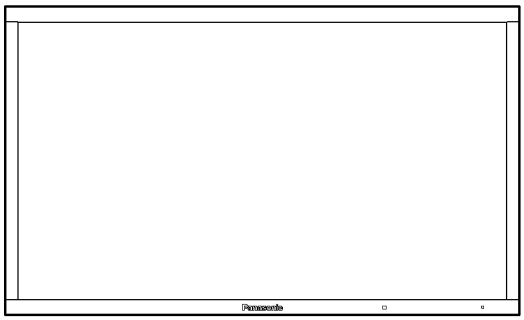
Order Number ITD1011141CE
B34 Canada: B62

Service Manual

High Definition Plasma Display



Model No. TH-103VX200U

GPF13DMONV Chassis

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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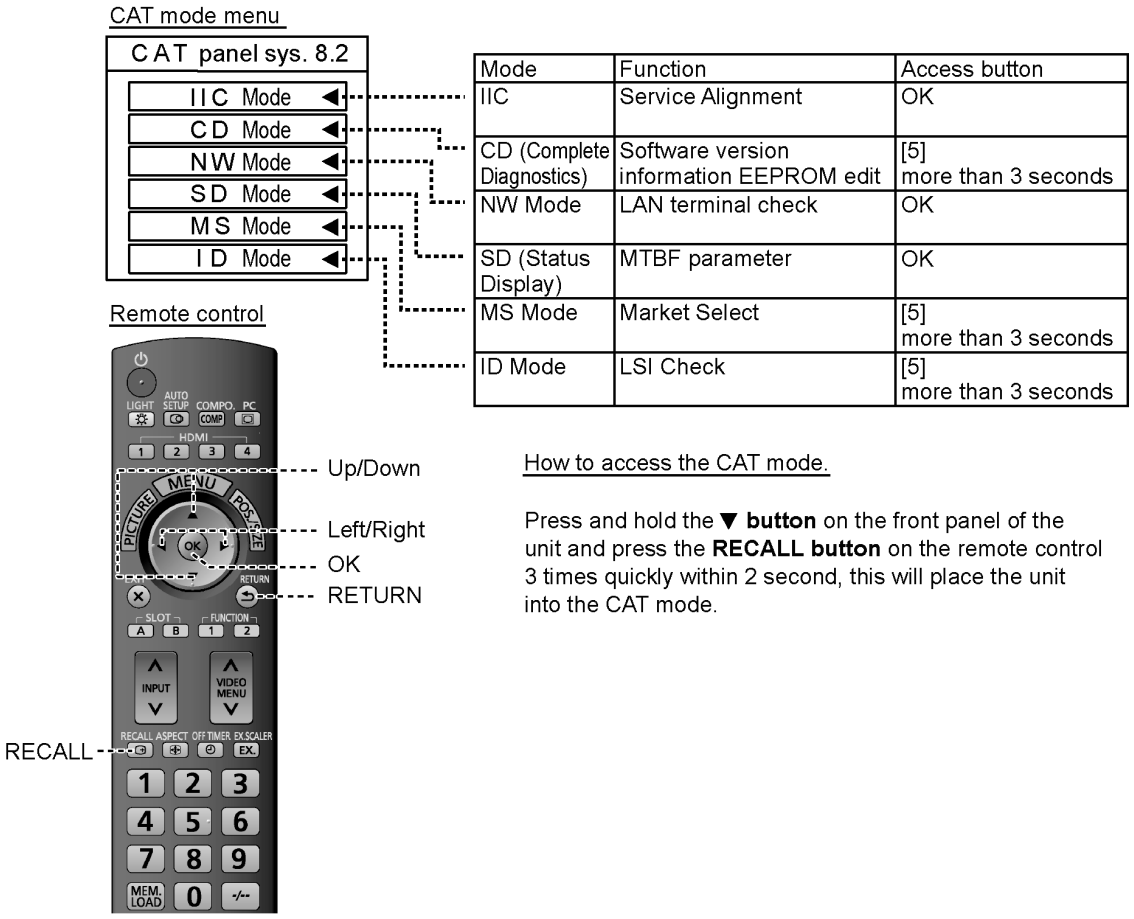
Panasonic®

