

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

MANUAL DE SERVIÇO

AZ1-L Chassis

ORIGINAL MANUAL ISSUE DATE: 5/2010

Version	Date	Subject
1.1	4/2011	Alteração do código da Placa HSW

LCD Digital Color TV

SONY®

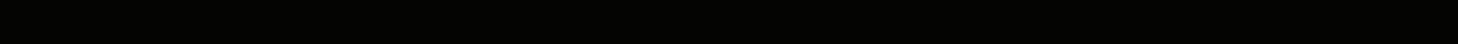
MANUAL DE SERVIÇO

AZ1-L Chassis

LCD Digital Color TV

SONY®

LISTA DE MODELOS



<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
KDL-32EX605	<i>RM-YD047</i>	<i>BRAZIL</i>
KDL-40EX605	<i>RM-YD047</i>	<i>BRAZIL</i>
KDL-46EX605	<i>RM-YD047</i>	<i>BRAZIL</i>

<i>MODEL</i>	<i>COMMANDER</i>	<i>DESTINATION</i>
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ESPECIFICAÇÕES

Especificações Técnicas

System	
Television system	Analog: NTSC 3.58 / PAL-M / PAL-N Digital: SBTVD
Channel coverage	VHF: 2-13, UHF: 14-69 CATV (Analog): 1-125
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 1/2/3	VIDEO / AUDIO
COMPONENT IN 1/2	YPBPR (Component Video) Signal format: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p
	AUDIO
HDMI IN 1/2/3/4	HDMI: Video: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p, 1080/24p Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital AUDIO (HDMI IN 4)
AUDIO OUT	500 mVrms (typical)
HEADPHONE	Stereo mini jack
DIGITAL AUDIO OUT (OPTICAL)	PCM/Dolby Digital optical signal
PC IN	D-sub 15-pin, analog RGB
PC/HDMI 4 AUDIO IN	Stereo mini jack
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.

* For LAN connections, use a Category 7 10BASE-T/100BASE-TX cable (not supplied).

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Este TV incorpora a tecnologia High-Definition Multimedia Interface (HDMI™). HDMI, o logotipo HDMI e High-Definition Multimedia Interface são marcas comerciais ou marcas registradas da HDMI Licensing, LLC.

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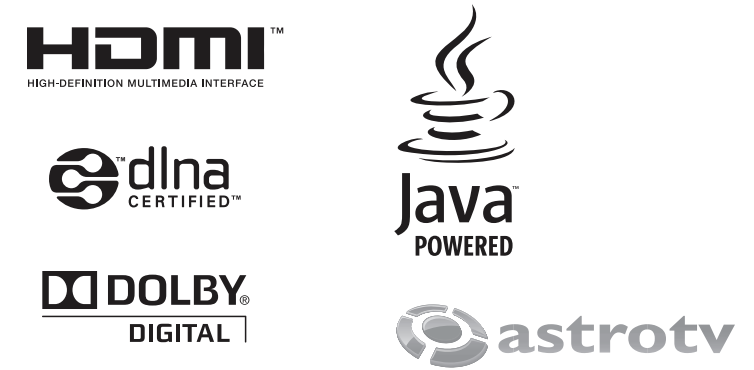
Astro TV is a software developed by TQTV Software Ltd., which implements the interactivity standard of the Brazilian Digital TV System “Ginga” NBR-15606

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Model name KDL-	32EX605	40EX605	46EX605
Power and others			
Power requirement	110-220 V AC, 60 Hz		
Power consumption	80 W	98 W	121 W
in use	15 W (You may hear a clicking noise during the download but this is normal.)		
in DAM* ¹			
in standby	Less than 0.2 W		Less than 0.23 W
Screen size (inches measured diagonally)	32 inches (32 class)	40 inches	46 inches
Display resolution	1,920 dots (horizontal) × 1,080 lines (vertical)		
Speaker (mm) Full range with speaker box (2)	34 × 160		
Dimensions with stand (mm)	764 × 507 × 250	952 × 613 × 250	1,085 × 688 × 260
without stand (mm)	764 × 475 × 73	952 × 581 × 74	1,085 × 656 × 74
wall-mount hole pattern (mm)	200 × 200	300 × 300	
wall-mount screw size (mm)	M6		
Mass with stand (kg)	11.1	14.9	18.4
without stand (kg)	9.1	12.7	16.1
Supplied accessories	See “Checking the accessories”		
Optional accessories	Connecting cables / Support Belt Kit/Wall-Mount Bracket		
Wall-Mount Bracket* ²	SU-WL500		

- *1 Download Acquisition Mode (DAM) is used for software updates.
- Optional accessories availability depends on its stock.
 - Design and specifications are subject to change without notice.

Checking the accessories

AC power cord (1)

Table-Top Stand (1)*¹

Stand Rear Cover (1)*²

Fixing screws for Table-Top Stand

(M5 × 16) (4)

Assembling Screws for Table-Top Stand

(M5 × 16) (4)

(for KDL-32/40EX605 models)

Remote control (1)*³

Size AAA batteries (2)

*1 The 32" and 40" models require assembling.
Refer to other leaflet to assemble the Table-Top Stand.

*2 The Stand Rear Cover is attached to the Table-Top Stand for 46" models.

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

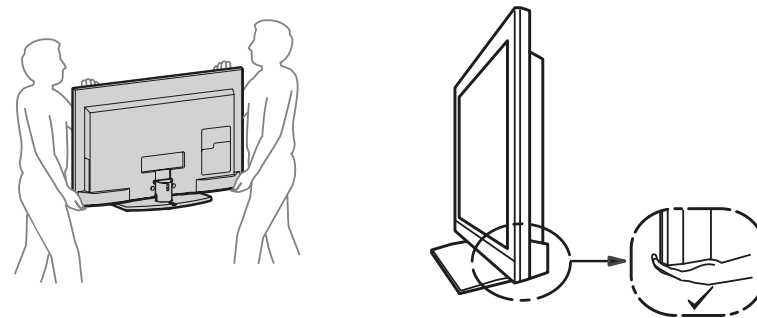
CUIDADOS E PRECAUÇÕES

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.

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.



WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the AC power line.

SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and  mark on the exploded views are critical for safe operation. Replace all components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. It is essential that all critical parts be replaced only with the part number specified in this manual to prevent electric shock, fire, or other hazard. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

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

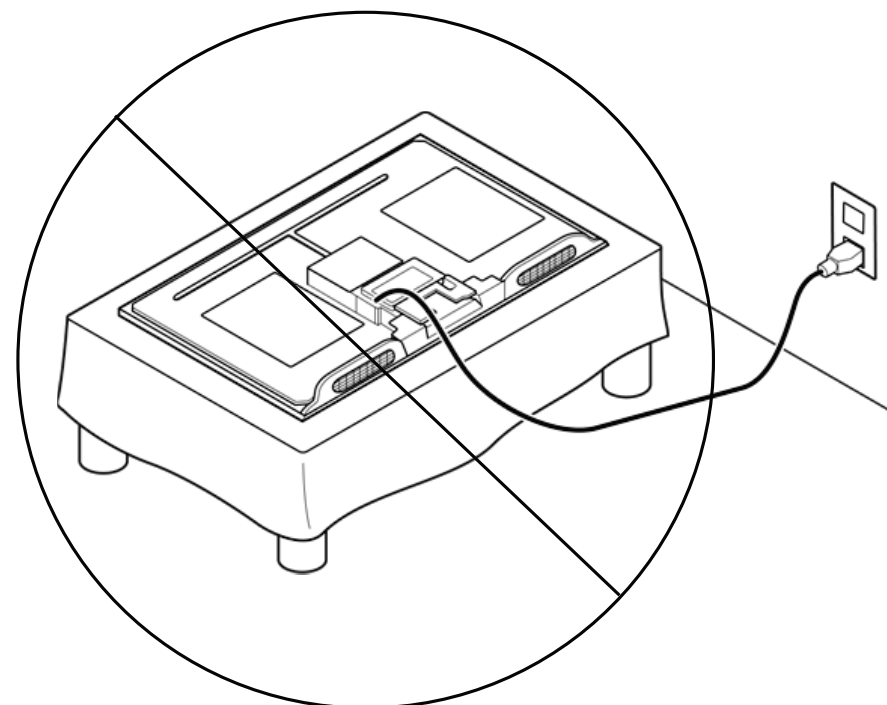
CUIDADO COM OS COMPONENTES DE SEGURANÇA

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.



INSPEÇÃO DE SEGURANÇA

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 below.

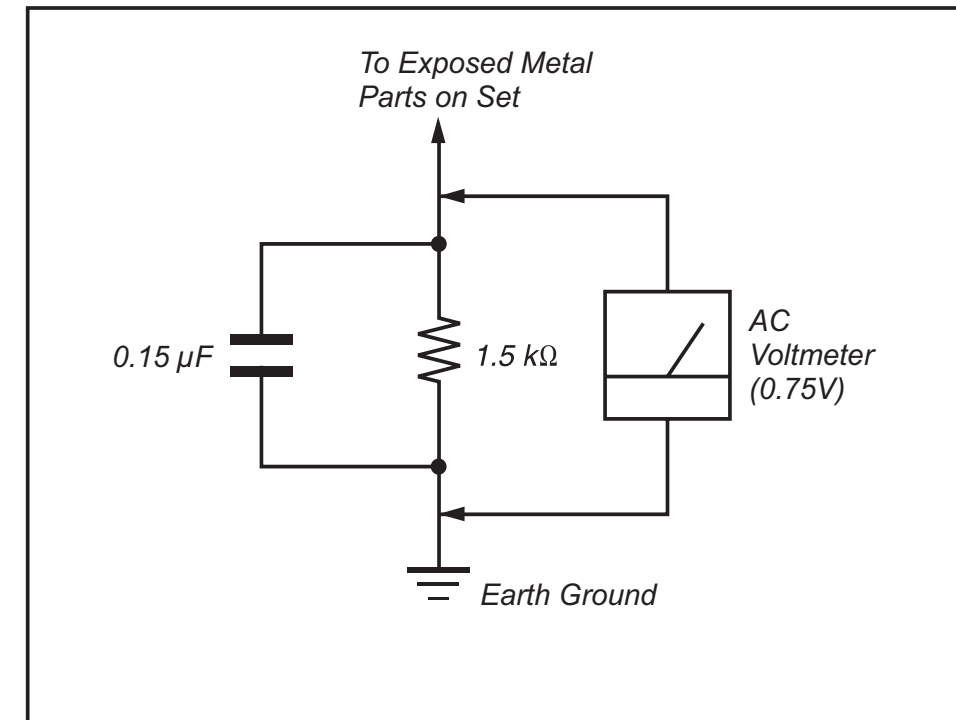


Figure A. Using an AC voltmeter to check AC leakage.

