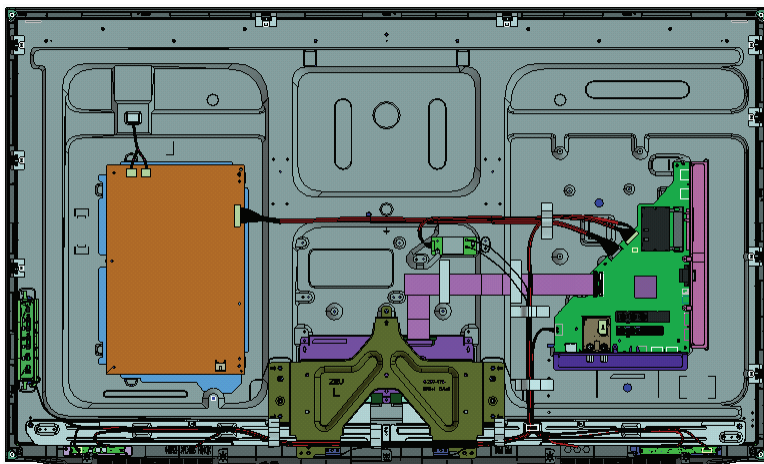
WIRE DRESSING



OVERALL WIRE DRESSING FOR KDL-40HX750 ONLY



OVERALL WIRE DRESSING FOR KDL-55HX750/55HX751 ONLY



OVERALL WIRE DRESSING FOR KDL-46HX750/46HX751 ONLY

SECTION 5 - UPDATES AND ADJUSTMENTS

OVERVIEW

The models in this manual utilize a “generic” type of Main Board, therefore a software update must be performed and certain service adjustment settings must be changed or confirmed whenever the Main Board, LCD Panel, or TCON Board is replaced.

There are 2 reasons for updating the software on the TVs:

- Software updates for customers
These updates are for enhancements or improvements that have been made to the software after the TV was released. These updates are accessed by the customer from the Sony Support Site at <http://esupport.sony.com>.
- Software update for servicers
These updates are specifically for servicers to use during a service call and are only available on the Sony Authorized Servicer Portal at <http://www.sony.com/asp>.

SOFTWARE UPDATES FOR CUSTOMERS

The subject of software updates is very important. The televisions of today have advanced to the point where they are not simply a television anymore. They are evolving into devices that are designed to integrate with numerous other devices found in the home. Some examples are: portable audio and video devices, still cameras, home computer networks and accessing the internet to name a few.

Communications with these varying devices requires that the television be compatible with varying communications protocols. Although standards are detailed for each of these protocols, the real world dictates that occasional errors may occur that could prevent devices from operating or communicating properly.

Keeping the software in the television up-to-date is a procedure that is normally handled by the owner of the television. Most customers who own computers and other digital devices are familiar with and are accustomed to updating the software in their products. If a customer contacts the Sony Customer Support Center and it is deemed to be correctable with a software update, the issue is handled at the customer level.

Software updates can be performed by:

- Customer Manual Downloads
Software updates can be accessed by the customer from the Sony Support Site at <http://esupport.sony.com> where they can be downloaded and placed on a USB thumb drive to be loaded onto the TV. The instructions for downloading the software file vary from chassis to chassis and sometimes from model to model. The customer is provided with the instructions to properly format the USB thumb drive, unzip the file, and the procedures for loading the software into the television.
- Network Downloads
Internet software updates are becoming more prevalent as more and more models incorporate home network capabilities. This method is the most practical since the television will check for the latest version of software. The models with this type of chassis provide the customer with a choice of turning the automatic software update feature on or off. If set to on, the television will lookup software information while the unit is in standby. If a newer version is available, it will be downloaded and installed without any input from the customer.
- Built-in Tuner
OTA or cable sources having the proper station that is transmitting software update data packets. Although the ability to transmit software update is possible in this way, it is the least common and is reserved for particular situations where a critical update is “forced”, thereby updating the TV without any input from the customer.

SECTION 5 - UPDATES AND ADJUSTMENTS

SOFTWARE UPDATES FOR SERVICERS

Replacement Main Boards are now stocked with basic software. Once the replacement board is installed in the TV, the most current software needs to be installed using a USB thumb drive containing the necessary software.

This new method of supplying Main Boards significantly reduces the complexity of replacing the Main Boards. Information about the LCD panel is stored on the TCON circuits. This information is automatically loaded onto the Main Board when the TV is powered up. With the correct software version the Main Board and/or the TCON can be replaced more efficiently. The software update and procedures for the software installation are located on the Sony Authorized Servicer Portal at <http://www.sony.com/asp>.

SOFTWARE UPDATE RESPONSIBILITY

Software updates are designed to be performed by the customer. Warranty repairs in which the issue can be resolved by a software update **are not reimbursable**. Most issues involving software updates are handled by the customer service center and should not be directed to an authorized service center. It is the responsibility of the servicer to prevent service calls for issues that involve software updates. Exceptions to this are certain cases whereby the customer is unable or unwilling to perform the task. In this situation, the servicer will be notified and receive the proper authorization for reimbursement.

It is the servicer's responsibility, however, to **make certain that any TV requiring a legitimate service is running the latest software version and to install it if necessary.**

CHECKING THE SOFTWARE VERSION

The easiest way to check the version of software that is currently on the TV is to access the Contact Sony screen by using the customer menu.

Contact Sony

Please contact Sony directly if you have questions on the use of your television

Website Support:	www.sony.com/tvsupport
United States Phone Contact:	1 (800) 222-SONY (7669)
Canada Phone Contact:	1 (877) 899-SONY (7669)
Other Countries Contact:	Consult the Warranty Card

Please have the following information available:

Service Code:	Unable to retrieve service code
Model Name:	KDL-46HX750
Serial Number:	50000092
Software Version:	PKG1.109AAA
Device ID:	B0:00:00:B1:92:D8

EXAMPLE OF SOFTWARE VERSION
LOCATED ON THE CONTACT SONY SCREEN

COMPLETING SERVICE REQUIREMENTS WHEN REPLACING THE MAIN BOARD

The following must be performed after replacing the Main Board to ensure that all of the features for the TV will be available.