6 Service Mode

6.1. CAT (Computer Aided Test) mode



Mode	Function	Access button
IIC	Service Alignment	OK
CD (Complete Diagnostics)	Software version information EEPROM edit	[5] more than 3 seconds
NW Mode	LAN terminal check	OK
SD (Status Display)	MTBF parameter	OK
MS Mode	Market Select	[5] more than 3 seconds
ID Mode	LSI Check	[5] more than 3 seconds

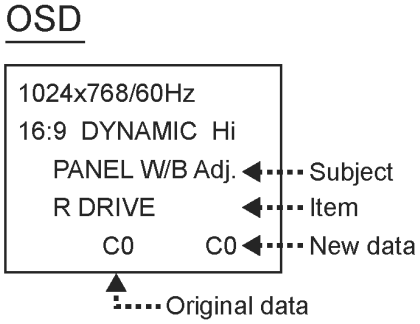
How to access the CAT mode.

Press and hold the ▼ **button** on the front panel of the unit and press the **RECALL button** on the remote control 3 times quickly within 2 second, this will place the unit into the CAT mode.

To exit the **CAT mode**, access the **ID mode** and switch off the main power.

6.1.1. IIC mode

Select the IIC mode by **Up/Down button** on the remote control at the front page of CAT mode and then press the **OK button** on the remote control.



How to use the IIC mode.

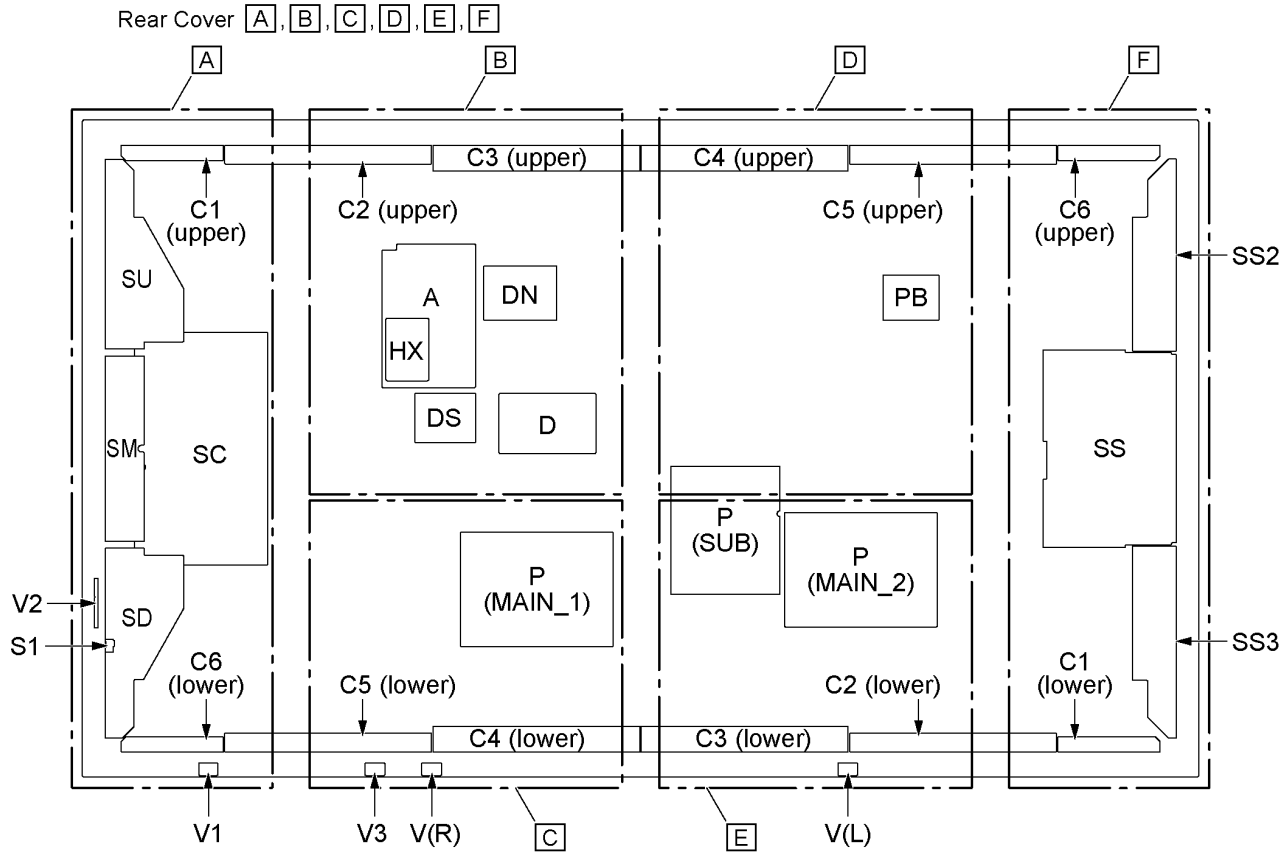
1. Select the alignment **Subject** by **Up/Down buttons** on the remote control.
2. Select the alignment Item by **Left/Right buttons** on the remote control.
3. Adjust **optimum setting** by **[8],[0] buttons** on the remote control.
4. The **data is memorized** when press the **RETURN button** on the remote control or change the alignment Subject (or Items).