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, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
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.

The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground.

If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60-to 100-watt trouble-light (not a neon 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).

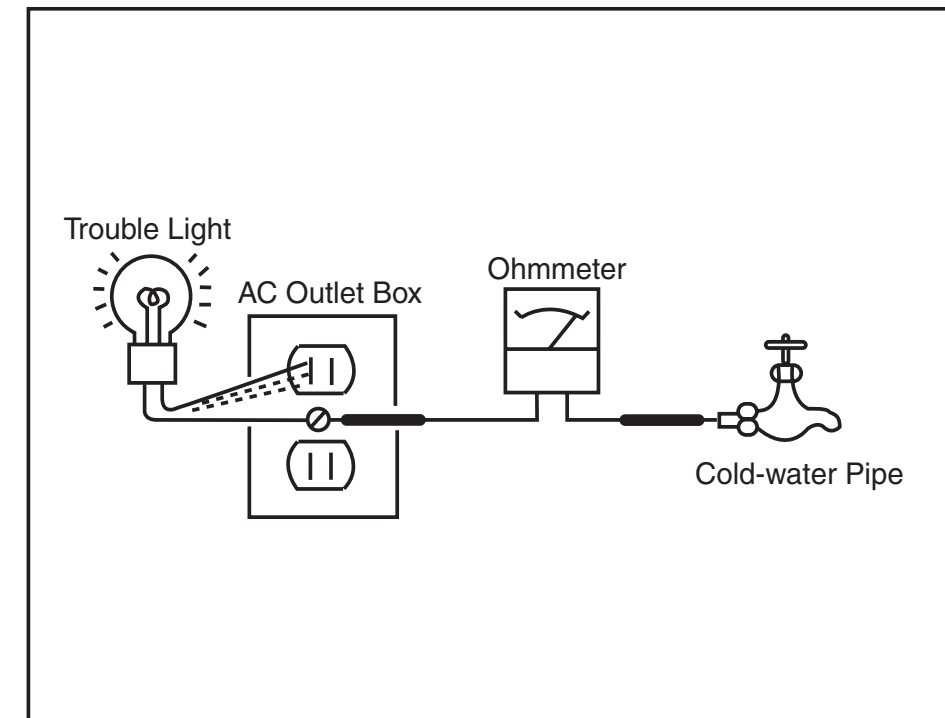


Figure B. Checking for earth ground.

FUNÇÃO DE AUTO-DIAGNÓSTICO



SELF DIAGNOSIS FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

DIAGNOSTIC TEST INDICATORS

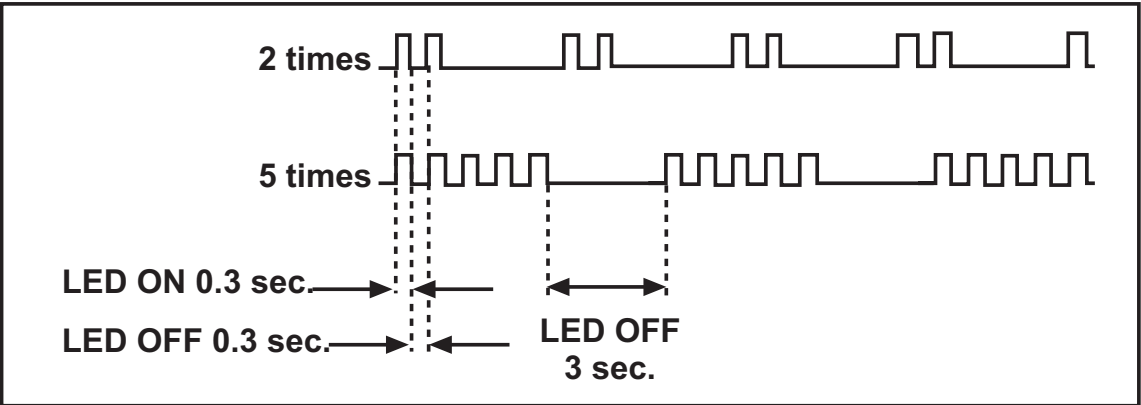
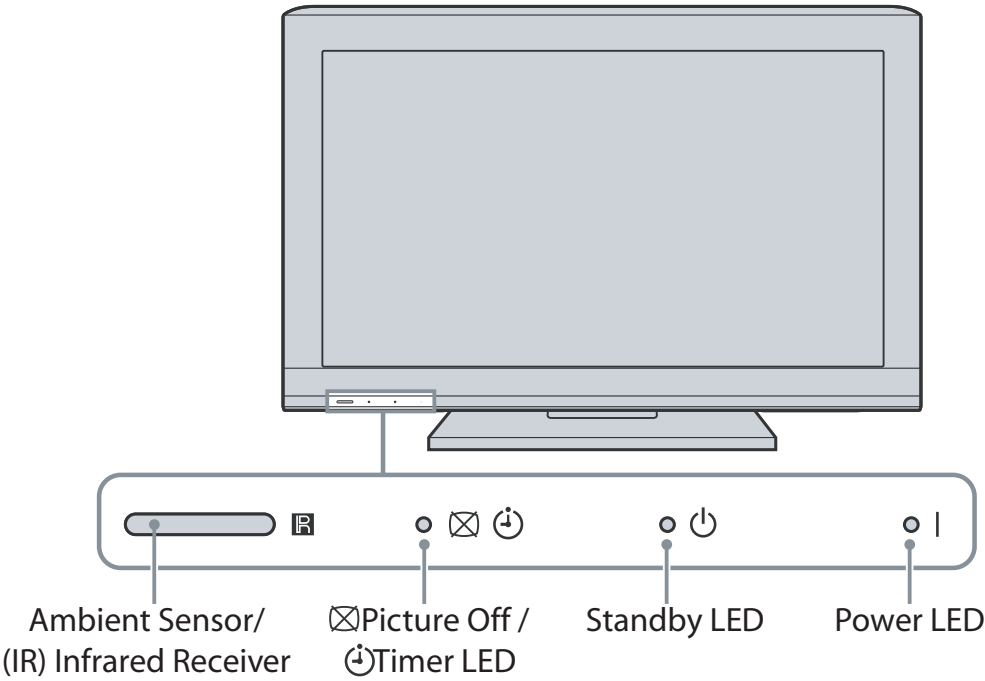
When an error occurs, the STANDBY LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.
Result for all of the following diagnostic items are displayed on screen.

If the screen displays a "0", no error has occurred .

Diagnostic Item	Diagnostic Item Description	Number of times Standby LED blinks	Possible Location
RGB_SEN	RGB Sensor ACK Error	NA	NA
MAIN_POWER	Main Power Error	2	GE3B (Power) Board (KDL-32EX605/40EX605 Only) GE2C (Power) Board (KDL-46EX605 Only) BAL (Main) Board
DC_ALERT DTT_WDT AUD_PROT	DC Alert DTT Error Audio Error Detection	3	BAL (Main) Board GE3B (Power) Board (KDL-32EX605/40EX605 Only) GE2C (Power) Board (KDL-46EX605 Only)
BALANCER	Panel Balancer Error	4	BAL (Main) Board
TCON_ERR HFR_ERROR P_ID_ERR	TCON Error HFR Error Panel ID NVM Error	5	LCD Panel TCON Contol MT Board BAL (Main) Board
BACKLITE	Backlight Error	6	BAL (Main) Board
TEMP_ERR	Temperature Error	7	BAL (Main) Board
FAN_ERR	Fan Error (Not used in these models)		NA

FUNÇÃO DE AUTO-DIAGNÓSTICO

STANDBY LED FLASH COUNT



FUNÇÃO DE AUTO-DIAGNÓSTICO

VIEWING THE SELF CHECK DIAGNOSTIC LIST

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of a failure for confirmation on the Self Check diagnostic screen:

- 1. TV must be in standby mode. (Power off).
- 2. 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					StandBy LED Flash Count
000 RGB_SEN				00	Diagnostic Item
002 MAIN_POWE	0501210811	0412311234	0311111825	00	Error history (Most recent time the failure occurred)
003 DC_ALERT1				00	Error history (Failure time before the last occurrence)
003 AUD_PROT				00	Error history (Failure time before the 2 nd to last occurrence)
003 DTT_WDT				00	Error Count (00-99)
004 BALANCER				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 RESERVED				00	
011 RESERVED				00	
12345-00333-06789					Panel operation time by hour (MAX:65535)
					Boot count (MAX:65535)
					Total operation time by hour (MAX:65535)

FUNÇÃO DE AUTO-DIAGNÓSTICO

CLEARING THE SELF CHECK DIAGNOSTIC LIST

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen after you have completed the repairs to be sure you have cleared the result display to “0”.

1. Error history and Error count :Press the Channel **8** ➡ Channel **0** .
2. Panel operation time :Press the Channel **7** ➡ Channel **0** .

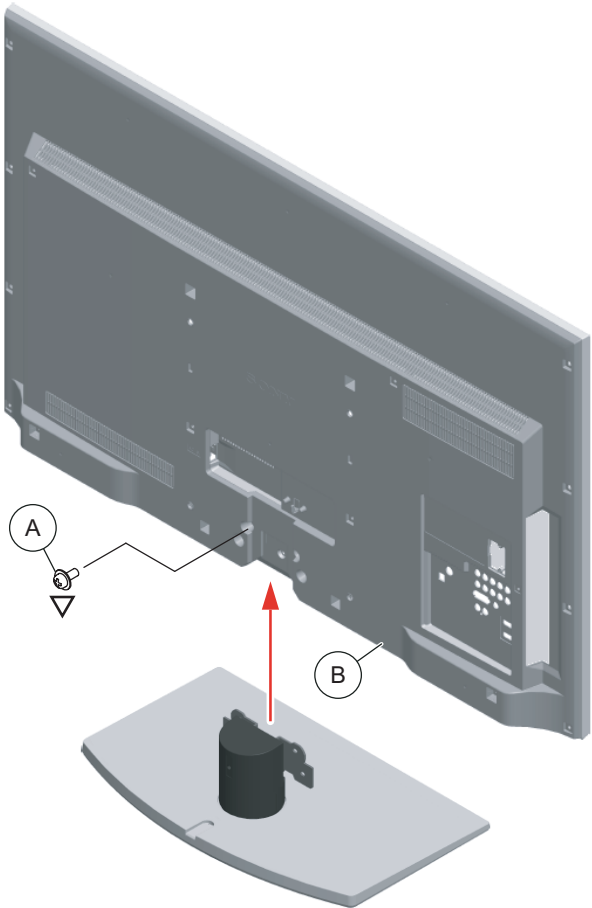
EXITING THE SELF CHECK DIAGNOSTIC SCREEN

1. To exit the Self Diagnostic screen, turn off the power to the TV by pressing the POWER button on the remote or the POWER button on the TV.