- ☒ Update the Software
- ☒ Select the Destination
- ☒ Select the Model Name
- ☒ Add the Serial Number
- ☒ Confirm the Model ID and the Product ID
- ☒ Clear the Self Diagnosis Self Check Information

SECTION 5 - UPDATES AND ADJUSTMENTS

UPDATING THE SOFTWARE

After replacing the Main Board you **MUST UPDATE** the SOFTWARE to the latest version.

Whenever the Main Board is replaced, the software must be updated so that the new board syncs with the LCD Panel. If a message displays indicating the latest software is already installed, proceed to Resetting the LCD Panel to Update the Software.

There are 2 situations that can occur after replacing the Main Board.

1. After replacing the Main Board, turn the TV ON.

Case 1 - If there is no picture displayed and lights flash on the front panel, insert the USB device. The update will start automatically.

NOTE: This update may take up to 5 minutes to complete. Do not remove the USB device, turn off the TV, or unplug the power cord while the update is in progress.

Case 2 - If the picture displays, you will need to reset the LCD Panel ID to force update the software. Proceed to **Resetting the LCD Panel to Update the Software**.

2. After the update is complete, proceed to ["Selecting the Destination" on page 29](#).

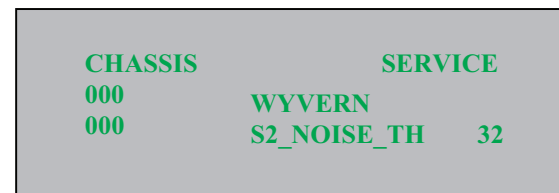
RESETTING THE LCD PANEL TO UPDATE THE SOFTWARE

NOTE: These steps are only required if the software did not update.

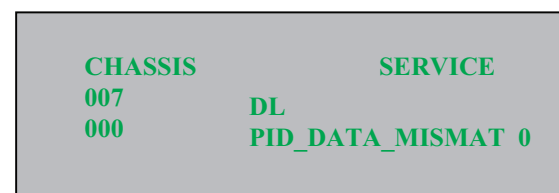
1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Access Service Mode by pressing the following buttons on the Remote Commander within a second of each other:
DISPLAY → Channel **5** → Volume **+** → **POWER**
4. The **DIGITAL Service Menu** displays.

NOTE: There are 3 Service Menus for this model, DIGITAL, CHASSIS and VPC.

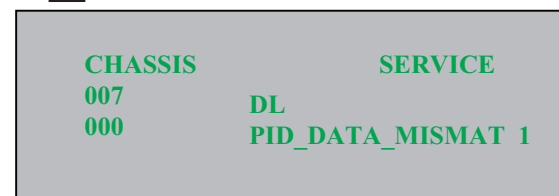
5. Press **JUMP** or **OPTIONS** on the Remote Commander until the **CHASSIS** menu displays.



6. Press **2** to move to the next category until the **007 DL** category displays.

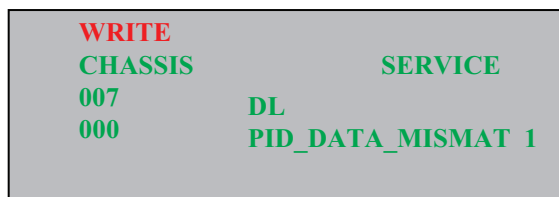


7. Press **3** to increase the data value to 1.



8. Press **MUTING** then press **0** to WRITE (Save) the changes.

When complete, the screen briefly indicates WRITE.



9. Exit **Service Mode** by turning the TV power off.
10. Return to **Upating the Software**.

SECTION 5 - UPDATES AND ADJUSTMENTS

SELECTING THE DESTINATION

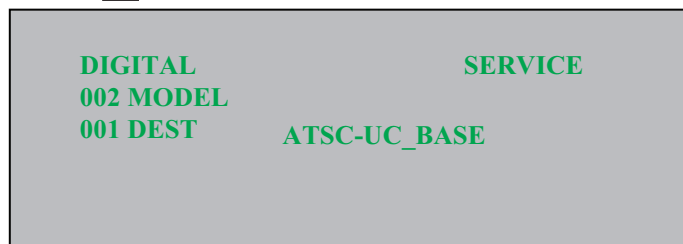
The correct destination needs to be selected after replacing the Main Board.

CAUTION: Selecting the incorrect destination may require replacing the Main Board.

Verify before proceeding to the next step:

☒ Updated the Software

1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Access **Service Mode** by pressing the following buttons on the Remote Commander within a second of each other:
DISPLAY → Channel **5** → Volume **+** → **POWER**
4. Press **2** to move to the next category until **002 MODEL** category displays.
5. Press **1** to move to the next item until **001 DEST** item displays.

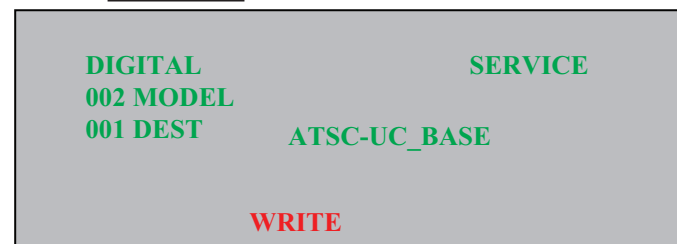


6. Using the table, press **3** to increase the data value or **6** to decrease the data value, to select the correct destination of the TV.

