6 Service Mode

6.1.   How to enter into Service Mode

6.1.1.   Purpose
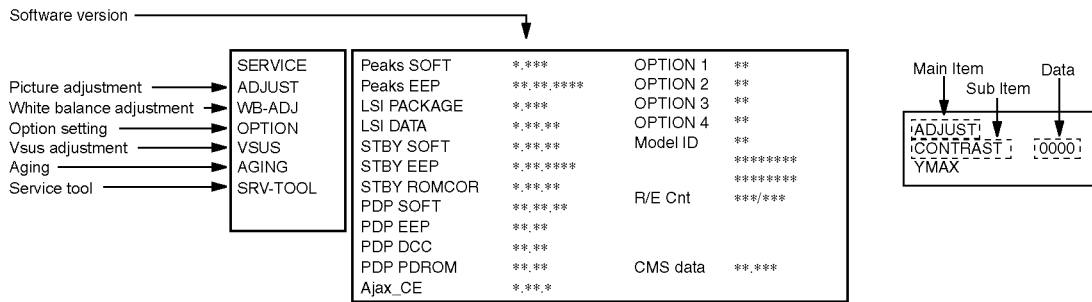
After exchange parts, check and adjust the contents of adjustment mode.

While pressing [VOLUME (-)] button of the main unit, press [0] button of the remote control three times within 2 seconds.

Note:

Service Mode can not be entered when 3D signal input.

Input 2D signal to enter Service Mode.

Software version				

SERVICE	Peaks SOFT	*.***	OPTION 1	**
ADJUST	Peaks EEP	**.**.****	OPTION 2	**
WB-ADJ	LSI PACKAGE	*.***	OPTION 3	**
OPTION	LSI DATA	*.**.**	OPTION 4	**
VSUS	STBY SOFT	*.**.**	Model ID	**
AGING	STBY EEP	*.**.****		********
SRV-TOOL	STBY ROMCOR	*.**.**		********
	PDP SOFT	**.**.**	R/E Cnt	***/***
	PDP EEP	**.**		
	PDP DCC	**.**		
	PDP PDROM	**.**	CMS data	**.***
	Ajax_CE	*.**.*		

Picture adjustment → ADJUST
White balance adjustment → WB-ADJ
Option setting → OPTION
Vsus adjustment → VSUS
Aging → AGING
Service tool → SRV-TOOL

Main Item   Data
Sub Item

ADJUST
CONTRAST   0000
YMAX

6.1.2.   Key command

[1] button...Main items Selection in forward direction

[2] button...Main items Selection in reverse direction

[3] button...Sub items Selection in forward direction

[4] button...Sub items Selection in reverse direction

[RED] button...All Sub items Selection in reverse direction

[GREEN] button...All Sub items Selection in forward direction

[VOL] button...Value of sub items change in forward direction (+), in reverse direction (-)

6.1.3.   How to exit

Switch off the power with the [POWER] button on the main unit or the [POWER] button on the remote control.

6.1.4. Contents of adjustment mode

• Value is shown as a hexadecimal number.
• Preset value differs depending on models.
• After entering the adjustment mode, take note of the value in each item before starting adjustment.