Subject and item are mentioned on [IIC mode structure].
To exit the IIC mode, press the **RETURN button** on the remote control.

9 Disassembly and Assembly Instructions

- To disassemble P.C.B., wait for 10 minute after power was off for discharge from electrolysis capacitors.
- ○, □, ⬆ and ⇧ marks indicate screw positions.

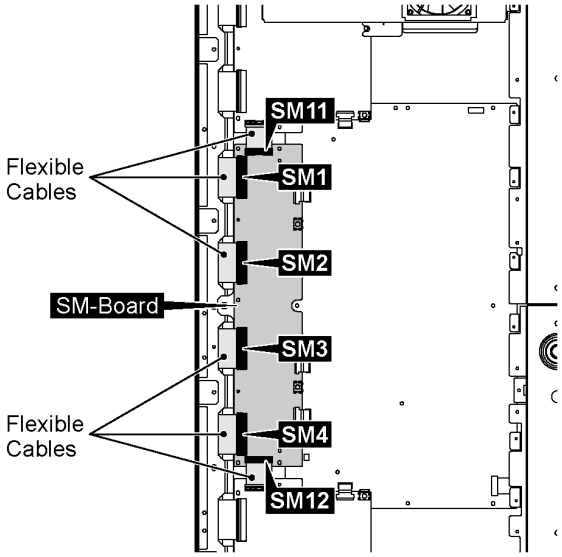
9.1. Rear Cover and Board



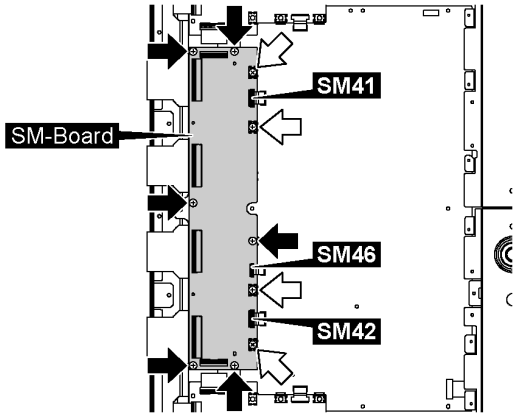
Rear Cover required to remove for each board exchange.