Model Name	Destination	Data Value
KDL-40HX750	LA/MX	ATSC-LTN_BASE
KDL-46HX750	US	ATSC-UC_BASE
KDL-46HX750	CND	ATSC-UC_BASE
KDL-46HX750	LA/MX	ATSC-LTN_BASE
KDL-46HX751	LA/MX	ATSC-LTN_BASE
KDL-46HX751	CND	ATSC-UC_BASE
KDL-46HX751	US	ATSC-UC_BASE
KDL-55HX750	US	ATSC-UC_BASE
KDL-55HX750	CND	ATSC-UC_BASE
KDL-55HX750	LA/MX	ATSC-LTN_BASE
KDL-55HX751	LA/MX	ATSC-LTN_BASE
KDL-55HX751	CND	ATSC-UC_BASE
KDL-55HX751	US	ATSC-UC_BASE

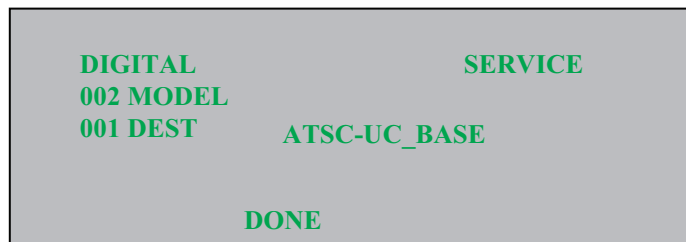
CAUTION: Verify the destination is set correctly before proceeding. If the incorrect Destination Data Value is selected, it may corrupt the software requiring a Main Board replacement.

7. Press **MUTING** then **0** to WRITE (Save) the changes.



SECTION 5 - UPDATES AND ADJUSTMENTS

When complete, the screen briefly indicates the process is DONE.



8. Proceed to **Software Update Responsibility**.

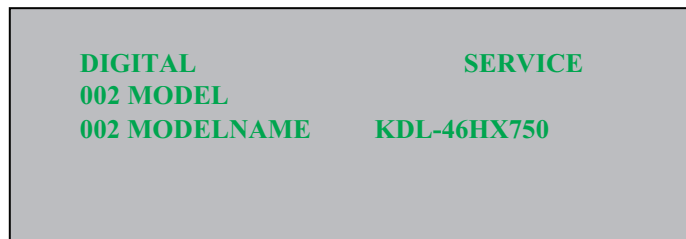
SELECTING THE MODEL NAME

The correct model name needs to be selected to ensure all of the TV features are available.

Verify before proceeding to the next step:

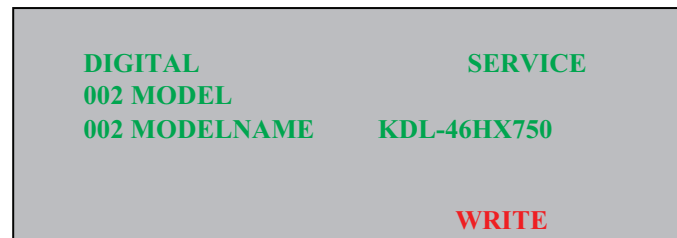
- ☒ Updated the Software
- ☒ Selected the Destination

9. Press **1** to move to the **002 MODELNAME** item.

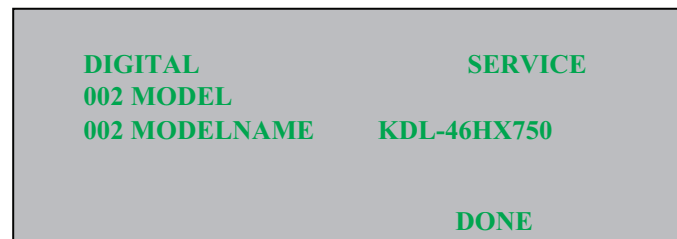


10. If the correct model does not display, press **3** until the model displayed matches the model of the TV.

11. Press **MUTING** then press **0** to WRITE (Save) the changes.



When complete, the screen briefly indicates the process is DONE.



12. Proceed to **Software Update Responsibility**.

SECTION 5 - UPDATES AND ADJUSTMENTS

ADDING THE SERIAL NUMBER

The replacement board does not contain a Serial Number. Use the following instructions to add the customer's Serial Number.

CAUTION: The Serial Number can only be selected once. Be sure to verify the information is correct before saving the changes.

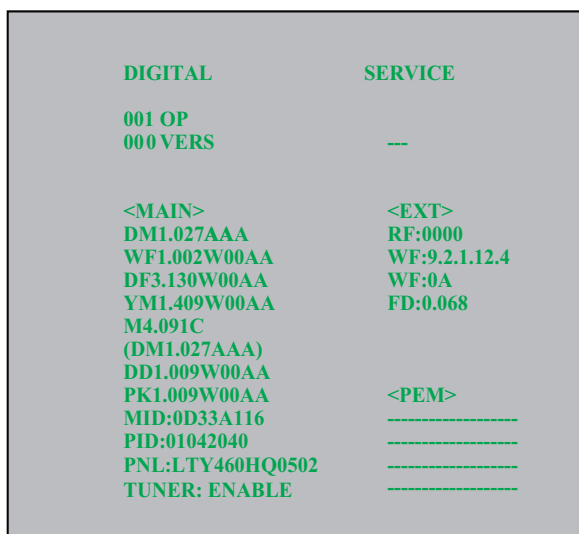
Verify before proceeding to the next step:

- ☒ Updated the Software
- ☒ Selected the Destination
- ☒ Selected the Model Name

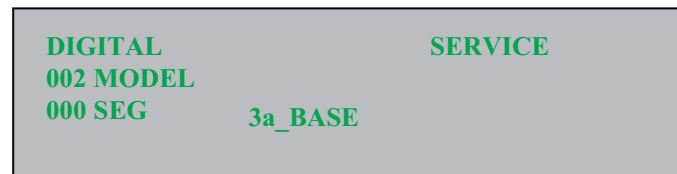
13. Locate the serial number for the TV on the side of the Rear Cover of the TV.



