S/M No. : DSP115BEF0

Service Manual

42" PLASMA PDP MONITOR

CHASSIS : SP-115

Model : DP-42SM

(FOR NEC MODULE)

DAEWOO ELECTRONICS Corp.

http : //svc.dwe.co.kr

AUG. 2003

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1. COMMENTS

This paper is the additional service manual for the DP-42SM/WM/GM using the NEC panel.

Other service contents with the exception of this manual are same as the existing service manual (DP-42SM/WM/GM). The existing service manual was made for ORION panel.

2. Safety Precautions

(1) When moving or laying down a PDP Set, at least two people must be working. Avoid any impact towards the PDP Set.

(2) Do not leave the broken PDP Set on for a long time. To prevent any further damages, after check the broken Set's condition, make sure to turn the power (AC) off.

(3) When opening the BACK COVER, turn off the power (AC) to prevent electric shock. When a PDP is on, high voltage and high current exist inside the Set.

(4) When loosening screws, check the connecting position and type of the screw. Sort out the screws and store them separately. Because screws holding PCB are working as electric circuit GROUNDING, make sure to check if any screw is missing when assembling.

(5) If you open the BACK COVER, you will see a Panel Gas Exhaust Tube.If this part is damaged, entire PDP PANEL must be replaced. Therefore, when working, be careful not to damage this part.

(6) A PDP Set contains different kind of connector cables. When connecting or disconnecting connector cables, check the direction and position of the cable beforehand.

(7) When disconnecting connectors, unplug the connectors slowly with care. Especially when connecting/disconnecting FFC (film) cables or FPC cables, do not unplug the connectors too much instantaneously or strongly, and always handle the cables with care.

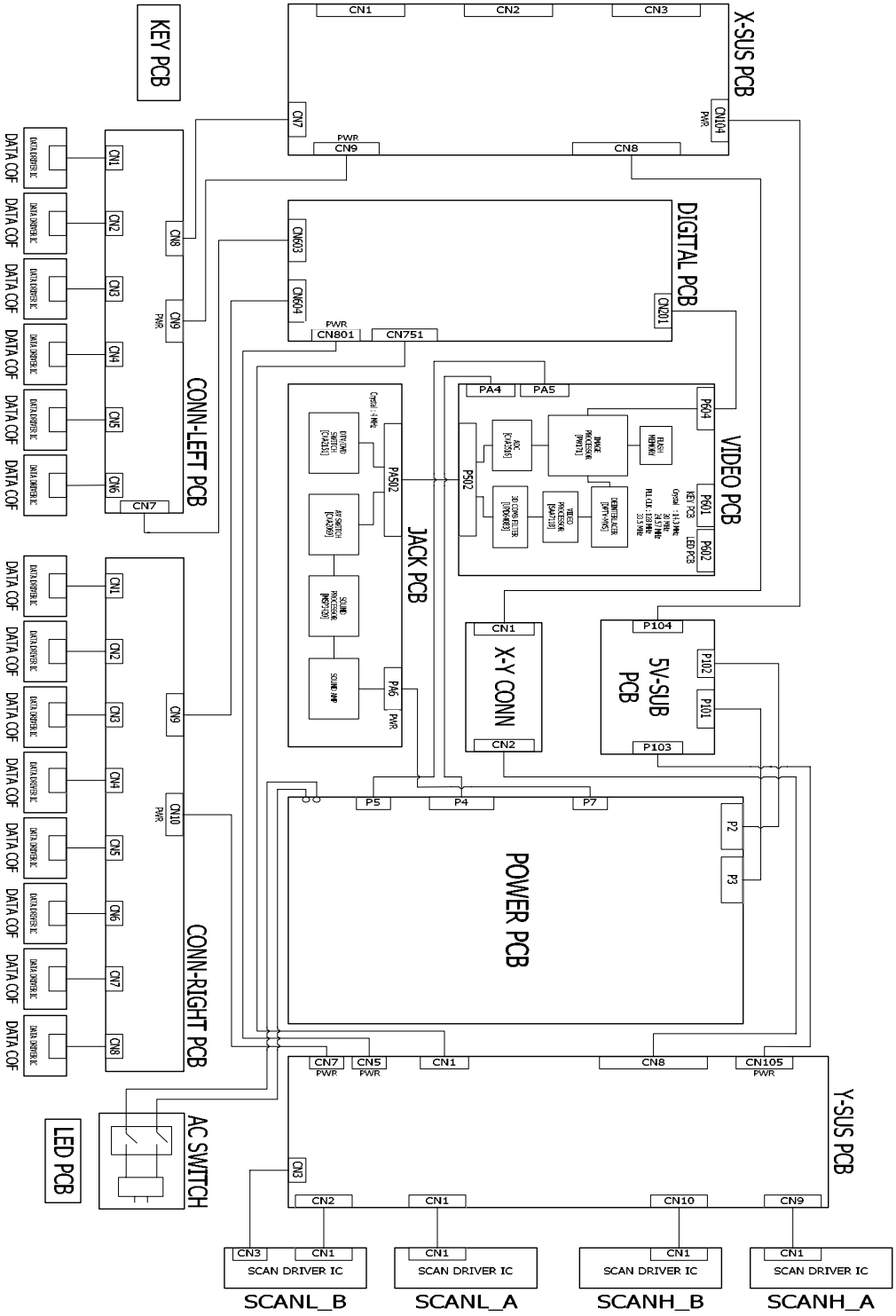
(8) Connectors are designed so that if the number of pins or the direction does not match, connectors will not fit. When having problem in plugging the connectors, make sure to check their kind, position, and direction.

3. Product Specification

I T E M	S P E C I F I C A T I O N	REMARK
1. GENERAL 1-1. MODEL NO 1-2. CHASSIS NO 1-3. SCREEN SIZE 1-4. COUNTRY 1-5. RESOLUTION 1-6. REMOCON TYPE 1-7. SAFETY STANDARD	 DSP-4280NVS SP-115 42”(16:9) WORLD WIDE 853(H) X 480(V) R-V28A (E) UL, C-UL, CE, CB, FCC(CLASS B), CE(CLASS B)	
2. MECHANICAL 2-1. APPEARANCE 1) WITHOUT STAND 2) WITH STAND 3) CARTON BOX 2-2. WEIGHT 1) WITHOUT STAND 2) WITH STAND	 WxHxD=1,039 x 628 x 80 mm WxHxD=1,039 x 725 x 320 mm WxHxD=1,256 x 800 x 327 mm 29.9 Kg 36.8 Kg	
3. ELECTRICAL 3-1. VIDEO INPUT 3-2. DTV/DVD INPUT 3-3. PC INPUT 3-4. SOUND INPUT 3-4. SPEAKER OUTPUT 3-5. POWER REQUIREMENT 3-6. POWER CONSUMPTION 3-8. RS-232 CONTROL 3-9. FUNCTION 1) SCALING 2) ZOOM 3) OSD 4) OTHERS	 COMPOSITE(NTSC, PAL, SECAM, PAL-M/N, NTSC4.43) & S-VHS(50/60Hz Y/C) 2SETS 1080 i, 720P, 480P , 480i (Y, Pb/Cb, Pr/Cr COMPONENT SIGNAL) 2SETS VGA ~ UXGA (15 PIN D-SUB) 1SET VIDEO 2SETS, DTV/DVD 2SETS, PC 1SET 8W(R) + 8W(L) AC 100V~240V, 50/60Hz 320W RS-232(FOR SOFTWARE UPGRADE) PC: H/V SIZE & POSITION ADJUST VIDEO/DTV/DVD:NOMAL,16:9, PANORAMA,ENLARGE LB,ENLARGE LBS 20 SCALE ZOOM & PANING SUPPORT 11 LANGUAGES STILL, SLEEP MODE,SOUND MODE	