Board Name	Rear Cover
A-Board	B
D-Board	B
DS-Board	B
SS-Board	F
SC-Board	A
SU-Board	A
SM-Board	A
SD-Board	A
C1-Board (upper)	A
C2-Board (upper)	A, B
C3-Board (upper)	B, D
C4-Board (upper)	B, D
C5-Board (upper)	D, F
C6-Board (upper)	F
C1-Board (lower)	F
C2-Board (lower)	E, F
C3-Board (lower)	C, E
C4-Board (lower)	C, E
C5-Board (lower)	A, C
C6-Board (lower)	A
S1-Board	A
SS2-Board	F
SS3-Board	F
V1-Board	A, B, C, D, E, F
V2-Board	A

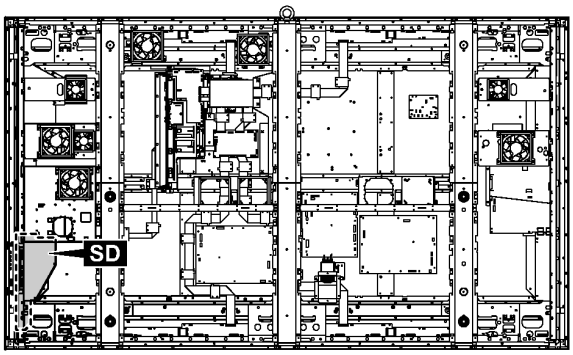
4. Remove the flexible cables from the connectors (SM1, SM2, SM3, SM4, SM11, SM12).



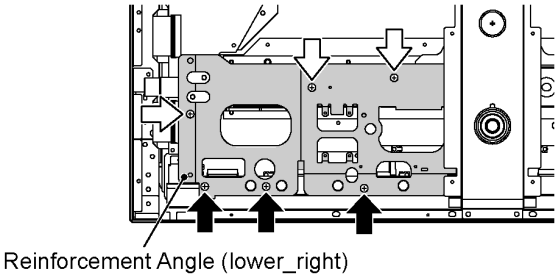
5. Disconnect the connectors (SM41, SM42, SM46)
6. Remove 6 screws (⬆).
7. Remove 4 screws (⇧) and then remove SM-Board.



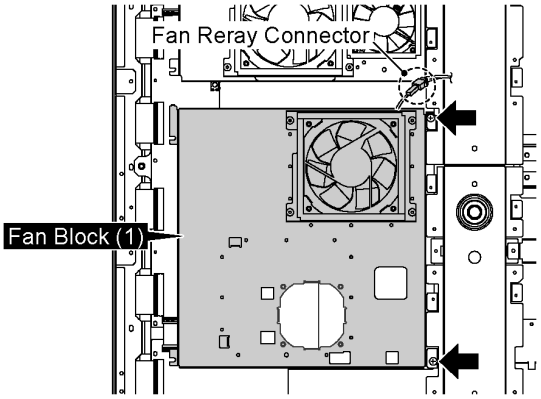
9.16. Removal of SD-Board



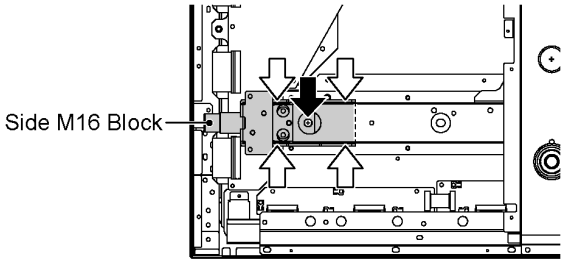
1. Remove the Side Angle (R).
   (Refer to Removal of the Side Angle (R))
2. Remove 3 screws (⬆).
3. Remove 3 screws (⇧) and then remove the Reinforcement Angle (lower_right).