Main item	Sub item	Sample Data	Remark
ADJUST	CONTRAST	277	
	COLOR	36	
	TINT	00	
	SUB-BRT	800	
	H-POS	0	
	H-AMP	0	
	V-POS	0	
	V-AMP	0	
WB-ADJ	R-CUT	80	
	G-CUT	80	
	B-CUT	80	
	R-DRV	EE	
	G-DRV	FF	
	B-DRV	86	
	ALL-CUT	80	
	ALL-DRV	FF	
OPTION	Panel-Type	42FHD	Factory Preset
	Boot	ROM	
	STBY-SET	00	
	EMERGENCY	ON	
	Y/C Delay		
	OPT 1	00010100	
	OPT 2	11101110	
	OPT 3	00000001	
	OPT 4	00010000	
	EDID-CLK	MID	
	MIRROR	00 (See Option-Mirror)	
	AMR-SELECT	OFF	
VSUS		LOW	See Vsus selection
AGING	ALL WHITE		Built-in test patterns can be displayed.
	ALL BLUE WITH WHITE OUTSIDE FRAME		
	ALL GREEN		
	ALL RED		
	LOW STEP WHITE		
	LOW STEP BLUE		
	LOW STEP GREEN		
	LOW STEP RED		
	WHITE DIAGONAL STRIPE		
	RED DIAGONAL STRIPE		
	GREEN DIAGONAL STRIPE		
	BLUE DIAGONAL STRIPE		
	A-ZONE & B-ZONE		
	1% WINDOW		
	COLOR BAR		
	9 POINTS BRIGHT MEASURE		
	2 DOT OUTSIDE FRAME		
	ALL BLUE		
	DOUBLE FIXED 1% WINDOW		
	VERTICAL LINE SCROLL		
	ON/OFF OR WHITE		
	R/G/B/W ROTATION		
	HALF FIXED ALL WHITE		
	ALL WHITE WITH COUNT DISPLAY		
SRV-TOOL			See Service tool mode

Destination	B	Y
Check sum	a7a1	a7b0

6.2. Option - Mirror

Picture can be reversed left and right or up and down.
00 : Default (Normal picture is displayed)
01 : Picture is reversed left and right.
02 : Picture is reversed up and down.

00   01

02

Hint : If the defective symptom (e.g. Vertical bar or Horizontal bar) is moved by selection of this mirror, the possible cause is in A-board.

6.3. Service tool mode

6.3.1. How to access

1. Select [SRV-TOOL] in Service Mode.
2. Press [OK] button on the remote control.

SRV-TOOL	
TD2Microcode:0200b105	
Flash ROM : AD - DA	
PTCT : 00 . 00 . 00 . 00 . 00 .	Time 00000:40 On/Off 0000022

Display of TD2Microcode version → TD2Microcode:0200b105
Display of Flash ROM maker code → Flash ROM : AD - DA
Display of SOS History → PTCT : 00 . 00 . 00 . 00 . 00 .

← POWER ON TIME/COUNT
Press [MUTE] button (3 sec)

6.3.2. Display of SOS History

SOS History (Number of LED blinking) indication.
From left side; Last SOS, before Last, three occurrence before, 2nd occurrence after shipment, 1st occurrence after shipment.
This indication will be cleared by [Self-check indication and forced to factory shipment setting].

6.3.3. POWER ON Time, On/Off

Note : To display TIME/COUNT menu, highlight position, then press MUTE for 3 sec.
Time : Cumulative power on time, indicated hour : minute by decimal
On/Off : Number of On/Off switching by decimal
Note : This indication will not be cleared by either of the self-checks or any other command.

6.3.4. Exit

1. Disconnect the AC cord from wall outlet or switch off the power with [Power] button on the main unit.

# 6.4. Hotel mode

1. Purpose
   Restrict a function for hotels.
2. Access command to the Hotel mode setup menu
   In order to display the Hotel mode setup menu:
   While pressing [VOLUME (-)] button of the main unit, press [AV] button of the remote control three times within 2 seconds.

   Then, the Hotel mode setup menu is displayed.

```
Hotel Mode

  Hotel Mode              Off
  Initial INPUT           Off
  Initial POS             Off
  Initial VOL Level       Off
  Maximum VOL Level       100
  Button Lock             Off
  Remote Lock             Off
  Private Information      Keep

         Select
 Change ──┐ ○ EXIT
         (◄ ◎ ►)
          └ ○ RETURN
```

