

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

ORIGINAL MANUAL ISSUE DATE: 1/2010

AZ1-L CHASSIS
Segment: 3a-1

Version	Date	Subject
1.0	1/2010	No revisions or updates are applicable at this time.
2.0	2/2010	Amend 32”(P.42) & 37”(P.45) EX504 ‘BAL’ board part number.
3.0	5/2010	Add updated Panel Caution Note (P.6). Add Inverter and Tcon Board Part Numbers (P.42,45,48,51,54). Add illustration showing location of neck to base screws (P.43,46,49,52,55).
4.0	6/2010	Add ‘Support, Panel’ Part Numbers (P.41,44,47,50,53). Add ‘Hotel Assy’ to Exploded Views (P.41,44,47,50,53). Add ‘Hotel Addendum’ for B2B Models (P.59).

LCD Digital Color TV
SONY[®]

KDL-32/37/40/46/55EX500
Series(AEP/UK)

9-888-265-04



SERVICE MANUAL

AZ1-L CHASSIS

Segment: 3a-1

LCD Digital Color TV

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MODEL LIST

<i>MODEL</i>	<i>COLOR</i>	<i>COMMANDER</i>	<i>DEST.</i>	<i>MODEL</i>	<i>COLOR</i>	<i>COMMANDER</i>	<i>DEST.</i>
KDL-32EX500	Black	RM-ED035	AEP				
KDL-32EX501	Black	RM-ED035	AEP				
KDL-32EX503	Black	RM-ED035	UK				
KDL-32EX504	Black	RM-ED035	AEP				
KDL-32EX505	Black	RM-ED035	AEP				
KDL-32EX508	Black	RM-ED033	AEP				
KDL-37EX500	Black	RM-ED035	AEP				
KDL-37EX503	Black	RM-ED035	UK				
KDL-37EX504	Black	RM-ED035	AEP				
KDL-37EX505	Black	RM-ED035	AEP				
KDL-40EX500	Black	RM-ED035	AEP				
KDL-40EX501	Black	RM-ED035	AEP				
KDL-40EX503	Black	RM-ED035	UK				
KDL-40EX505	Black	RM-ED035	AEP				
KDL-40EX508	Black	RM-ED033	AEP				
KDL-46EX500	Black	RM-ED035	AEP				
KDL-46EX501	Black	RM-ED035	AEP				
KDL-46EX503	Black	RM-ED035	UK				
KDL-46EX505	Black	RM-ED035	AEP				
KDL-55EX500	Black	RM-ED035	AEP				
KDL-55EX503	Black	RM-ED035	UK				
KDL-55EX505	Black	RM-ED035	AEP				

WARNINGS AND CAUTIONS - ENGLISH

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, because of live chassis.
The chassis of this receiver is directly connected to the ac power line.

CARRYING THE TV

Be sure to follow these guidelines to protect your property and avoid causing serious injury.

- Carry the TV with an 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 damages.

SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ! mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. 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.

WARNINGS AND CAUTIONS - FRENCH

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 é faire ainsi.

WARNING!!

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.

POUR TRANSPORTER LE TÉLÉVISEUR

Tenez compte de ce qui suit pendant l'installation du téléviseur :

- Débranchez tous les câbles avant de transporter le téléviseur.
- Transportez le téléviseur avec le nombre de personnes approprié ; un téléviseur de grande taille doit être transporté par au moins deux personnes.
- Lors du transport du téléviseur, l'emplacement des mains est très important pour votre sécurité, ainsi que pour éviter de causer des dommages.

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. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

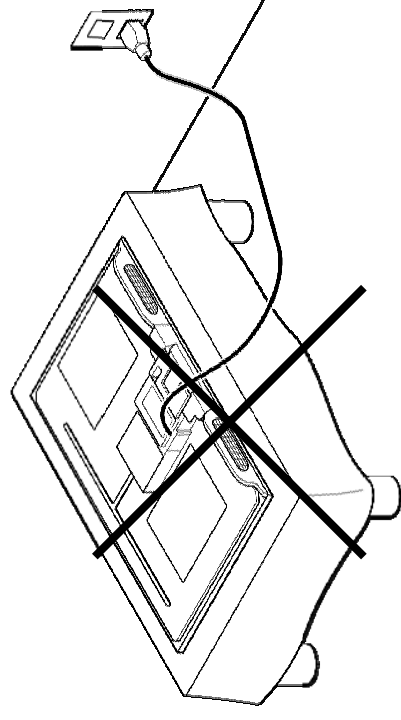
Les composants identifiés par une trame et par une marque ! sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel 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.

USE CAUTION WHEN HANDLING THE LCD PANEL

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

When repairing the LCD panel on the wall, the LCD panel must be secured using the 4 mounting holes on the rear cover.

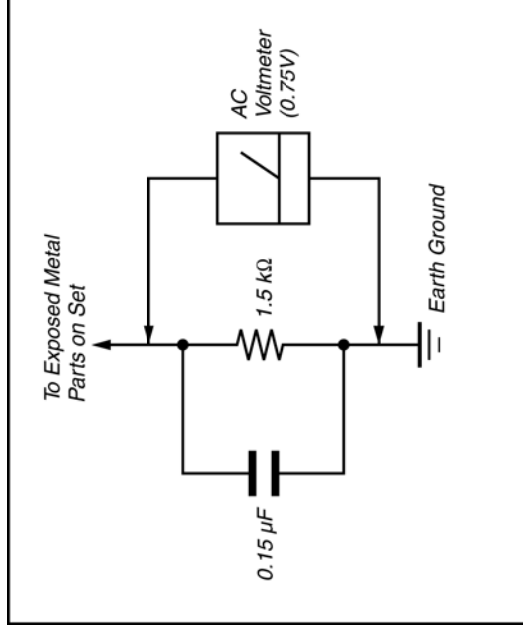
- 1) Do not press on the panel or frame edge to avoid the risk of electric shock.
- 2) Do not scratch or press on the panel with any sharp objects.
- 3) Do not leave the module in high temperatures or in areas of high humidity for an extended period of time.
- 4) Do not expose the LCD panel to direct sunlight.
- 5) Avoid contact with water. It may cause a short circuit within the module.
- 6) Disconnect the AC power when replacing the backlight (CCFL) 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) It is recommended not to exceed 1 hour of Power-On nor Burn-in period with LCD panel face down condition, in repair activity.



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 below.
8. For safety reasons, repairing the Power board and/or Inverter board is prohibited.



FigureA. 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).

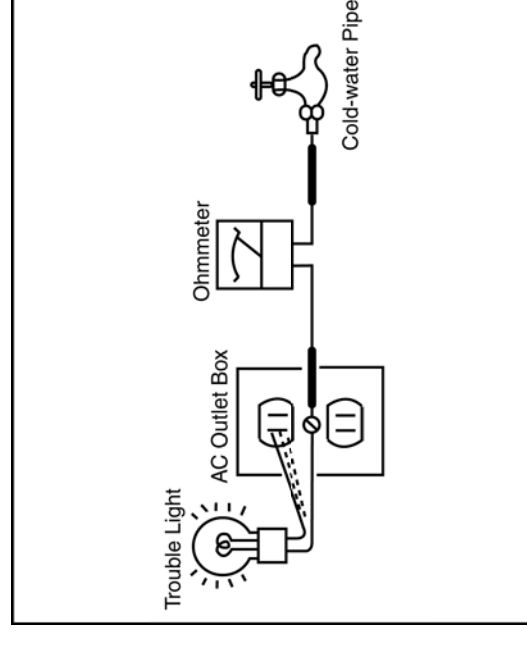


Figure B. Checking for earth ground.

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.

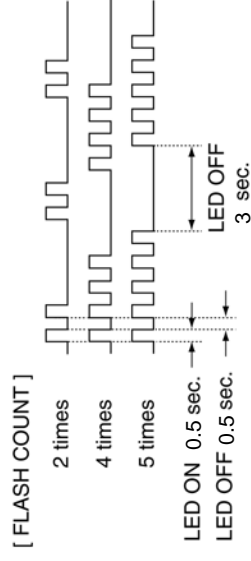
If there is more than one error, the LED will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen.

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

STBY LED Flash time	Service menu item name (Screen Display)	Diagnostic Item Description
2	MAIN_POWE	Main Power Over Voltage Protection
3	DC_ALERT	DC_ALERT
	DTT_WDT	DTT Error
	AUD_PROT	Audio Abnormal Detection
4	BALANCER_	Panel Balancer Error
5	TCON_ERR	T-CON Error
	HFR_ERR	HFR Error
	P_ID_ERR	Panel ID NVM Error
6	BACKLITE_	Back Light Error (Panel Inverter)
7	TEMP_ERR	Thermal Error
	FAN_ERR	FAN Error (Not Detected. Display Only)
8	-	Not used
9	-	Not used
10	-	Not used
11	-	Not used
12	-	Not used
-	RGB_SEN	RGB Sensor ACK Error

DISPLAY OF STANDBY LED FLASH COUNT



Note: One flash counts is not self-diagnostic.

SELF-DIAGNOSTIC SCREEN DISPLAY

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 failure for confirmation on the screen:

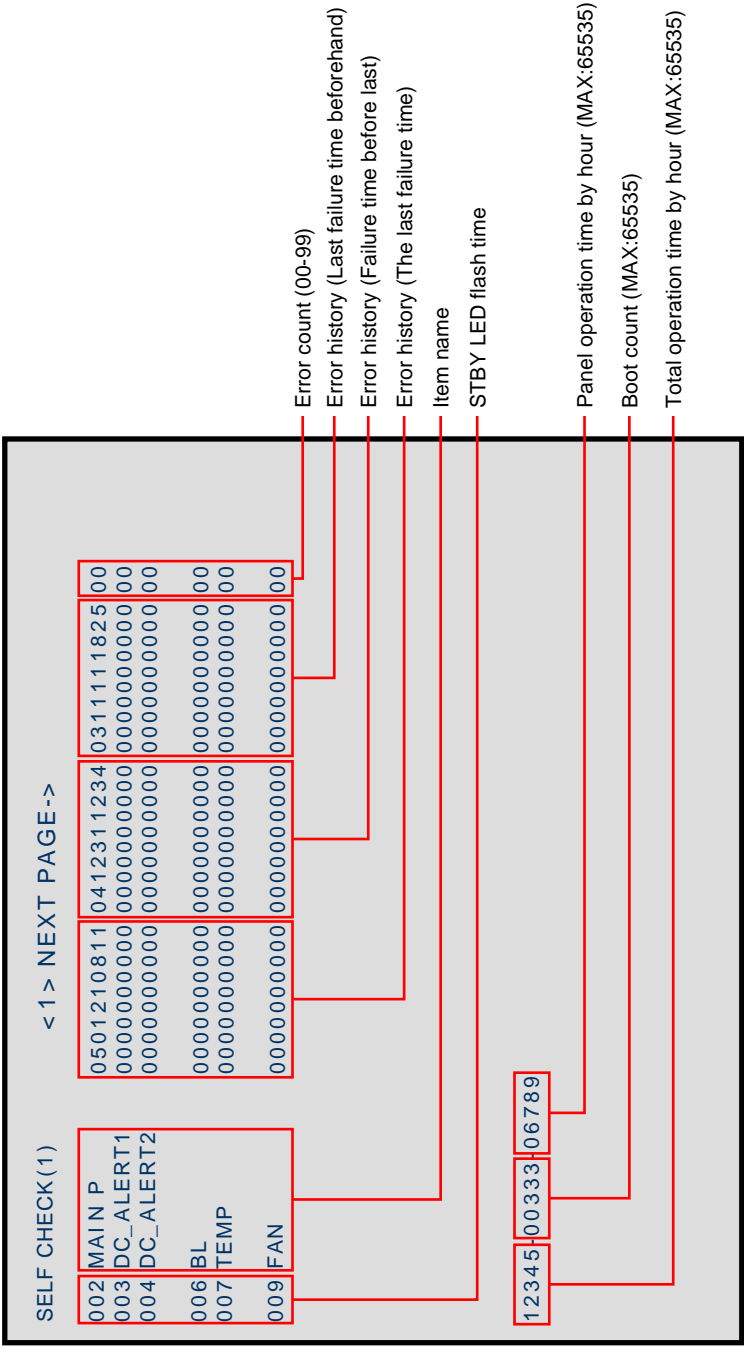
[To Bring Up Screen Test]

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

[DISPLAY] → Channel [5] → Volume [-] → TV POWER

* : Note that this differs from entering the service mode (volume +)

[SELF DIAGNOSTIC SCREEN DISPLAY]



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

Clearing the Self Check Diagnostic List

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-diagnostic screen

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. DISASSEMBLY

1-1. MOVIE LIST

KDL-32EX500 Series

KDL-37EX500 Series

KDL-40EX500 Series

KDL-46EX500 Series

KDL-55EX500 Series

SEC 2. ADJUSTMENT

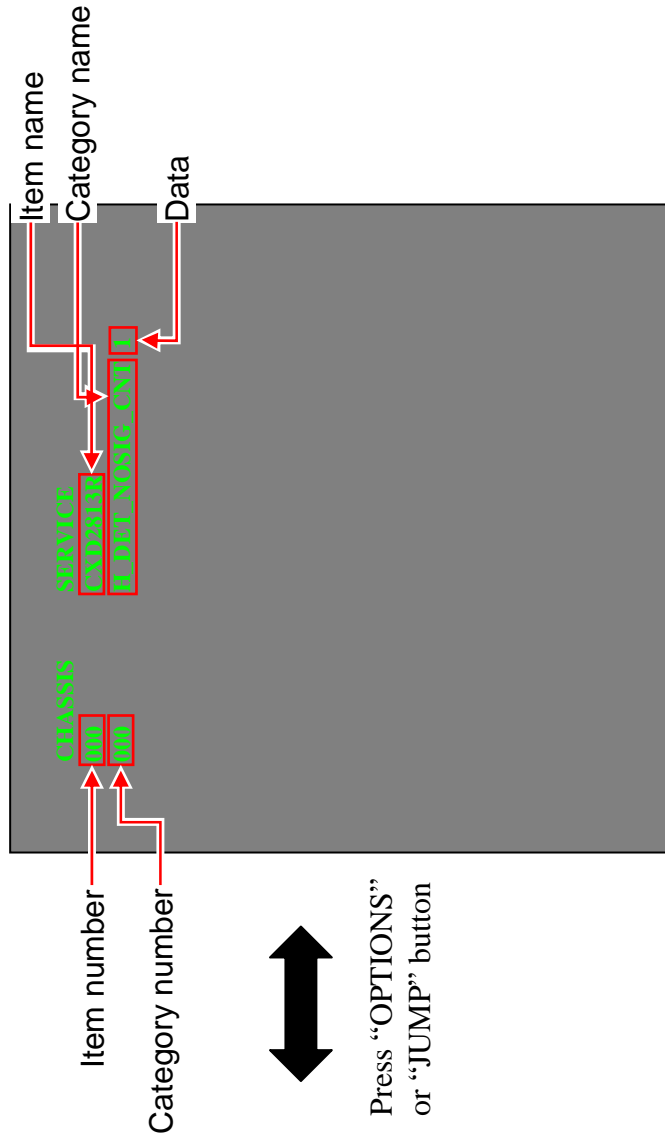
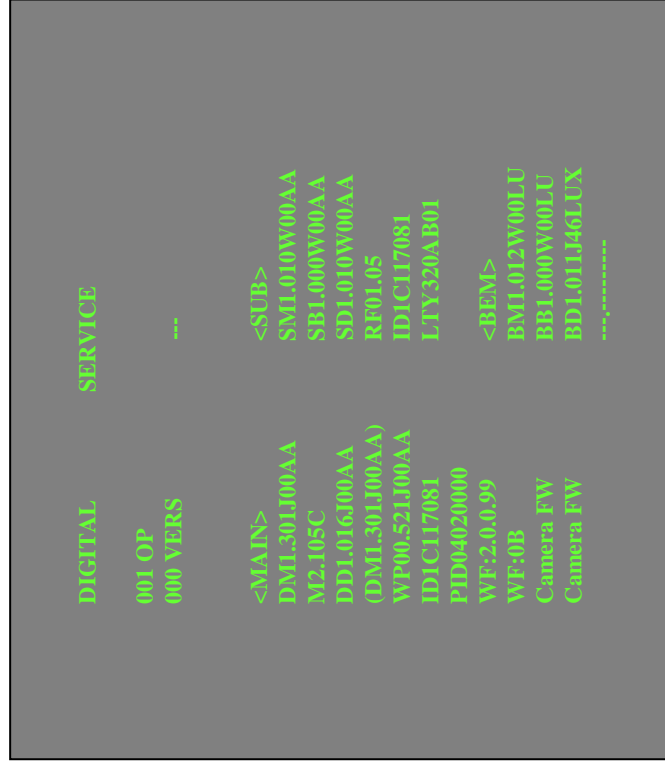
HOW TO ENTERING SERVICE MODE

- 1) Turn on the main power switch to place this set in standby mode.
- 2) Press the buttons on the remote commander as follows, and entering service mode.

[DISPLAY] → Channel [5] → Volume + → [TV POWER]

- 3) Service mode display.

Note: First of all, when you enter Service Mode, you can see “Digital” service mode.
Whenever you press “OPTIONS” or “JUMP” on remote, each service mode is changed.
“Digital” -> “Chassis” -> “Sub”



Press “OPTIONS”
or “JUMP” button

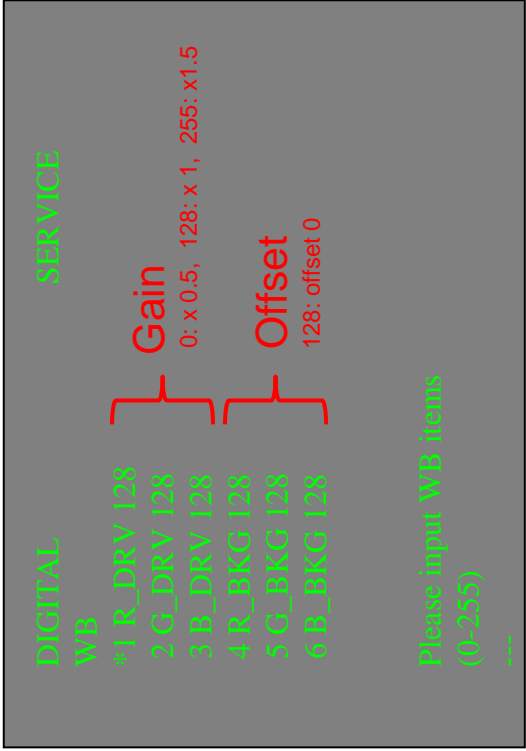
4) How to use the remote commander.

Function	The flow of control
Service mode on	<Test>+<TV>/<Display><5><Vol Up><Power>
Service mode off	<Other> / <Power off + on>
Item up / down	<1>/<4>
Category up / down	<2>/<5>
Data up / down	<3>/<6>
Test reset	<8> + <Mute> + <0>
Read data	<9> + <0>
Execute	<10 or 0>
Write data	<Mute> + <0>
Change module	<Jump> / <Option>

5) After entering service mode, then turn off the power switch.

WHITE BALANCE ADJUSTMENT

- Change Data of “Digital” service mode. (“006 WB” category)
- a. Press “0” or “10” on remote to enter WB adjustment mode.
 - b. Press number key “1”~”6” directly. “*” stamp move.
 - c. Press “12 / enter / select” to decide and advance next step.
When returning on the previous page, press “return”.
 - d. Change data by number key “0”~”9” directly. (0-255)
 - e. Press “12 / enter / select” to save data.
 - f. It shows red “WRITE”. It indicate writing is processing.
- Writing process is done at this point.



SAVE CHANGING DATA

- 1) Change Data of “Chassis” or “Sub” service mode
- 2) Write data for “Chassis” or “Sub” service mode
 - a. Press “Mute” on remote.
It shows green “SERVICE” changes to green “WRITE”.
 - b. Press “0” or “enter” on remote. Green “WRITE” changes to red “WRITE”. It indicate writing is processing.
 - c. After a while, red “WRITE” changes to green “SERVICE”. Writing process is done at this point.
- 3) TV reboot is necessary for applying data change.