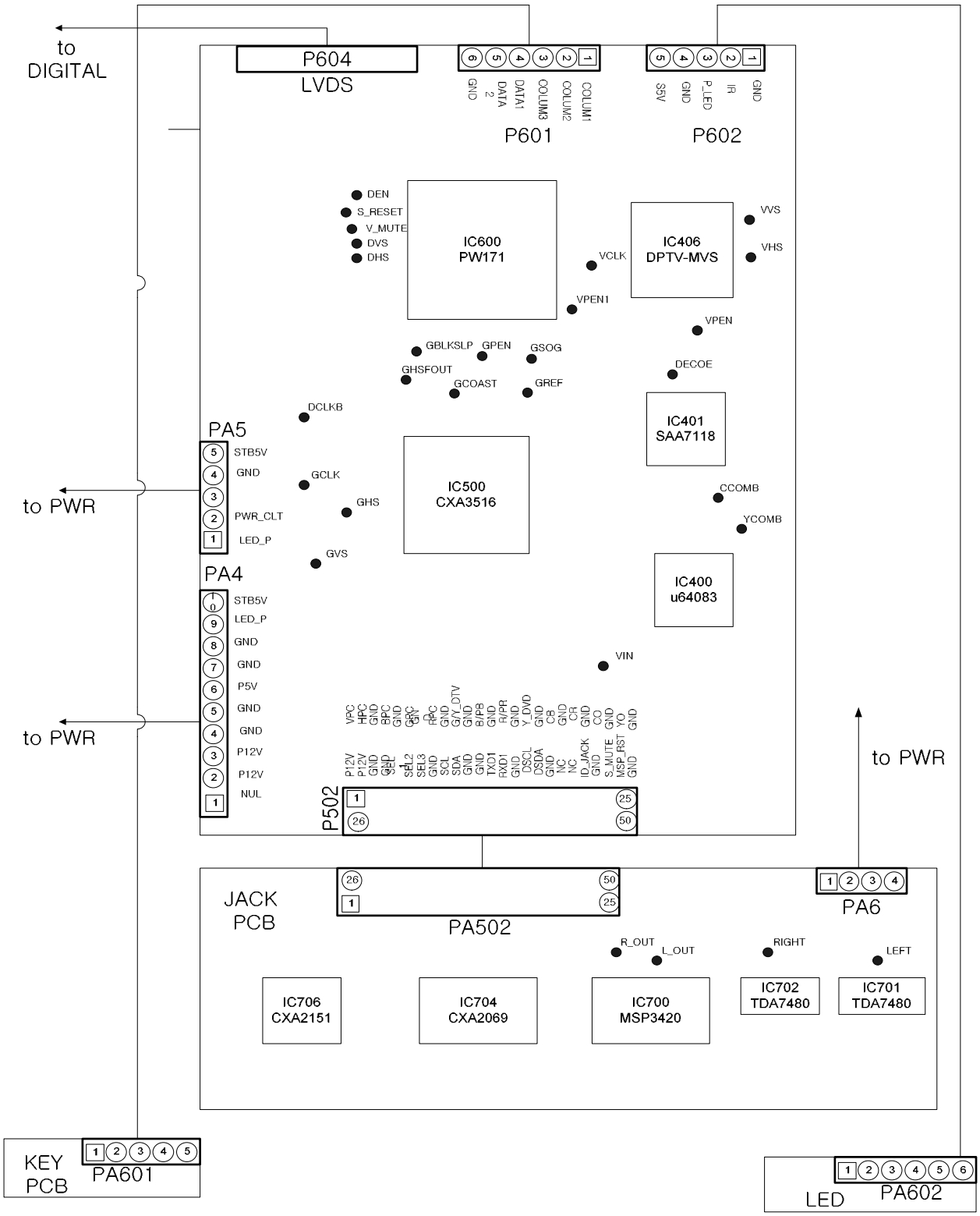
I T E M	S P E C I F I C A T I O N	REMARK
4-2. ASPECT RATIO 4-3. NUMBER OF PIXELS 4-4. DISPLAY COLOR 4-5. PIXEL PITCH 4-6. PEAK LUMINANCE 4-7. CONTRAST RATIO 4-8. VIEWING ANGLE 5. USERCONTROL & ACCESSORY 5-1 CONTROL BUTTON(SET)	16:9 853(H)X480(V) 16.77 MILLION COLOR (8BIT RGB) 1.08(H)X1.08(V) 300cd/m³(WITH FILTER GLASS) 1500:1 160 DEGREE(VERTICAL/HORIZONTAL)	
5-2. REMOTE CONTROL(R-V28) 5-3. ACCESSORIES	AC POWER BUTTON(PUSH-PULL S/W) MENU, SELECT, UP, DOWN, LEFT, RIGHT(SOFT S/W) POWER,INPUT SELECT,DISPLAY,ZOOM-, ZOOM+, MENU, UP, DOWN,VOLUME UP, VOLUME DOWN,FREEZE,SCREEN MODE, SOUND MODE,SLEEP REMOCON, BATTERY,INSTRUCTION MANUAL A/V CABLE,STAND, WALL HANGER, SPEAKER R/L	

4. BLOCK DIAGRAM



5. A / V BLOCK DESCRIPTION

5-1. A/V BLOCK DIAGRAM



5-2.VIDEO PCB

- PROCESS Various Signal (PC, COMPONENT, COMPOSITE) to produce 24BIT DIGITAL output

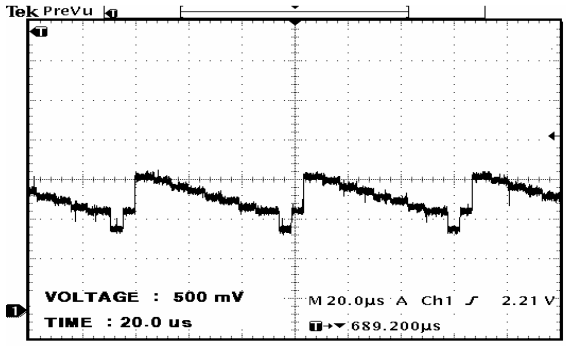
1) IC and TP

(1) IC400(UPD64083)

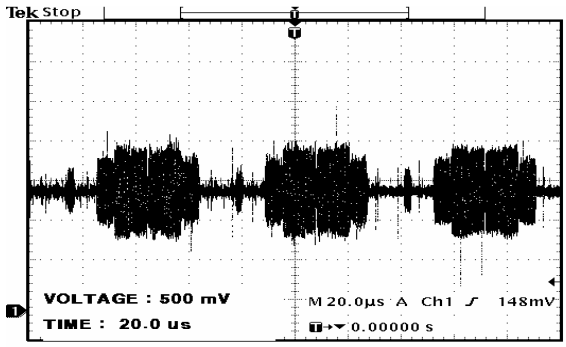
-Using 3D COMBFILTER to separate COMPOSITE signal to Brightness Signal(Y) and Color Signal(C)

*TP (Input : COLOR BAR PATTERN)

A. YCOMP : Brightness Signal(Y)



B. CCOMP : Color Signal (C)



(2) IC401 (SAA7118E)

-Receive NTSC, SECAM, PAL VIDEO by COMPOSITE(V) , S-VHS(Y.C) COMPONENT (Y Cb Cr) and process signal

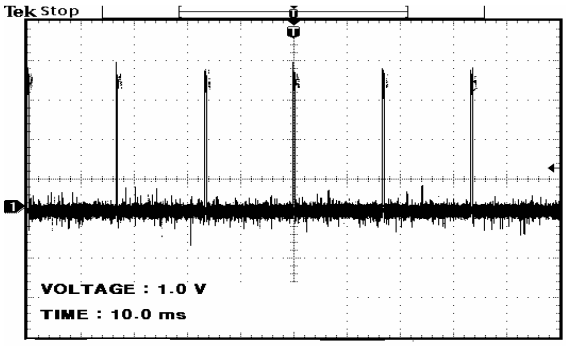
*TP
A. DECOE : CHIP ENABLE part. When signal process is done by IC401, output 3.3V DC LEVEL

(3) IC406 (DPTV-MVS)

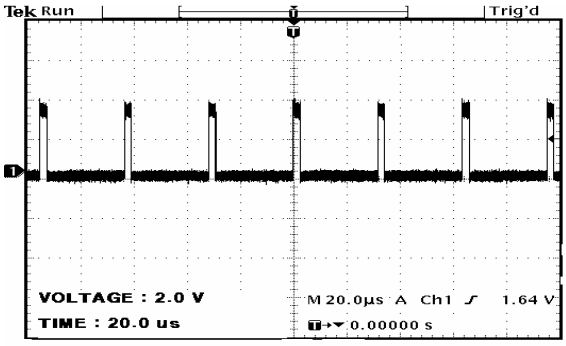
-A Scan Rate Converter which converts Interlace signal into Progressive signal

*TP

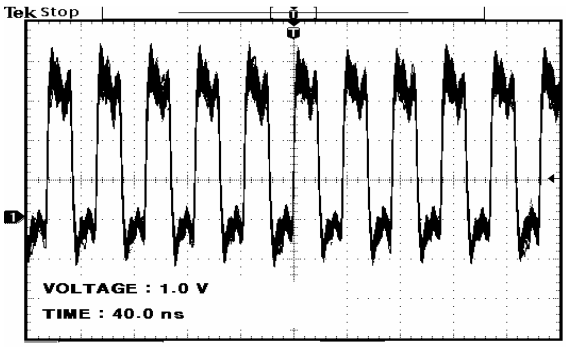
A. VVS : VERTICAL SYNC (output by DPTV-MVS)