4. Disconnect the Fan relay connectors.
5. Remove 2 screws and then remove the Fan Block (1).

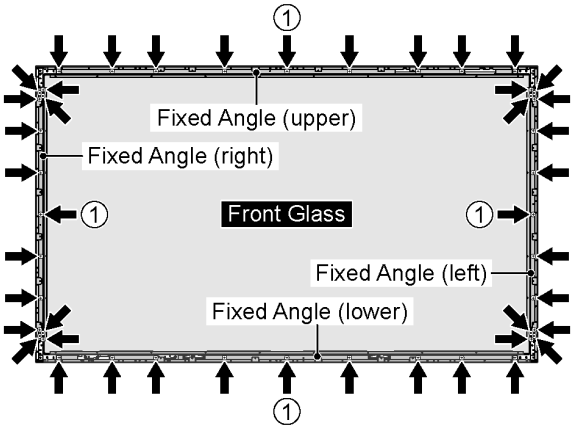


6. Remove 1 screw (⬆).
7. Remove 4 screws (⇧) and then remove the Side M16 Block.



9.35.1. Removal of Front Glass

1. Remove 44 screws and then remove the Fixed Angles (left, right, upper, lower).
2. Remove the Front Glass.

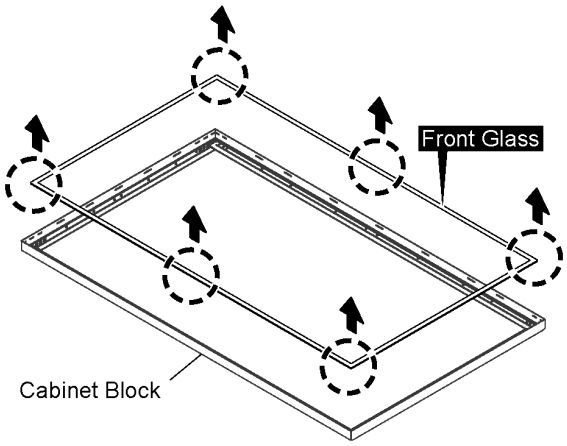


Note: when fixing Fixed Angle

- Screw on 4 screws (1) firstly.

(Note)

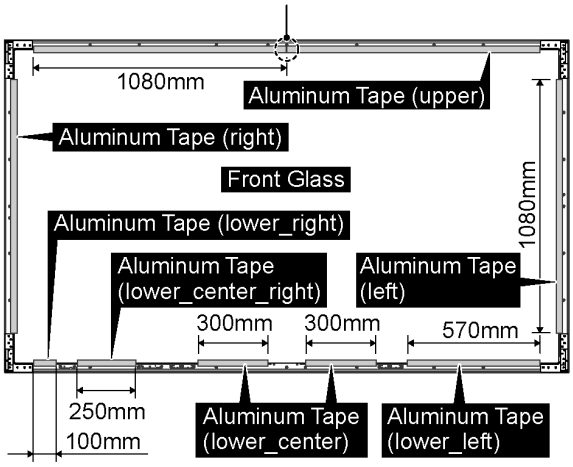
- **When removing the Front Glass from Cabinet, there is a risk of the glass center bending damage.**
- **Be sure to lift the instruction six positions of the figure, when remove the Front Glass.**

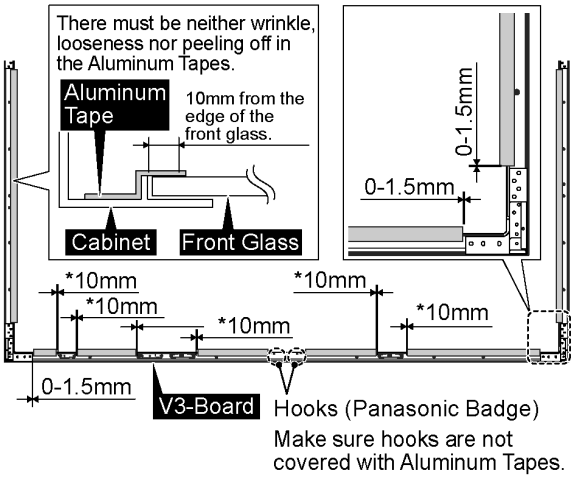


Note: when Cabinet or Front Glass is exchanged

- You need new Aluminum Tape kit when you exchange the Cabinet or Front Glass.