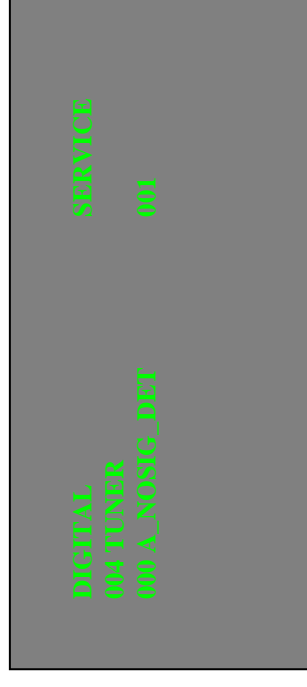


CHASSIS WRITE
000 CXD2813R
000 H_DET_NOSIG_CNT 1

CHANGE DATA

Note: “Digital” service mode don’t have to Save. (except “002 MODEL” category)

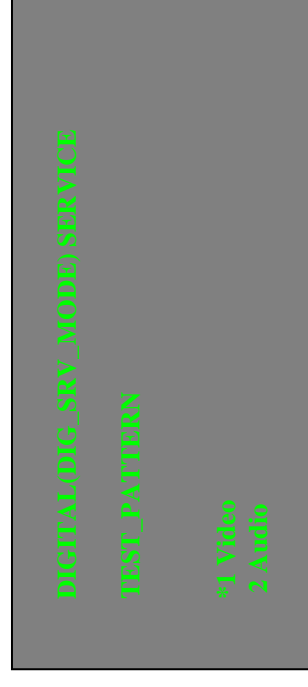
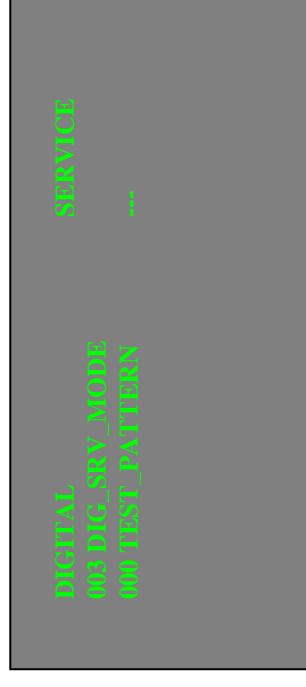
- 1) Change Data of **“Digital”** service mode. (except “003 DIG_SRV_MODE” category)
 - a. Press “2 / 5” on remote to select (up / down) category.
 - b. Press “1 / 4” on remote to select (up / down) Item.
 - c. Press “0 / 10” on remote to select item.



- 2) Change Data of **“Digital”** service mode. (“003 DIG_SRV_MODE” category)
 “003 DIG_SRV_MODE” is one category of “Digital” service mode.

Please note because this operation is special.

- a. Press “2 / 5” on remote to select “003 DIG_SRV_MODE”.
- b. Press “1 / 4” on remote to select (up / down) Item.
- c. Press “0 / 10” on remote to select item.
- d. Press number key “1”~“9” directly. “*” stamp move.
- e. Press “12 / enter / select” to decide and advance next step. Press “return”,
 when returning on the previous page.



3) Write data for ‘Digital’ service mode. (‘002 MODEL’ category)

Note: This procedure operation, when replaced the B board.

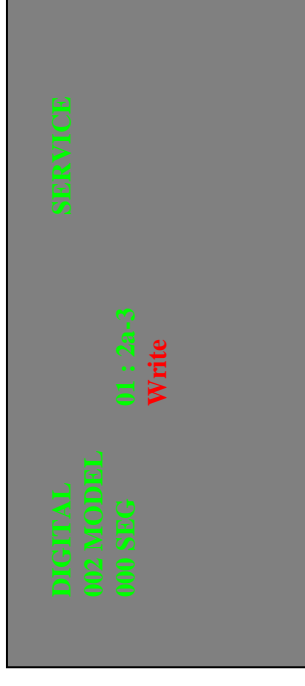
Note: Do not write a wrong segment or destination information in Product ID.

When the wrong setting is written, TV may not operate.

- 000 SEG . . . Product ID - segment information
- 001 DEST . . . Product ID – destination information
- a. Change data for each model.
- b. Press “0” or “enter” on remote.

It shows red “WRITE”. It indicate writing is processing.

- c. Writing process is done at this point.



SET TO SHIPPING CONDITION

How to do shipping condition.

- a. Move to “**Digital**” service mode.

Press “8” on remote.

It shows green “**SERVICE**” changes to green “**RST-**”.

Press “mute” on remote.

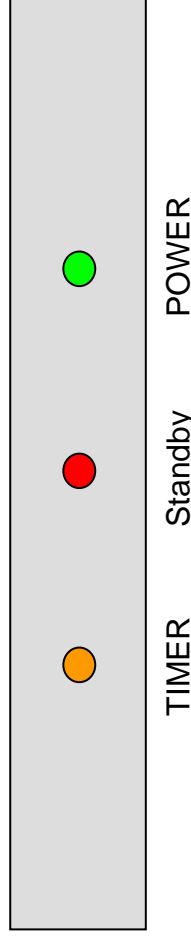
Added green “**EXE**” after green “**RST-**”.

- d. Press “0” or “enter” on remote. Green “**EXE-RST**” changes to red “**EXE-RST**”. It indicate writing is processing.

After a while, red “**EXE-RST**” changes to green “**SERVICE**”.

And all LED lights.

Writing process is done at this point.



<Another way>

You can set to shipping condition w/o entering Service Mode.

-> “Cursor Up” on remote + “Power Key” on Front panel.

SEC 3. TROUBLE SHOOTING

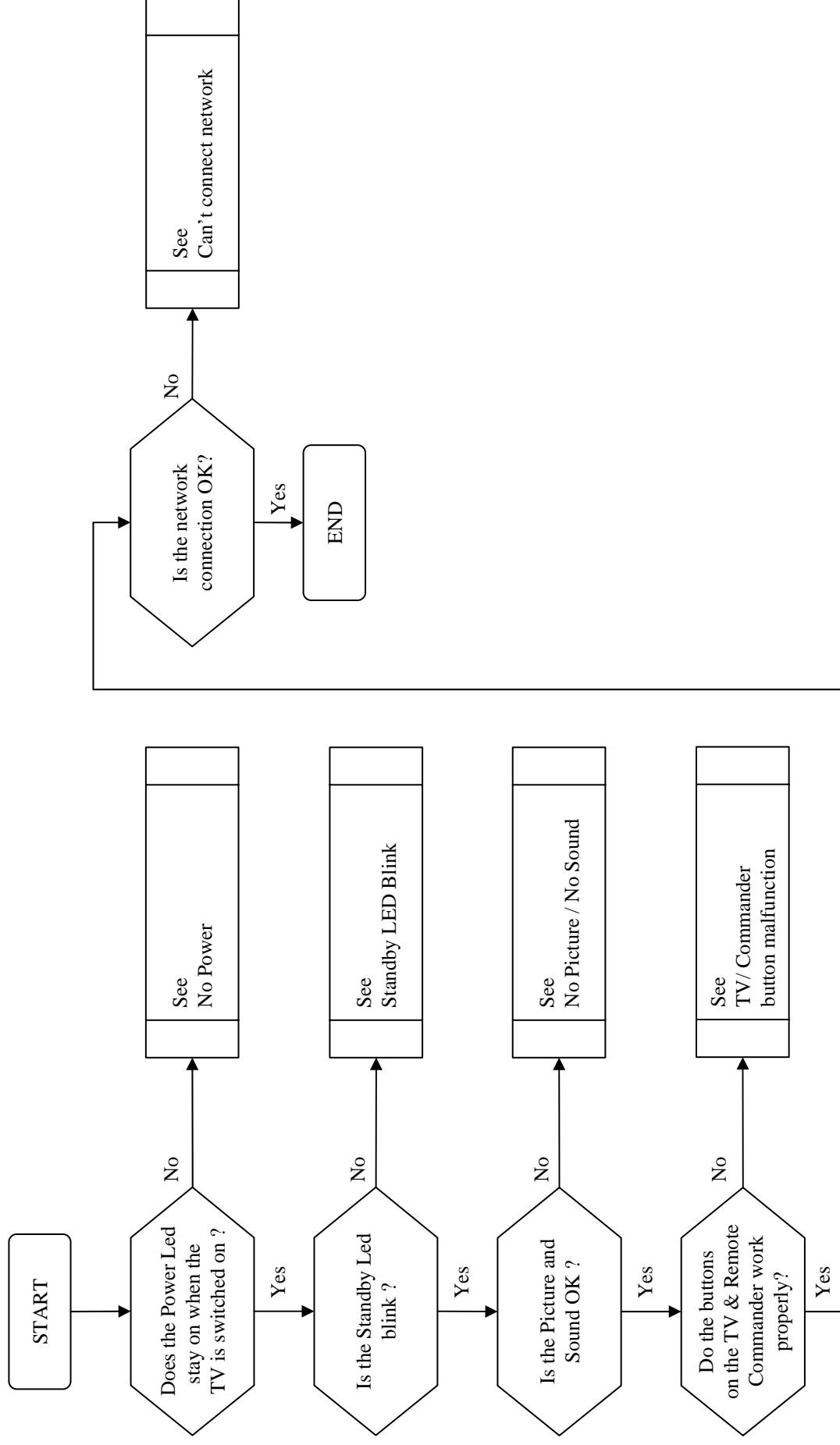
3-1. TRIAGE CHART

Note: Power board is different in name every inch. Therefore this section displays difference point in "*".

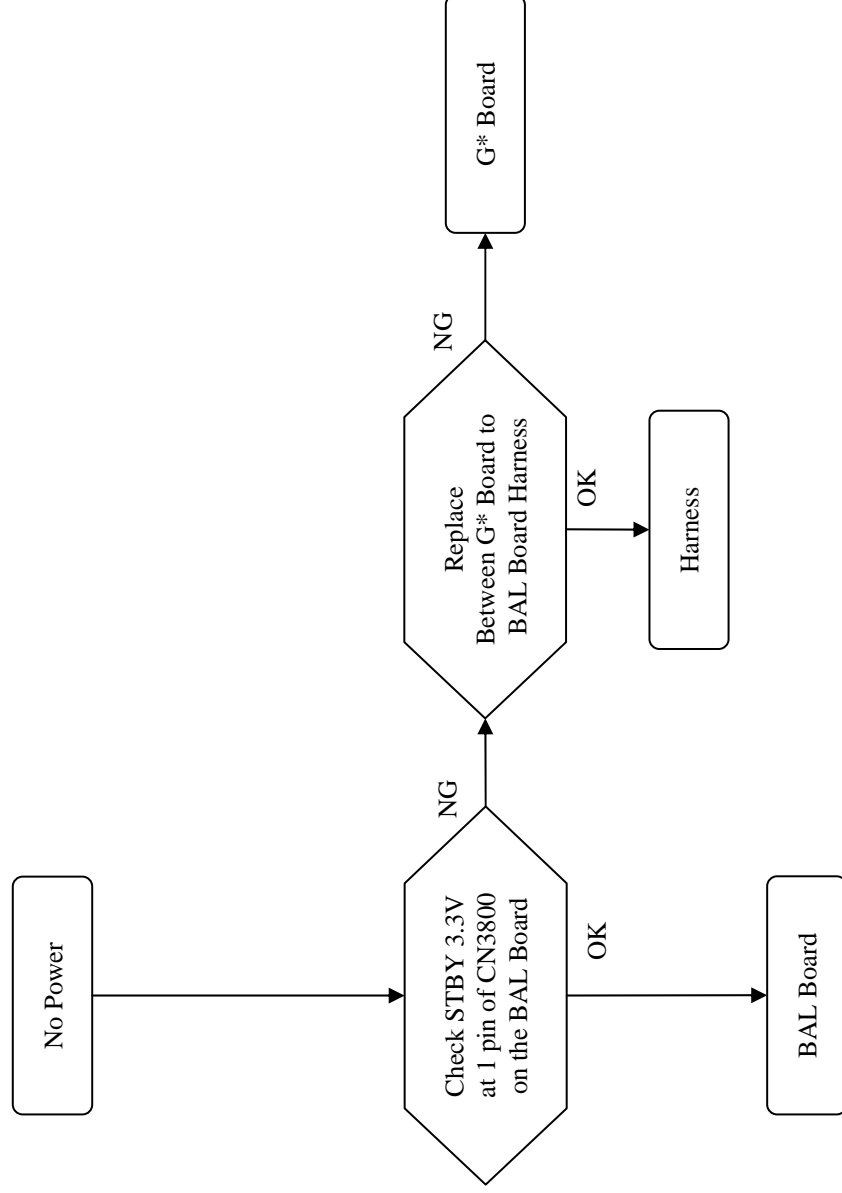
Reference	Symptoms - Shutdown. Power LED blinking red diagnostics sequences					No Power No Green Power LED (Dead Set)	Video - missing or distorted			Remote	Network	Audio
	2	3	4	5	6	7	Stationary colored lines or dots	No video one of Inputs	No video all Inputs			
BAL BOARD	▲	●	▲	▲	●	●	▲	●	●	▲	▲	●
G* BOARD	●	▲										▲
HLR BOARD										●		
WiFi MODULE											●	
D1 BOARD		▲	●									
LVDS CABLE												
LCD PANEL				●			▲		▲			
Problem	POWER	POWER DTT AUDIO	POWER	PANEL (TCON)	PANEL (INVERTER)	TEMP	●					

- : doubtful part
- ▲ : Few possibility

3-2. FLOW CHART

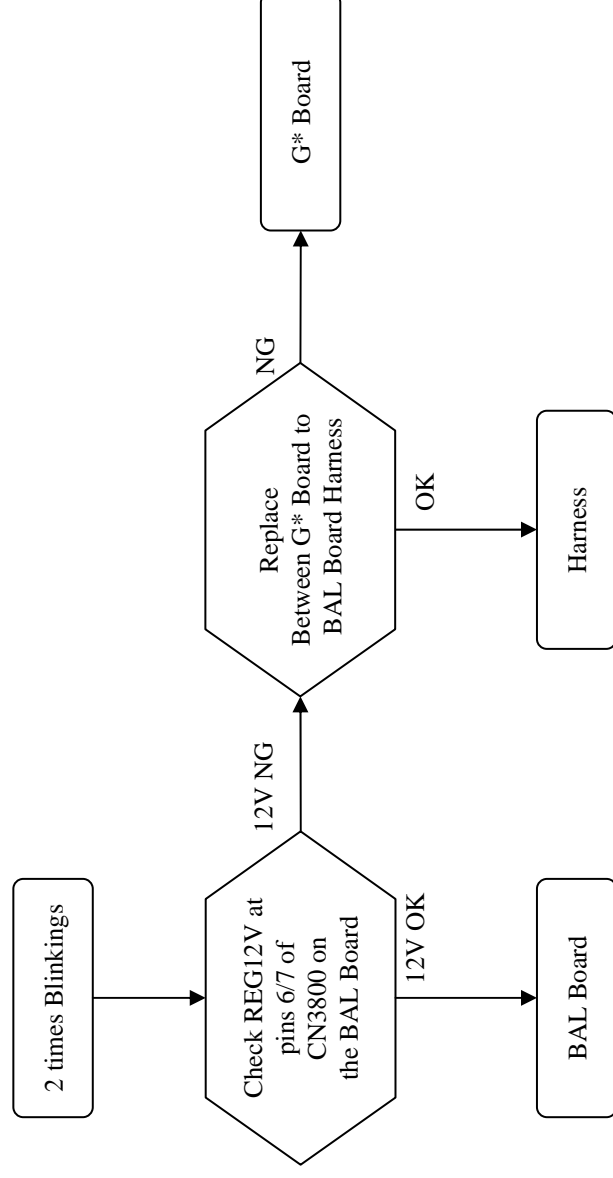


3-3. NO POWER

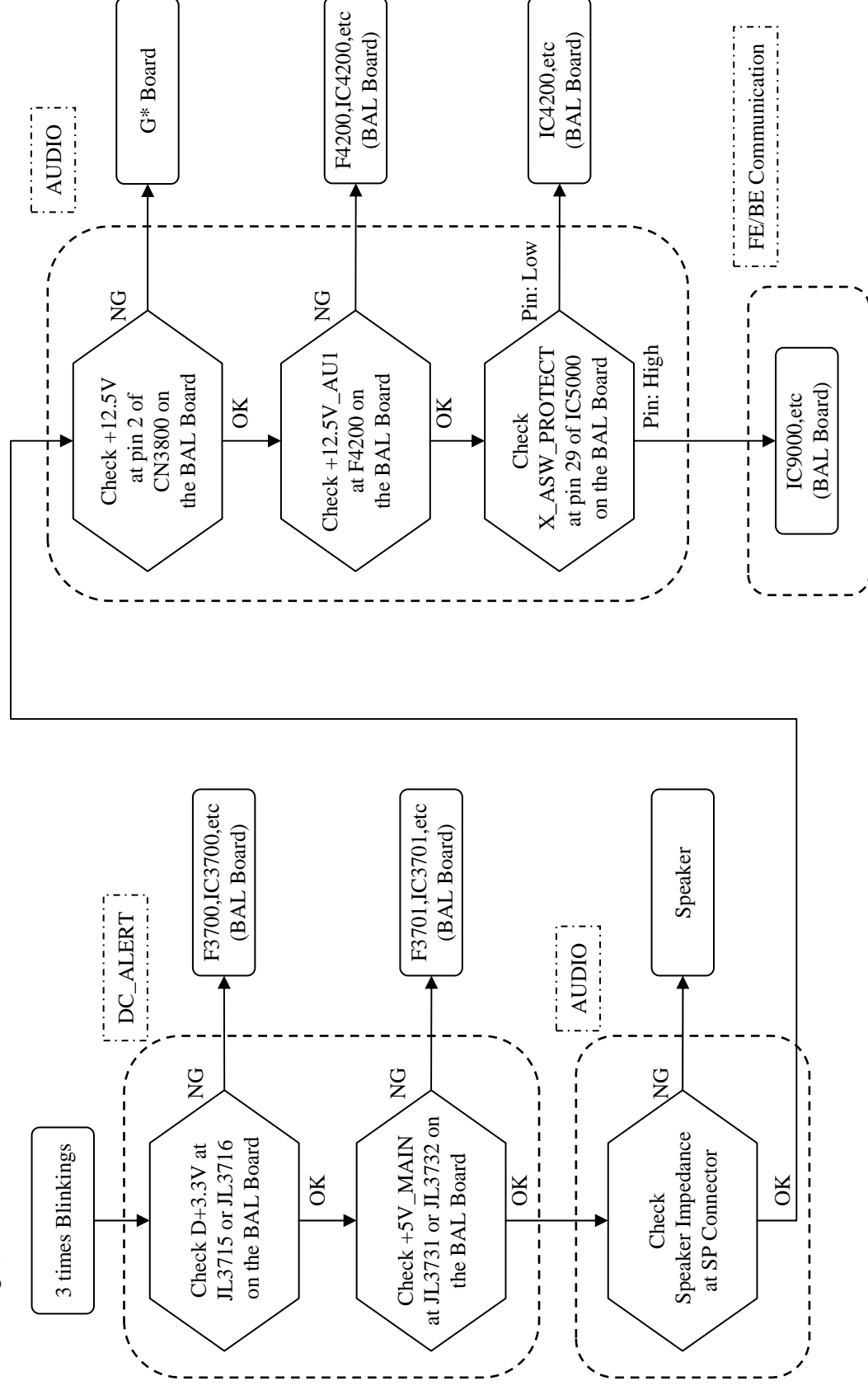


3-4. STANDBY LED BLINK

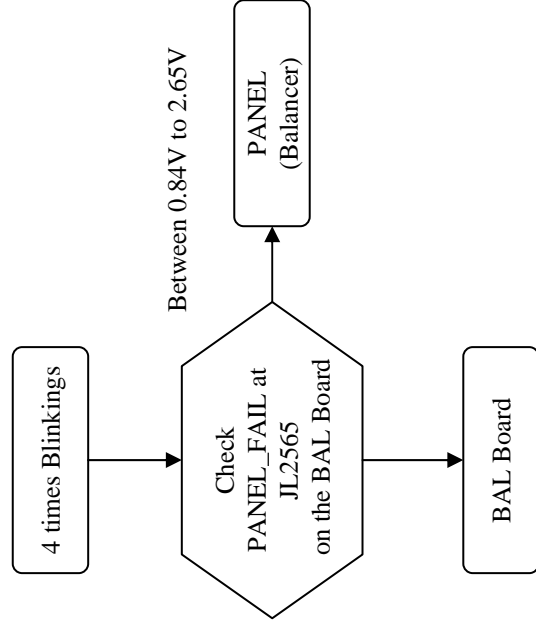
1) 2 times blinkings (Main Power Error)