B. VHS : HORIZONTAL SYNC (output by DPTV-MVS)



C. VCLK : CLOCK (output by DPTV-MVS)

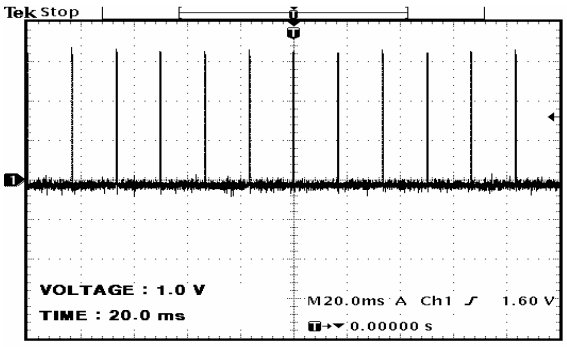


(4) IC500 (CXA3516R)

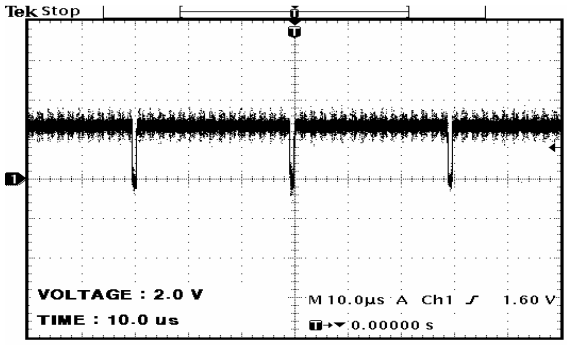
-3-channel 8-bit 165MSPS A/D converter which process PC , DTV signal

* TP

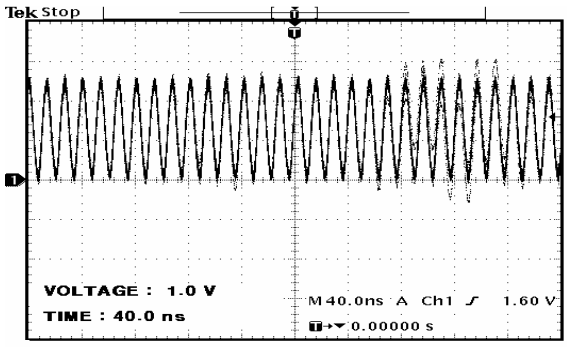
A. GCOAST : COAST CONTOL Signal for PLL (input by CXA3516)



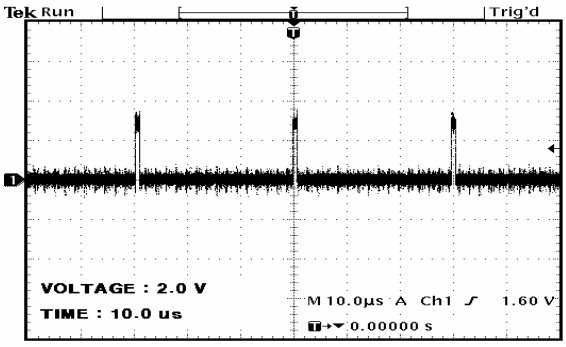
B .GHS : HORIZONTAL SYNC for GRAPHIC (output by CXA3516)



C. GCLK : CLOCK for CLOCK (output by CXA3516)



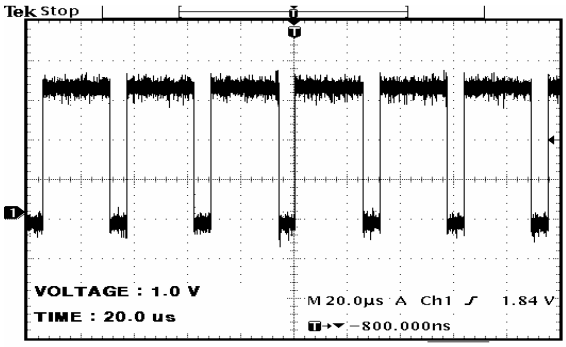
D. GFBK : SYNC for PLL



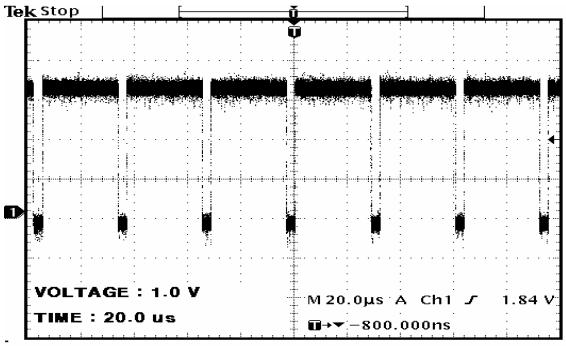
(5) IC600 (PW171) - Image processor IC

*TP

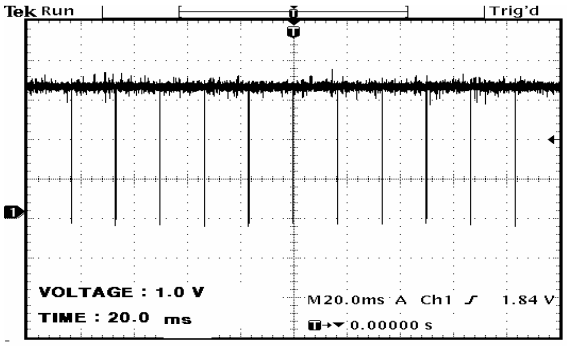
A. DEN : DATA ENABLE (output by PW171)



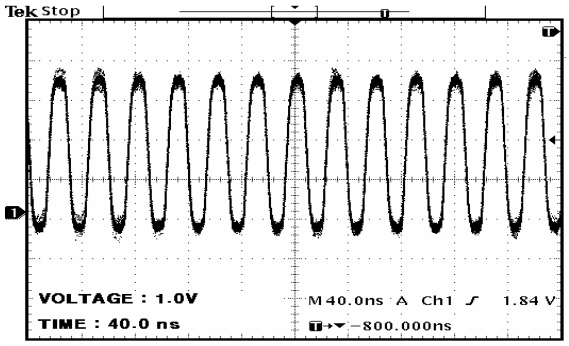
B. DHS : HORIZONTAL SYNC (output by PW171)



C.DVS : VERTICAL SYNC for DISPLAY (output by PW171)



D. DCLKB : CLOCK for DISPLAY (output by PW171)



5-3. JACK PCB

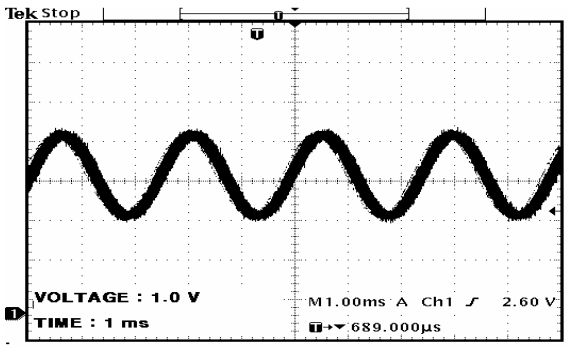
- Separate and process various VIDEO and AUDIO signal

(1) IC706(VIDEO /SYNC SELECTOR)
- This chooses Y Cb/Pb Cr/Pr or RGB signal to output Y Cb/Pb Cr/Pr, to separate SYNC, and to perform SYNC COUNTER.

(2) IC704(7_INPUT 3_OUTPUT AUDIO/VIDEO SWITCH)
- The IC perform AUDIO or VIDEO SWITCHING

(3) IC700(MULTI STANDARD SOUND PROCDSSOR)
-AUDIO SINGNAL VOLUME control, EQUALIZER control

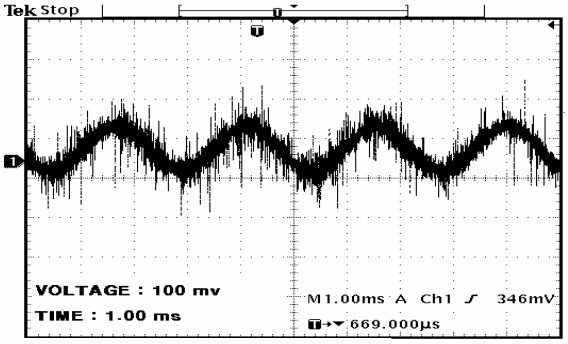
*TP
R_OUT(L_OUT) : AUDIO SIGNAL that goes into MSP3420 before AUDIO PROCESSING



(4) IC701 .IC700 (TDA 7480)