14. Press **JUMP** or **OPTIONS** on the Remote Commander until the **DIGITAL** menu displays.



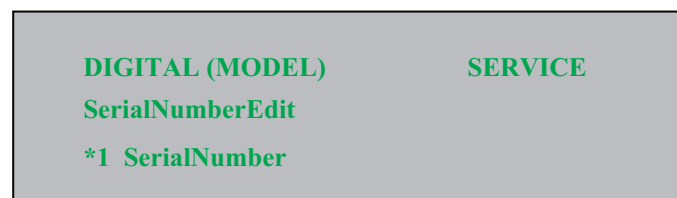
15. Press **2** to move to the **002 MODEL** category.



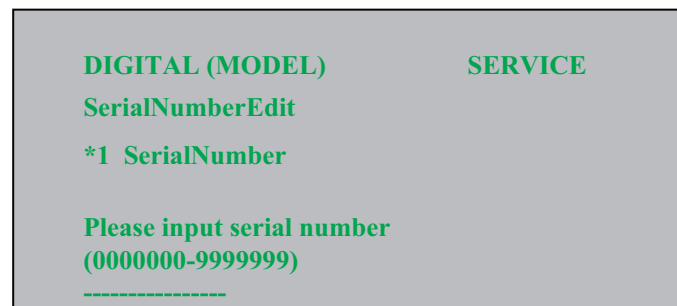
16. Press **1** until the **003 SERIAL** item displays.



17. Press **0** to display the **Serial Number Edit** option.



18. Press **+** to display the **Serial Number** input screen.



CAUTION: The Serial Number can only be selected once. Be sure to verify the information is correct before saving the changes.

SECTION 5 - UPDATES AND ADJUSTMENTS

19. Using the Remote Commander, enter the Serial Number of the TV.

NOTE: If the incorrect Serial Number is entered, press  to go back to the Serial Number input screen and re-enter the correct Serial Number.

20. After confirming the Serial Number, press  to WRITE (Save) the Serial Number to the replacement Main Board.

DIGITAL (MODEL)	SERVICE
SerialNumberEdit	
*1 SerialNumber	
Please input serial number (0000000-9999999)	
5000092	WRITE

When complete, the screen indicates the process is DONE, then the Serial Number displays.

DIGITAL (MODEL)	SERVICE
SerialNumberEdit	
*1 SerialNumber	
Please input serial number	
5000092	DONE

21. Proceed to **Confirming the Model ID and Product ID**.

CONFIRMING THE MODEL ID AND PRODUCT ID

After completing all of the service adjustment changes, verify that the correct Model ID and Product ID displays in the Service menu.

Verify before proceeding to the next step:

- ☒ Updated the Software
- ☒ Selected the Destination
- ☒ Selected the Model Name
- ☒ Added the Serial Number

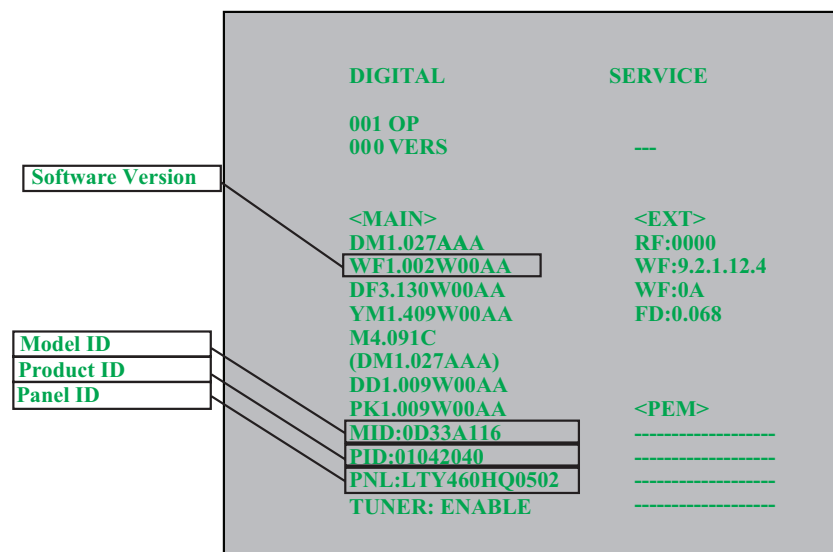
22. Press **4** to move to the **001 OP** category.

DIGITAL	SERVICE
001 OP	
000 VERS	---
<MAIN>	<EXT>
DM1.027AAA	RF:0000
WF1.002W00AA	WF:9.2.1.12.4
DF3.130W00AA	WF:0A
YM1.409W00AA	FD:0.068
M4.091C	
(DM1.027AAA)	
DD1.009W00AA	
PK1.009W00AA	<PEM>
MID:0D33A116	-----
PID:01042040	-----
PNL:LTY460HQ0502	-----
TUNER: ENABLE	-----

SECTION 5 - UPDATES AND ADJUSTMENTS

23. Using the information provided in the table, verify the Model ID and Product ID are correct.

Model Name	Destination	Panel Name	Model-ID	Product-ID
KDL-40HX750	LA/MX	LTY400HL0401	0C33A115	03042040
KDL-40HX750	LA/MX	LTY400HL0402	0C33A115	03042040
KDL-40HX750	LA/MX	LTY400HL0501	0C33A131	03042040
KDL-46HX750	US/CND	LTY460HQ0501	0D33A116	01042040
KDL-46HX750	US/CND	LTY460HQ0502	0D33A116	01042040
KDL-46HX750	US/CND	LTY460HQ0601	0D33A132	01042040
KDL-46HX750	LA/MX	LTY460HQ0501	0C33A116	03042040
KDL-46HX750	LA/MX	LTY460HQ0502	0C33A116	03042040
KDL-46HX750	LA/MX	LTY460HQ0601	0C33A132	03042040
KDL-46HX751	LA/MX	LTY460HQ0501	0C33A116	03042040
KDL-46HX751	LA/MX	LTY460HQ0502	0C33A116	03042040
KDL-46HX751	LA/MX	LTY460HQ0601	0C33A132	03042040
KDL-55HX750	US/CND	LTY550HQ0401	0D33A117	01042040
KDL-55HX750	US/CND	LTY550HQ0501	0D33A133	01042040
KDL-55HX750	LA/MX	LTY550HQ0401	0C33A117	03042040
KDL-55HX750	LA/MX	LTY550HQ0501	0C33A133	03042040
KDL-55HX751	LA/MX	LTY550HQ0401	0C33A117	03042040
KDL-55HX751	LA/MX	LTY550HQ0501	0C33A133	03042040
KDL-55HX751	US/CND	LTY550HQ0401	0D33A117	01042040
KDL-55HX751	US/CND	LTY550HQ0501	0D33A133	01042040