3. To exit the Hotel mode setup menu
   Disconnect AC power cord from wall outlet.
4. Explain the Hotel mode setup menu

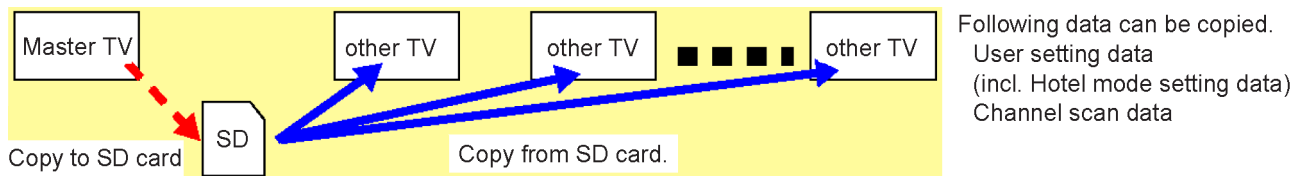| Item	Function
Hotel Mode	Select hotel mode On/Off
Initial INPUT	Select input signal modes. Set the input, when each time power is switched on. Selection : Off/Analogue/DVB(B)/DVB-C(Y)/DVB-T(Y)/AV1/AV2/COMPONENT/HDMI1/HDMI2/HDMI3 • Off: give priority to a last memory. However, Euro model is compulsorily set to TV. • AVnS/AVnC: only Euro model selectable
Initial POS	Select programme number. Selection : Off/0 to 99 • Off: give priority to a last memory
Initial VOL Level	Adjust the volume when each time power is switched on. Selection/Range : Off/0 to 100 • Off: give priority to a last memory
Maximum VOL Level	Adjust maximum volume. Range : 0 to 100
Button Lock	Select local key conditions. Selection : Off/SETUP/MENU/ALL • Off: altogether valid • SETUP: only F-key is invalid (Tuning guide (menu) can not be selected.) • MENU: only F-key is invalid (only Volume/Mute can be selected.) • ALL: altogether invalid.
Remote Lock	Select remote control key conditions. Selection : Off/SETUP/MENU • Off: altogether valid • SETUP: only Setup menu is invalid • MENU: Picture/Sound/Setup menu are invalid
Private Information	Select private information for VIERA Cast is Keep or Reset if Hotel mode is set to [On] when TV power on. Selection : Keep/Reset • Keep: private information for VIERA Cast is keep • Reset: private information for VIERA Cast is reset

6.5. Data Copy by SD Card

6.5.1. Purpose

(a) Board replacement (Copy the data when exchanging A-board):
When exchanging A-board, the data in original A-board can be copied to SD card and then copy to new A-board.

TV

(Before exchanging)
Copy to SD card

A

SD

(After exchanging)
Copy back from SD card

Following data can be copied.
  User setting data
  (incl. Hotel mode setting data)
  Channel scan data
  Adjustment and factory preset data
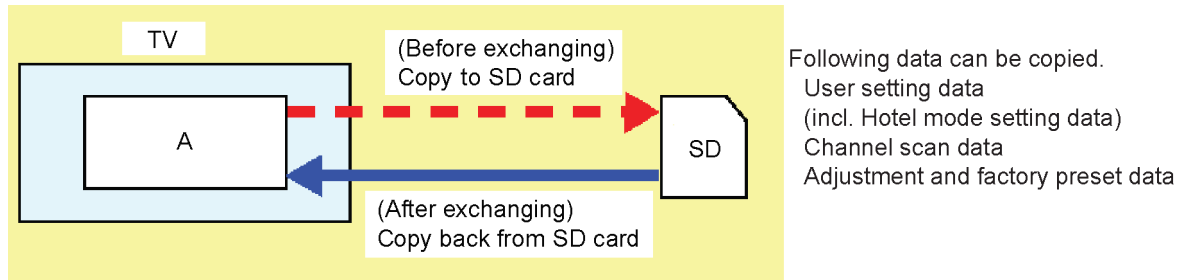
(b) Hotel (Copy the data when installing a number of units in hotel or any facility):
When installing a number of units in hotel or any facility, the data in master TV can be copied to SD card and then copy to other TVs.