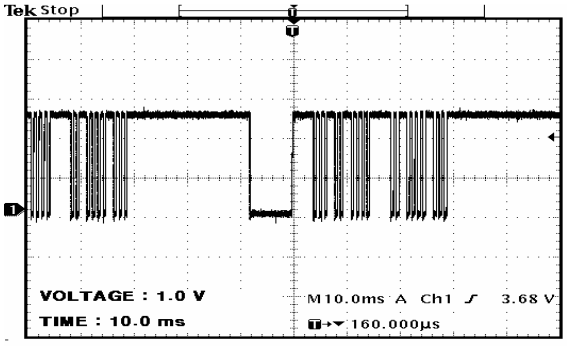
*TP

A. RIGHT(LEFT) :AMP input signal before 30dB amplification



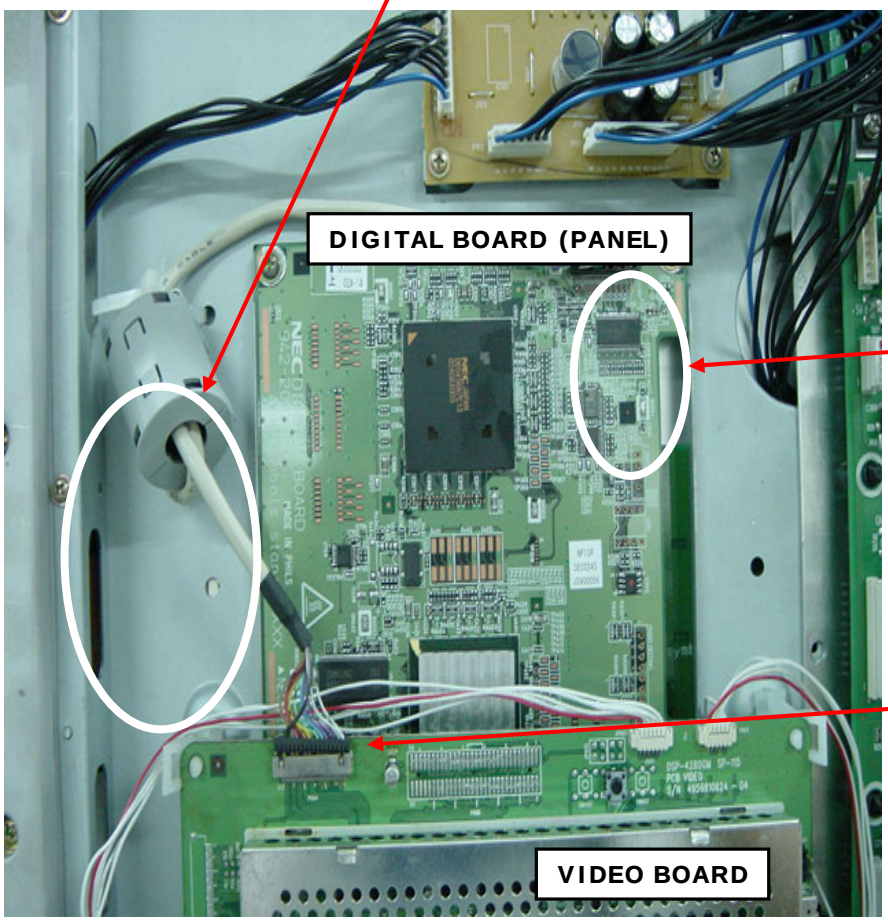
4-1-4.KEY PCB
-Input PCB using KEY

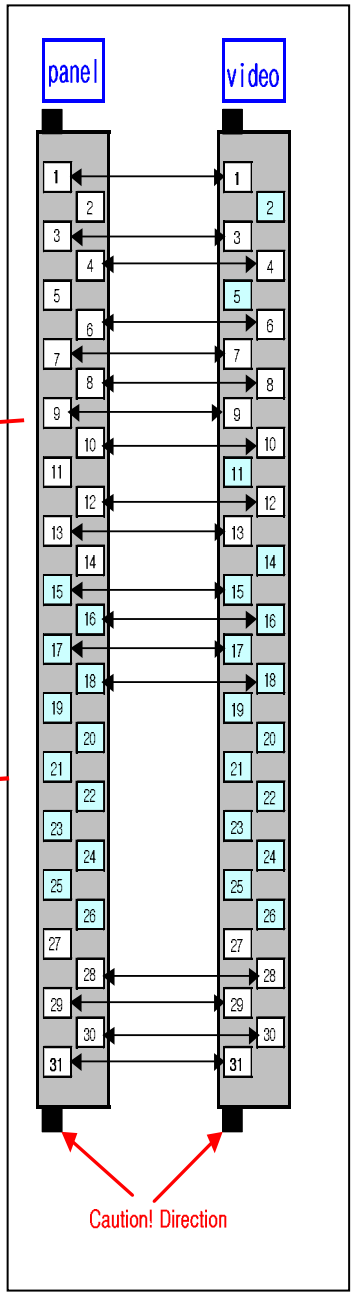
4-1-5.LED PCB
- PCB for REMOCON CONTROL



6. LVDS CABLE

CAUTION!
After servicing, you must check if ring core is coupled with LVDS cable. Otherwise, PDP may not display.





7. SERVICE MODE (VIDEO PCB INITIAL DATA)

(1) Input Selection : VIDEO

(2) USER CONTROL INITIAL VALUE
BRIGHTNESS : 35, CONTRAST : 47, COLOR : 32, TINT : 0 (CENTER)
SHARPNESS : 4

(3) SERVICE MODE INITIAL VALUE

1) PW171
SUB-BRIGHTNESS : 28, SUB-CONTRAST : 40
R-BIAS : 64, G-BIAS : 64, B-BIAS : 64
R-GAIN : 64, G-GAIN : 64, B-GAIN : 64

2) SAA7118
SUB BRT : 128, SUB CONT : 50, SUB CLR : 55, SUB TNT : 0
SUB SRP : 10

3) DPTV
SUB BRT : 61, SUB CONT : 16,

4) CXA3516
SUB CONT : 58, Cb OFFSET : 39, Cr OFFSET : 37, HYS : 3,
THRSLD : 14

5) MSP34X0
PRESCALE : 22

6) PANEL
MOVING : Video60STD
STILL : Video60RFC

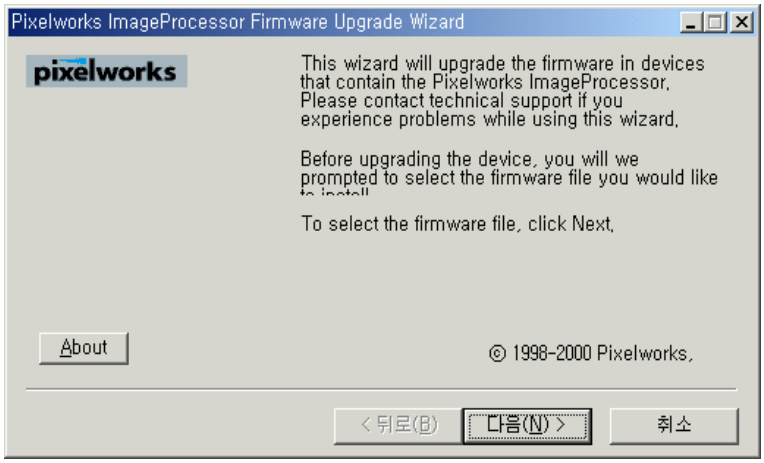
8. SOFTWARE UPGRADE Method

1.Connect the JACK PCB to the Video PCB.

2.Connect 9 PIN serial cable to the computer's serial port.

3.Connect serial cable's opposite end to Jack PCB's RS-232C port.

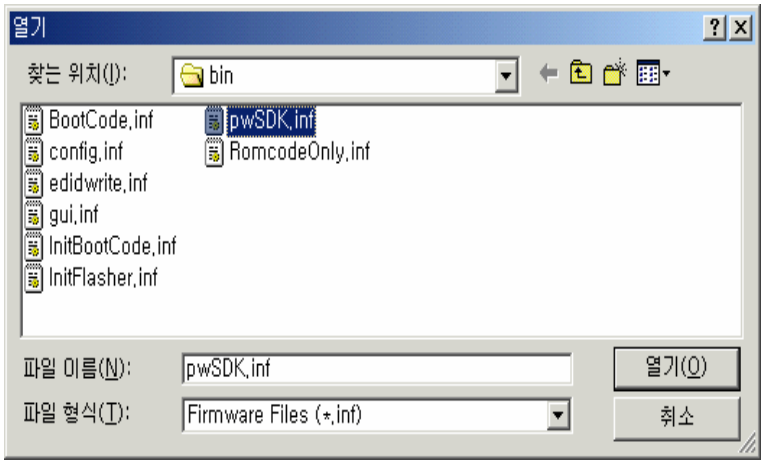
4.Run PC's Flashupgrader.exe and then push "Next(N) >" button.



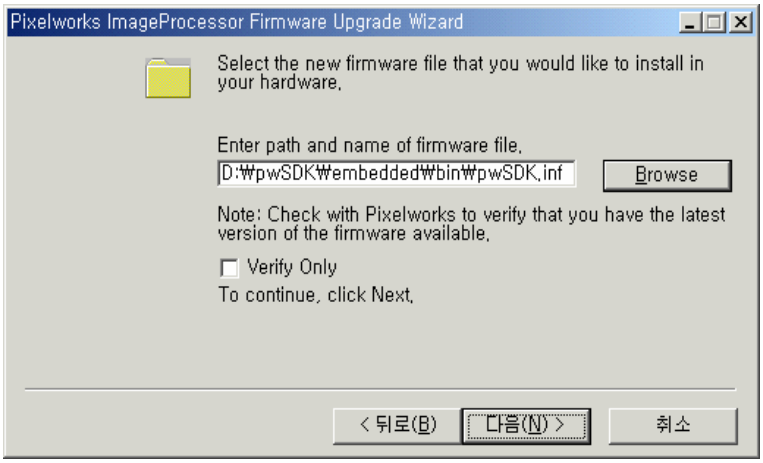
1.Select current Upgrade file

-Copy files sent by research center to a folder you wish to copy.