- Exit **Service Mode** by turning the TV power off.
- Cycle AC Power.
(Unplug and plug AC Cord from the AC Outlet).
- Wait a minute while lights flash, and Initial Setup screen shows.
- TV update is complete.

NOTE: The additional features of the TV, including 3D, are now available.

SECTION 5 - UPDATES AND ADJUSTMENTS

CLEARING THE SELF DIAGNOSIS HISTORY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the Self Check screen after you have completed the repairs to be sure you reset the result display to "0".

Verify before proceeding to the next step:

- ☒ Updated the Software
- ☒ Selected the Segment Code
- ☒ Selected the Destination
- ☒ Selected the Model Name
- ☒ Added the Serial Number

1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel **5** → Volume **-** → **POWER**

NOTE: This differs from accessing Service Adjustments Mode (Volume +).

SELF CHECK			
000 RESERVED	-----	-----	00
000 RESERVED	-----	-----	00
002 MAIN_POWE	-----	-----	00
003 DC_ALERT	-----	-----	00
003 AUD_PROT	-----	-----	00
003 HDMI_EQ	-----	-----	00
003 TU_DEMOD	-----	-----	00
004 VLED	-----	-----	00
004 LD_ERR	-----	-----	00
005 HFR_ERR	-----	-----	00
005 TCON_ERR	120123132522	120123113645	02
005 P_ID-ERR	-----	-----	00
006 BACKLITE	-----	-----	00
007 TEMP_ERR	-----	-----	00
007 FAN_ERR	-----	-----	00
010 EMITTER	-----	-----	00
101 VPC_WDT	-----	-----	00
102 MEPS_WDT	-----	-----	00
103 HOST_WDT	-----	-----	00
104 STBY_WDT	-----	-----	00
00345 000333 06789			

Error Count

4. To clear the error history and error count press **8** → **0**.

SECTION 5 - UPDATES AND ADJUSTMENTS

SELF CHECK			
000 RESERVED	-----	-----	00
000 RESERVED	-----	-----	00
002 MAIN_POWE	-----	-----	00
003 DC_ALERT	-----	-----	00
003 AUD_PROT	-----	-----	00
003 HDMI_EQ	-----	-----	00
003 TU_DEMOD	-----	-----	00
004 VLED	-----	-----	00
004 LD_ERR	-----	-----	00
005 HFR_ERR	-----	-----	00
005 TCON_ERR	-----	-----	00
005 P_ID-ERR	-----	-----	00
006 BACKLITE	-----	-----	00
007 TEMP_ERR	-----	-----	00
007 FAN_ERR	-----	-----	00
010 EMITTER	-----	-----	00
101 VPC_WDT	-----	-----	00
102 MEPS_WDT	-----	-----	00
103 HOST_WDT	-----	-----	00
104 STBY_WDT	-----	-----	00
00345 000333 06789			

5. Exit **Self Check** by turning the TV power off.
6. Cycle AC Power.
(Unplug and plug AC Cord from the AC Outlet).

RESOLVING AN 8 BLINK ERROR

It's possible that a customer may report an 8X blink error code even though an 8X blink error isn't an option in the Self Diagnosis Self Check list. An 8X blink error is mainly used during TV software development. To verify that there is an actual 8X error, view the TV's Self Diagnosis Self Check list history, specifically at the bottom of the list WDT (Watch Dog Timer) error codes.

The 8X error code could be the result of:

- Software Issue
- Network Issue
- Skype Login Issue
- Incompatible USB Device Plugged Inserted
- Defective Main Board

Every time 3 errors are registered in the Self Diagnosis Self Check screen the TV will shut down and activate an 8X blink pattern on the Standby LED. If an error count is indicated, usually as an 103 HOST_WDT error, follow these instructions to update the TV.

SELF CHECK			
000 RESERVED	-----	-----	00
000 RESERVED	-----	-----	00
002 MAIN_POWE	-----	-----	00
003 DC_ALERT	-----	-----	00
003 AUD_PROT	-----	-----	00
003 HDMI_EQ	-----	-----	00
003 TU_DEMOD	-----	-----	00
004 VLED	-----	-----	00
004 LD_ERR	-----	-----	00
005 HFR_ERR	-----	-----	00
005 TCON_ERR	-----	-----	00
005 P_ID-ERR	-----	-----	00
006 BACKLITE	-----	-----	00
007 TEMP_ERR	-----	-----	00
007 FAN_ERR	-----	-----	00
010 EMITTER	-----	-----	00
101 VPC_WDT	-----	-----	00
102 MEPS_WDT	-----	-----	00
103 HOST_WDT	1201231325	1201231136	02
104 STBY_WDT	-----	-----	00
00345 000333 00345			

SECTION 5 - UPDATES AND ADJUSTMENTS

VERIFYING THERE IS AN 8X ERROR

1. Disconnect all inputs to the TV.
2. Cycle AC Power (Unplug and plug AC Cord from the AC Outlet).
3. Do one of the following:
 - a. If the Standby LED blinks red 8 times, proceed to **Resetting the TV to Factory Condition**.
 - b. Clear the Self Check history by following the instructions provided in ["Clearing the Self Diagnosis History" on page 34](#).