Master TV

other TV

other TV

■ ■ ■ ■

other TV

Copy to SD card

SD

Copy from SD card.

Following data can be copied.
  User setting data
  (incl. Hotel mode setting data)
  Channel scan data

6.5.2. Preparation

Make pwd file as startup file for (a) or (b) in a empty SD card.
1. Insert a empty SD card to your PC.
2. Right-click a blank area in a SD card window, point to New, and then click text document. A new file is created by default (New Text Document.txt).
3. Right-click the new text document that you just created and select rename, and then change the name and extension of the file to the following file name for (a) or (b) and press ENTER.

File name:
  (a) For Board replacement : boardreplace.pwd
  (b) For Hotel : hotel.pwd

Note:
Please make only one file to prevent the operation error.

No any other file should not be in SD card.

6.5.3. Data copy from TV set to SD Card

1. Turn on the TV set.
2. Insert SD card with a startup file (pwd file) to SD slot.
   On-screen Display will be appeared according to the startup file automatically.
3. Input a following password for (a) or (b) by using remote control.
   (a) For Board replacement : 2770
   (b) For Hotel : 4850
   Data will be copied from TV set to SD card.
   It takes around 2 to 6 minutes maximum for copying.
4. After the completion of copying to SD card, remove SD card from TV set.
5. Turn off the TV set.

Note:
   Following new folder will be created in SD card for data from TV set.
   (a) For Board replacement : user_setup
   (b) For Hotel : hotel
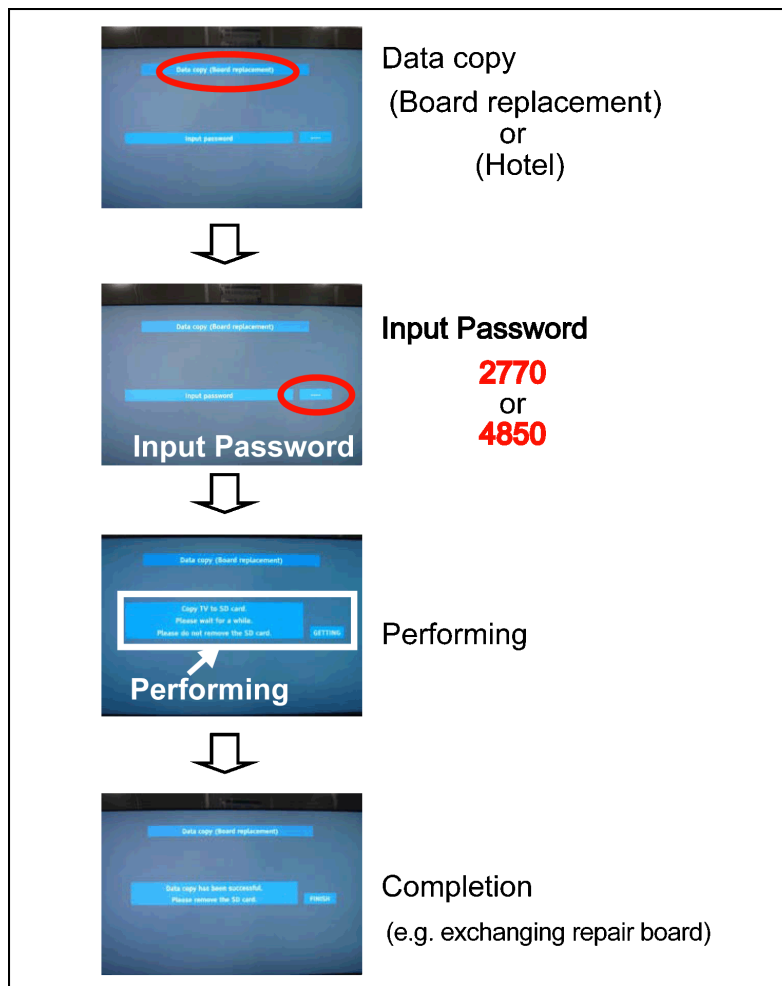
6.5.4. Data copy from SD Card to TV set