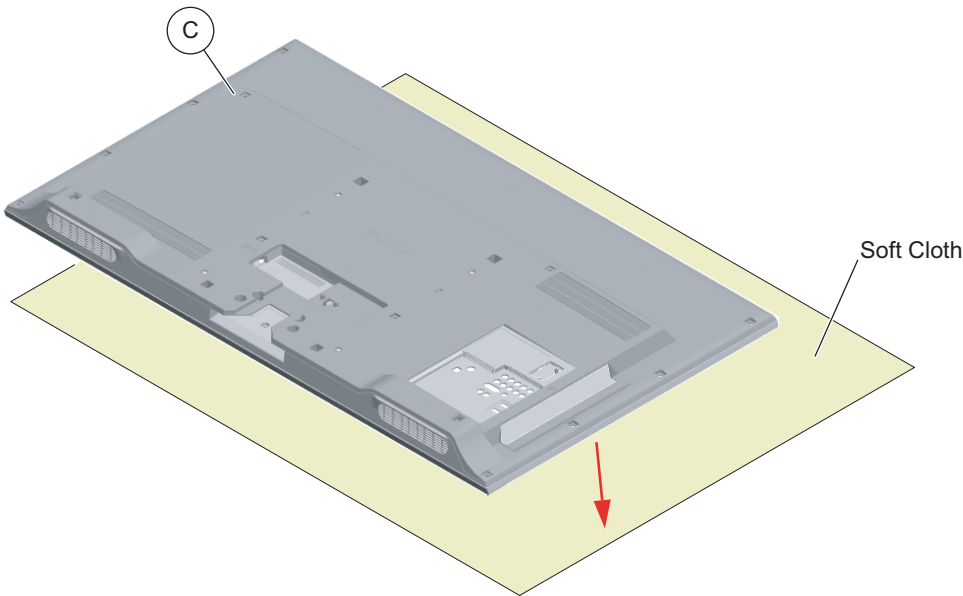
SEC 1. INFORMAÇÃO DE DESMONTAGEM E CÓDIGOS DE PEÇAS

1-1. REMOÇÃO DO PEDESTAL MONTADO

- Ⓐ Remove 4 screws from Table-Top Stand Assembly
- Ⓑ Lift up TV set to detach from Table-Top Stand Assembly



- Ⓒ Gently place the TV set face down onto a soft cloth



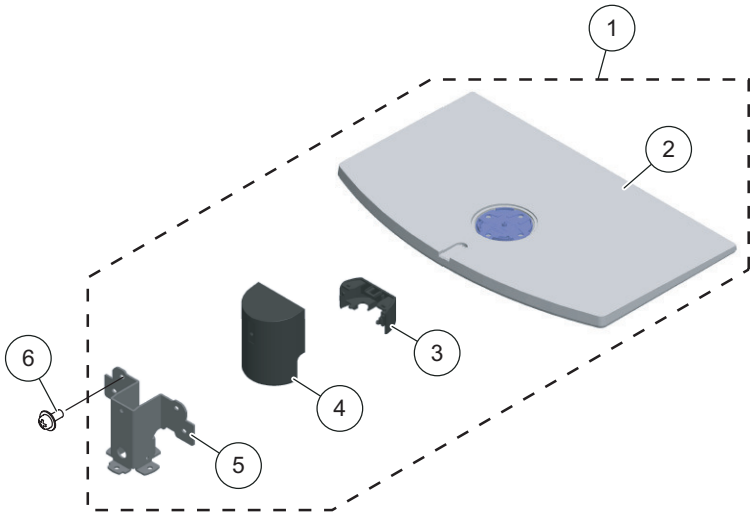
Components not identified by a part number or description are not stocked because they are seldom required for routine service.

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

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 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.



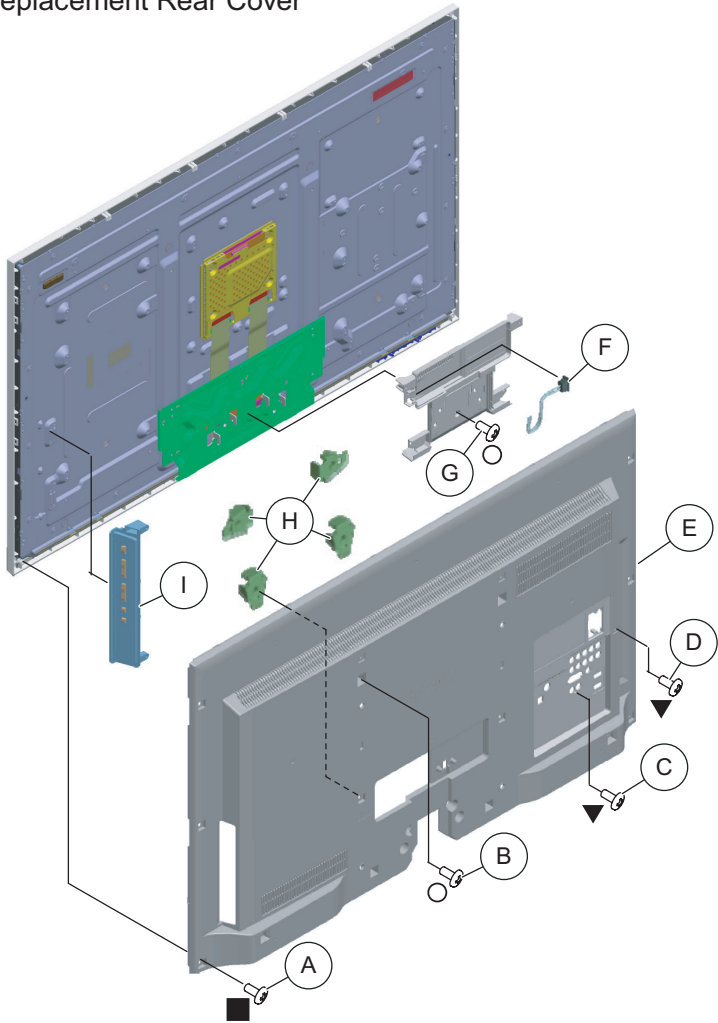
REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
1	A-1780-315-A	PEDESTAL MONTADO (L3C) (KDL-46EX605 ONLY)	[2-5]	6	2-580-608-01	SCREW, +PSW M5X16 (SCREWS TO ATTACH TABLE-TOP STAND TO LCD TV) For product protection and safety reasons, Sony strongly recommends that you use the screws provided with the TV CAUTION: These screws cannot be used to secure the TV to the Wall Mount Brackets	
2	A-1768-634-A	BASE MONTADO (M3A) (KDL-32EX605/40EX605 ONLY)					
3	4-193-169-01	TAMPA DO PEDESTAL (M3A FRONTAL)					
4	4-189-302-01	TAMPA PLASTICA (M3A TRASEIRA)					
5	4-170-449-01	SUPORTE DO PEDESTAL (M3A) (KDL-32EX605 ONLY)		▽	2-580-608-01	SCREW, +PSW M5X16	
5	4-170-450-01	SUPORTE DO PEDESTAL (ML3A) (KDL-40EX605/46EX605 ONLY)					

INFORMAÇÃO DE DESMONTAGEM E CÓDIGOS DE PEÇAS

1-2. REMOÇÃO DA TAMPA TRASEIRA, TAMPA INFERIOR, SUPORTE VESA E UNIDADE CHAVE

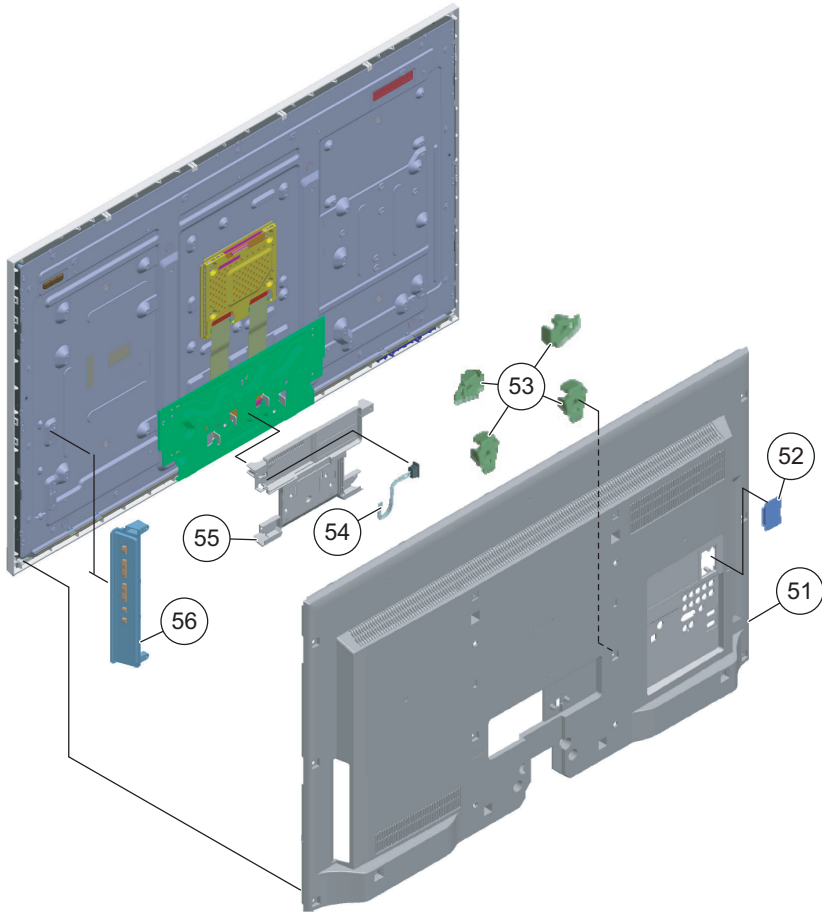
- Ⓐ Remove 4 screws from Rear Cover to detach from Bezel
- Ⓑ Remove 8 screws from Rear Cover to detach from Panel
8 from KDL-32EX605/40EX605 Only
10 from KDL-46EX605 Only
- Ⓒ Remove 1 screw from Rear Cover to detach from Terminal area
- Ⓓ Remove 1 screw from Rear Cover to detach from Side Jack area
- Ⓔ Lift up Rear Cover from bottom side to detach from Bezel
- Ⓕ Disconnect AC Inlet from GE3B/GE2C (Power) Boards and detach from Under Cover
- Ⓖ Remove 1 screw from Under Cover to detach from Bottom Frame
- Ⓗ Slide out Vesa Brackets to detach from Rear Cover
- Ⓘ Lift up Switch Unit and disconnect 1 connector to remove from Panel

NOTE: The Vesa Brackets are not included with the Rear Cover and must be reattached to the replacement Rear Cover



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

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.