RESETTING THE TV TO FACTORY CONDITION

Verify before proceeding to the next step:

- ☒ Verified the error is an 8X error
- 1. To reset the TV, follow the instructions for **Resetting the TV to Factory Condition**.
- 2. Do one of the following:
 - a. If the Standby LED blinks red 8 times, proceed to **Updating the Software**.
 - b. Clear the Self Check history by following the instructions provided in ["Clearing the Self Diagnosis History" on page 34](#).

UPDATING THE SOFTWARE

Verify before proceeding to the next step:

- ☒ Verified the error is an 8X error
- ☒ Reset the TV to Factory Condition
- 1. Check for latest Software Version through Network Connection or Reference Library.
- 2. Connect and Configure TV Network Connection.
- 3. Display the menu by pressing **HOME**.
- 4. Using     and  on the on the Remote Commander, select the following:

Settings ➡ Product Support ➡ Software Update.

NOTE: If TV is not connected to a network go to <http://www.sony.com/asp> and download the latest software for these models and Install using a USB Thumb Drive.

models and Install using a USB Thumb Drive..

5. Do one of the following:
 - a. If the Standby LED blinks red 8 times, proceed to ["Replacing the Main Board" on page 37](#).
 - b. Clear the Self Check history by following the instructions provided in ["Clearing the Self Diagnosis History" on page 34](#).

SECTION 5 - UPDATES AND ADJUSTMENTS

REPLACING THE MAIN BOARD

The Main Board should be replaced only if all other options have not resolved the issue.

Verify before proceeding to the next step:

- ☒ Verified the error is an 8X error.
- ☒ Reset the TV to Factory Condition
- ☒ Updated the Software

1. Follow all of the instructions in [“Completing Service Requirements When Replacing the Main Board” on page 27.](#)

COMPLETING SERVICE REQUIREMENTS WHEN REPLACING THE LCD PANEL

The following must be performed after replacing the LCD Panel to ensure that all of the features for the TV will be available.

- ☒ Update the Software
- ☒ Confirm Model ID and Product ID
- ☒ Reset the Panel Operation Time
- ☒ Clear the Self Check Diagnosis Self Check History

UPDATING THE SOFTWARE

After replacing the LCD Panel you **MUST UPDATE the SOFTWARE to the latest version.**

Whenever the LCD Panel is replaced, the software must be updated so that the new panel syncs with the Main Board. If a message displays indicating the latest software is already installed, proceed to Resetting the LCD Panel to Update the Software.

There are 2 situations that can occur after replacing the LCD Panel:

1. After replacing the LCD Panel, turn the TV ON.

Case 1 - If there is no picture displayed and lights flash on the front panel, insert the USB device. The update will start automatically.

NOTE: This update may take up to 5 minutes to complete. Do not remove the USB device, turn off the TV or unplug the power cord while the update is in progress.

Case 2 - If the picture displays, you will need to reset the LCD Panel ID to force software update. Proceed to [“Resetting the LCD Panel to Update the Software” on page 31.](#)

2. After the update is complete, proceed to **Confirming the Model ID and Product ID.**

SECTION 5 - UPDATES AND ADJUSTMENTS

CONFIRMING THE MODEL ID AND PRODUCT ID

After completing all of the service adjustment changes, verify that the correct Model ID and Product ID displays in the Service menu.

Verify before proceeding to the next step:

☒ Updated the Software

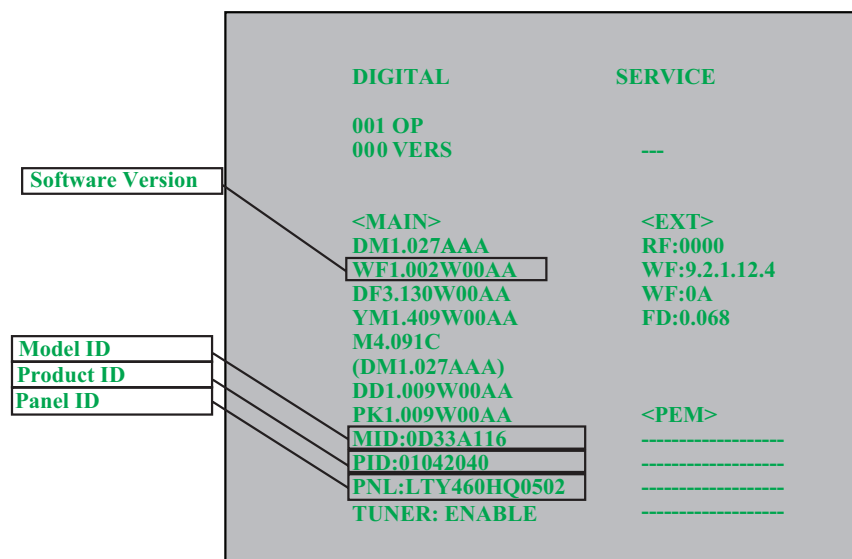
3. Press **JUMP** or **OPTIONS** on the Remote Commander until the **DIGITAL** menu displays.
4. If necessary, press **4** to move to the **001 OP** category.