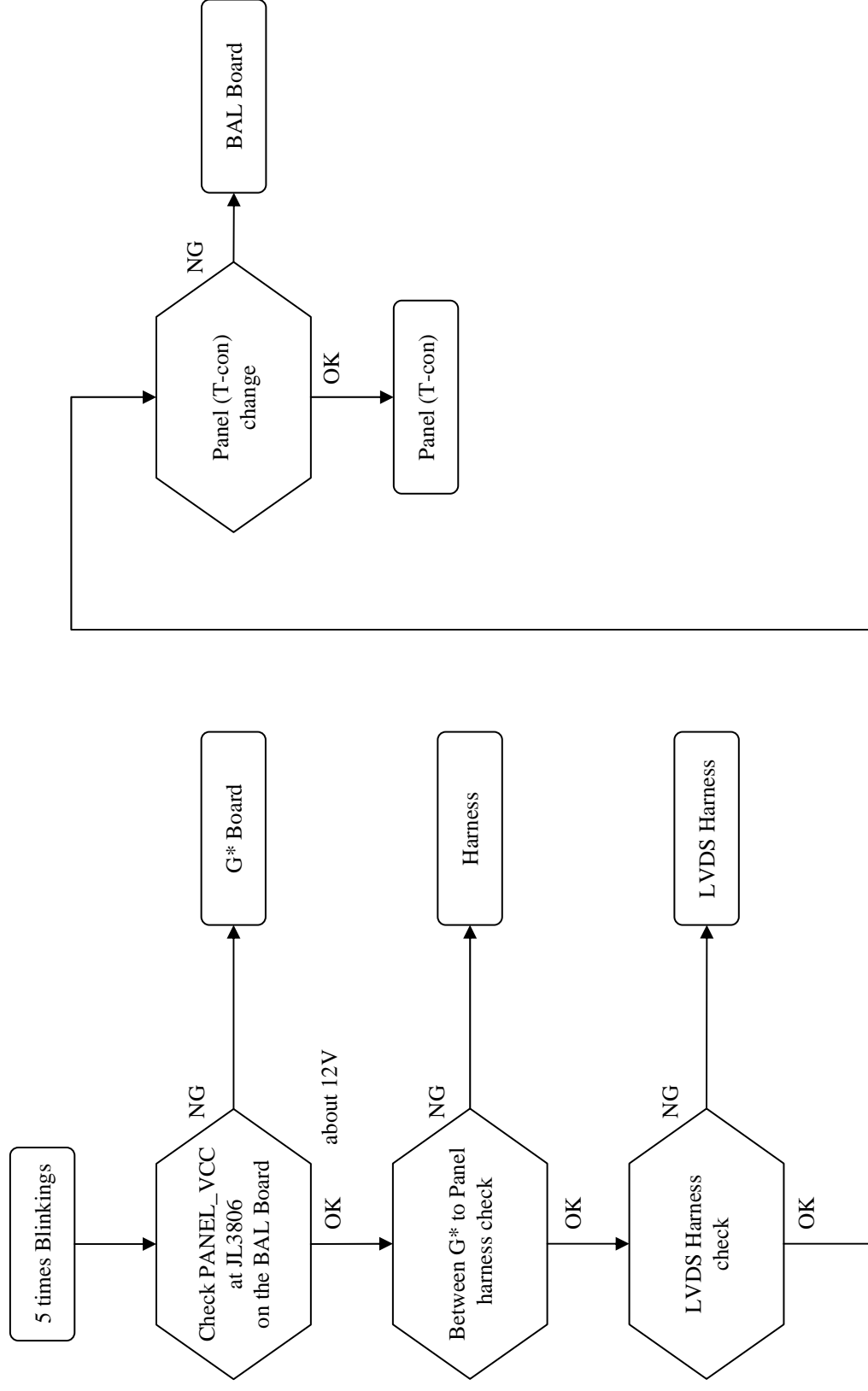
2) 3 times blinkings (DC Alert, Audio Error and Communication Error)



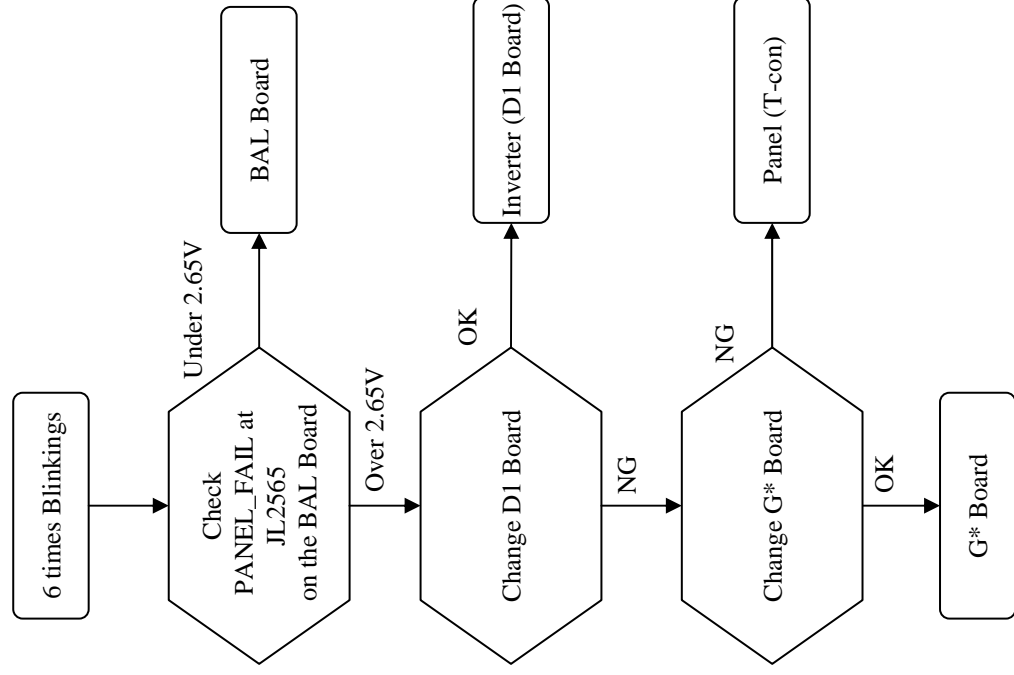
3) 4 times blinkings (Balancer Error)



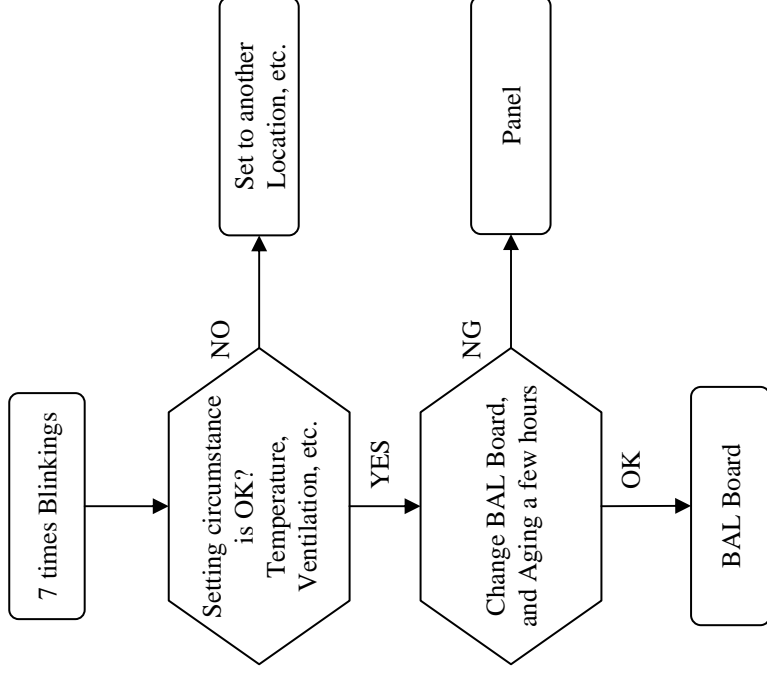
4) 5 times blinkings (T-con Error)



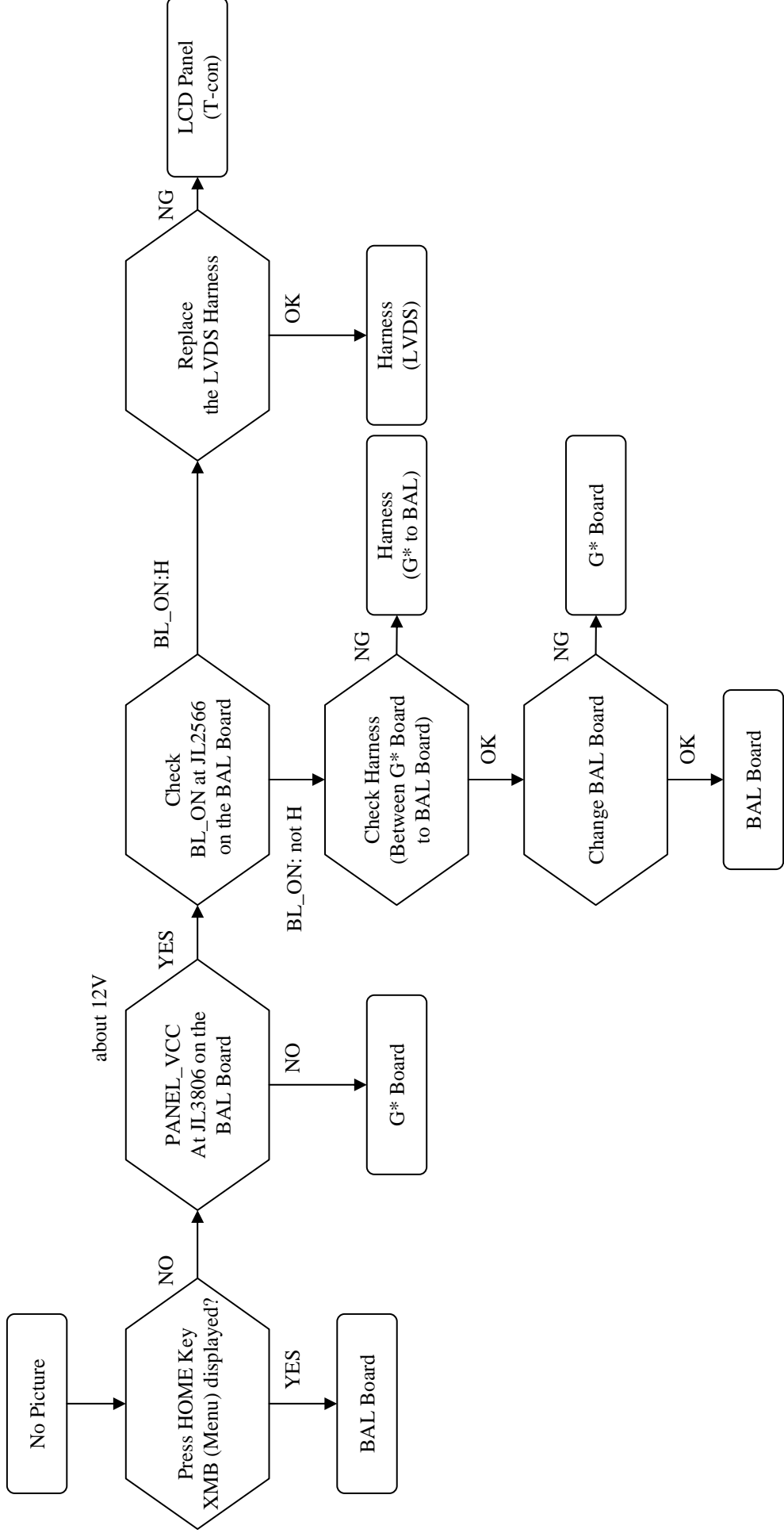
5) 6 times blinkings (Backlight Error)



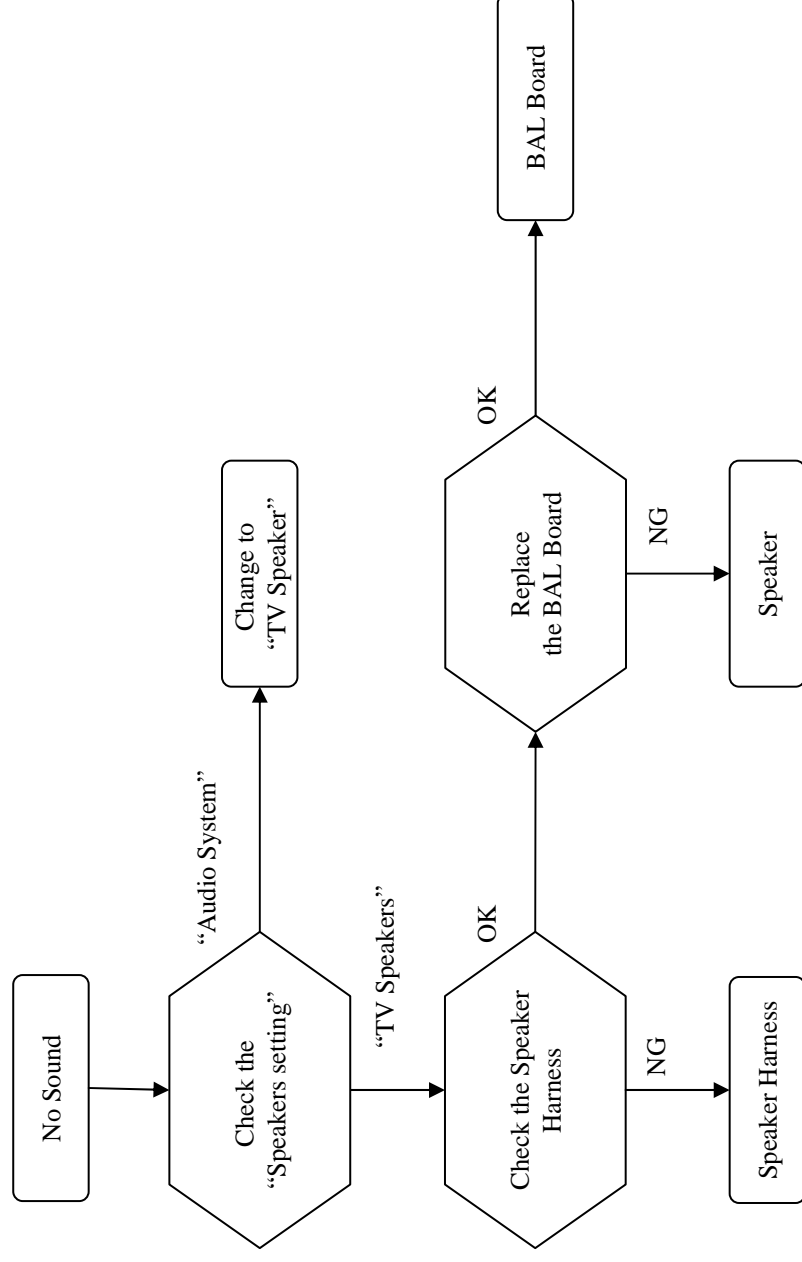
6) 7 times blinkings (Temperature Error)