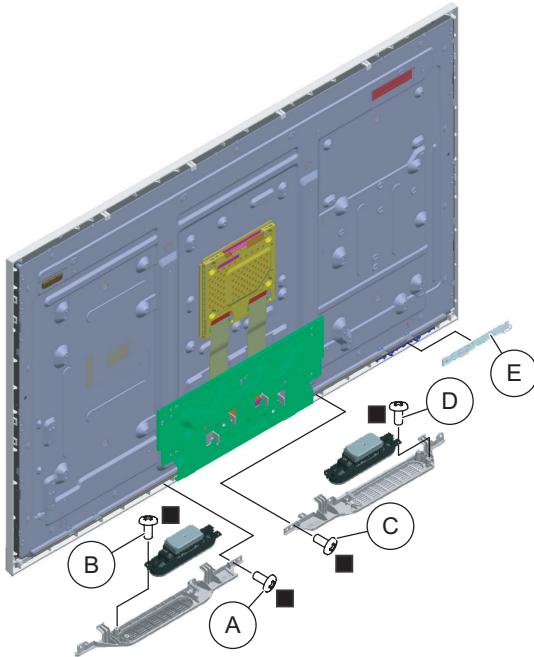


REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
51	4-176-751-01	TAMPA TRASEIRA (32) (KDL-32EX605 ONLY)		55	4-176-838-01	TAMPA INFERIORE (32) (KDL-32EX605 ONLY)	
51	4-176-752-01	TAMPA TRASEIRA (40) (KDL-40EX605 ONLY)		55	4-184-861-01	TAMPA INFERIOR (40) (KDL-40EX605/46EX605 ONLY)	
51	4-176-753-02	TAMPA TRASEIRA(46) (KDL-46EX605 ONLY)		56	Y-8287-064-A	PLACA HSW (CHAVE) MONTADA	
52	3-196-465-12	TAMPA, ECS		■	2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3	
53	4-168-272-01	SUPORTE, VESA (S)		▼	7-685-648-79	SCREW, +BVTP 3X12 TYPE2 IT-3	
⚠ 54	1-842-031-11	AC INLET (2P)		○	4-159-298-01	SCREW, +PSW M4X10	

INFORMAÇÃO DE DESMONTAGEM E CÓDIGOS DE PEÇAS

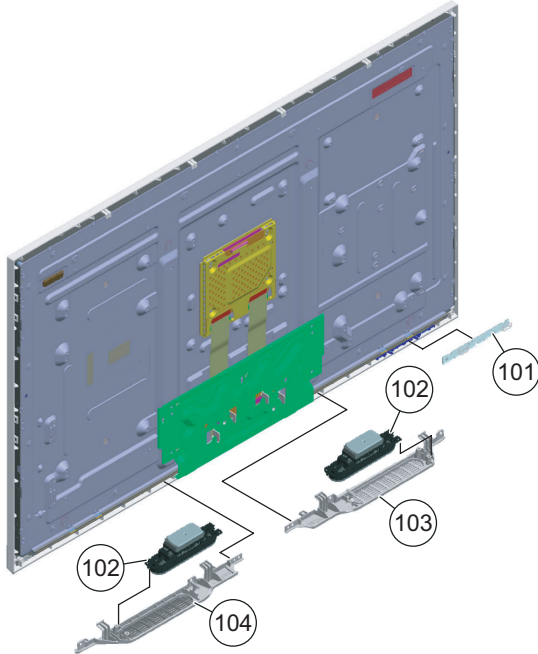
1-3 REMOÇÃO DOS ALTO-FALANTES, SUPORTES DOS ALTO-FALANTES E A PLACA HLR

- Ⓐ Remove screws from Speaker Bracket Right to detach from Bezel
 - 1 from KDL-32EX605 Only
 - 2 from KDL-40EX605/46EX605 Only
- Ⓑ Remove screws from Speaker to detach from Speaker Bracket Right
 - 4 from KDL-32EX605 Only
 - 2 from KDL-40EX605/46EX605 Only
- Ⓒ Remove screws from Speaker Bracket Left to detach from Bezel
 - 1 from KDL-32EX605 Only
 - 2 from KDL-40EX605/46EX605 Only
- Ⓓ Remove screws from Speaker to detach from Speaker Bracket Left
 - 4 from KDL-32EX605 Only
 - 2 from KDL-40EX605/46EX605 Only
- Ⓔ Disconnect 1 connector from HLR Board, then release clips and lift up to remove from LED Guide



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

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.

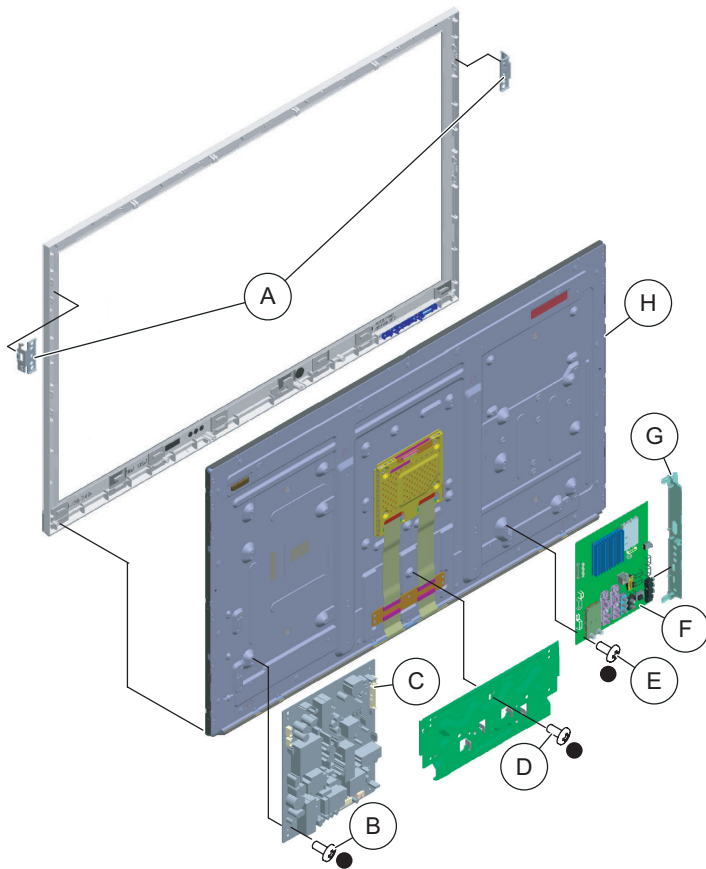


REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
101	Y-8287-185-A	PLACA HLR MONTADA		104	4-176-758-01	SUPORTE DO ALTO-FALANTE DIR. (32)	
102	1-826-873-41	ALTO-FALANTE (3.4X17.5CM)				(KDL-32EX605 ONLY)	
103	4-176-757-01	SUPORTE DO ALTO-FALANTE ESQ. (32)		104	4-184-863-01	SUPORTE DO ALTO-FALANTE DIR. (40)	
		(KDL-32EX605 ONLY)				(KDL-40EX605 ONLY)	
103	4-184-862-01	SUPORTE DO ALTO-FALANTE ESQ. (40)		104	4-184-865-01	SUPORTE DO ALTO-FALANTE DIR. (46)	
		(KDL-40EX605 ONLY)				(KDL-46EX605 ONLY)	
103	4-184-864-01	SUPORTE DO ALTO-FALANTE ESQ. (46)			2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3	
		(KDL-46EX605 ONLY)					

INFORMAÇÃO DE DESMONTAGEM E CÓDIGOS DE PEÇAS

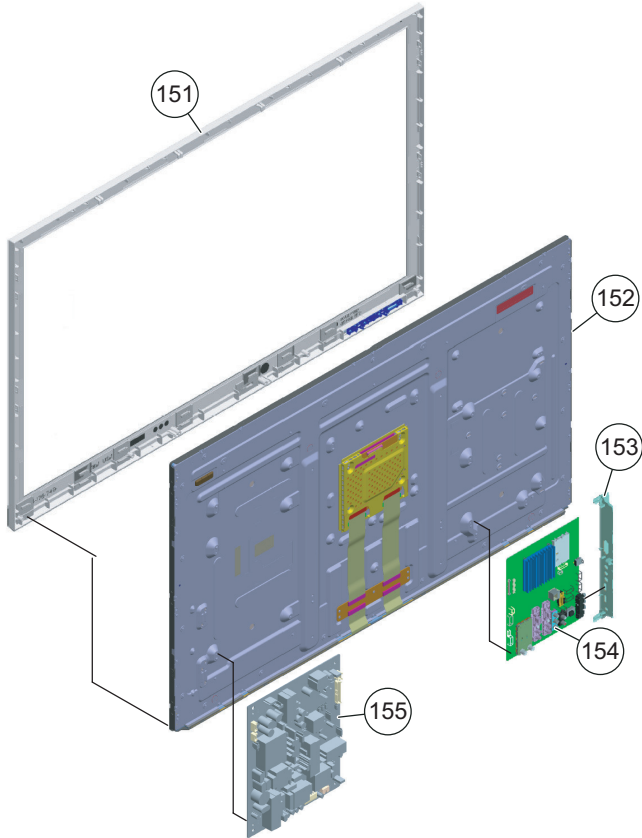
1-4. REMOÇÃO DAS PLACAS GE3B/GE2C(FONTE), PLACA BAL E GABONETE FRONTAL

- A Lift-up Panel Brackets to detach from Bezel
4 from KDL-32EX605/40EX605 Only
6 from KDL-46EX605 Only
- B Remove 4 screws from GE3B/GE2C (Power) Boards
- C Disconnect 3 connectors from GE3B/GE2C (Power) Boards
- D Remove screws from Bottom Frame to detach from Panel
3 from KDL-32EX605 Only
5 from KDL-40EX605/46EX605 Only
- E Remove 4 screws from BAL Board
- F Disconnect 5 connectors from BAL Board
- G Slide Side Jack Bracket to right-side to remove from BAL Board
- H Carefully Lift up Panel to remove from Bezel



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

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.