Paste the Aluminum Tapes based on the center.
Make sure Aluminum Tapes do not overlap each other.

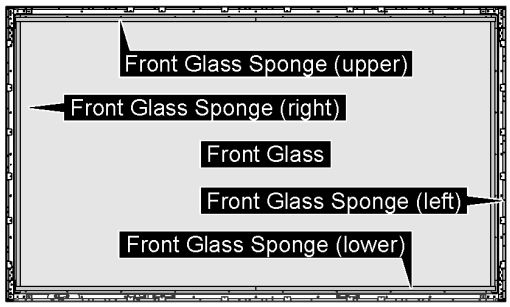




*10mm from the Print Mounting frame

Note: when Front Glass is exchanged

- Paste the Sponges in order along each Fixed Angles (left, right, upper, lower).



Note

- The sponges are parts which cannot be recycled. Please use the new article when you exchange the Front Glass.

10.1.3. P.C.B. (Print Circuit Board) and Plasma Display Panel exchange

10.1.3.1. Quick adjustment after P.C.B. and Panel exchange

1. To remove P.C.B., wait 10 minute after power was off for discharge from electrolysis capacitors.

10.1.3.2. Quick adjustment after P.C.B. exchange

Adjust the following voltages with the multimeter.

P.C.B.	Name	Test Point	Voltage	Volume	Remarks
P Board (Main_1)	Vsus	TPVSUS (SC)	Vsus ± 2V	VR251 (P_Main_1)	*
	Vda	TP9 (P_Main_1)	70V +1V, -2V	Fixed	
P Board (Main_2)	Vsus	TPVSUS (SS)	Vsus ± 2V	VR251 (P_Main_2)	*
	Vda	TP9 (P_Main_2)	70V +1V, -2V	Fixed	
SC Board	Vad	TPVAD (SC)	-135V ± 1V	VR16600 (SC)	
	Vscn	TPVSCN (SC)	Vad_base:+145V±4V GND_base: +10V±6V	Fixed	
SS Board	Ve**	TPVE (SS)	Ve ± 1V	VR16001 (SS)	*
D, DS Board	White balance and Sub brightness for NTSC, PAL, HD, PC and 625i signals				
A Board	Set Market Select Number to correct destination by MS mode. (See chap. 6.1.4)				
D, A Board	Set Ve Mode until bright points disappears by IIC mode.				***

*See the Panel Label.
**See chap. 10.1.6.
***See chap. 10.1.7.1.

10.1.3.3. Quick adjustment after Plasma Display Panel exchange

Adjust the following voltages with the multimeter.

Name	Test Point	Voltage	Volume	Remarks
Vsus (SC Side)	TPVSUS (SC)	Vsus ± 2V	VR251 (P_Main_1)	*
Vsus(SS Side)	TPVSUS (SS)	Vsus ± 2V	VR251 (P_Main_2)	*
Ve Life	Check Ve Mode. (See chap. 10.1.7.2.)			

*See the Panel Label.