3-5. NO PICTURE

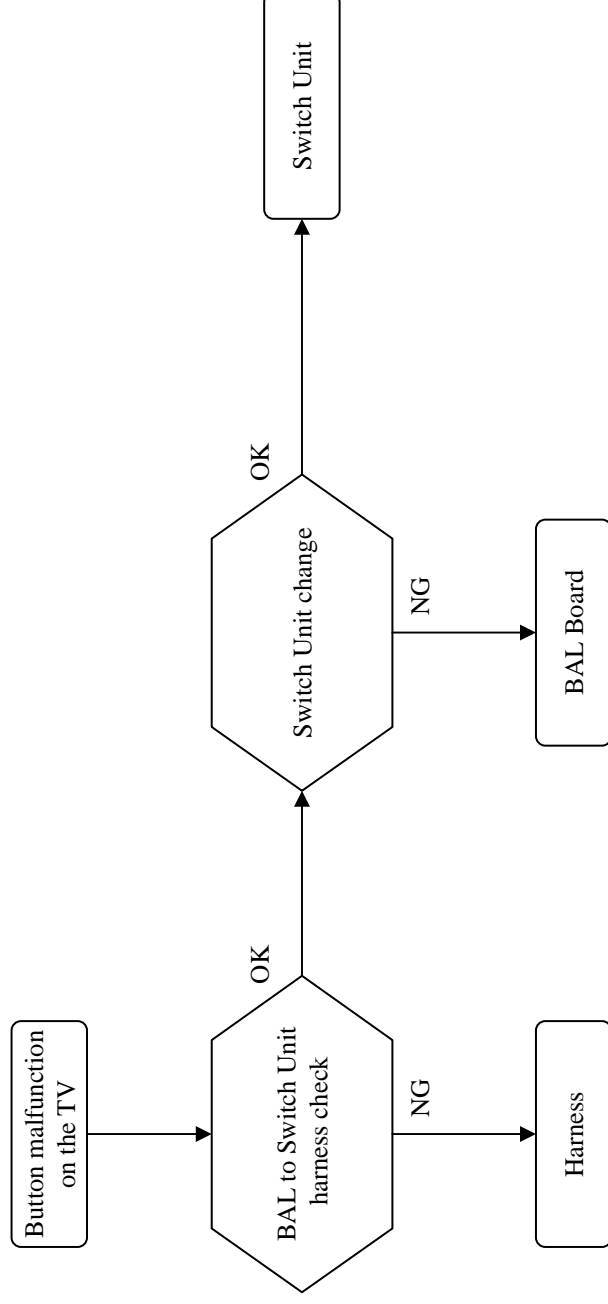


3-6. NO SOUND

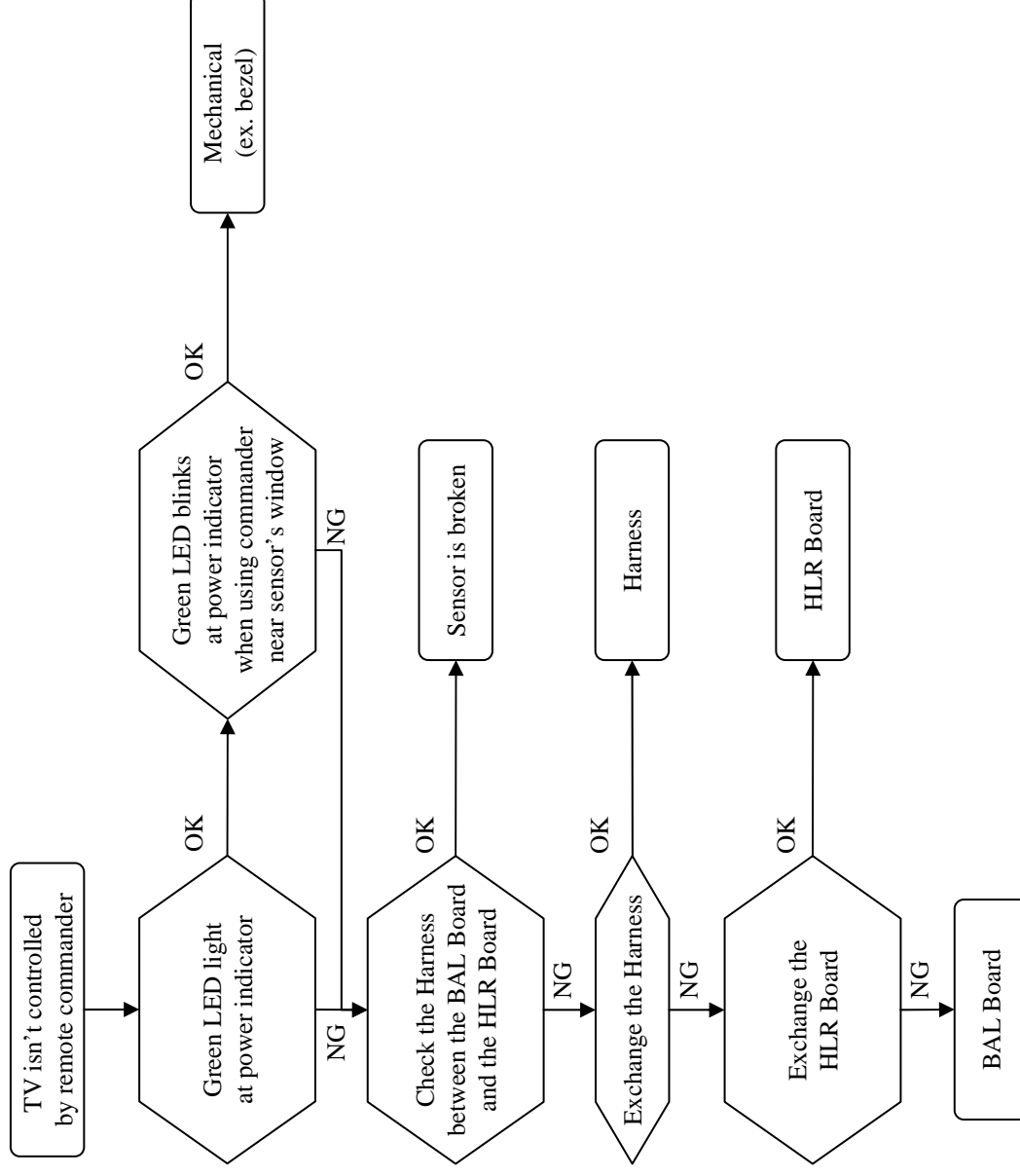


3-7. TV COMMANDER BUTTONS MALFUNCTION

1) TV button malfunction

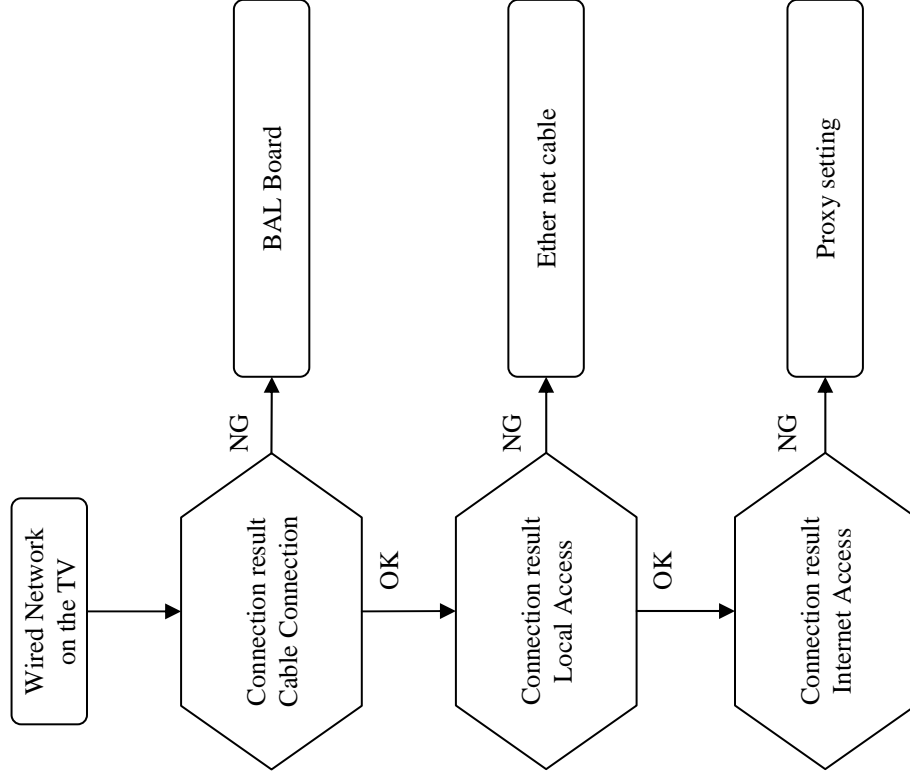


2) IR remote commander malfunction

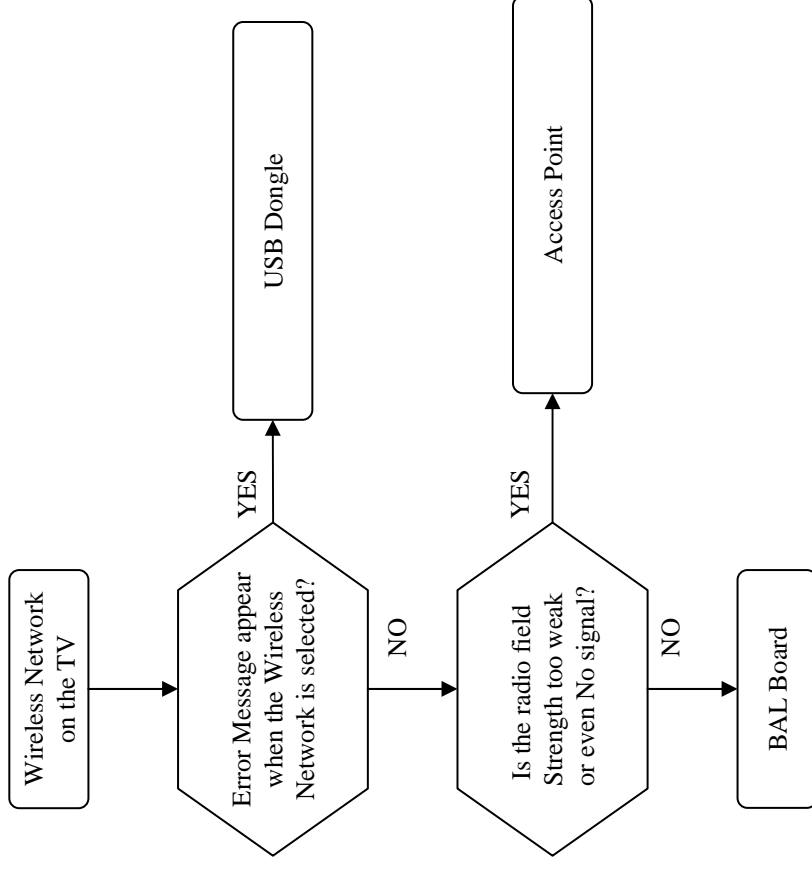


3-8. NETWORK MALFUNCTION

1) Wired Network malfunction

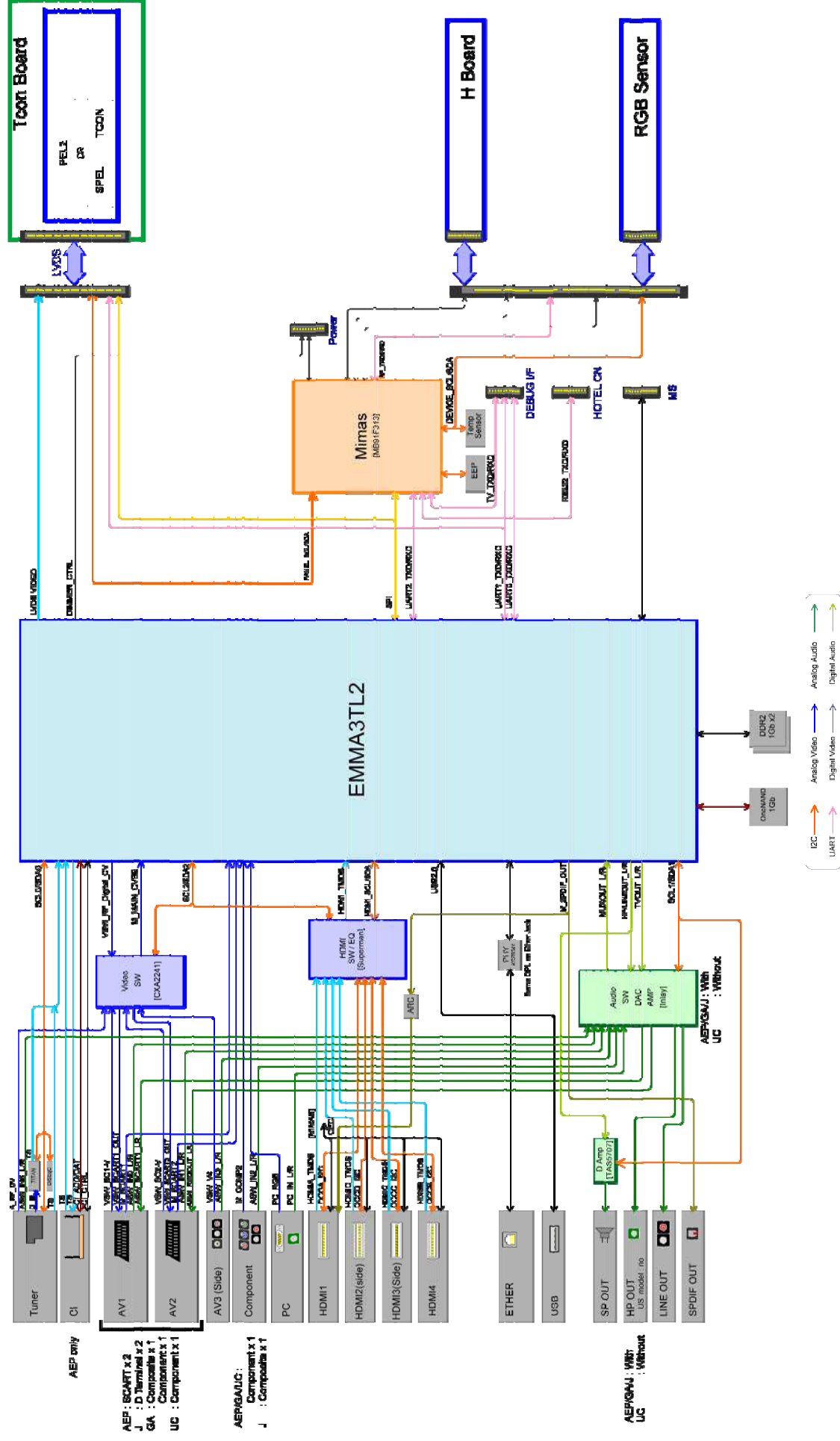


2) USB Wireless Network malfunction



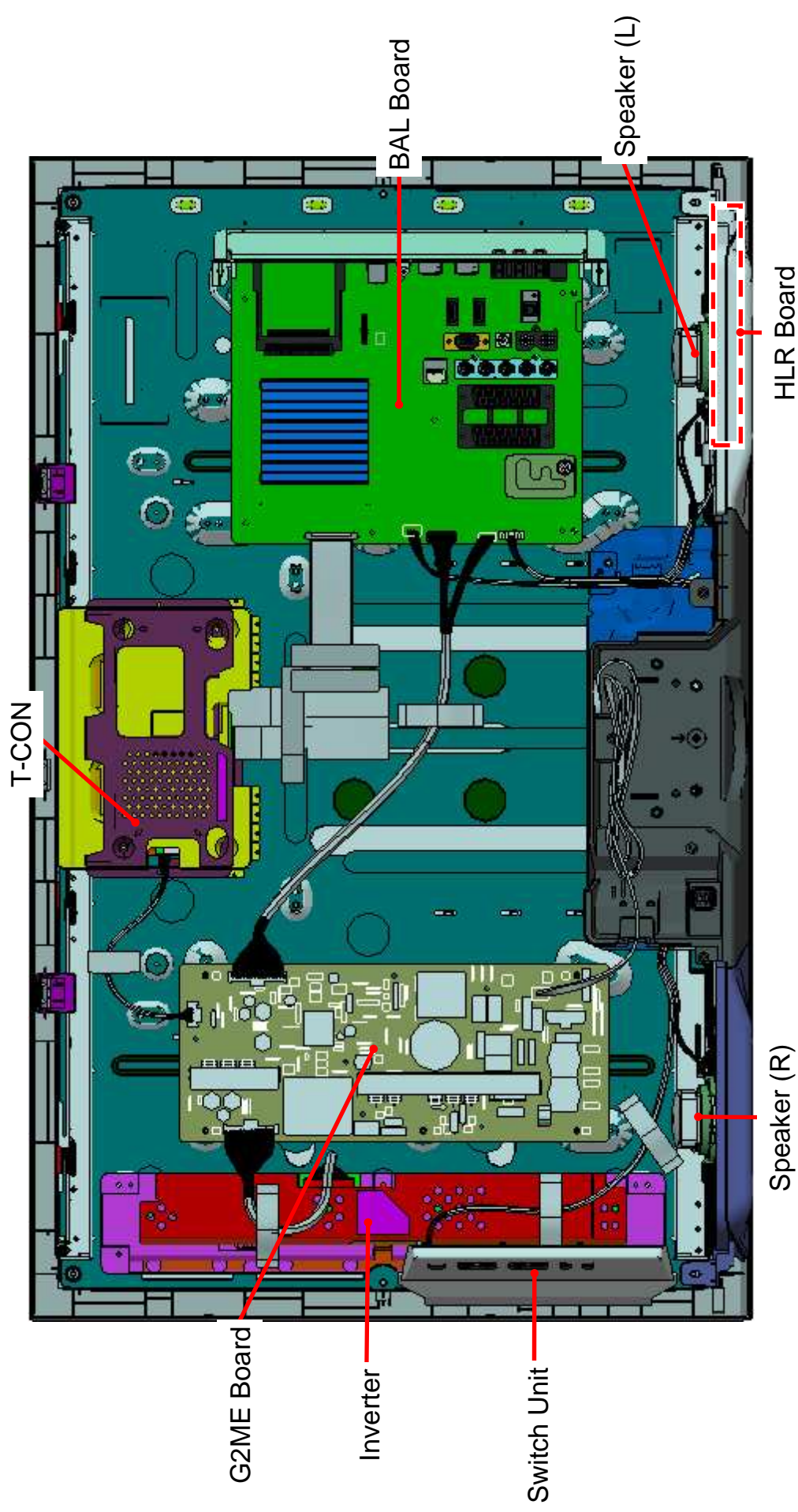
SEC 4. DIAGRAMS

4-1. BLOCK DIAGRAM

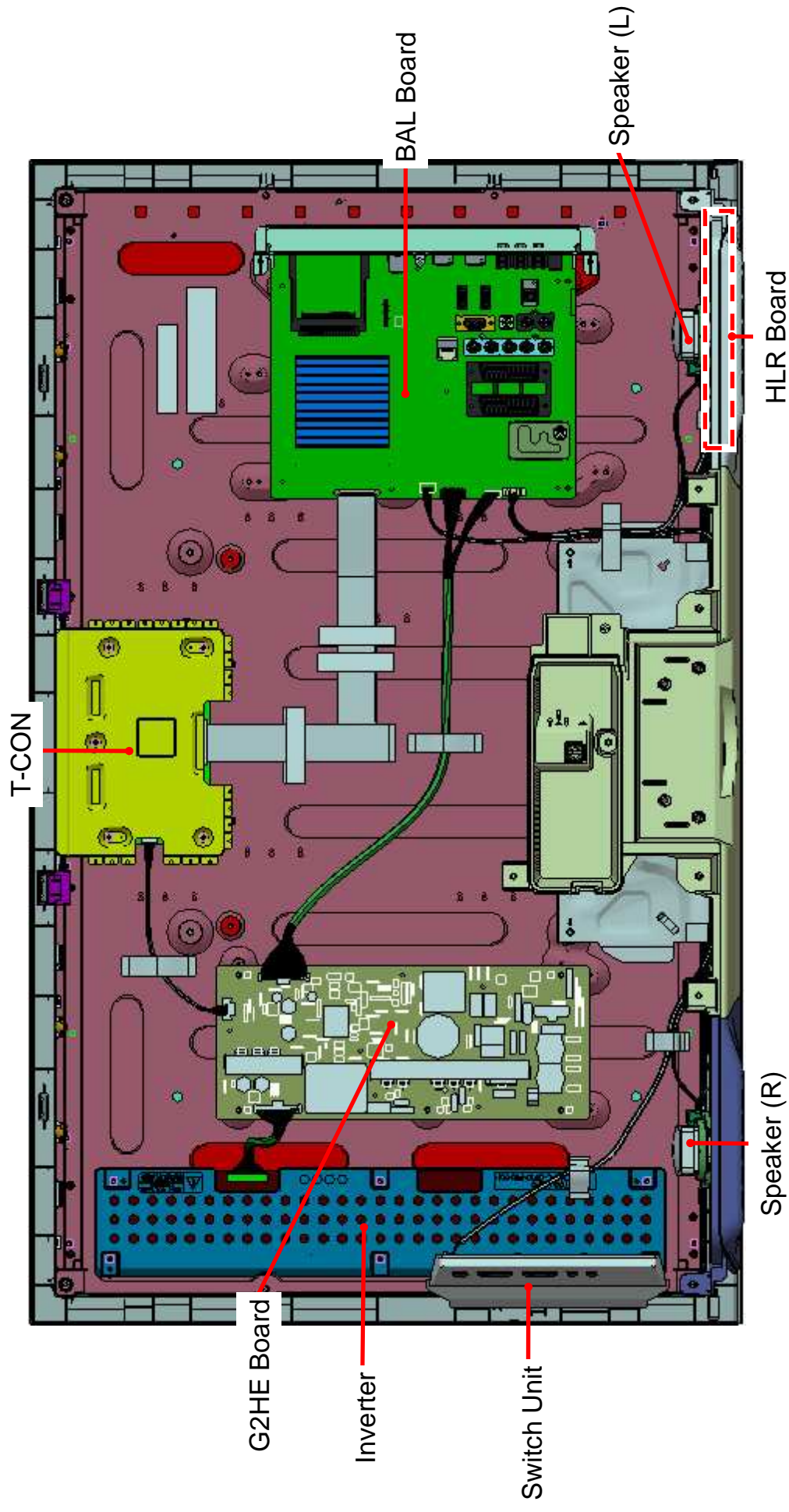


4-2. CIRCUIT BOARDS LOCATION

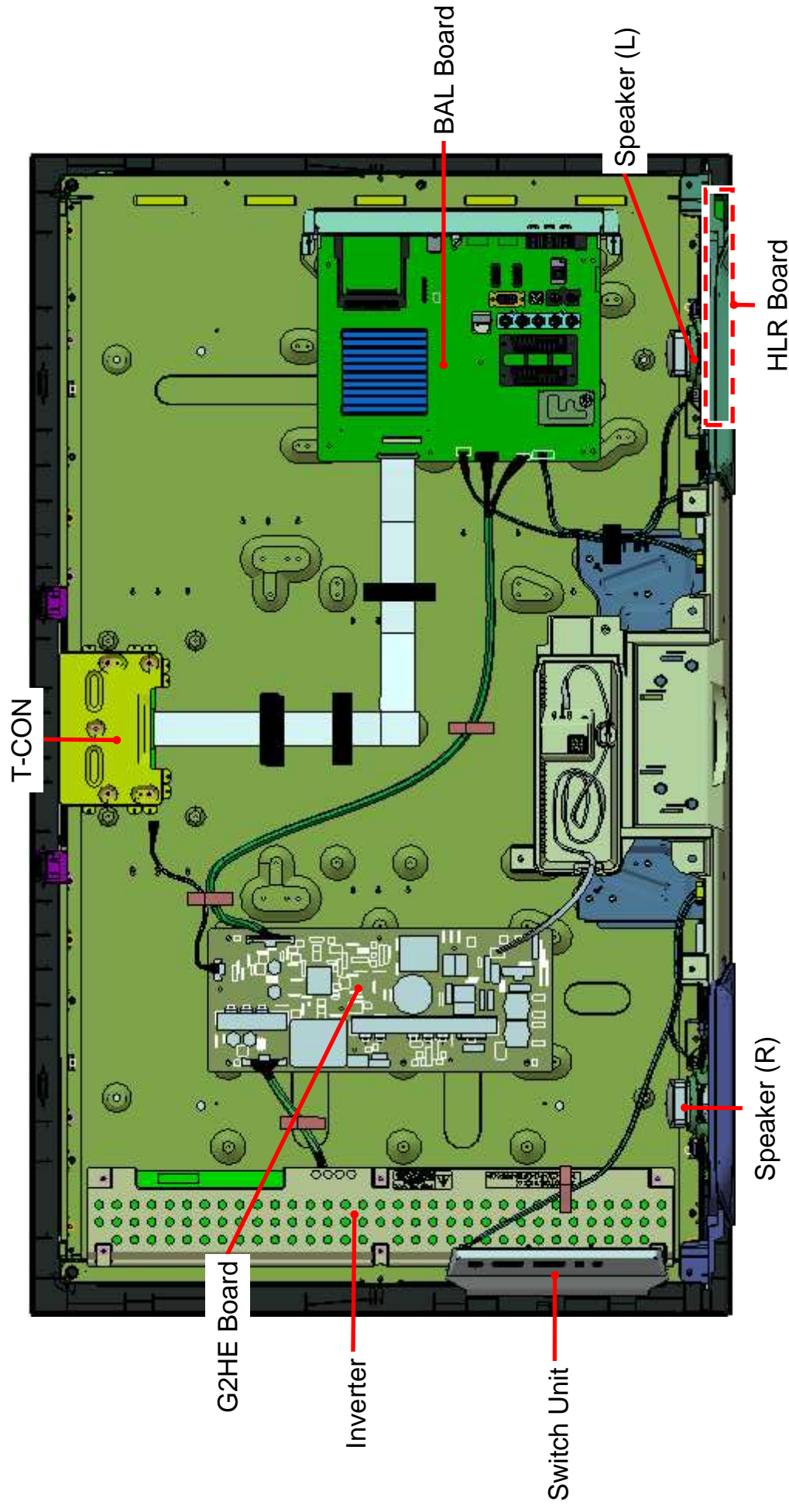
(1) KDL-32EX500 Series



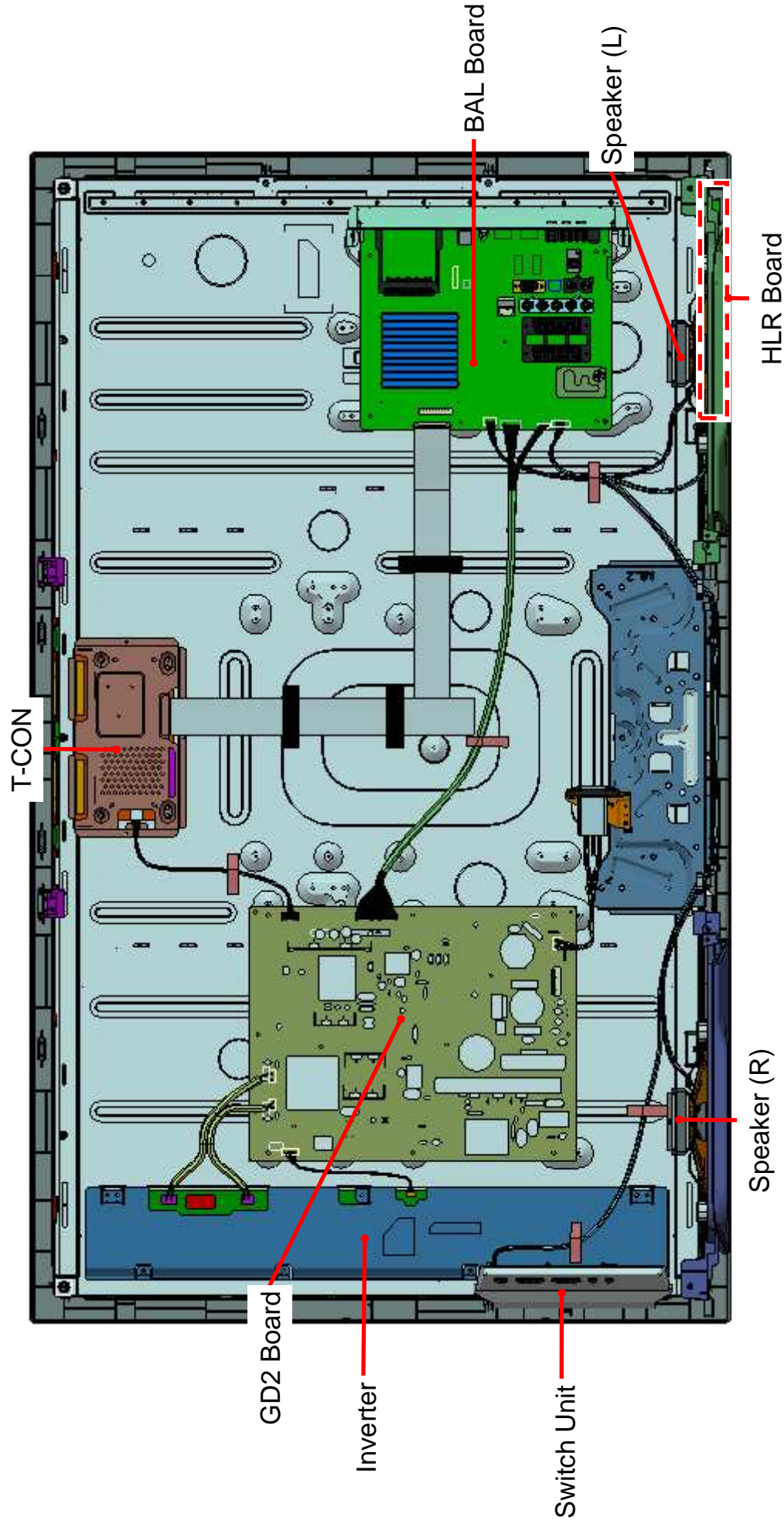
(2) KDL-37EX500 Series



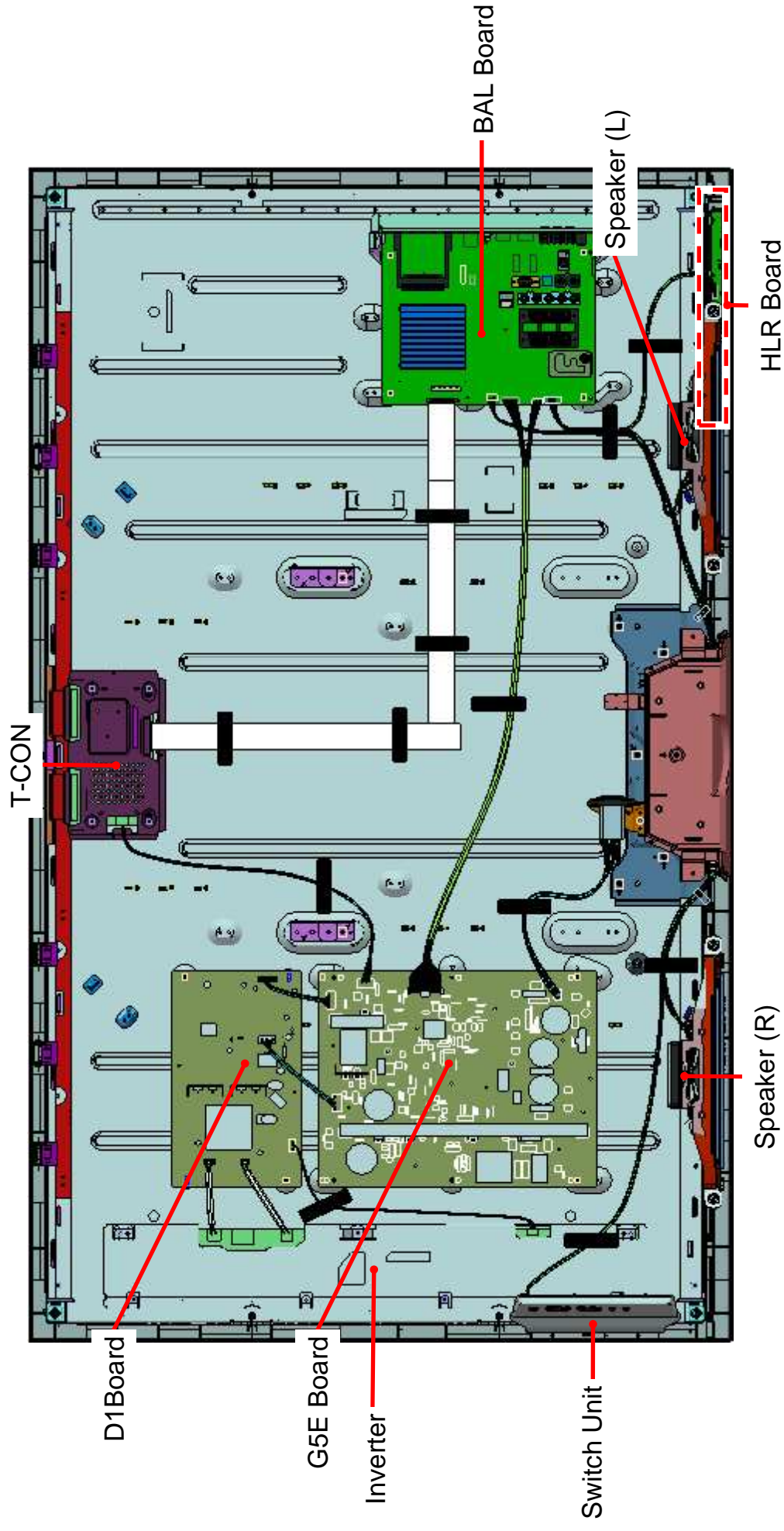
(3) KDL-40EX500 Series



(4) KDL-46EX500 Series





(5) KDL-55EX500 Series



SEC 5. EXPLODED VIEWS

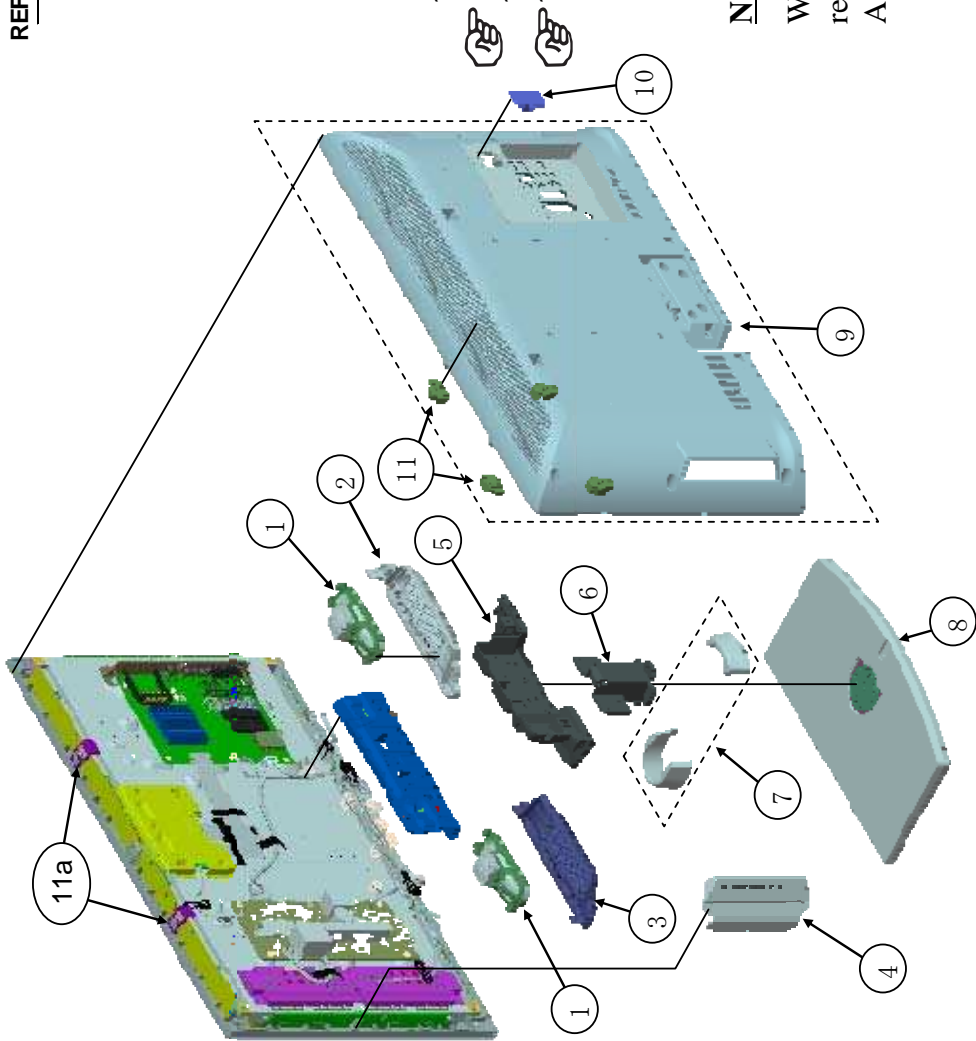