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
151	X-2548-060-3	GABINETE FRONTAL (32) (KDL-32EX605 ONLY)		 154	Y-8287-241-A	PLACA BAL MONTADA	
151	X-2548-061-3	GABINETE FRONTAL (40) (KDL-40EX605 ONLY)		NOTE: For BAL Board replacement, please refer to section 2-2. Adjustments After Replacing the BAL Board or the LCD Panel.			
151	X-2548-062-3	GABINETE FRONTAL (46) (KDL-46EX605 ONLY)		NOTE: Final software is not installed on this BAL Board. Install the update after replacing this board using the instructions provided with the software.			
152	NA	PAINEL DE LCD		155	1-474-218-11	PLACA GE3B (FONTE) MONTADA (KDL-32EX605/40EX605 ONLY)	
		AS INFORMAÇÕES DOS CÓDIGOS DAS PEÇAS DOS TODOS PAINÉIS DE LCD, CONSULTE MANUAL DO PAINEL DE LCD		155	1-474-219-11	PLACA GE2C (FONTE) MONTADA (KDL-46EX605 ONLY)	
153	4-166-286-21	SUPORTE LATERAL JACK			2-580-592-01	SCREW, +PSW M3X8	

INFORMAÇÃO DE DESMONTAGEM E CÓDIGOS DE PEÇAS

1-5. LIMPANDO PAINEL DE LCD

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 to proper ventilation.

1-6. LEGENDA DOS PARAFUSOS

KDL-32EX605

P/N	DESCRIPTION	REMARKS	TOTAL
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3	RC(4), SPKR BRKT-L(1), SPKR BRKT-R(1), SPKR-L(4), SPKR-R(4)	14
▼ 7-685-648-79	SCREW, +BVTP 3X12 TYPE2 IT-3	RC to SIDE JACK(1), RC to TRMNL AREA(1)	2
▽ 2-580-608-01	SCREW, +PSW M5X16	TABLE-TOP STAND(4), NECK to BASE(4)	8
● 2-580-592-01	SCREW, +PSW M3X8	GE3B(4), BAL(4)	8
○ 4-159-298-01	SCREW, +PSW M4X10	RC(8), UC(1), BTM FRM(3)	12

KDL-40EX605

P/N	DESCRIPTION	REMARKS	TOTAL
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3	RC(4), SPKR BRKT-L(2), SPKR BRKT-R(2), SPKR-L(2), SPKR-R(2)	12
▼ 7-685-648-79	SCREW, +BVTP 3X12 TYPE2 IT-3	RC to SIDE JACK(1), RC to TRMNL AREA(1)	2
▽ 2-580-608-01	SCREW, +PSW M5X16	TABLE-TOP STAND(4), NECK to BASE(4)	8
● 2-580-592-01	SCREW, +PSW M3X8	GE3B(4), BAL(4)	8
○ 4-159-298-01	SCREW, +PSW M4X10	RC(8), UC(1), BTM FRM(5)	14

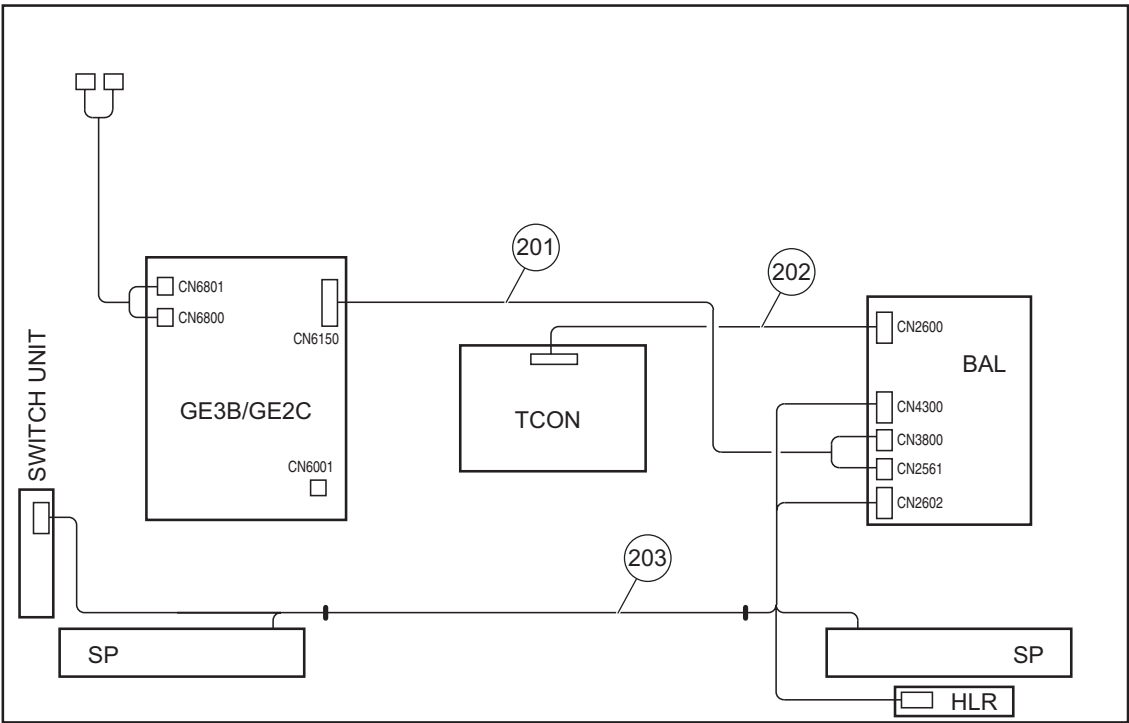
KDL-46EX605

P/N	DESCRIPTION	REMARKS	TOTAL
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3	RC(4), SPKR BRKT-L(2), SPKR BRKT-R(2), SPKR-L(2), SPKR-R(2)	12
▼ 7-685-648-79	SCREW, +BVTP 3X12 TYPE2 IT-3	RC to SIDE JACK(1), RC to TRMNL AREA(1)	2
▽ 2-580-608-01	SCREW, +PSW M5X16	TABLE-TOP STAND(4)	4
● 2-580-592-01	SCREW, +PSW M3X8	GE2C(4), BAL(4)	8
○ 4-159-298-01	SCREW, +PSW M4X10	RC(10), UC(1), BTM FRM(5)	16

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

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.

1-7. CONNECTORS



REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]	REF. NO.	PART NO.	DESCRIPTION	[ASSEMBLY INCLUDES]
* 201	1-910-100-54	CONNECTOR ASSEMBLY 15P (32)	(KDL-32EX605 ONLY)	* 203	1-910-100-53	HARNESS ASSEMBLY (32)	(KDL-32EX605 ONLY)
* 201	1-910-100-56	CONNECTOR ASSEMBLY 15P (40)	(KDL-40EX605 ONLY)	* 203	1-910-100-55	HARNESS ASSEMBLY (40)	(KDL-40EX605 ONLY)
* 201	1-910-100-58	CONNECTOR ASSEMBLY 15P (46)	(KDL-46EX605 ONLY)	* 203	1-910-100-57	HARNESS ASSEMBLY (46)	(KDL-46EX605 ONLY)
* 202	1-837-816-11	(LVDS) FLEXIBLE FLAT CABLE	(KDL-32EX605 ONLY)				
* 202	1-837-817-11	(LVDS) FLEXIBLE FLAT CABLE	(KDL-40EX605 ONLY)				
* 202	1-837-818-11	(LVDS) FLEXIBLE FLAT CABLE	(KDL-46EX605 ONLY)				

INFORMAÇÃO DE DESMONTAGEM E CÓDIGOS DE PEÇAS

1-8. ACESSÓRIOS E EMBALAGEN

	A-1768-620-A	BAG ASSEMBLY,SCREW A (KDL-32EX605/40EX605 ONLY)
	A-1768-621-A	BAG ASSEMBLY,SCREW C (KDL-46EX605 ONLY)
	4-180-192-13	MANUAL DE INSTRUÇÕES
*	4-180-045-11	SUPPLEMENT(STAND INSTALLATION)

1-9. DIVERSOS

	4-182-211-01	GASKET (KDL-32EX605/40EX605 ONLY)
	1-837-645-12	CABO DE FORÇA
	4-100-136-01	SHEET (CORE), C (KDL-32EX605/40EX605 ONLY)
	X-2348-140-3	SUPPORT BELT KIT
	7-632-452-24	TAPE (NO.303) 18MMX35M YEL

1-10. CONTROLE REMOTO

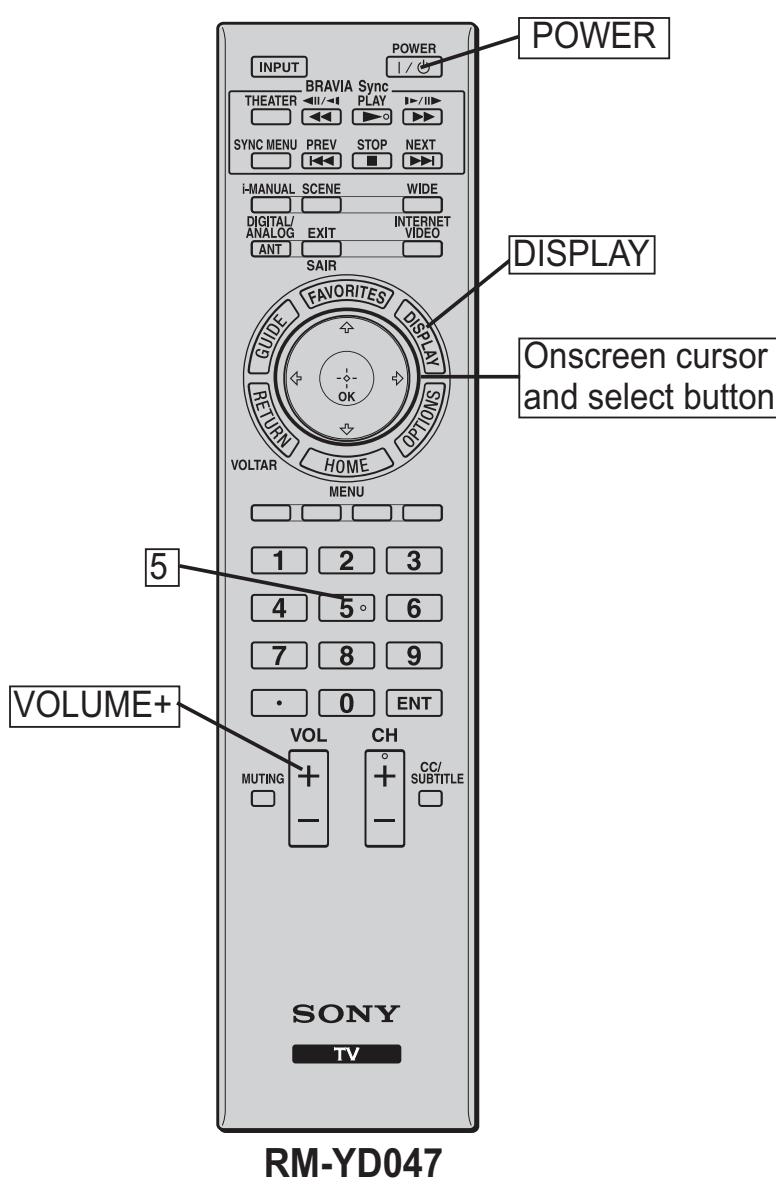
	1-487-702-22	CONTROLE REMOTO (RM-YD047)
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SEC 2. AJUSTES DE SERVIÇO