-Browse and Select pwSDK.inf from the folder.

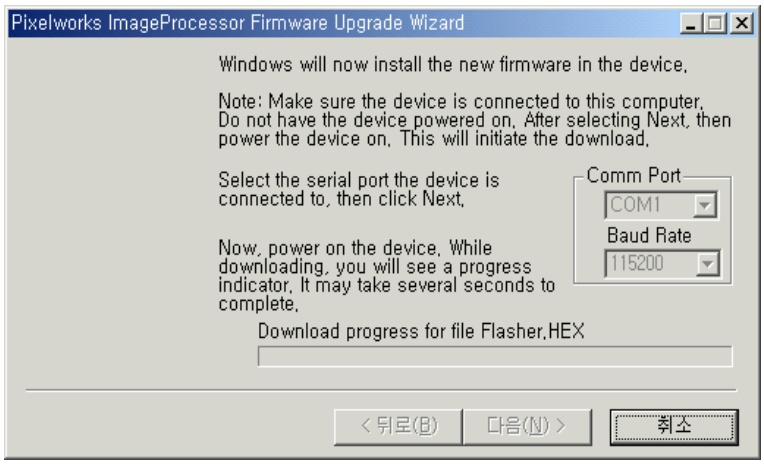


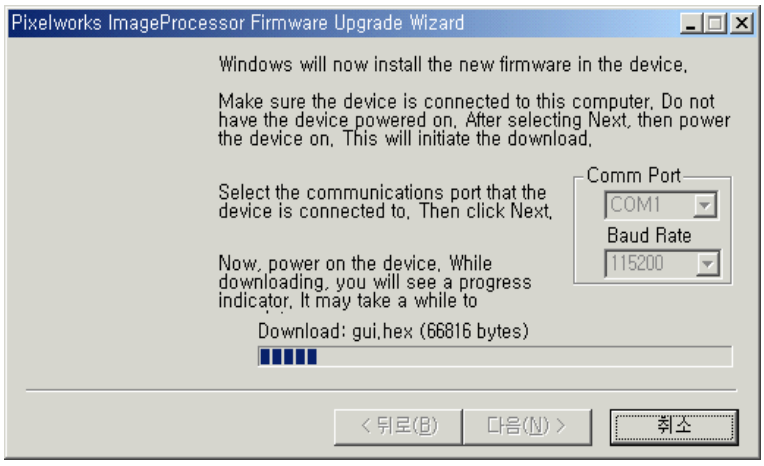
-Push "Next(N) >" button.



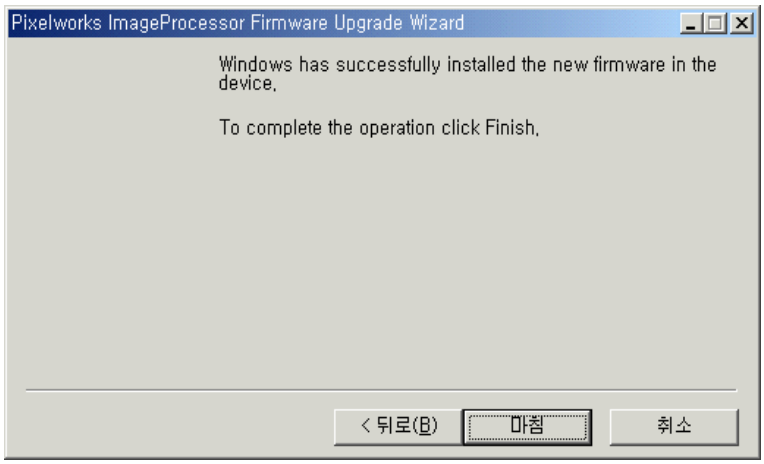
1. Select as above and push “Next(N) >” button. Select Comm port and Boud rate and push “Next(N) >” button

1.Upgrade process will be displayed. Power the AC on will initiate the download.





1.When all files Upgrade are complete, a window (below) will open. Push “Finish” button to complete the process.



9. POWER ADJUSTMENTS

1. Vsus (SUSTAIN Voltage) : Discharge Sustain Voltage

. METER used : DIGITAL MULTIMETER (DC Voltage Measure Mode)

. Adjusting TP : TP204 (refer to PAGE 11)

. Adjusting VOLUME : RV203 (refer to PAGE 11)

. Standard Voltage : 170V (This value could be different from the optimum adjusting voltage)

. Optimum adjusting Voltage : Stated in the LABEL

(See voltage adjustment label in the top of Panel Back Plate - PAGE 11)

2. Vadd (ADDRESS voltage) : DATA Input Voltage

. METER used : DIGITAL MULTIMETER (DC Voltage Measure Mode)

. Adjusting TP : TP206 (refer to PAGE 11)

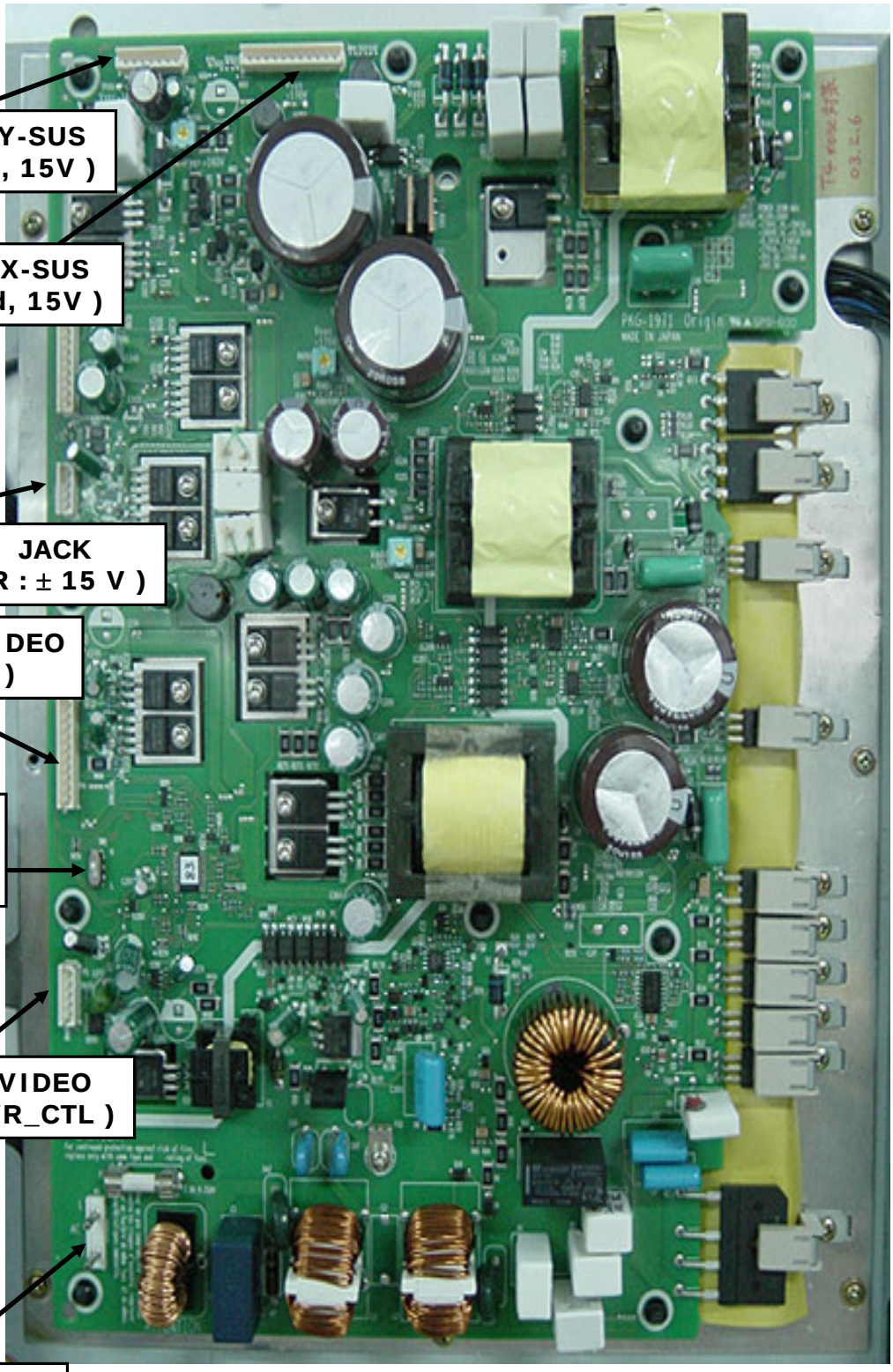
. Adjusting VOLUME : RV204 (refer to PAGE 11)