1. Turn on the TV set.
2. Insert SD card with Data to SD slot.
   On-screen Display will be appeared according to the Data folder automatically.
3. Input a following password for (a) or (b) by using remote control.
   (a) For Board replacement : 2771
   (b) For Hotel : 4851
   Data will be copied from SD card to TV set.
4. After the completion of copying to SD card, remove SD card from TV set.
   (a) For Board replacement : Data will be deleted after copying (Limited one copy).
   (b) For Hotel : Data will not be deleted and can be used for other TVs.
5. Turn off the TV set.

Note:
1. Depending on the failure of boards, function of Data copy for board replacement does not work.
2. This function can be effective among the same model numbers.
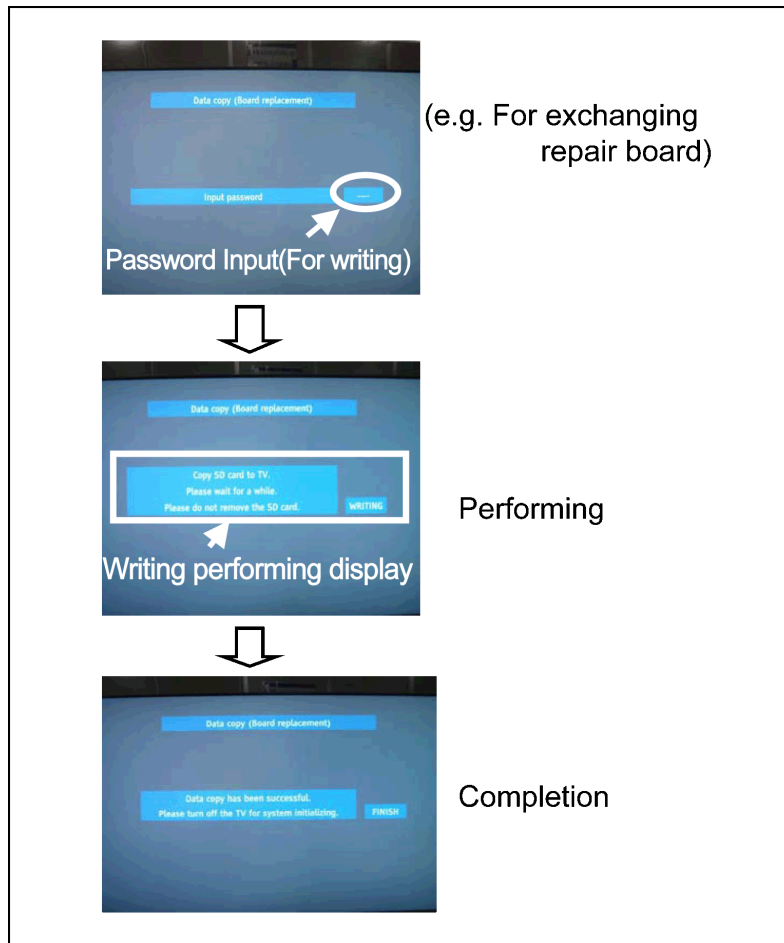
7 Troubleshooting Guide

Use the self-check function to test the unit.
1. Checking the IIC bus lines
2. Power LED Blinking timing

7.1.   Check of the IIC bus lines

7.1.1.   How to access

7.1.1.1.   Self-check indication only:

Produce TV reception screen, and while pressing [VOLUME (-)] button on the main unit, press [OK] button on the remote control for more than 3 seconds.

7.1.1.2.   Self-check indication and forced to factory shipment setting:

Produce TV reception screen, and while pressing [VOLUME (-)] button on the main unit, press [MENU] button on the remote control for more than 3 seconds.