2-1. ACCESSING SERVICE ADJUSTMENT MODE

1. TV must be in standby mode. (Power off).
2. 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>	<SUB>
DM1.301J00AA	SM1.010W00AA
M2.105C	SB1.000W00AA
DD1.016J00AA	SD1.010 W00AA
(DM13 01J00AA)	RF01.05
WP00.521J00AA	ID1C117081
ID1C117081	LTY320AB01
PID04020000	
WF:2.0.0.99	<BEM>
WF:0B	BM1.012W00LU
Camera FW	BB1.000W00LU
Camera FW	BD1.011J46LUX

SAMPLE SERVICE MENU

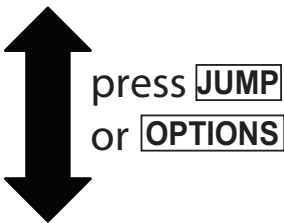
2-1-1. VIEWING THE SERVICE MENUS

Use the Remote Commander to view the **Digital**, **Chassis** and **Sub** Service Menus and their options.

3. To display the **Service Menu** that contains the Category you want to adjust, press **JUMP** or **OPTIONS** on the Remote Commander.

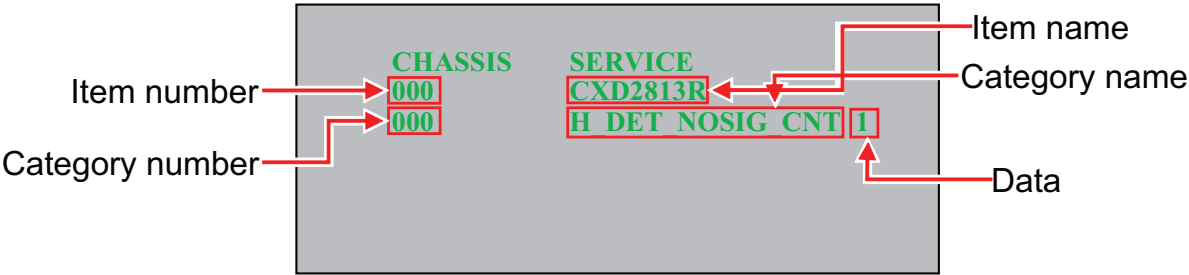
DIGITAL	SERVICE
001 OP	
000 VERS	---
<MAIN>	<SUB>
DM1.301J00AA	SM1.010W00AA
M2.105C	SB1.000W00AA
DD1.016J00AA	SD1.010W00AA
(DM13 01J00AA)	RF01.05
WP00.521J00AA	ID1C117081
ID1C117081	LTY320AB01
PID04020000	
WF:2.0.0.99	<BEM>
WF:0B	BM1.012W00LU
Camera FW	BB1.000W00LU
Camera FW	BD1.011J46LUX

Sample Digital Service Menu



CHASSIS	
000	CXD2813R
000	H_DET_NOSIG_CNT 1

Within each Service Menu are Categories and data information.



Sample Chassis Service Menu

2-1-2. USING THE REMOTE COMMANDER TO VIEW OR CHANGE SERVICE DATA

Use the buttons on the Remote Commander to access the Service Menu items and adjust the Data Values.

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

4. To change the **Category**, press **2** to move to the Next Category or press **5** to go back to the Previous Category.
Note: Pressing **2** or **5** Only changes the Categories within the Service Menu displayed.
5. To change the **adjustment item**, press **1** to move to the Next Item or **4** to go back to the Previous Item.
6. To change the **Data Value**, press **3** to increase the Data Value or **6** to decrease the Data Value.
7. Press **MUTING** then press **0** to Write the changes.
8. To exit service mode, press **HOME** or turn the TV power off.

2-2. ADJUSTMENTS AFTER REPLACING THE BAL BOARD OR LCD PANEL

The following procedures must be completed after replacing the BAL Board or the LCD panel.

- ☒ Update the TV to the latest software version
- ☒ Select the Model
- ☒ Select the Destination
- ☒ Verify model and panel information are correct
- ☒ Reconnect all cables

2-2-1. UPDATING THE SOFTWARE

After replacing the BAL Board or the LCD Panel, you must update the software to the latest version.

Before you begin

- ☒ Disconnect all cables (RF, External input, Ethernet, etc.) from the TV

Instructions for updating the software are included with the software package. After completing the software update, proceed to Selecting the Model.

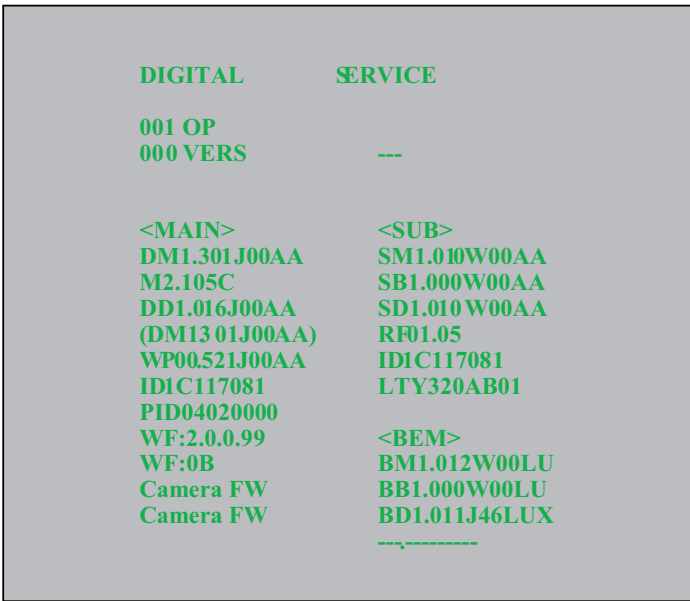
2-2-2. SELECTING THE MODEL

After replacing the BAL Board or LCD Panel, go into Service Mode to set the Model data value.

- 1. TV must be in standby mode. (Power off).
- 2. Access Service Mode.
Press the following buttons on the Remote Commander within a second of each other:

DISPLAY → Channel 5 → Volume + → POWER

- 3. Display the **DIGITAL Service Menu**.
NOTE: There are 3 Service Menus for this model, DIGITAL, CHASSIS, and SUB. If the DIGITAL Service Menu is not displayed, press **JUMP** or **OPTIONS** on the Remote Commander.

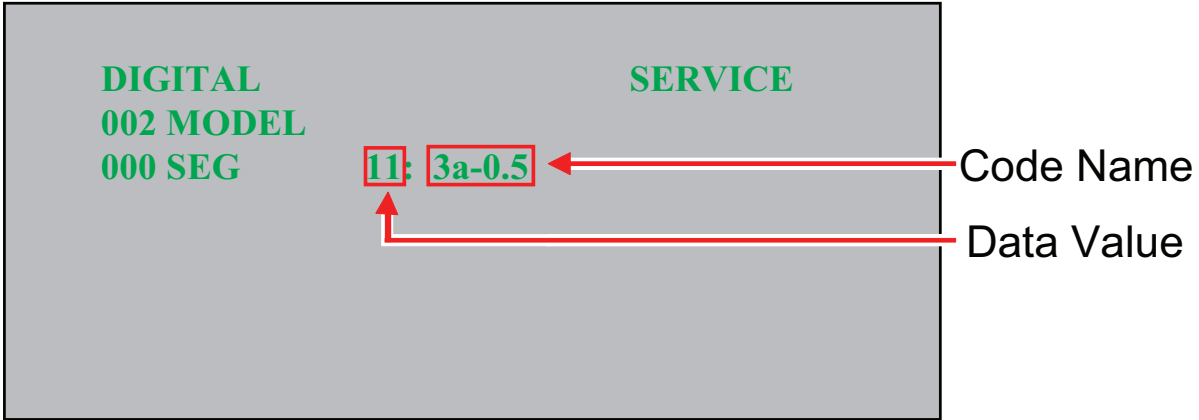


- 4. Press 2 to move to the **002 MODEL** (Next) category.



- 5. Using the table, press 3 to increase the data value or 6 to decrease the data value, to match the model of the TV.

Chassis	Model Name	Data Value	Code Name
AZ1-L	KDL-32EX605	11	3a-0.5
AZ1-L	KDL-40EX605	11	3a-0.5
AZ1-L	KDL-46EX605	11	3a-0.5



- 6. Proceed to Selecting the Destination.

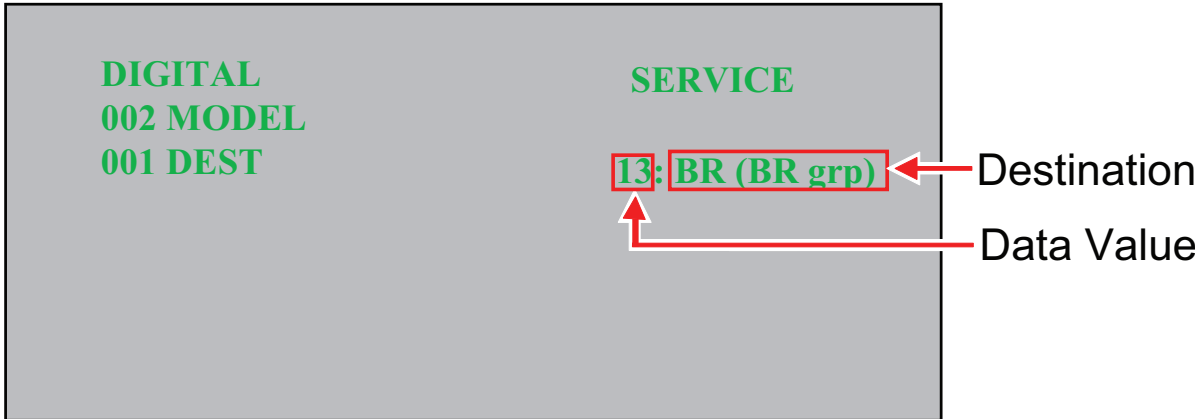
2-2-3. SETTING THE DESTINATION

After replacing the BAL Board or the LCD Panel, the destination location must be set.