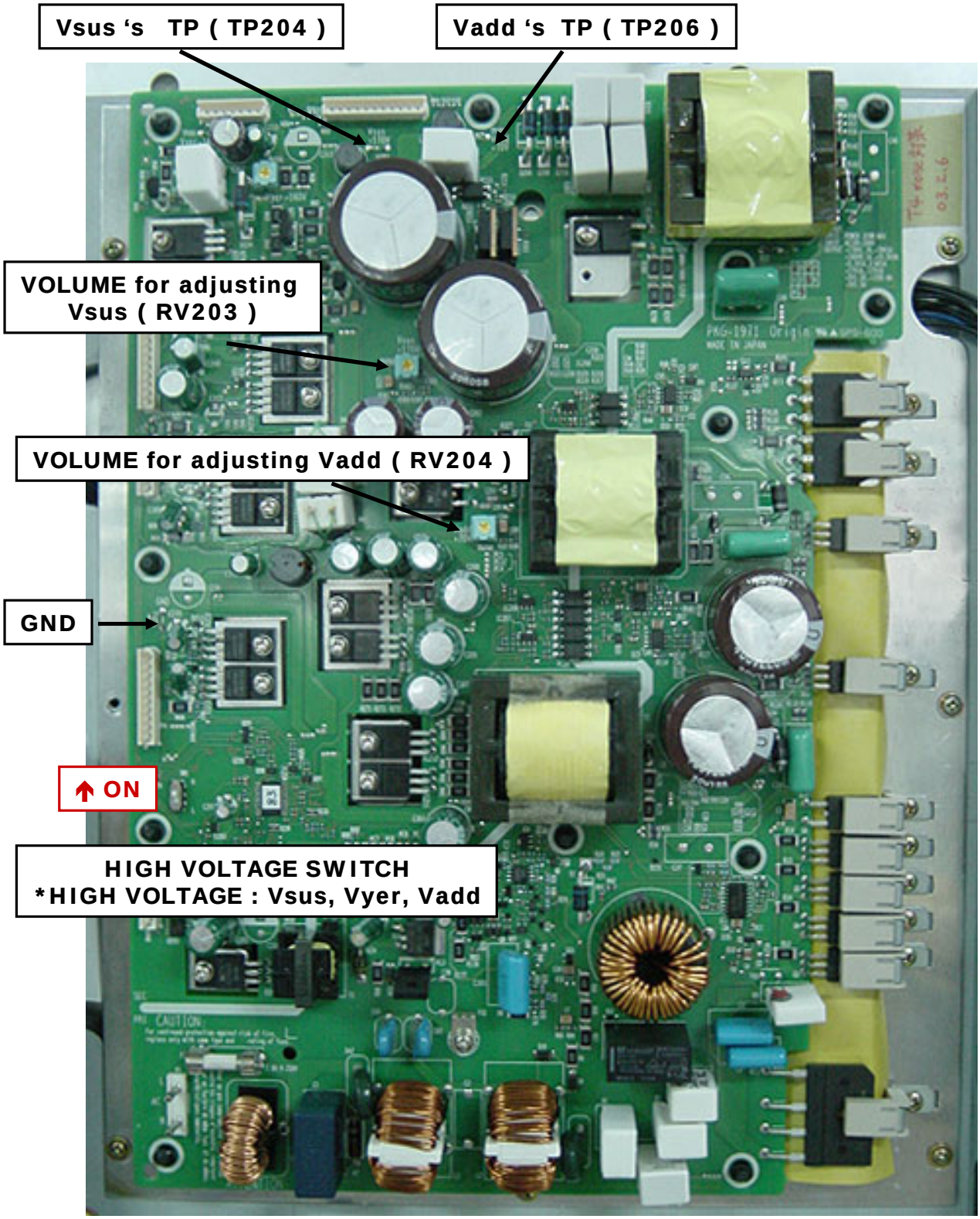
. Standard Voltage : 60V (This value could be different from the optimum adjusting voltage)

. Optimum adjusting Voltage : Stated in the LABEL

(See voltage adjustment label in the top of Panel Back Plate - PAGE 11)

*. As NEC Panel doesn't apply Vyer, it is unnecessary to adjust.


POWER ⇒ Y-SUS
(Vsus, Vyer, 15V)
POWER ⇒ X-SUS
(Vsus, Vadd, 15V)
POWER ⇒ JACK
(AUDIO PWR : ± 15 V)
POWER ⇒ VIDEO
(5V, 12V)
HIGH
VOLTAGE
SWITCH
POWER ⇔ VIDEO
(STB 5V, PWR_CTL)
AC POWER
INPUT LINE

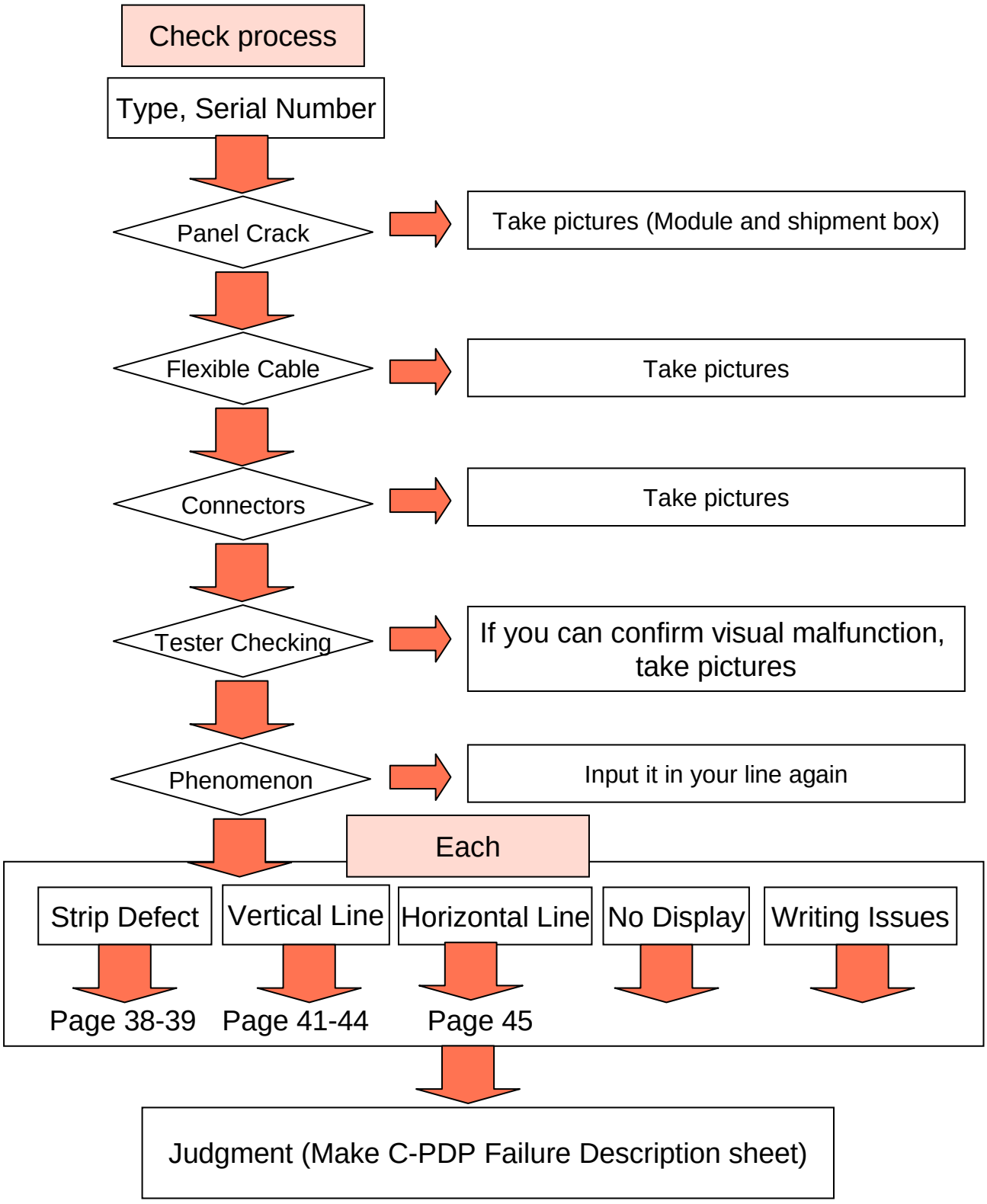

Vsus 's TP (TP204)
Vadd 's TP (TP206)
VOLUME for adjusting Vsus (RV203)
VOLUME for adjusting Vadd (RV204)
GND
ON
HIGH VOLTAGE SWITCH
*HIGH VOLTAGE : Vsus, Vyer, Vadd