DIGITAL	SERVICE
001 OP	
000 VERS	---
<MAIN>	<EXT>
DM1.027AAA	RF:0000
WF1.002W00AA	WF:9.2.1.12.4
DF3.130W00AA	WF:0A
YM1.409W00AA	FD:0.068
M4.091C	
(DM1.027AAA)	
DD1.009W00AA	
PK1.009W00AA	<PEM>
MID:0D33A116	-----
PID:01042040	-----
PNL:LTY460HQ0502	-----
TUNER: ENABLE	-----

5. Using the information provided in the table, verify the Model ID and Product ID are correct.

Model Name	Destination	Panel Name	Model-ID	Product-ID
KDL-40HX750	LA/MX	LTY400HL0401	0C33A115	03042040
KDL-40HX750	LA/MX	LTY400HL0402	0C33A115	03042040
KDL-40HX750	LA/MX	LTY400HL0501	0C33A131	03042040
KDL-46HX750	US/CND	LTY460HQ0501	0D33A116	01042040
KDL-46HX750	US/CND	LTY460HQ0502	0D33A116	01042040
KDL-46HX750	US/CND	LTY460HQ0601	0D33A132	01042040
KDL-46HX750	LA/MX	LTY460HQ0501	0C33A116	03042040
KDL-46HX750	LA/MX	LTY460HQ0502	0C33A116	03042040
KDL-46HX750	LA/MX	LTY460HQ0601	0C33A132	03042040
KDL-46HX751	LA/MX	LTY460HQ0501	0C33A116	03042040
KDL-46HX751	LA/MX	LTY460HQ0502	0C33A116	03042040
KDL-46HX751	LA/MX	LTY460HQ0601	0C33A132	03042040
KDL-55HX750	US/CND	LTY550HQ0401	0D33A117	01042040
KDL-55HX750	US/CND	LTY550HQ0501	0D33A133	01042040
KDL-55HX750	LA/MX	LTY550HQ0401	0C33A117	03042040
KDL-55HX750	LA/MX	LTY550HQ0501	0C33A133	03042040
KDL-55HX751	LA/MX	LTY550HQ0401	0C33A117	03042040
KDL-55HX751	LA/MX	LTY550HQ0501	0C33A133	03042040
KDL-55HX751	US/CND	LTY550HQ0401	0D33A117	01042040
KDL-55HX751	US/CND	LTY550HQ0501	0D33A133	01042040

SECTION 5 - UPDATES AND ADJUSTMENTS



6. Exit **Service Mode** by turning the TV power off.
7. Cycle AC Power.
(Unplug and plug AC Cord from the AC Outlet).
8. Wait a minute while lights flash, and Initial Setup screen shows.
9. Proceed to **Resetting the Panel Operation Time**.

RESETTING THE PANEL OPERATION TIME

After completing all steps, reset the panel operation time from the **Self Check** screen.

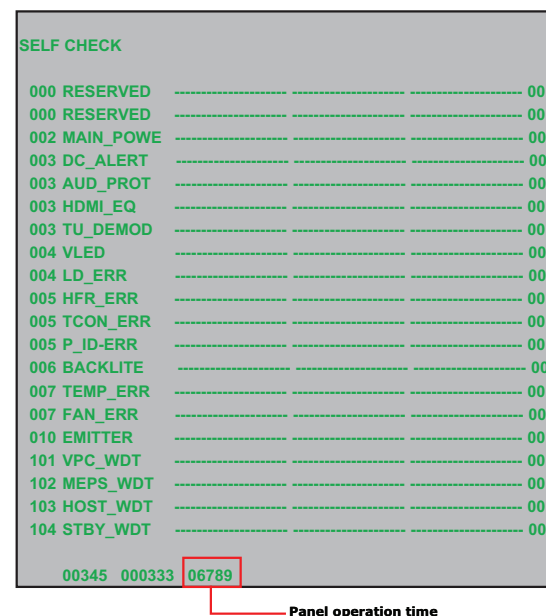
Verify before proceeding to the next step:

- ☒ Updated the Software
- ☒ Confirmed Model ID and Product ID

1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel **5** → Volume **-** → **POWER**

NOTE: This differs from accessing Service Adjustments Mode (Volume +).



SECTION 5 - UPDATES AND ADJUSTMENTS

4. To clear the LCD Panel operating hours after replacing the LCD Panel, press **7** → **0**.

SELF CHECK		
000 RESERVED	-----	00
000 RESERVED	-----	00
002 MAIN_POWE	-----	00
003 DC_ALERT	-----	00
003 AUD_PROT	-----	00
003 HDMI_EQ	-----	00
003 TU_DEMOD	-----	00
004 VLED	-----	00
004 LD_ERR	-----	00
005 HFR_ERR	-----	00
005 TCON_ERR	-----	00
005 P_ID-ERR	-----	00
006 BACKLITE	-----	00
007 TEMP_ERR	-----	00
007 FAN_ERR	-----	00
010 EMITTER	-----	00
101 VPC_WDT	-----	00
102 MEPS_WDT	-----	00
103 HOST_WDT	-----	00
104 STBY_WDT	-----	00
00345 000333	00000	

Panel operation time

5. Proceed to Clearing the **Self Check Diagnosis History**.

CLEARING THE SELF CHECK DIAGNOSIS HISTORY

After resetting the panel operation time, clear the **Self Check** screen.

6. To clear the error history and error count press **8** → **0**.

SELF CHECK		
000 RESERVED	-----	00
000 RESERVED	-----	00
002 MAIN_POWE	-----	00
003 DC_ALERT	-----	00
003 AUD_PROT	-----	00
003 HDMI_EQ	-----	00
003 TU_DEMOD	-----	00
004 VLED	-----	00
004 LD_ERR	-----	00
005 HFR_ERR	-----	00
005 TCON_ERR	-----	00
005 P_ID-ERR	-----	00
006 BACKLITE	-----	00
007 TEMP_ERR	-----	00
007 FAN_ERR	-----	00
010 EMITTER	-----	00
101 VPC_WDT	-----	00
102 MEPS_WDT	-----	00
103 HOST_WDT	-----	00
104 STBY_WDT	-----	00
00345 000333	06789	

7. Exit **Self Check** by turning the TV power off.
8. Cycle AC Power.
(Unplug and plug AC Cord from the AC Outlet).

SECTION 5 - UPDATES AND ADJUSTMENTS

OPTIONAL ADJUSTMENTS

All Sony TVs are set for optimal viewing performance. Refer to the following instructions if the customer requests additional adjustments.

ENABLING VCOM TO ADJUST THE PICTURE

The VCOM adjustment displays a Green screen while you adjust the picture.