CAUTION: Selecting the incorrect destination may requiring replacing the BAL Board.



7. Press **1** to move to **001 DEST** sub Category.



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

GROUP	DESTINATION CODE	DATA VALUE	DESTINATION
BR grp	BR	13	BRAZIL
	AR	20	ARGENTINA

CAUTION: Verify the DESTINATION is set correctly before proceeding to the next step. If another destination Data Value is selected, it may possibly corrupt the software which would require a BAL Board replacement.

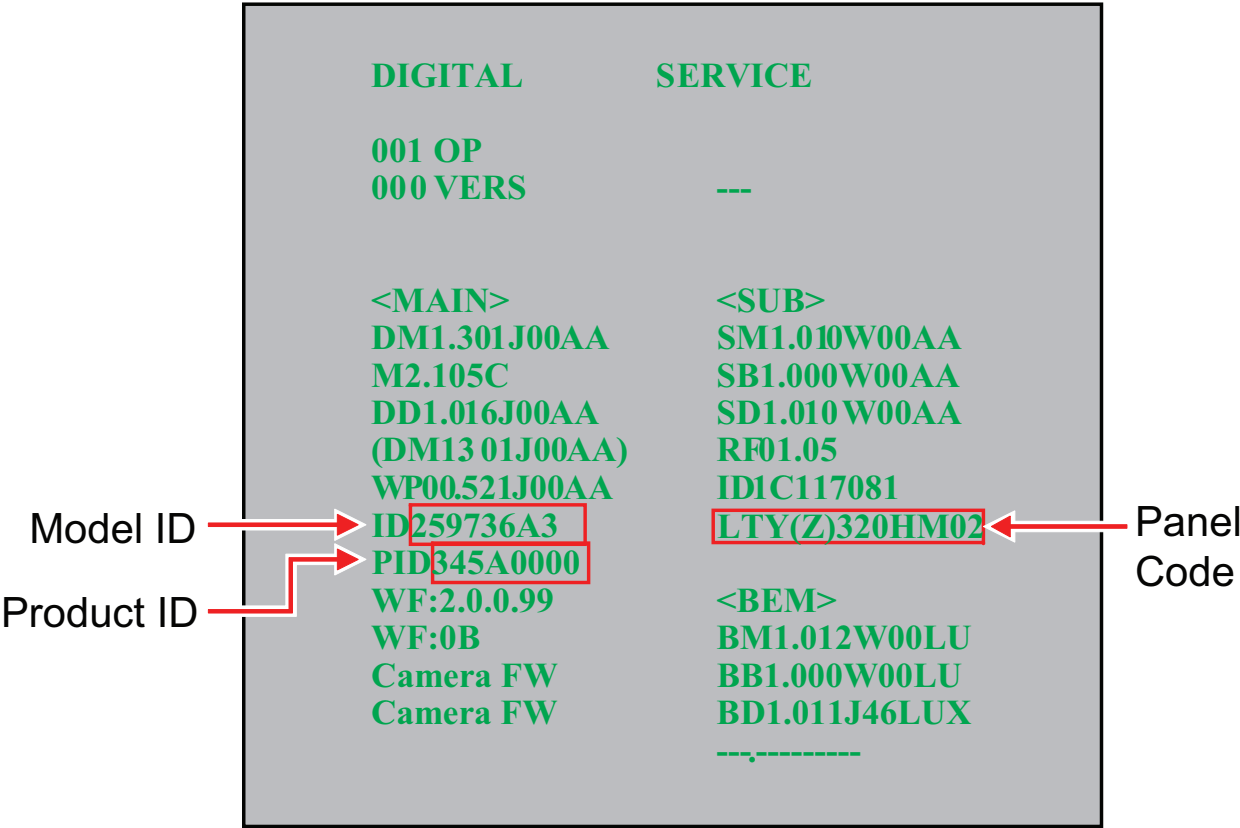
2-2-4. VERIFYING THE MODEL AND PANEL INFORMATION

After saving the changes to the service data, verify the information.

- 1. TV must be in standby mode. (Power off).
- 2. Access Service Mode.
Press the following buttons on the Remote Commander within a second of each other:



- 3. Display the **DIGITAL Service Menu**.
NOTE: There are 3 Service Menus for this model, DIGITAL, CHASSIS, and SUB. If the DIGITAL Service Menu is not displayed, press **JUMP** or **OPTIONS** on the Remote Commander.



- 4. Using the table, verify the Model ID and the Product ID match the information in the Service Menu.

Model Name	Model ID	Product ID	Panel ID	Code Name
KDL-32EX605	259736A3	345A0000	LTY(Z)320HM02	3a-0.5
KDL-32EX605	259736A3	345A0000	LTY(Z)320HM02	3a-0.5
KDL-40EX605	259736A4	345A0000	LTY(Z)400HM02	3a-0.5
KDL-40EX605	259736A4	345A0000	LTY(Z)400HM02	3a-0.5
KDL-46EX605	259736A5	345A0000	LTY(Z)460HM02	3a-0.5
KDL-46EX605	259736A5	345A0000	LTY(Z)460HM02	3a-0.5

- 5. Exit Service Mode by pressing **HOME** or turn the TV power off.
- 6. Proceed to Reconnecting All Cables.

2-2-5. RECONNECTING ALL CABLES

After completing the changes to service mode, reconnect all the cables (RF, External input, Ethernet, etc.) to the TV then verify the TV set picture. If necessary, proceed to White Balance Adjustments.

2-3. WHITE BALANCE ADJUSTMENTS

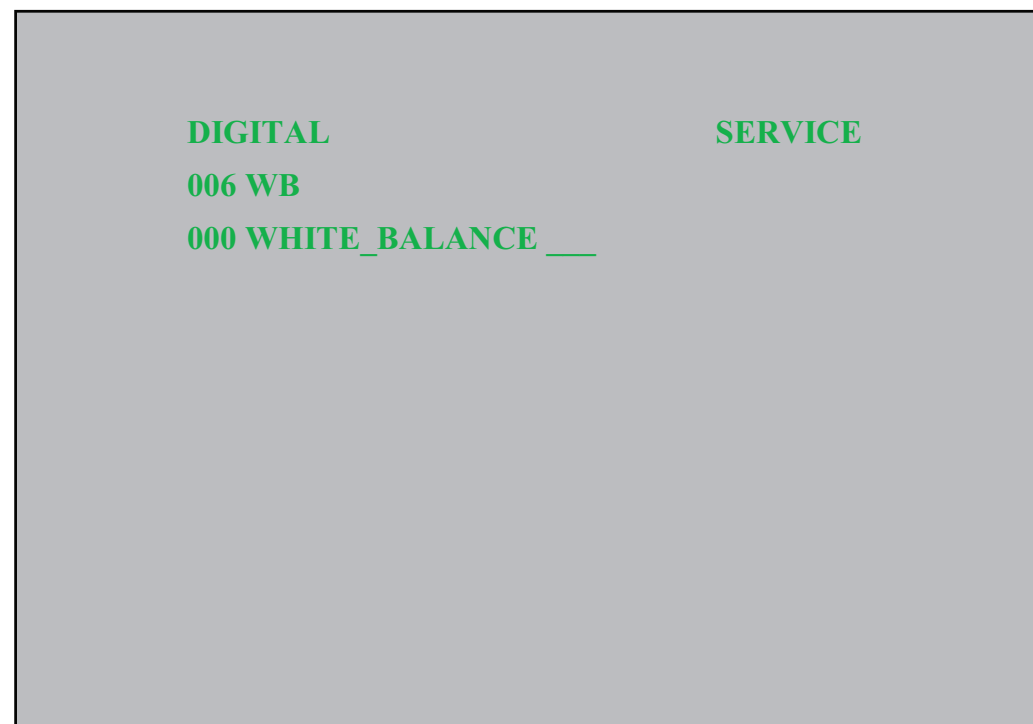
White Balance adjustment data is located on the Digital Service Menu.

1. TV must be in Standby Mode. (POWER off).
2. Press the following buttons on the Remote Commander within a second of each other:

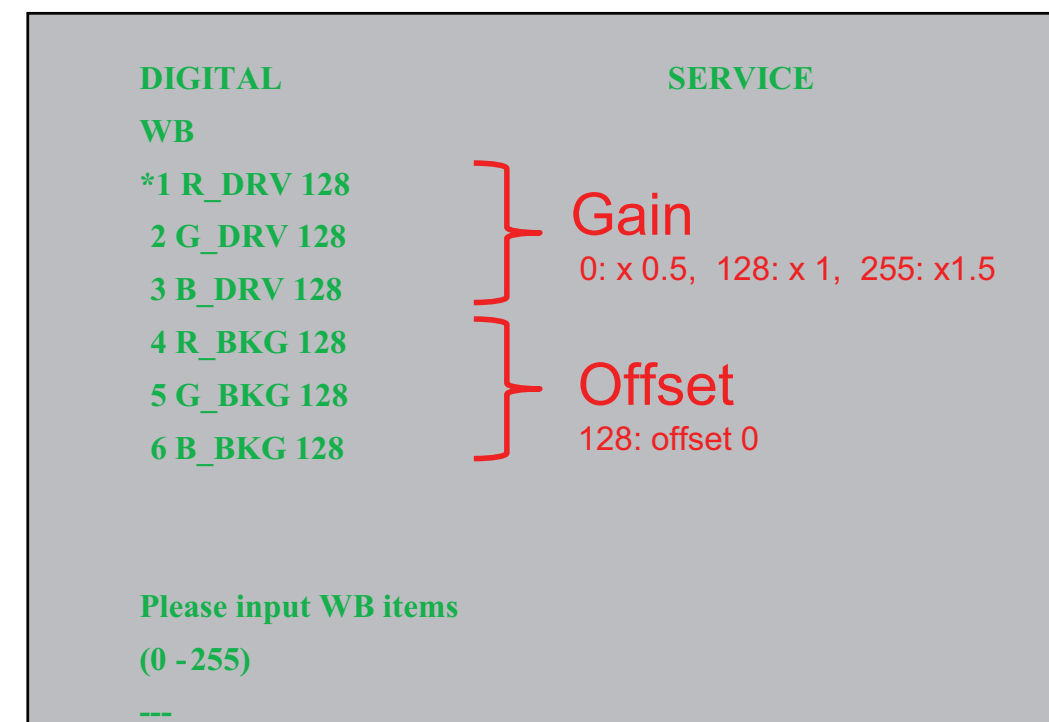
DISPLAY → Channel **5** → Volume **+** → **POWER**

NOTE: There are 3 Service Menus for this model, DIGITAL, CHASSIS, and SUB. If the DIGITAL Service Menu is not displayed, press **JUMP** or **OPTIONS** on the Remote Commander.