10. ASSEMBLY LIST

No.	PCB ASS'Y NAME	ASS'Y CORD	ASS'Y DESCRIPTION
1	VIDEO PCB AS	PTVDMSG009	PCB VIDEO MANUAL AS
2	JACK PCB AS	PTJAMSG009	PCB JACK MANUAL AS
3	5V SUB PCB AS	PTSBMSG009	PCB SUB MANUAL AS
4	MODULE PDP	4850M06110	NP42B2MF02
5	X-SUS PCB AS	485AS00290	X-SUS PCB AS (NP42B2MF02 NEC)
6	Y-SUS PCB AS	485AS00390	Y-SUS PCB AS (NP42B2MF02 NEC)
7	DIGITAL PCB AS	485AS00490	DIGITAL PCB AS (NP42B2MF02 NEC)
8	CONN CENTER AS	485AS00790	CONN CENTER AS (NP42B2MF02 NEC)
9	CONN LEFT AS	485AS00590	CONN LEFT AS (NP42B2MF02 NEC)
10	CONN RIGHT AS	485AS00690	CONN RIGHT AS (NP42B2MF02 NEC)
11	PANEL GLASS	485AS00190	PANEL GLASS (NP42B2MF02 NEC)
12	GLASS FILTER	4952400200	PDF-6PH02
13	MODULE POWER	4850M05910	PDD-421
14	CONNECTOR	4850711N04	YMH025-11R+YMH025-11R+ULW=230
15	CONNECTOR	4850707N11	YMH025-07R+YMH025-07R+ULW=220
16	CONNECTOR	4850709N06	YMH025-09R+YH396-09V+ULW=400
17	CONNECTOR	4850710N09	YMH025-10R+YH396-10V+ULW=310
18	CONNECTOR	4850704N29	A2501H02-4P+440133-4+ULW=410
19	CONNECTOR	4850710N08	YMH025-10R+YMT025R+ULW=500
20	CONNECTOR	4850705N27	YMH025-05R+YMT025R+ULW=500
21	CONNECTOR	4950706025	12505HS-06+12505TS+ULW=750
22	CONNECTOR	4850705N28	12505HS-05+12505TS+ULW=900
23	CONNECTOR	4850704N28	YMH025-04R+YMT025R+ULW=400
24	CABLE FFC	485900038L	0.5-R-50P-320MM 6X4-6X4
25	CABLE FFC	485900018L	0.5-K-50P-400MM 6X4-6X4
26	CABLE FFC	485900028L	0.5-K-50P-360MM 6X4-6X4
27	FILTER EMI	5PZCAT3035	ZCAT3035-1330
28	BRKT MAIN	4853954100	SECC T1.0
29	SUPPORT CIRCUIT C	4957300400	PCBEHE2-25M-01

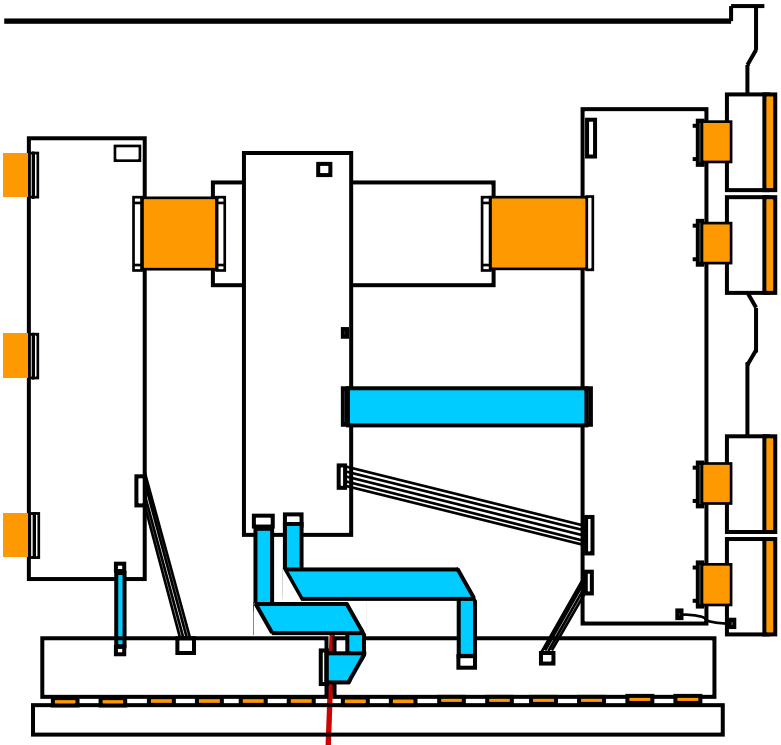
11. PDP MODULE CHECK POINT

11-1. Flow Chart



11-2. Serial Number

Module Number and Panel ID

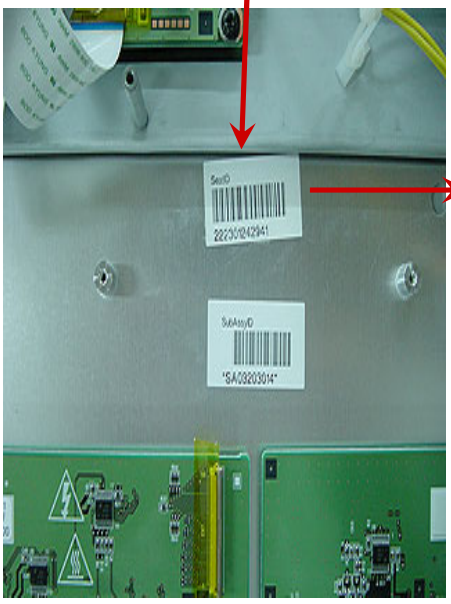


Serial No.

SERIAL NO.
302200129
Vd=60V
Vs=168.4V

Type

CODE CA-01

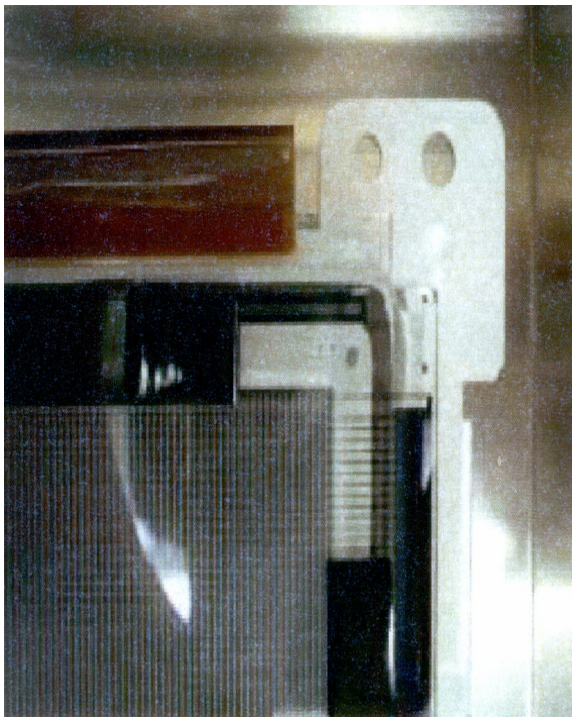


Panel ID

222301242941

11-3. Panel Crack

Panel Crack Check the surface of glass whether crack or not



This issue may be caused by transportation or treatment after shipment.

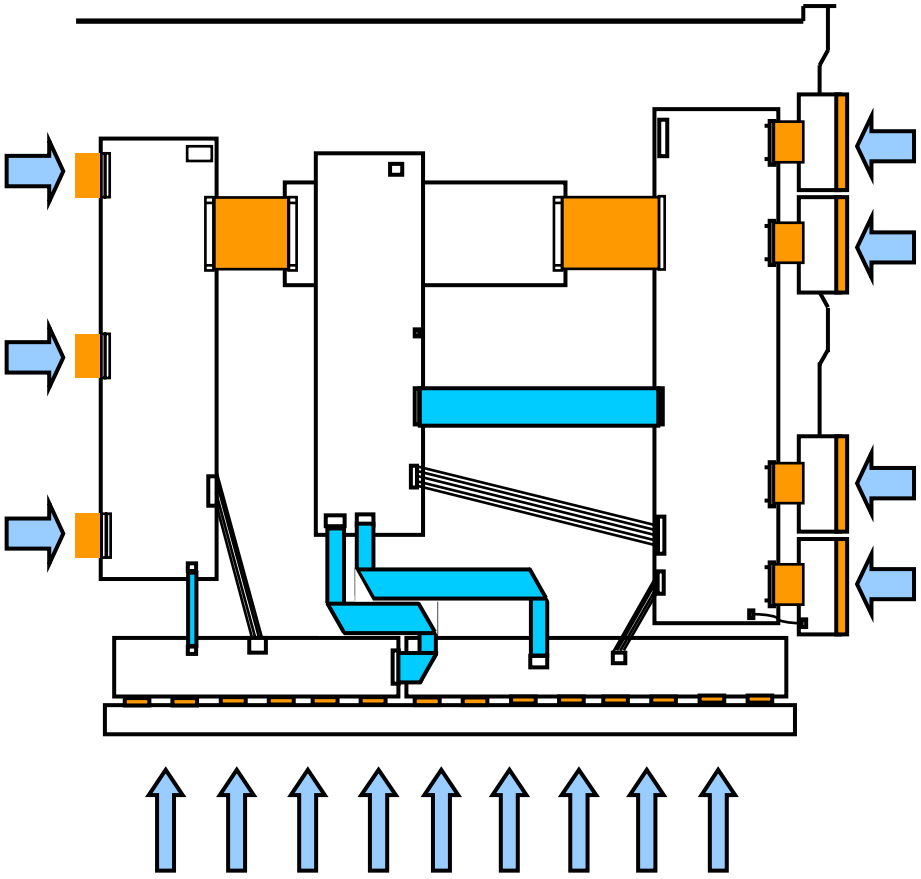
We would like you to take some pictures, the broken module, the outside box, and inform the shipment data