1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel **5** → Volume **+** → **POWER**

DIGITAL	SERVICE
001 OP	
000 VERS	---
<MAIN>	<EXT>
DM1.027AAA	RF:0000
WF1.002W00AA	WF:9.2.1.12.4
DF3.130W00AA	WF:0A
YM1.409W00AA	FD:0.068
M4.091C	
(DM1.027AAA)	
DD1.009W00AA	
PK1.009W00AA	<PEM>
MID:0D33A116	-----
PID:01042040	-----
PNL:LTY460HQ0502	-----
TUNER: ENABLE	-----

4. Press **JUMP** or **OPTIONS** on the Remote Commander until the **VPC** menu displays.

5. Press **2** to move to the **002 VCOM** category.

VPC	SERVICE	
002	VCOM	
000	ENABLE	0

6. Enable the **VCOM** by pressing **3** to increase the data value to 1.
7. Press **1** to move to the **001 ADJUST** item.

VPC	SERVICE	
002	VCOM	
001	ADJUST	64

8. Change the value of the **001 ADJUST** item to adjust the picture by pressing **3** to increase the data value or **6** to decrease the data value.

NOTE: When changing the data value, the screen will turn green for approximately 3 seconds before returning to the service adjustment screen.

VPC	SERVICE	
001	VCOM	
001	ADJUST	69

9. When the picture is clear, press **MUTING** then **0** to WRITE (Save) the changes.

VPC	WRITE	
002	VCOM	
001	ADJUST	64

SECTION 5 - UPDATES AND ADJUSTMENTS

10. Do one of the following:
 - a. If adjustments are complete, exit **Service Mode** by turning the TV power off.
 - b. Proceed to **Setting White Balance Adjustments**.

SETTING WHITE BALANCE ADJUSTMENTS

White Balance adjustment data is located on the DIGITAL menu.

11. Press **2** to move to **006 WB** category.

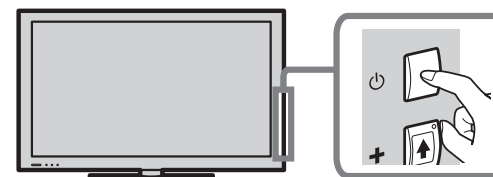


12. To change the data value of the **R_DRV**, press **3** to increase the value or **6** to decrease the value.
NOTE: The data value must be set between the range 1 to 255.
13. Press **1** to move to the next item (**001 G_DRV**).
14. To change the data value, press **3** to increase the value or **6** to decrease the value.
15. Repeat steps 6 and 7 for each of the following items:
 - 002 B_DRV**
 - 003 R_BKG**
 - 004 G_BKG**
 - 005 B_BKG**
16. To save the changes, press **MUTING** then press **0**.
17. Exit **Service Mode** by turning the TV power off.

RESETTING THE TV TO FACTORY CONDITION

Use the following instructions to restore the User Adjustments and Channel Memory settings to the preset Factory Conditions.

1. Turn the TV On by pressing **POWER**, then wait approximately 40 to 60 seconds.
2. While holding down **⇧** on the Remote Commander, press the **POWER** button on the side of the TV.

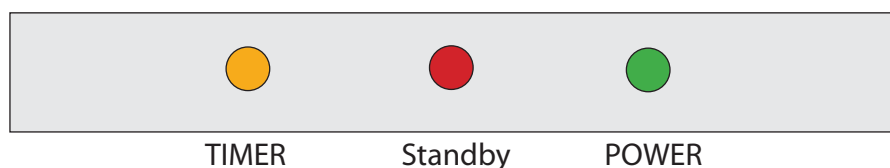


3. The set restarts and displays the Initial Setup screen. This may take several minutes.

SECTION 5 - UPDATES AND ADJUSTMENTS

RESETTING THE TV TO FACTORY CONDITION USING SERVICE MODE

1. Take the TV out of deep Standby mode by pressing **POWER** to turn on the TV.
2. Press **POWER** to turn the TV back off.
3. Press the following buttons on the Remote Commander within a second of each other:
DISPLAY → Channel **5** → Volume **+** → **POWER**
4. If necessary, press **JUMP** or **OPTIONS** to go to DIGITAL menu.
5. Press the following buttons on the Remote Commander within a second of each other:
8 → **MUTING** → **0**.
SERVICE changes to green RST.
RST executes the command and displays EXE.
EXE-RST displays green, then red indicating the TV is writing the data.
6. When the process is complete the green SERVICE text displays and the LED display as shown below:



7. Cycle AC Power
(Unplug and plug AC Cord from the AC Outlet).
The set restarts and displays the Initial Setup screen.
This may take several minutes.



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English
2012BJ74WEB-1
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9-888-462-05

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APPENDIX A: ENCRYPTION KEY COMPONENTS

Encryption key components developed by Sony Corporation contain confidential information, and shall be handled under the non-disclosure obligations provided in the applicable agreement with Sony Corporation (and/or its subsidiary).

As part of this agreement specific instructions must be adhered to whenever a Circuit Board containing encryption key components is repaired and/or replaced pursuant to the following:

1. In the service manual the Circuit Board(s) containing encryption key components shall be identified with a red outline and a .
2. Only repair boards or components listed in the service manual shall be utilized for replacement and/or repair.
3. Disassembly, decryption, or reverse-engineering component(s) is strictly prohibited.
4. Any board in which the Servicer replaces an encryption key component must be placed back into the set it originally came from and the replaced defective component MUST BE DESTROYED. Boards cannot be swapped.
5. If a Circuit Board identified with a red outline and a  in the service manual is deemed to be defective:
 - a. and if a core charge is imposed and is covered under the product warranty, the defective un-repaired or modified board MUST BE RETURNED to Sony.
 - b. and if the core charge is NOT covered under the product warranty, the defective un-repaired or modified board MUST BE DESTROYED.
6. If a unit is destroyed (such as field scrap), the Circuit Board identified with a red outline and a  in the service manual MUST BE DESTROYED.