3. Press **2** to until the **006 WB** Category displays.



4. Press **0** to enter White Balance Adjustment mode.
5. To select the White Balance Adjustment setting that needs to be changed, do the following:
 - a. To select R_DRV, press **1**.
 - b. To select G_DRV, press **2**.
 - c. To select B_DRV, press **3**.
 - d. To select R_BKG, press **4**.
 - e. To select G_BKG, press **5**.
 - f. To select B_BKG, press **6**.
6. After selecting the White Balance setting, press **ENT** to display the edit screen. The screen displays a Please input WB items message.



7. Using the numbers buttons on the remote, enter the Data Value for the White Balance setting (value must be between 1 and 255).
8. Press **ENT** to WRITE (save) the changes.
9. To exit White Balance Adjustment, press **JUMP** or **OPTIONS**

2-4. RESETTING THE TV TO FACTORY CONDITION

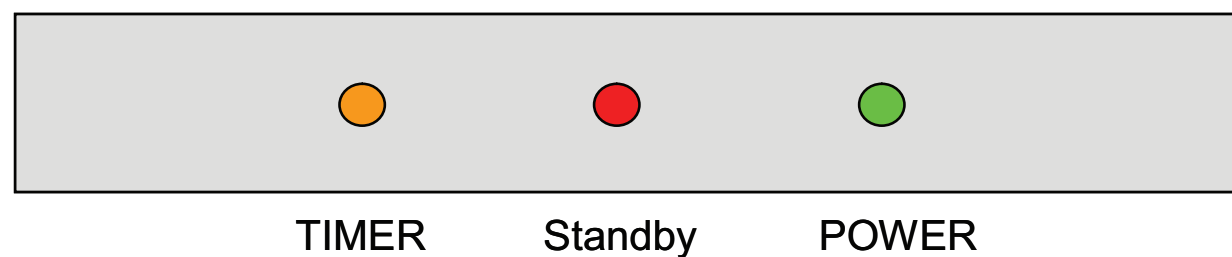
Use the following instructions to restore the User Adjustments and Channel Memory settings to the preset factory conditions.

1. While holding down the  on the Remote Commander, press the POWER button on the TV Switch Unit of the set.

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

2-4-1. RESETTING THE TV TO FACTORY CONDITION USING SERVICE MODE

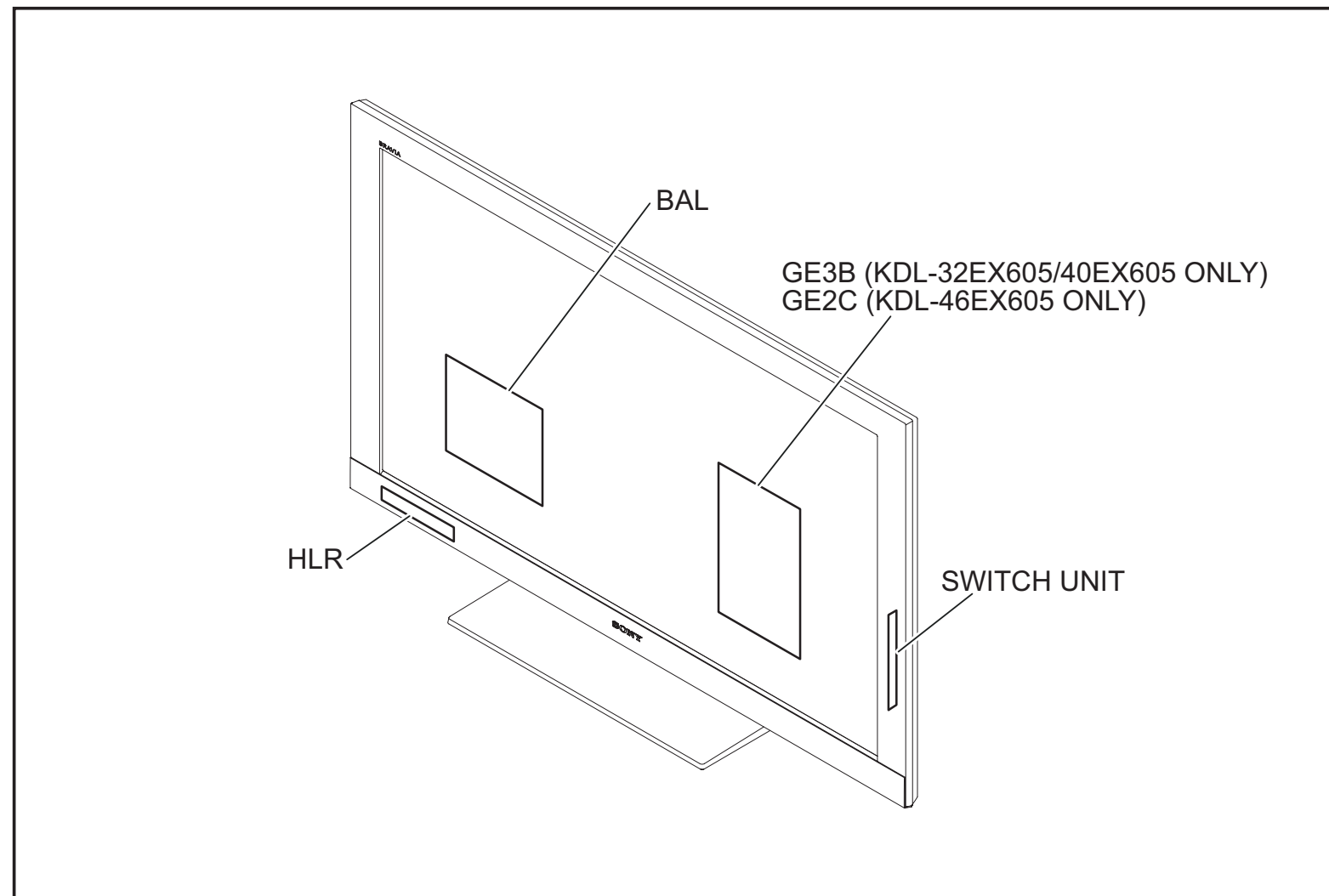
1. TV must be in Standby Mode. (POWER off).
2. Press the following buttons on the Remote Commander within a second of each other:
DISPLAY → Channel **5** → Volume **+** → **POWER**.
3. If necessary, press **JUMP** or **OPTIONS** to go to DIGITAL mode.
4. Press **8**.
SERVICE changes to green RST.
5.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



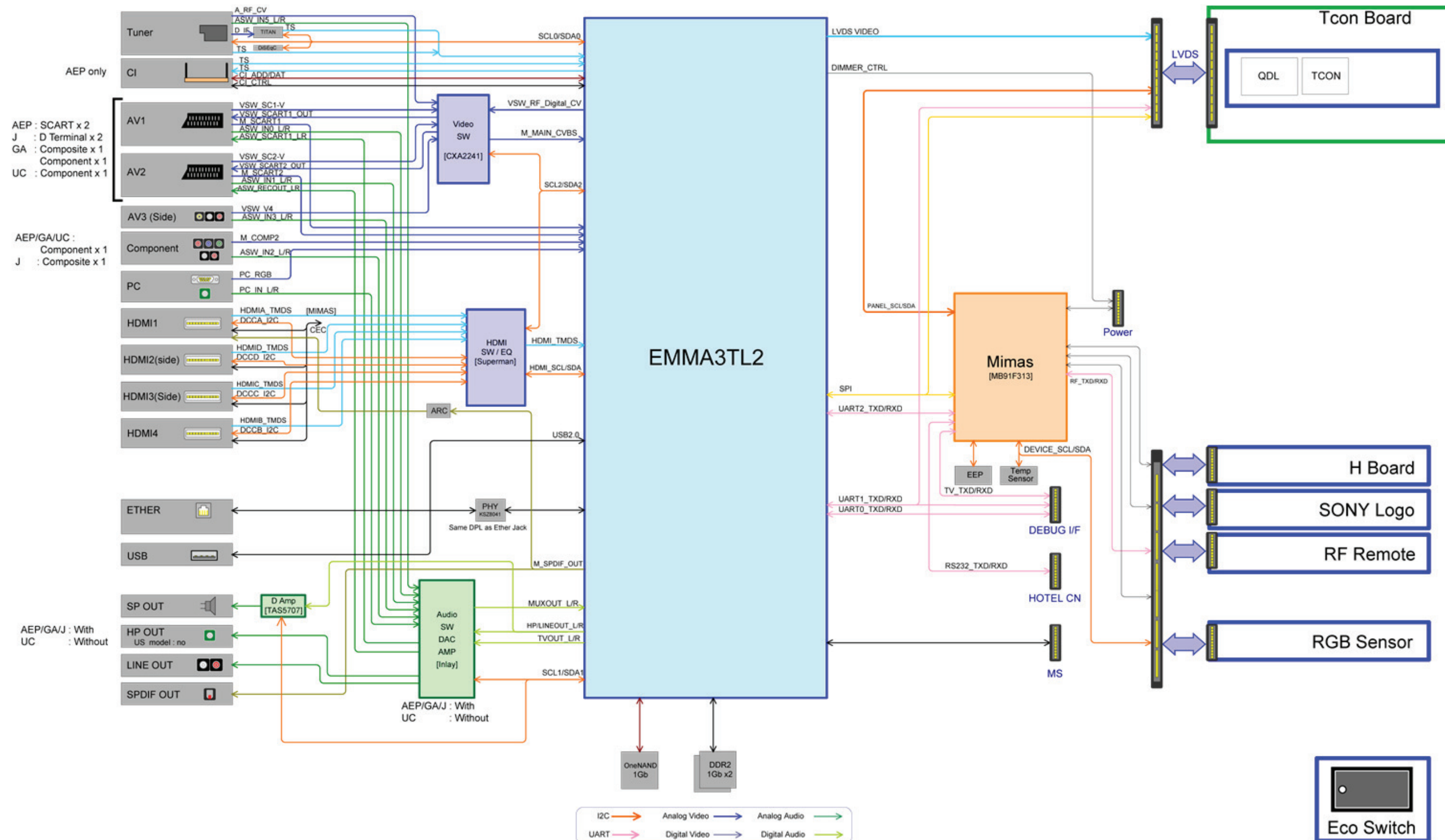
8. Cycle AC Power (Unplug and Plug AC Cord from the AC Outlet).
9. The set restarts and displays the Initial Setup screen. This may take several minutes.

SEC 3. DIAGRAMAS

3-1. CIRCUIT BOARDS LOCATION



3-2. BLOCK DIAGRAM





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