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

The components identified by mark  contain confidential information. Strictly follow the instructions whenever the components are repaired and/or replaced.

5-1. KDL-32EX500 SERIES

5-1-1. CHASSIS-1



REF. No.	PART No.	DESCRIPTION	REMARK
1	1-858-364-22	LOUDSPEAKER (12.5x4.5CM)	
2	4-166-121-11	BRACKET, SP (32L)	
3	4-166-122-11	BRACKET, SP (32R)	
4	1-487-728-11	SWITCH UNIT	
5	4-166-124-11	COVER, UNDER (32)	
6	4-158-349-01	NECK (M3)	
7	X-2546-541-1	COVER (M3) ASSY	
8	X-2546-980-1	BASE (M3) ASSY	
9	X-2546-624-1	REAR COVER (TR32) ASSY	
10	X-2547-420-1	REAR COVER (32_SAT) ASSY	EX505,508
	*3-106-546-51	COVER,ECS	
11	4-167-326-01	HOTEL ASSY	See Hotel Addendum
11a	4-166-118-11	BRACKET, VESA (S) SUPPORT, PANEL	

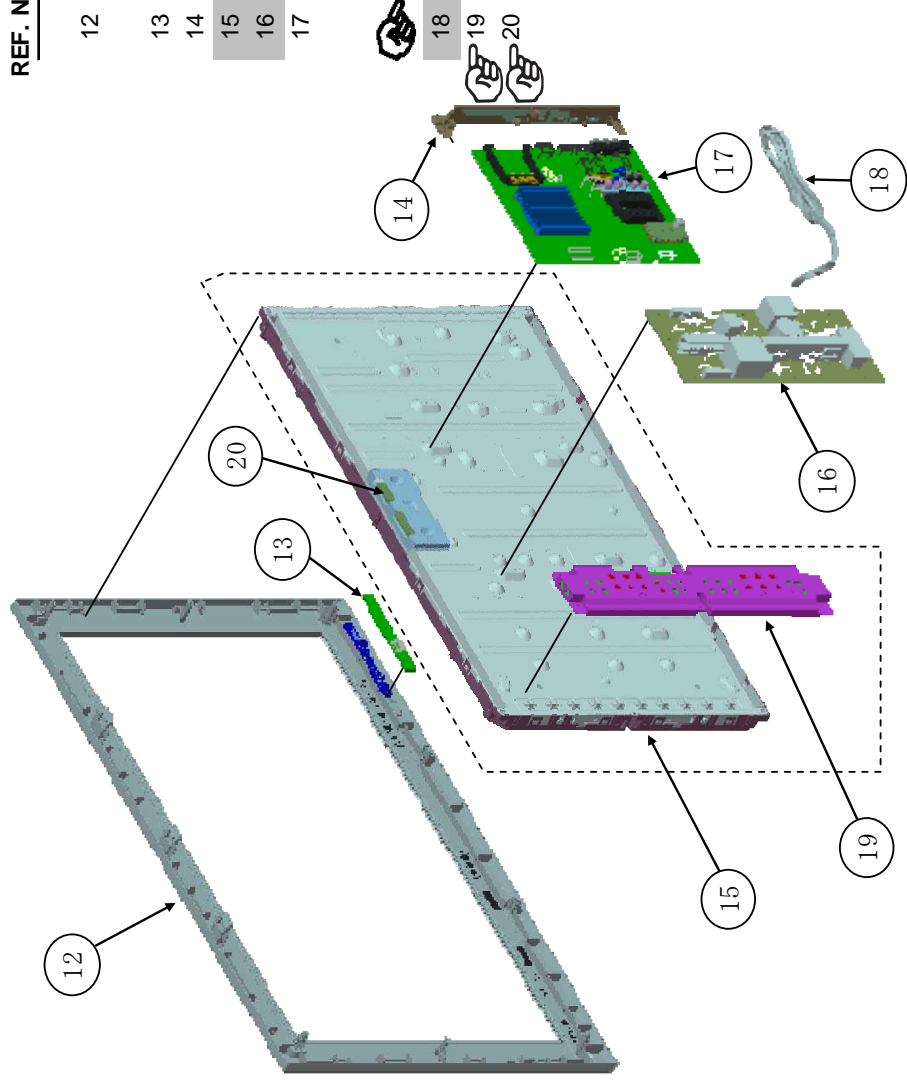
Note:

Whenever removing the 'Rear Cover' on B2B models remember to remove the connector inside the 'Hotel Assy' on the 'R2' board first.