10.1.4. Vsus adjustment

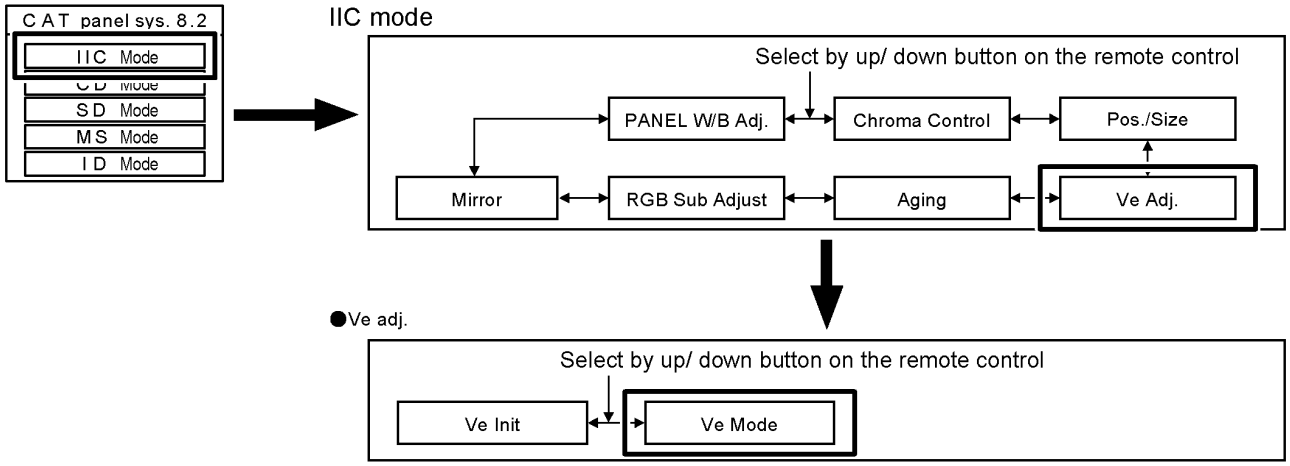
After exchange P board or Plasma Display Panel, see the Panel Label and check TPVSUS and adjust the volume.

10.1.5. Vad adjustment

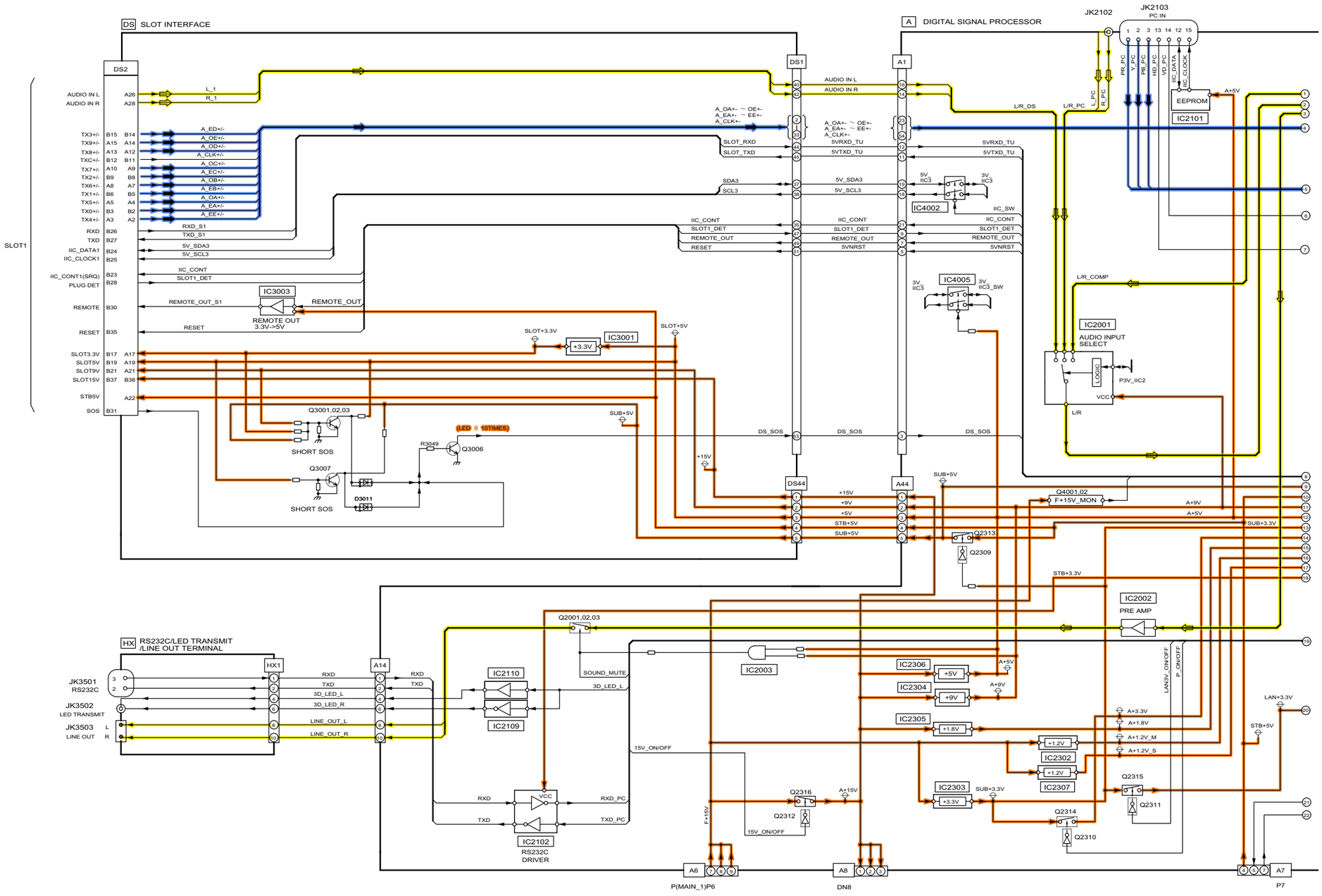
After exchange SC board, check TP9 and adjust the volume.