7.1.2.   Screen display

```
42FHD                       Panasonic  2011PDP
SET
                              SELF CHECK COMPLETE
```

```
TUN      OK        PEAKS-SOFT          *.***        SUM                ****
STBY     OK        PEAKS-EEP        **.**.****
MEM1     OK        LSI-PACKAGE         *.***        MODEL ID             **
MEM2     OK        LSI-RELEASE          *.**                       ********
AVSW     OK        STBY-SOFT         *.**.**                       ********
TEMP     OK        STBY-EEP         *.**.****
LAN      OK        STBY-ROMCORR     *.**.**
FE       OK        PDP-MCU         **.**.**
ID2      OK        PDP-EEP           **.**
LP1      OK        PDP-DCC           **.**
IRDRV    OK        PDP-PDROM         **.**
```

7.1.3.   Check Point

Confirm the following parts if NG was displayed.

DISPLAY	Check Ref. No.	Description	Check P.C.B.
TUN	TU4801	TUNER	A-BOARD
STBY	IC8000	PEAKS-LDA3(STM)	A-BOARD
MEM1	IC8902	PEAKS EEPROM	A-BOARD
MEM2	IC8901	STM EEPROM	A-BOARD
AVSW	IC3001	AUDIO/VIDEO SW	A-BOARD
TEMP	IC2001	TEMP SENSOR	A-BOARD
LAN	IC8601	ETHERPHY	A-BOARD
FE	IC6700	OFDM	A-BOARD
ID2			A-BOARD
LP1	IC9300	LP1	A-BOARD
IRDRV	IC5901	IR LED DRIVER	A-BOARD

7.1.4.   Exit

Disconnect the AC cord from wall outlet or switch off the power with [Power] button on the main unit.

7.2. Power LED Blinking timing chart

1. Subject

   Information of LED Flashing timing chart.

2. Contents

   When an abnormality has occurred the unit, the protection circuit operates and reset to the stand by mode. At this time, the defective block can be identified by the number of blinks of the Power LED on the front panel of the unit.

Blinking Times	Contents	Check point
1	Panel information SOS PD5 Start SOS	-
3	P+ 3.3V SOS	A-Board
4	Power SOS	P-Board
5	P+ 5V SOS	A-Board
6	Driver SOS1 (SN Energy recovery circuit) (A-SN FPC DET)	SN-Board A-SN FPC
7	Driver SOS2 (SN Connector DET) (SN Scan and Logic IC)	SN-Board
8	Driver SOS3 (SS FPC DET) (SS Energy recovery circuit)	SS-Board SS FPC
9	Discharge Control SOS	A-Board
10	Sub 5V SOS Sub 3.3V SOS Tuner power SOS	A-Board SN-Board SS-Board P-Board
12	Sound SOS	A-Board Speaker
13	Emergency SOS	A-Board
14	IROM SOS (ROM in Peaks IC)	A-Board P-Board

7.3. No Power

First check point

There are following 3 states of No Power indication by power LED.

1. No lit.
2. Green is lit then turns red blinking a few seconds later. (See 7.2.)
3. Only red is lit.

```
                          ┌─────────────────┐
                          │     No lit       │
                          └────────┬────────┘
                                   │
         OK                        ▼                        OK
                            ╱─────────────╲
  ┌──────────────────┐     ╱    Check      ╲     ┌──────────────────┐
  But no AC supplied ◄─────    P board      ─────►      Check
  │                  │     ╲               ╱     │    A board        │
  ├──────────────────┤      ╲─────────────╱      └──────────────────┘
  │ Check AC power   │           │ NG
  │ cord or power    │           ▼
  │ source           │     ┌──────────────────┐
  └──────────────────┘     │      Check         │
                           │ Fuse F101, F102,   │
                           │ F201 F301, F401    │
                           └──────────────────┘
```