EXPLODED VIEWS

5-1. KDL-32EX500 SERIES

5-1-2. CHASSIS-2

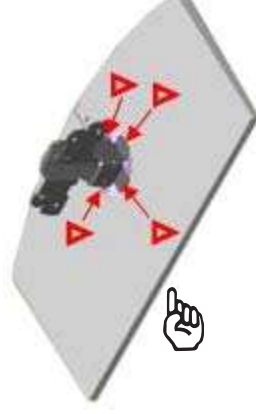
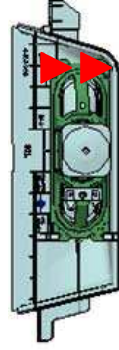
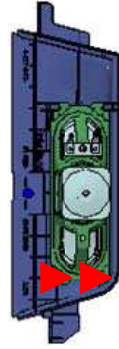
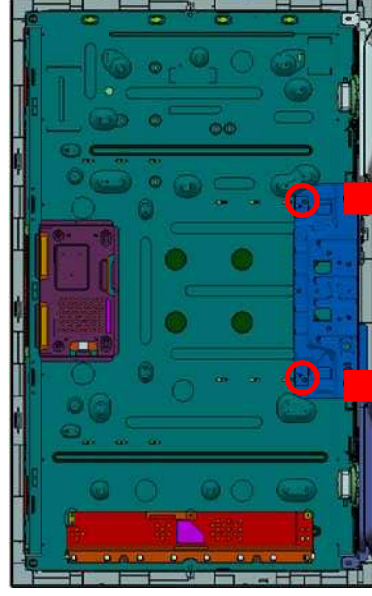
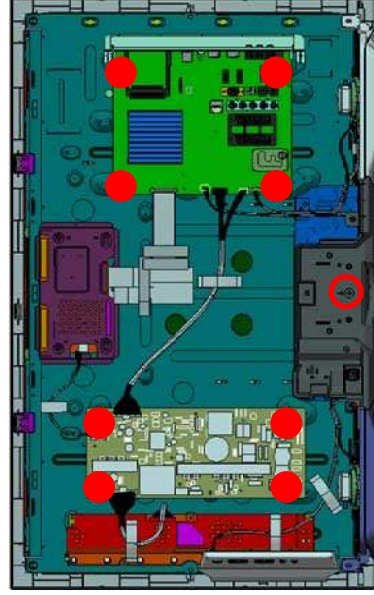
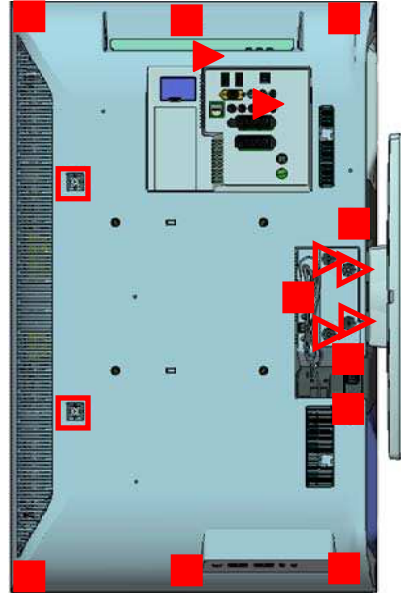


REF. No.	PART No.	DESCRIPTION	REMARK
12	X-2546-599-1	BEZEL ASSY (32TR_MET)	EX500,503,504,505
13	X-2546-744-1	BEZEL ASSY (32TR_BCK)	EX501,EX508
14	A-1753-636-A	HLR MOUNT	
15	4-166-268-01	BRACKET, SIDE JACK	
16	1-811-054-11	LCD PANEL (S32TDP)	
17	1-474-201-21	STATIC CONVERTER (TV)	
18	A-1760-331-A	BAL BOARD COMPLETE	EX500,501
19	A-1768-994-A	BAL BOARD COMPLETE	EX503
20	A-1769-581-A	BAL BOARD COMPLETE	EX505,508
	A-1780-319-A	BAL BOARD COMPLETE	EX504
18	1-837-454-11	POWER-SUPPLY CORD	
19	1-857-634-11	INVERTER BOARD	
20	1-489-034-11	TCON BOARD	

5-1. KDL-32EX500 SERIES

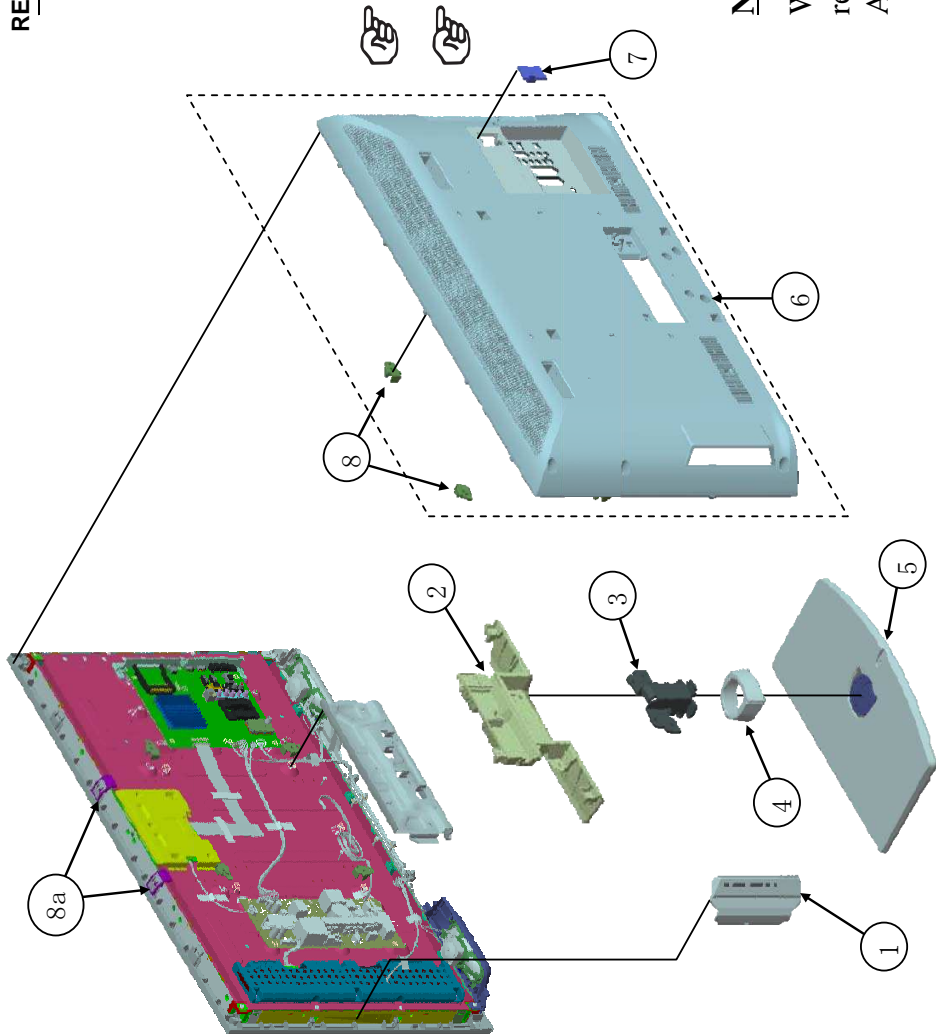
5-1-3. SCREWS

PART No.	DESCRIPTION
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□ 2-580-595-01	SCREW, +PSW M3X12
▶ 7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▽ 2-580-608-01	SCREW, +PSW M5X16
● 2-580-592-01	SCREW, +PSW M3X8
○ 4-159-298-01	SCREW, +PSW M4X10



5-2. KDL-37EX500 SERIES

5-2-1. CHASSIS-1



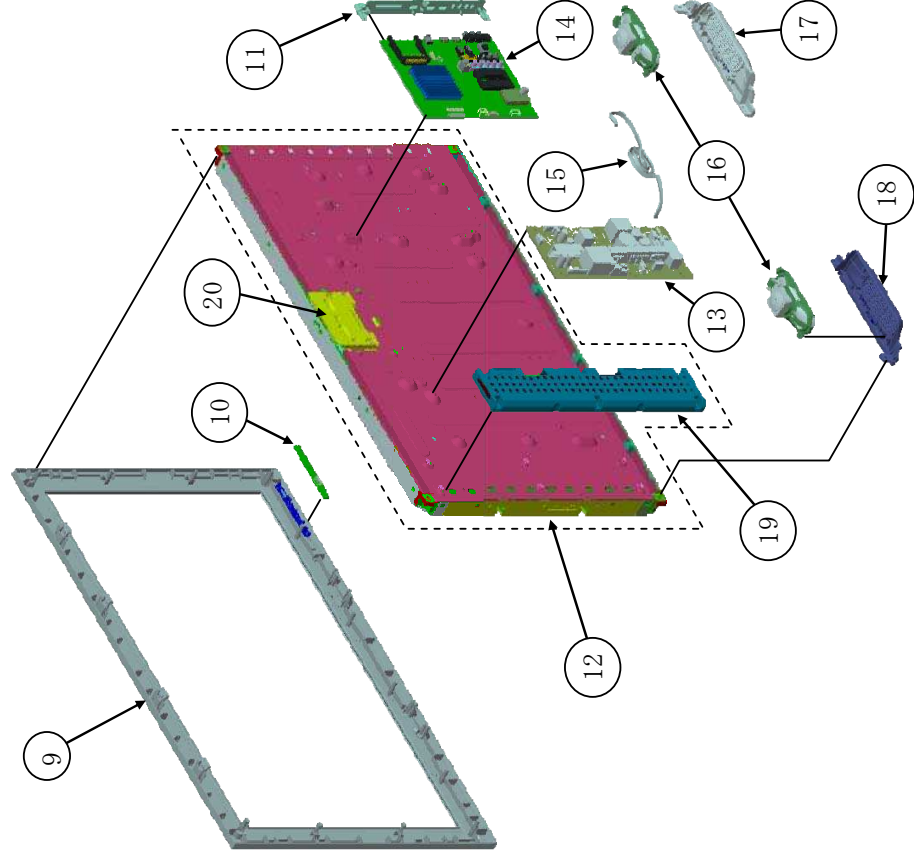
REF. No.	PART No.	DESCRIPTION	REMARK
1	1-487-728-11	SWITCH UNIT	
2	4-166-123-11	COVER, UNDER (37)	
3	4-158-350-01	NECK (ML3)	
4	X-2546-541-1	COVER (M3) ASSY	
5	X-2541-845-1	BASE (ML3) ASSY	
6	X-2546-655-1	REAR COVER (TR37) ASSY	
7	X-2547-422-1	REAR COVER (37_SAT) ASSY	EX505
	*3-106-546-51	COVER,ECS	
8	4-167-326-01	HOTEL ASSY	See Hotel Addendum
8a	4-166-118-01	BRACKET, VESA (S) SUPPORT, PANEL	

Note:

Whenever removing the 'Rear Cover' on B2B models remember to remove the connector inside the 'Hotel Assy' on the 'R2' board first.

5-2. KDL-37EX500 SERIES

5-2-2. CHASSIS-2

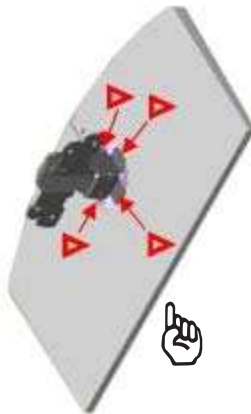
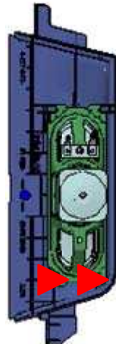
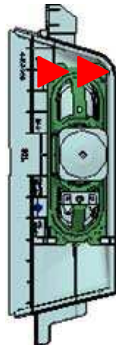
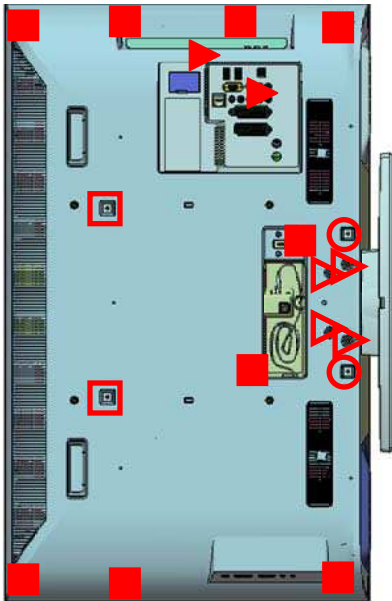
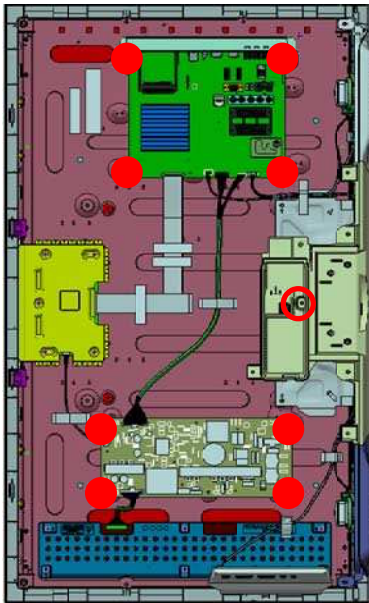
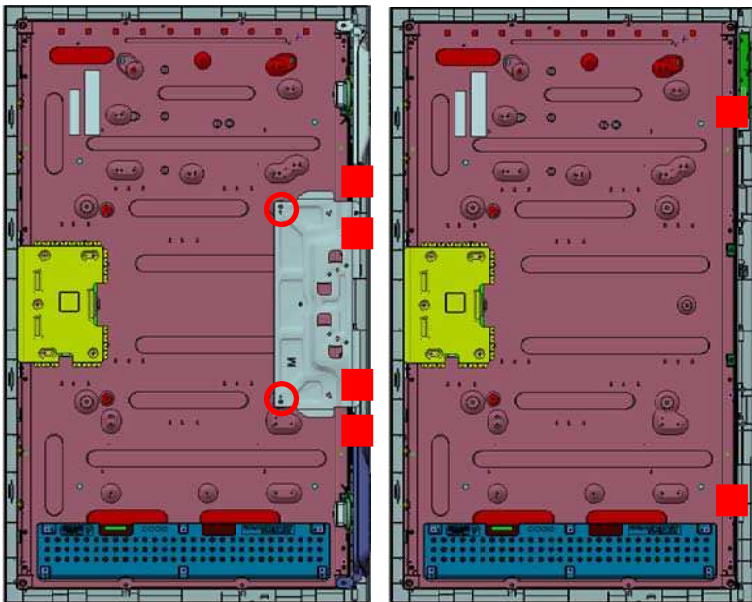


REF. No.	PART No.	DESCRIPTION	REMARK
9	X-2546-657-1	BEZEL ASSY (TR37_MET)	
10	A-1753-636-A	HLR MOUNT	
11	4-166-268-01	BRACKET, SIDE JACK	
12	1-811-077-11	LCD PANEL (A37V9)	
13	1-474-202-21	STATIC CONVERTER (TV)	
14	A-1760-331-A	BAL BOARD COMPLETE	EX500,501
15	A-1768-994-A	BAL BOARD COMPLETE	EX503
16	A-1769-581-A	BAL BOARD COMPLETE	EX505
17	A-1780-319-A	BAL BOARD COMPLETE	EX504
18	1-837-454-11	POWER-SUPPLY CORD	
19	1-858-364-22	LOUDSPEAKER (12.5x4.5CM)	
20	4-166-121-11	BRACKET, SP (37L)	
	4-166-122-11	BRACKET, SP (37R)	
	1-857-701-11	INVERTER BOARD	
	1-857-700-11	TCON BOARD	

5-2. KDL-37EX500 SERIES

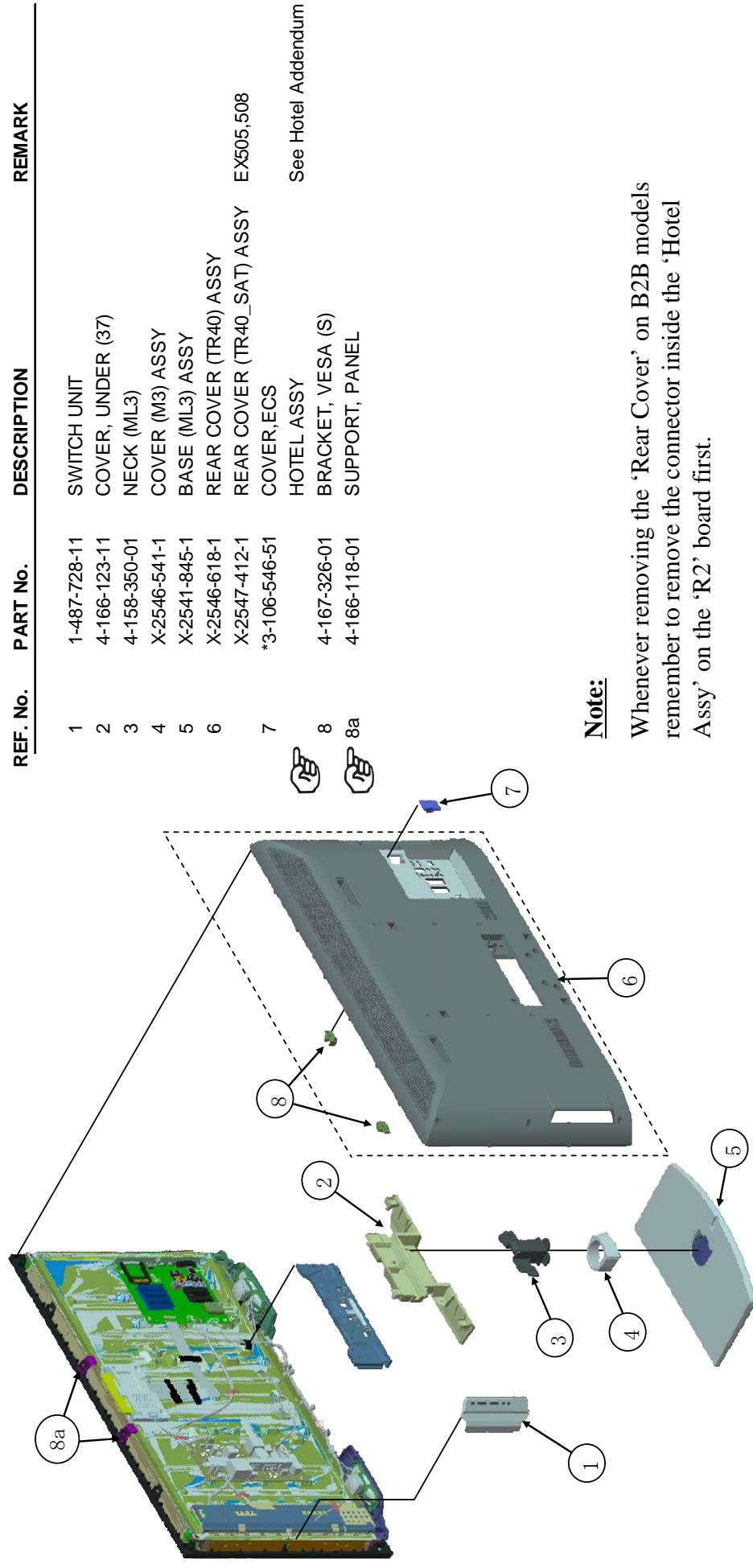
5-2-3. SCREWS

PART No.	DESCRIPTION
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□ 2-580-595-01	SCREW, +PSW M3X12
▴ 7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▾ 2-580-608-01	SCREW, +PSW M5X16
● 2-580-592-01	SCREW, +PSW M3X8
○ 4-159-298-01	SCREW, +PSW M4X10



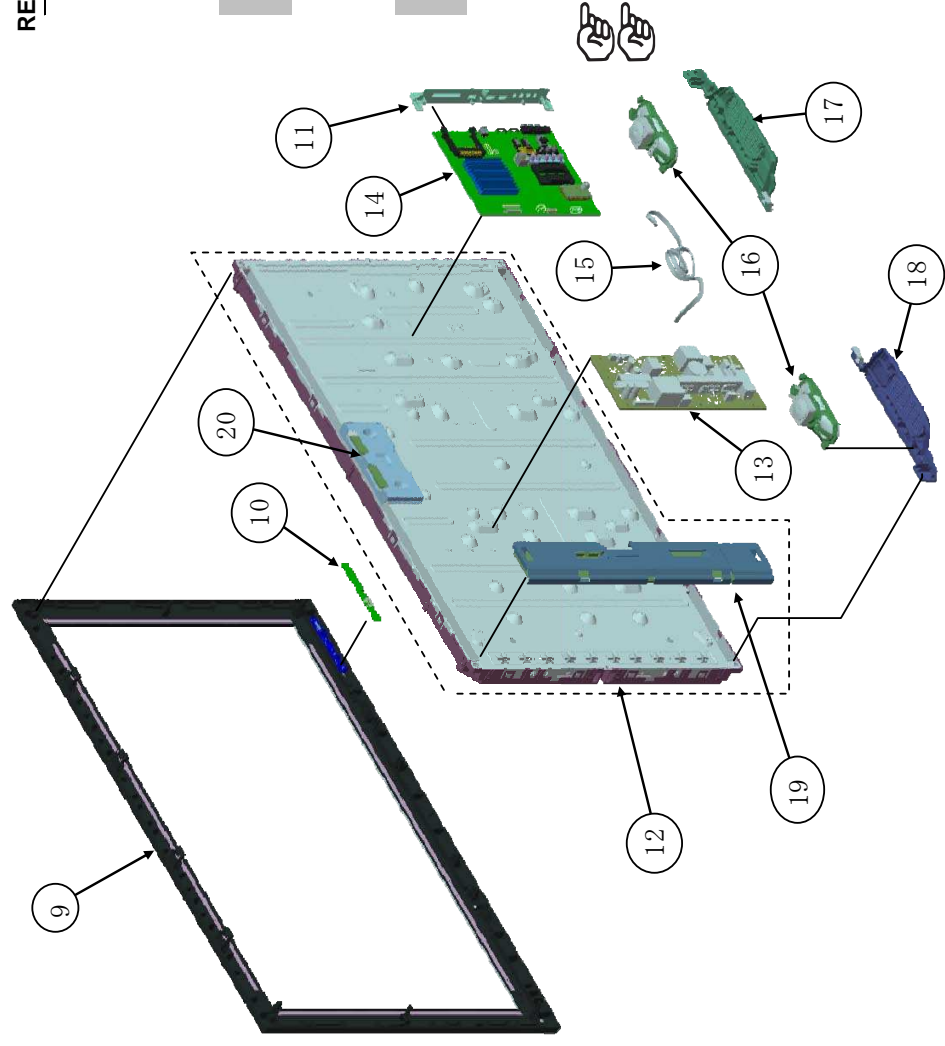
5-3. KDL-40EX500 SERIES

5-3-1. CHASSIS-1



5-3. KDL-40EX500 SERIES

5-3-2. CHASSIS-2

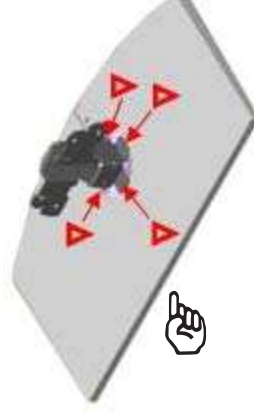
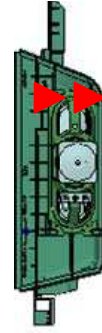
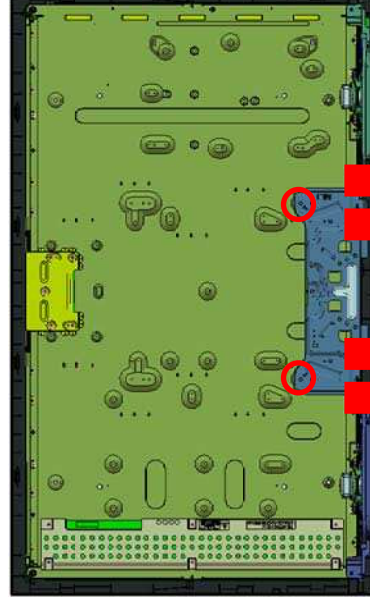
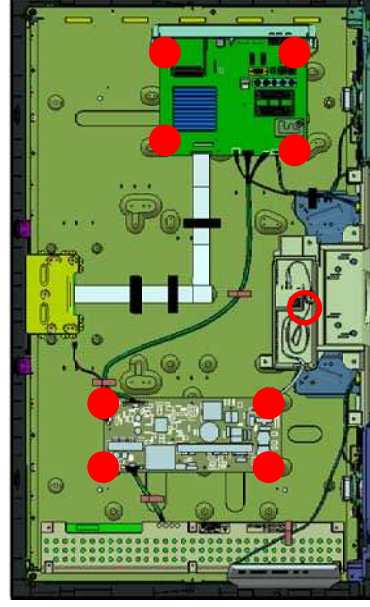
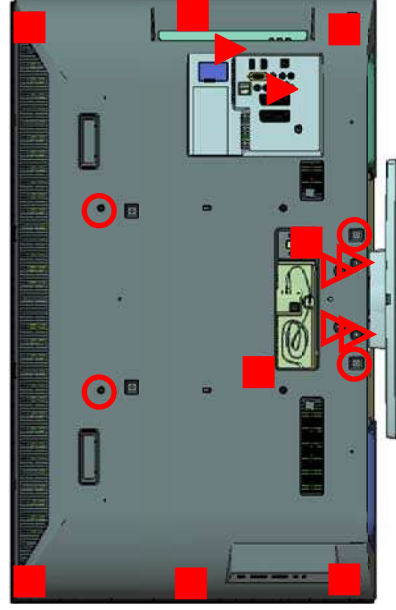