10.1.6. Ve adjustment

1. After exchange SS board, connect the multimeter to the testpoint TPVE(SS).
2. Select Ve Mode by IIC mode. (See chap. 6.1.1., and 6.2.)



11.4. Block (1 of 8) Diagram



Clamp position

CON:No - CON:No	⑧	⑨	⑩	⑲	⑳	㉑	㉓	㉔	㉕	㉖	㉗	㉜	㉝	㉞	㉟	㊱	㊵	㊶	㊷	㊸	㊹	㊺	㊻	㊼	㊽	㊾
A44 - DS44																						●	●	●		
HX1 - A14																										
A3 - D3																		●	●		●	●	●			
A6 - P6(P(R))																			●	●	●	●	●	●		
A7 - P7(P(SUB))	●	●															●	●	●		●	●	●	●		
A8 - DN8																									●	
A9 - PB30																									●	●
A33 - Relay -V11												●	●						●	●	●	●	●			
A33 - Relay -V33												●	●						●	●	●	●	●			
DN1 - Relay -V1(R)												●	●						●	●	●	●	●	●	●	
DN1 - Relay -V1(L)		●	●	●	●	●	●	●	●	●	●						●	●	●		●	●	●	●	●	
DN4 - D4																										
DN5 - D5																										
P2(P(R)) - SC2												●	●		●	●										
C55(TOP-C5) - P35(P(L))				●					●	●	●															
D21 - SS21		●	●				●	●	●								●									
D25 - P25(P(SUB))	●	●															●									
P35 (P(R)) - C55 (UNDER-C5)													●	●												
P6 (P(L)) - PB31				●	●				●	●	●															

C-E are passed through the cut holes of the barrier.

CON:No - CON:No	㊶	㊷	㊸	㊹	㊿	㊶	㊷	㊺	㊿	㊶	㊷	㊶	㊷	㊹	C	D	E
A44 - DS44																	
HX1 - A14									●								
A3 - D3																	
A6 - P6(P(R))													●				
A7 - P7(P(SUB))												●					●
A8 - DN8															●		
A9 - PB30					●	●	●								●	●	
A33 - Relay -V11													●				
A33 - Relay -V33													●				
DN1 - Relay -V1(R)													●		●		
DN1 - Relay -V1(L)															●		●
DN4 - D4											●						
DN5 - D5										●							
P2 (P(R)) - SC2			●	●									●				
C55(TOP-C5) - P35(P(L))							●	●						●			
D21 - SS21	●	●															●
D25 - P25(P(SUB))												●					●
P35 (P(R)) - C55 (UNDER-C5)																	
P6 (P(L)) - PB31								●						●			

Model No. : TH-103VX200U Duct Barriers