REF. No.	PART No.	DESCRIPTION	REMARK
9	X-2546-615-1	BEZEL ASSY (TR40_MET)	EX500,503,505
	X-2546-769-1	BEZEL ASSY (TR40_BCK)	EX501,508
10	A-1753-636-A	HLR MOUNT	
11	4-166-268-01	BRACKET, SIDE JACK	
12	1-811-055-12	LCD PANEL (S40TDP)	
13	1-474-202-21	STATIC CONVERTER (TV)	
14	A-1760-331-A	BAL BOARD COMPLETE	EX500,501
	A-1768-994-A	BAL BOARD COMPLETE	EX503
	A-1769-581-A	BAL BOARD COMPLETE	EX505,508
15	1-837-454-11	POWER-SUPPLY CORD	
	1-837-455-11	POWER-SUPPLY CORD (UK)	EX503
16	1-858-364-22	LOUDSPEAKER (12.5x4.5CM)	
17	4-166-119-11	BRACKET, SP (40L)	
18	4-166-120-11	BRACKET, SP (40R)	
19	1-857-640-11	INVERTER BOARD	
20	1-857-648-11	TCON BOARD	

5-3. KDL-40EX500 SERIES

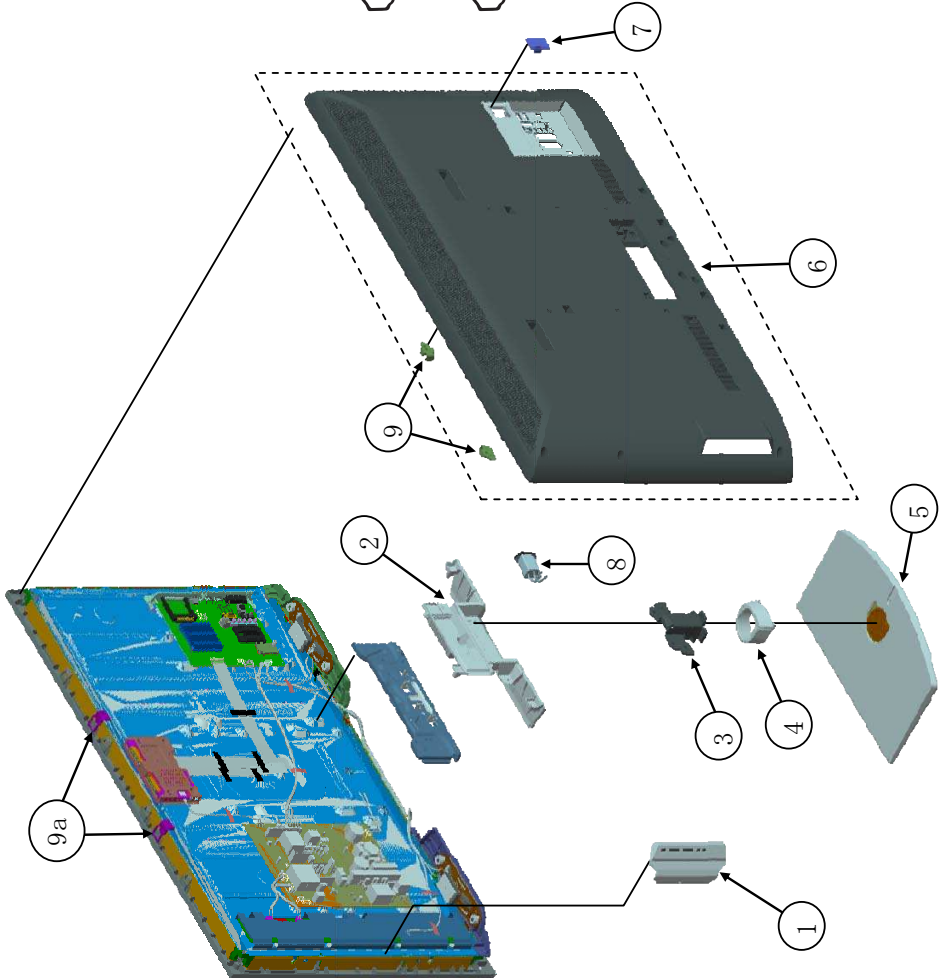
5-3-3. SCREWS

PART No.	DESCRIPTION
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□ 2-580-595-01	SCREW, +PSW M3X12
▴ 7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▾ 2-580-608-01	SCREW, +PSW M5X16
● 2-580-592-01	SCREW, +PSW M3X8
○ 4-159-298-01	SCREW, +PSW M4X10



5-4. KDL-46EX500 SERIES

5-4-1. CHASSIS-1



REF. No.	PART No.	DESCRIPTION	REMARK
1	1-487-728-11	SWITCH UNIT	
2	4-166-123-31	COVER, UNDER (37)	
3	4-158-350-01	NECK (ML3)	
4	X-2546-541-1	COVER (M3) ASSY	
5	X-2541-846-1	BASE (L3) ASSY	
6	X-2546-628-1	REAR COVER (TR46) ASSY	
7	X-2547-418-1	REAR COVER (46_SAT) ASSY	EX505
8	*3-106-546-51	COVER,ECS	
9	1-842-008-11	HOTEL ASSY	See Hotel Addendum
9a	4-167-326-01	AC INLET FILTER	
	4-166-118-01	BRACKET, VESA (S)	
		SUPPORT, PANEL	

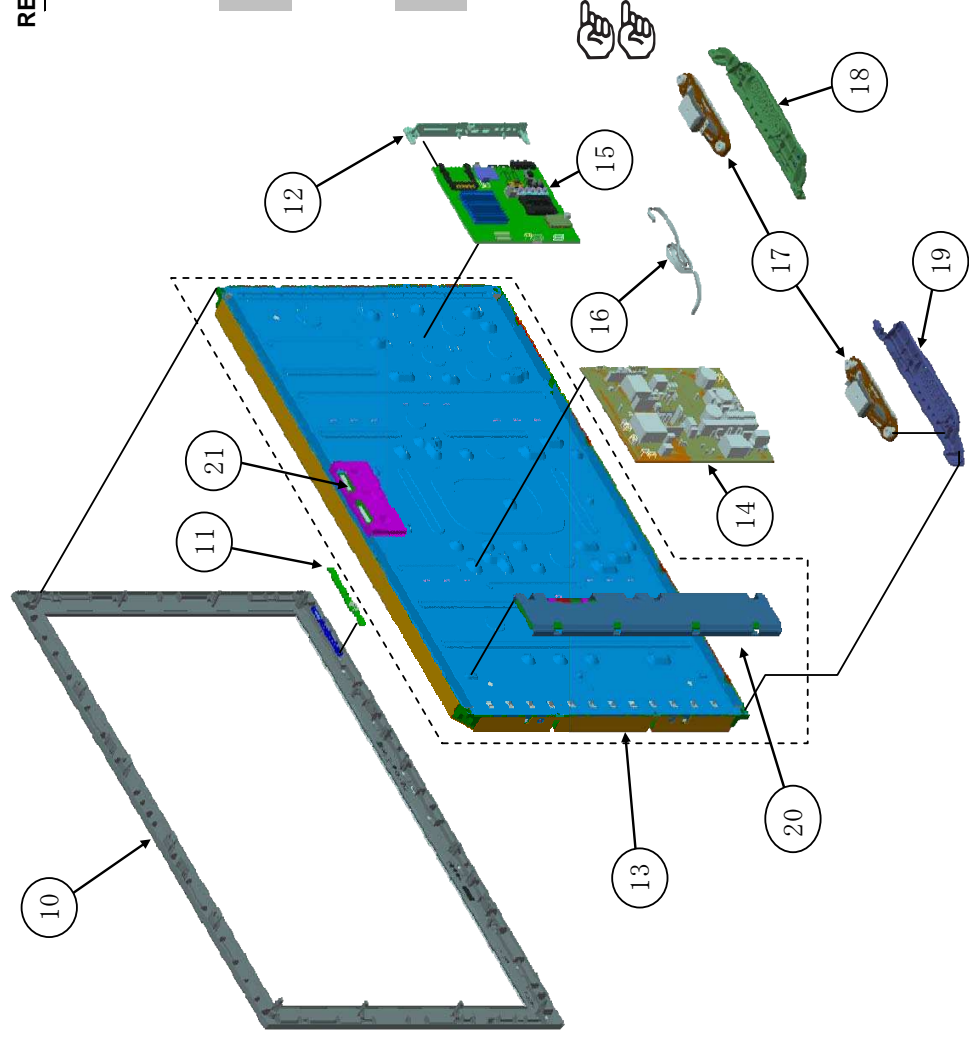
Note:

Whenever removing the 'Rear Cover' on B2B models remember to remove the connector inside the 'Hotel Assy' on the 'R2' board first.

EXPLODED VIEWS

5-4. KDL-46EX500 SERIES

5-4-2. CHASSIS-2

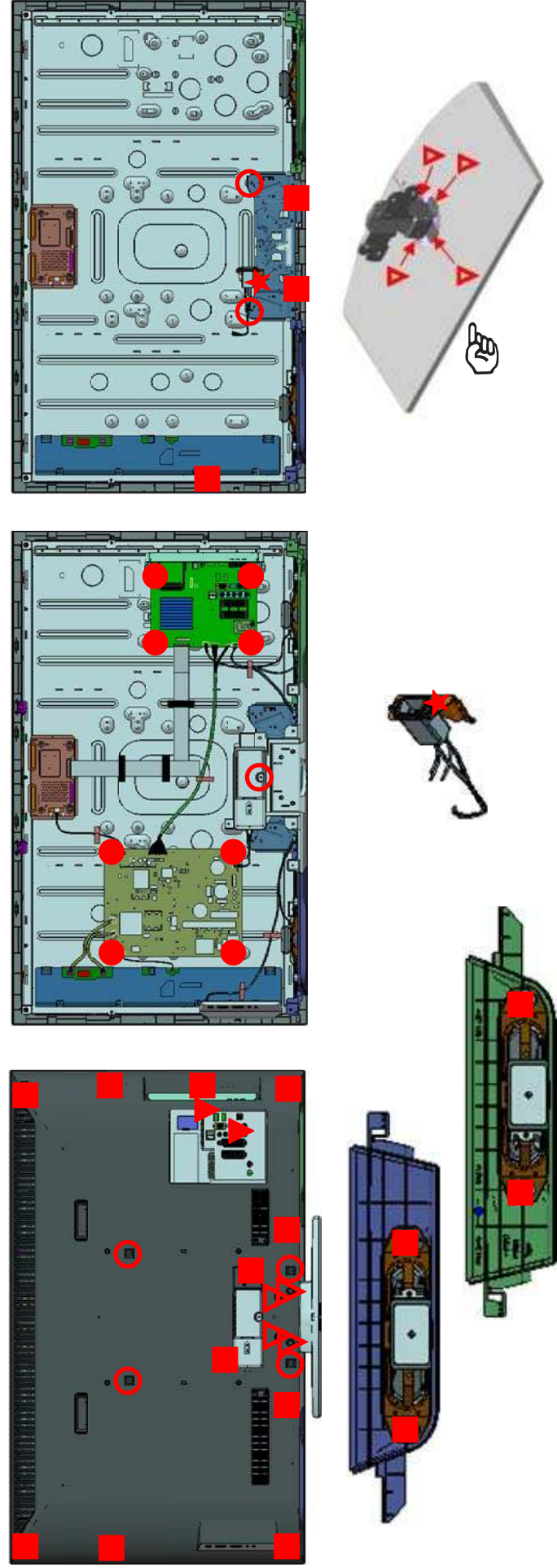


REF. No.	PART No.	DESCRIPTION	REMARK
10	X-2546-629-1	BEZEL ASSY (TR46_MET)	EX500,503,505
	X-2546-746-1	BEZEL ASSY (TR46_BCK)	EX501
11	A-1753-636-A	HLR MOUNT	
12	4-166-268-01	BRACKET, SIDE JACK	
13	1-811-056-12	LCD PANEL (S46TDP)	
14	1-474-205-11	STATIC CONVERTER (TV)-GD2	
15	A-1760-331-A	BAL BOARD COMPLETE	EX500,501
	A-1768-994-A	BAL BOARD COMPLETE	EX503
	A-1769-581-A	BAL BOARD COMPLETE	EX505
16	1-837-639-11	POWER-SUPPLY CORD	EX500,501,505
	1-837-640-11	POWER-SUPPLY CORD	EX503
17	1-858-371-11	LOUDSPEAKER (20x4.5CM)	
18	4-157-973-11	BRACKET, SP (46L)	
19	4-157-974-11	BRACKET, SP (46R)	
20	1-857-643-11	INVERTER BOARD	
21	1-857-650-11	TCON BOARD	

5-4. KDL-46EX500 SERIES

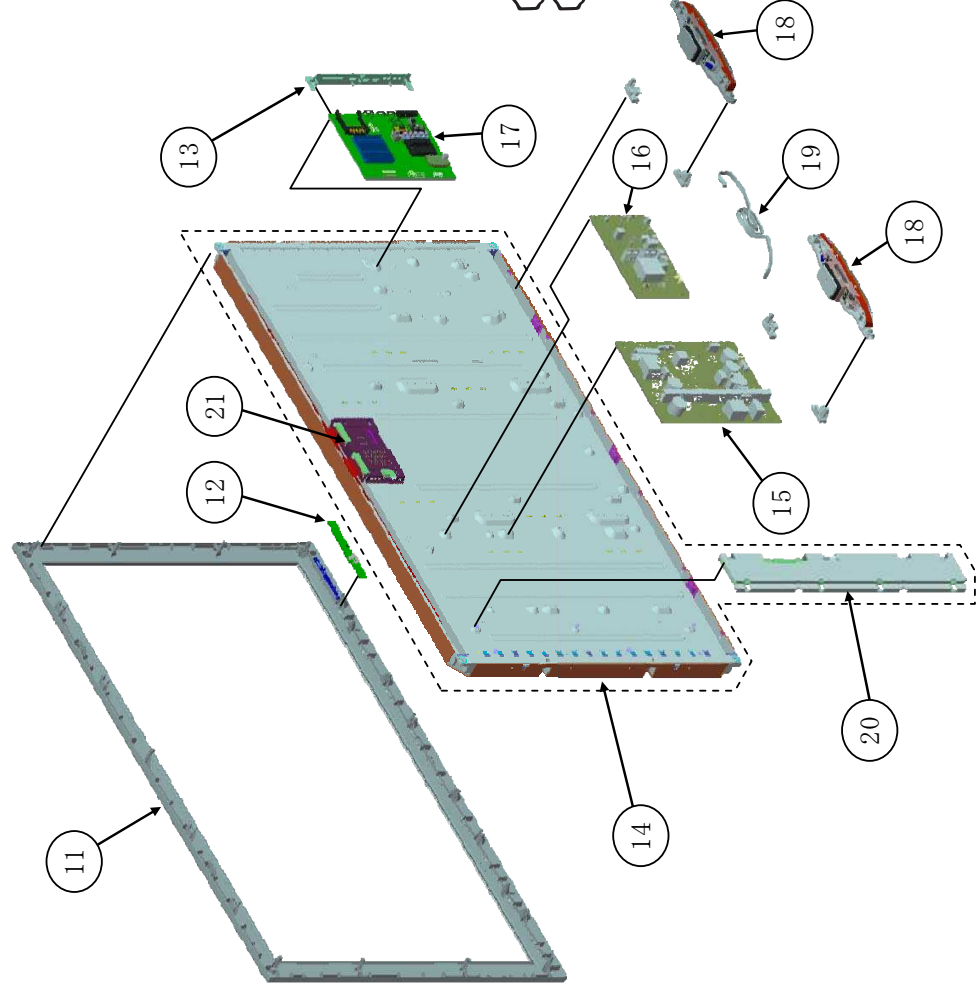
5-4-3. SCREWS

PART No.	DESCRIPTION
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□ 2-580-595-01	SCREW, +PSW M3X12
▴ 7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▽ 2-580-608-01	SCREW, +PSW M5X16
● 2-580-592-01	SCREW, +PSW M3X8
○ 4-159-298-01	SCREW, +PSW M4X10
★ 2-580-629-01	SCREW, +BVST 3X8
◆ 4-167-964-01	SCREW, +PWTP2 4X16



5-5. KDL-55EX500 SERIES

5-5-2. CHASSIS-2

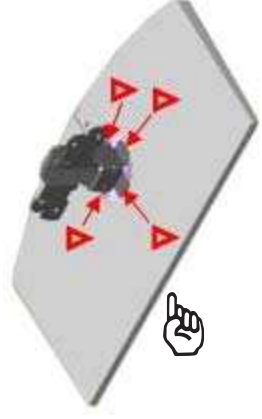
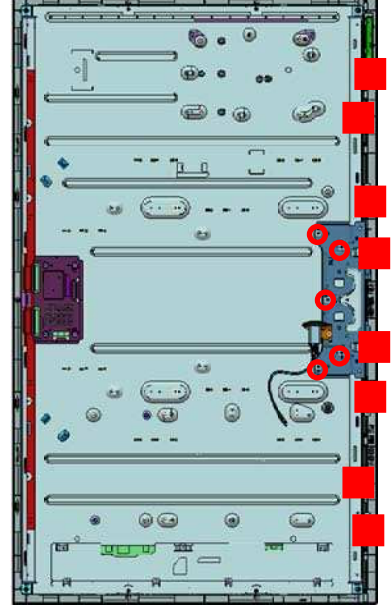
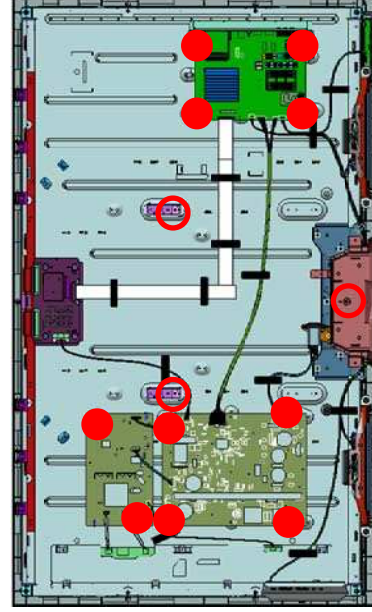
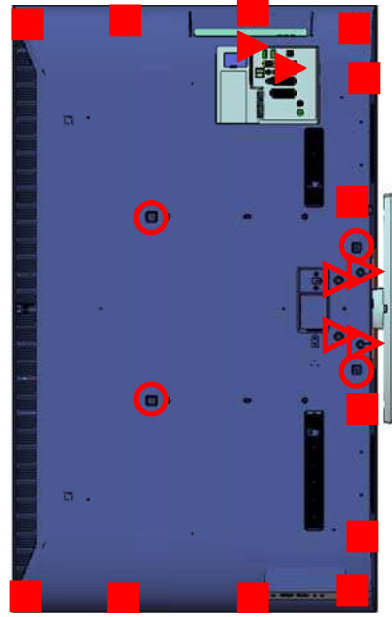


REF. No.	PART No.	DESCRIPTION	REMARK
11	X2546-579-1	BEZEL ASSY (TR55_MET)	
12	A-1753-636-A	HLR MOUNT	
13	4-166-268-01	BRACKET, SIDE JACK	
14	1-811-057-12	LCD PANEL (S55TDP)	
15	1-474-203-11	STATIC CONVERTER (TV)	
16	1-474-206-11	STATIC CONVERTER (TV)-D1	
17	A-1760-331-A	BAL BOARD COMPLETE	EX500, EX501
	A-1768-994-A	BAL BOARD COMPLETE	EX503
	A-1769-581-A	BAL BOARD COMPLETE	EX505
18	1-858-354-11	LOUDSPEAKER	
19	1-837-639-11	POWER-SUPPLY CORD	EX500, 501, 505
	1-837-640-11	POWER-SUPPLY CORD	EX503
20	1-857-653-11	INVERTER BOARD	
21	1-857-652-11	TCON BOARD	

5-5. KDL-55EX500 SERIES

5-5-3. SCREWS

PART No.	DESCRIPTION
■ 2-580-640-01	SCREW, +BVTP 4X16 TYPE2 IT-3
□ 2-580-595-01	SCREW, +PSW M3X12
▴ 7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
▽ 2-580-608-01	SCREW, +PSW M5X16
● 2-580-592-01	SCREW, +PSW M3X8
○ 4-159-298-01	SCREW, +PSW M4X10
★ 2-580-629-01	SCREW, +BVST 3x8



5-6. OTHER PARTS

5-6-1. ACCESSORIES and CONNECTORS

32 INCHES

1-837-517-11	FLEXIBLE FLAT CABLE (CN2600-TCON)
*1-910-060-06	HARNESS ASSY (CN2602,CN4300-CN001,SW,SP)
*1-910-060-07	CONNECTOR ASSY 15P (CN6401-CN2561,CN3800)
*1-910-060-08	CONNECTOR ASSY 14P (CN6402-BALANCER)
*1-910-060-09	CONNECTOR ASSY 6P (CN6403-TCON)

37 INCHES

1-837-519-11	FLEXIBLE FLAT CABLE (CN2600-TCON)
*1-910-060-10	HARNESS ASSY (CN2602,CN4300-CN001,SW,SP)
*1-910-060-11	CONNECTOR ASSY 15P (CN6401-CN2561,CN3800)
*1-910-060-12	CONNECTOR ASSY 14P (CN6402-BALANCER)
*1-910-060-13	CONNECTOR ASSY 6P (CN6403-TCON)

40 INCHES

1-837-521-11	FLEXIBLE FLAT CABLE (CN2600-TCON)
*1-910-060-14	HARNESS ASSY (CN2602,CN4300-CN001,SW,SP)
*1-910-060-15	CONNECTOR ASSY 15P (CN6401-CN2561,CN3800)
*1-910-060-16	CONNECTOR ASSY 14P (CN6402-BALANCER)
*1-910-060-17	CONNECTOR ASSY 6P (CN6403-TCON)

46 INCHES

1-837-523-11	FLEXIBLE FLAT CABLE (CN2600-TCON)
*1-910-060-18	HARNESS ASSY (CN2602,CN4300-CN001,SW,SP)
*1-910-060-19	CONNECTOR ASSY 15P (CN6150-CN2561,CN3800)
*1-910-060-20	CONNECTOR ASSY 5P (CN6702-BALANCER)
*1-910-060-21	CONNECTOR ASSY 6P (CN6151-TCON)

55 INCHES

*1-836-742-11	CONNECTOR ASSY (CN6301-CN6600)
*1-837-322-11	CONNECTOR ASSY (CN6705-BALANCER)
*1-837-324-11	CONNECTOR ASSY (CN6704-BALANCER)
1-837-524-11	FLEXIBLE FLAT CABLE (CN6200-TCON)
*1-910-060-22	HARNESS ASSY 15P (CN2602,CN3400-CN001,SW,SP)
*1-910-060-23	CONNECTOR ASSY 15P (CN6201-CN2561,CN3800)
*1-910-060-24	CONNECTOR ASSY 5P (CN6702-BALANCER)
*1-910-060-25	CONNECTOR ASSY 6P (CN6403-TCON)
*1-910-060-26	CONNECTOR ASSY 6P (CN6401-CN6703)

5-6-2. INSTRUCTION MANUALS

*4-174-985-21	MANUAL, INSTRUCTION	EX500, EX501, EX504
*4-174-985-31	MANUAL, INSTRUCTION	EX500, EX501
*4-174-989-71	MANUAL, INSTRUCTION	EX505, EX508
*4-174-990-11	MANUAL, INSTRUCTION	EX503

5-6-3. REMOTE COMMANDER

1-487-700-11	REMOTE COMMANDER (RM-ED035)	
1-487-758-11	REMOTE COMMANDER (RM-ED033)	EX508

5-6-4. MISCELLANEOUS

1-822-482-11	HDMI CONNECTOR (REAR)	1-822-580-41	CONNECTOR DUAL SCART
1-822-484-11	HDMI CONNECTOR (SIDE)	1-822-581-12	MULTIPLE PHONO JACK 4P
1-822-525-21	OPTICAL OUT CONNECTOR	1-842-010-11	JACK
1-821-827-21	D SUB CONNECTOR	1-822-524-21	PHONO JACK 2P
1-821-868-11	ETHERNET CONNECTOR(8P)	1-842-096-11	PHONO JACK 5P
1-821-834-12	USB CONNECTOR		
1-822-579-31	CARD CONNECTOR (PCMCIA CARD)		

END

9-888-265-04

KDL-32/37/40/46/55EX500 Series(AEP/UK)

Sony Corporation
Sony UK
Service Promotions Dept.

English
10FP7100-1
Made in U.K.
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👉 Hotel Assembly SOP For B2B Model



Use a Gauge to Pull the Wire (1-910-057-37) to the Outside

*** Production line need to create pull gauge for operator use



Use Fingers to Pull Wire to the Outside

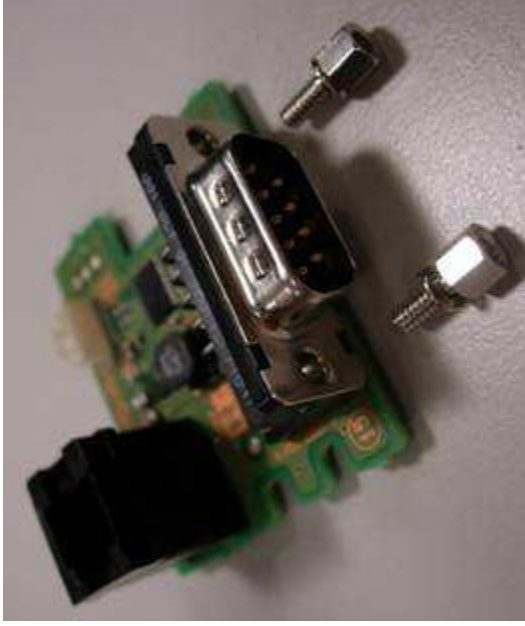


Ready For Hotel Assembly – R2 Board

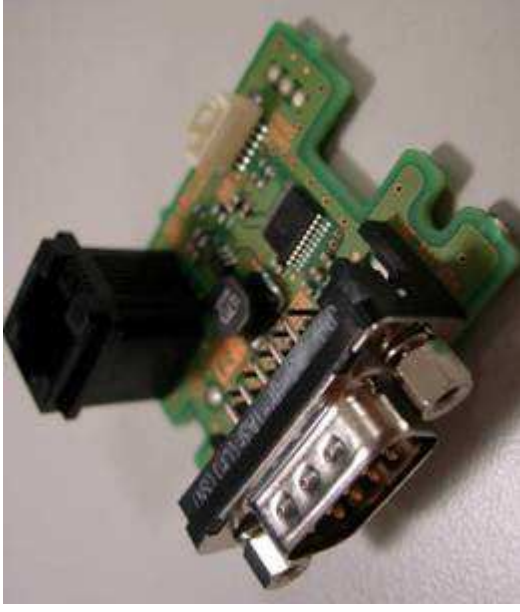


Paste ID Label onto R/C First

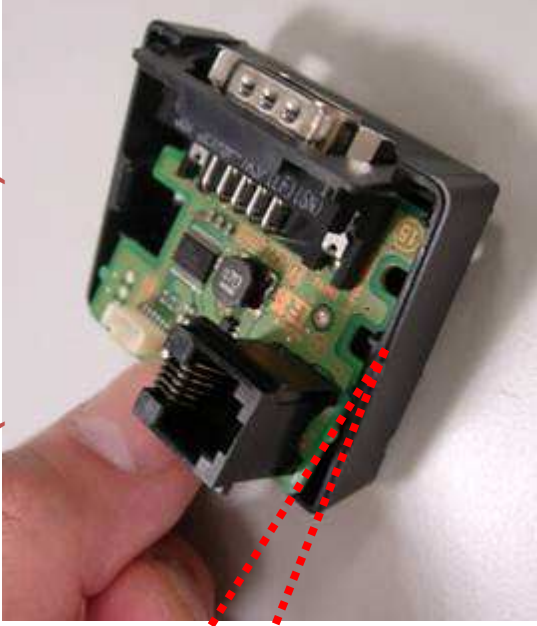
Hotel Assembly SOP For B2B Model



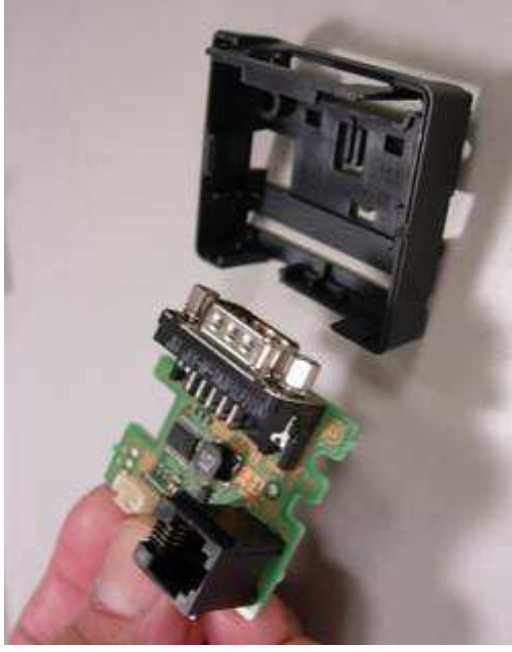
Fix VGA Screws (2-580-626-01) to R2 Board (A-1565-554-A)



Finished Assembly

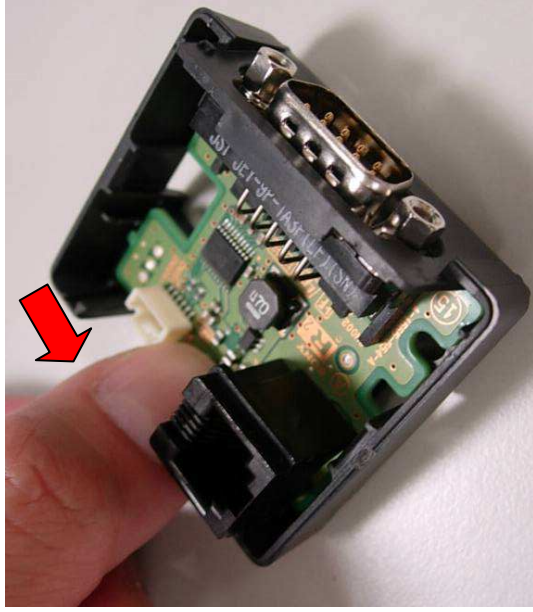


Tilt, Angle Director to Bottom Cover

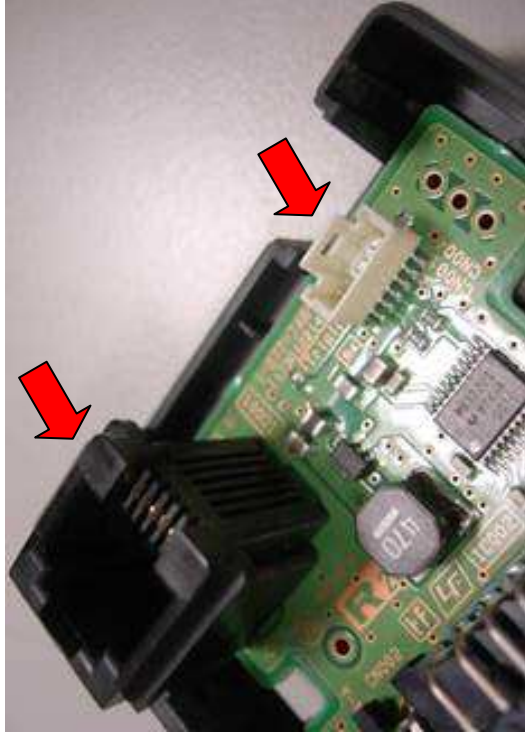


Put R2 Board into bottom cover

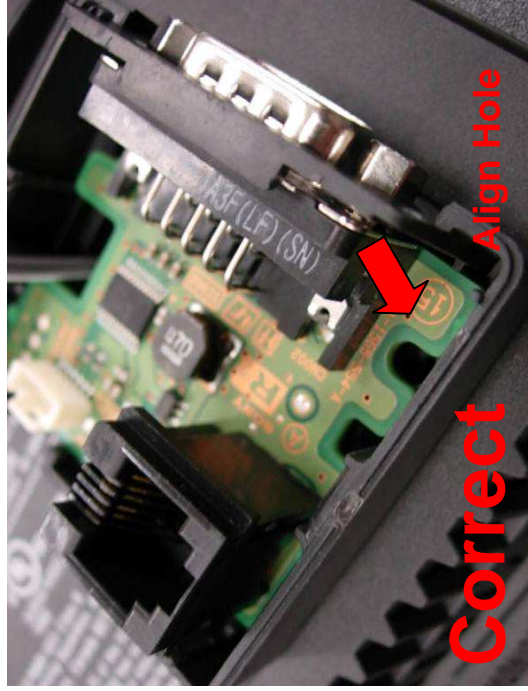
Hotel Assembly SOP For B2B Model



Press R2 Board into Bottom Cover



Don't Touch IR Pass-Through & Connector



Correct

Align Hole



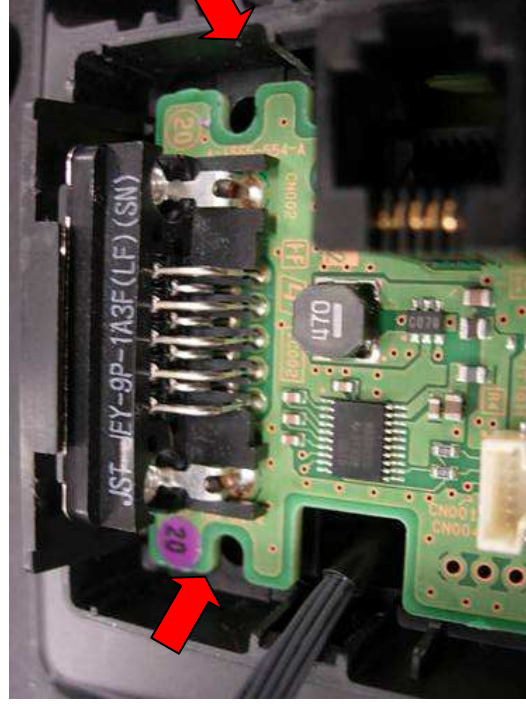
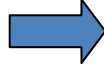
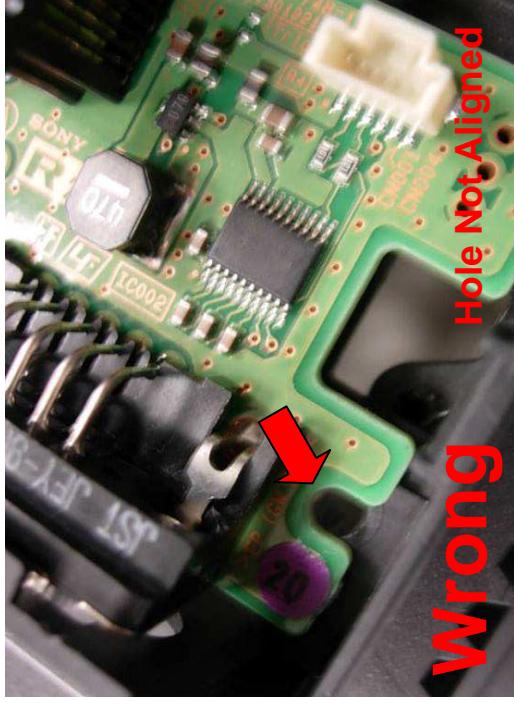
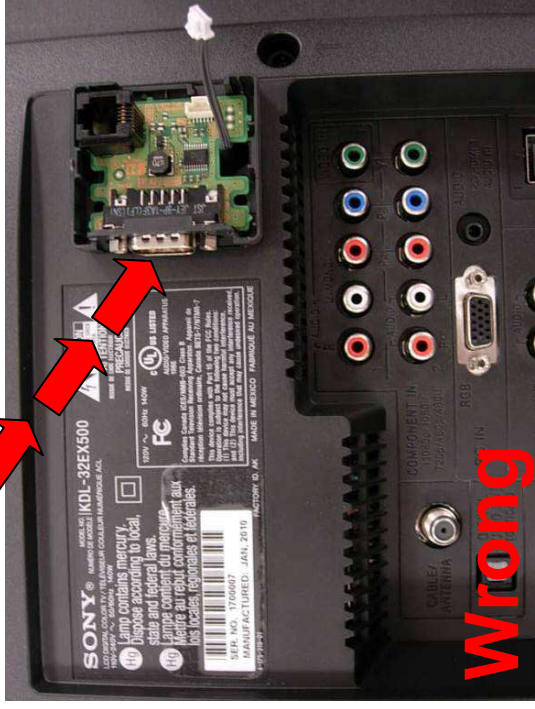
Correct

Assembly Hole
Director Outside

2

Hotel Assembly SOP For B2B Model

Assembly Hole Director Inside



T3 Screw different to Side Cover Use & I/O



Attention :
The Screws are
different to the
side cover & I/O



Fix T3 Screw * 2 Pcs (14mm) To R/C
(Part Number 7-685-649-79)

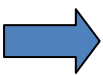
Hotel Assembly SOP For B2B Model



Insert Wire into R2 Board



Fix Top Cover to Hotel Assy (No need to use a screw)



Finished

Hotel Assembly SOP For B2B Model - Separation



Push The Top Cover Edge



Finished

Use finger to Pull the
Top Cover Edge