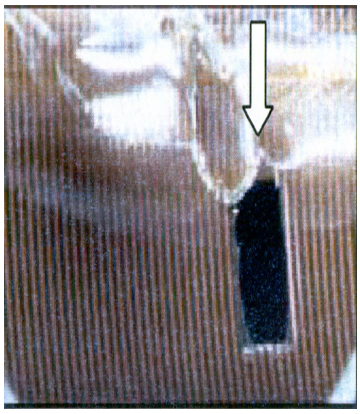
If you do not the pictures, we can dispose the broken modules on our responsibility.

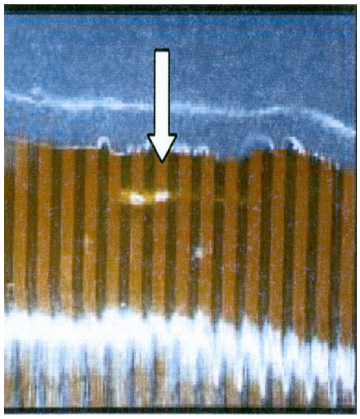
11-4. Flexible cable

Flexible Cable Check the Flexible Cables whether scratched, broken, or not.

Cutting cable or broken







In this case, it caused by handling them at customer line.

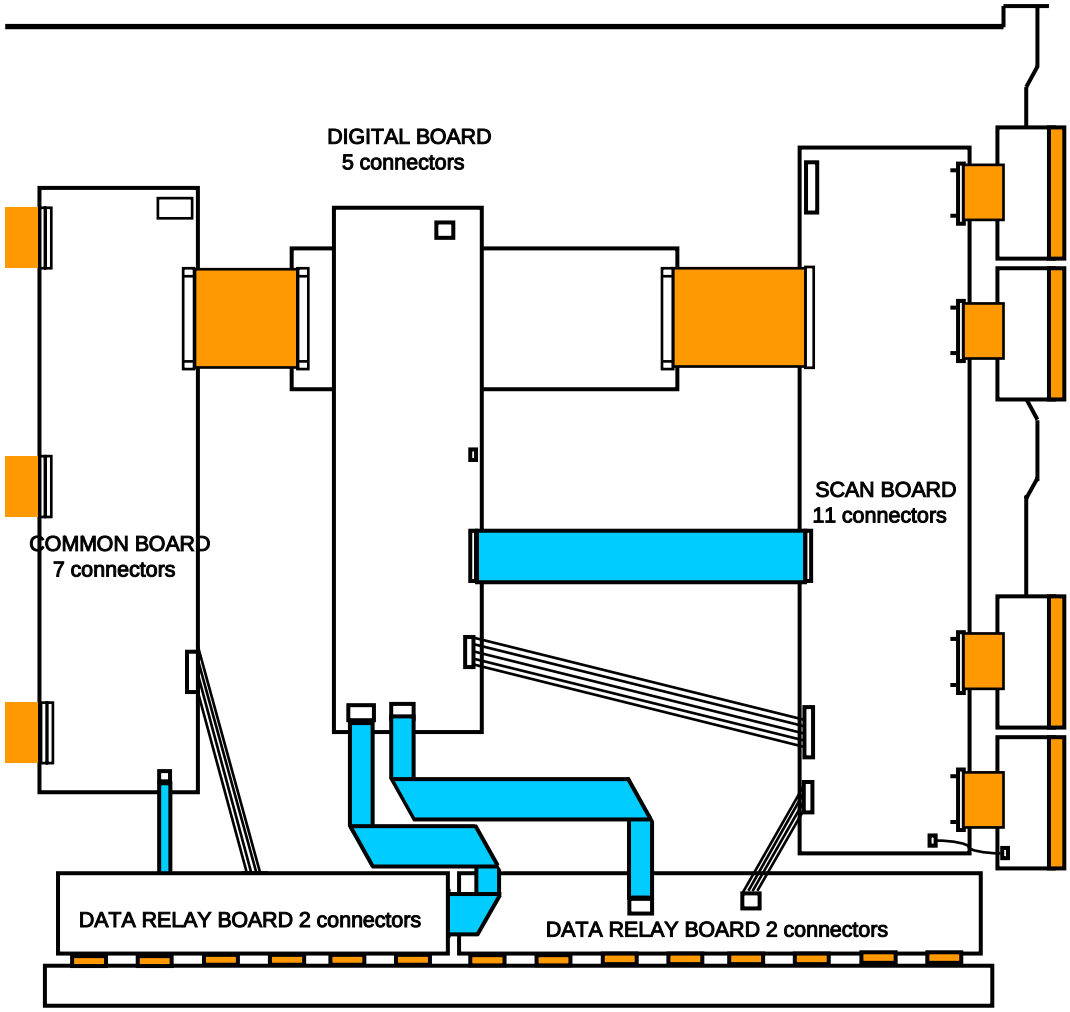
We would like you to be careful to handle the modules.

11-5. Connectors

Connectors Condition

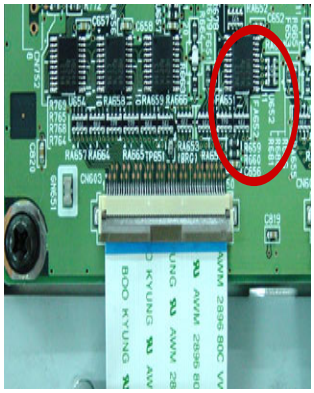
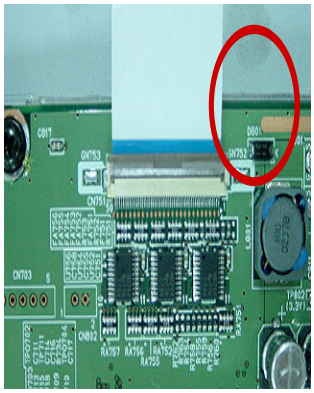
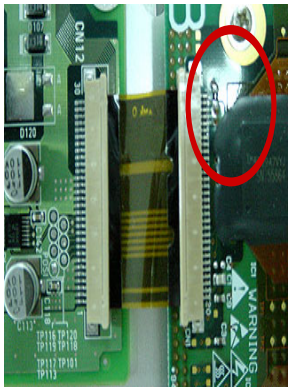
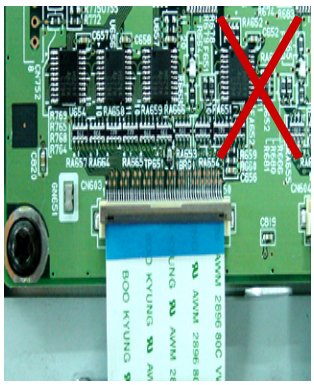
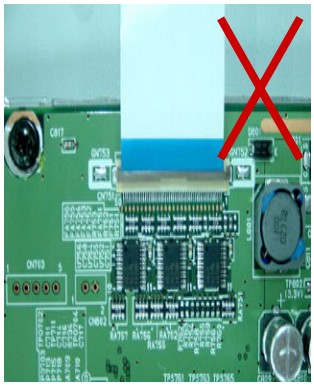
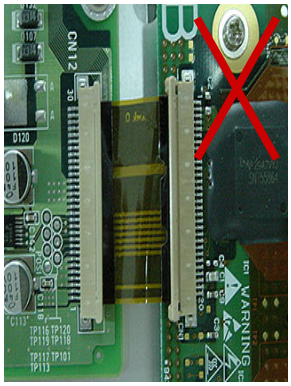
Check the Cable or Connectors whether connected and locked, or not

NEC MODULE ONLY (with the exception of video, power and jack board)



We would like you to be careful to handle the modules at assembling

Each Connectors Condition

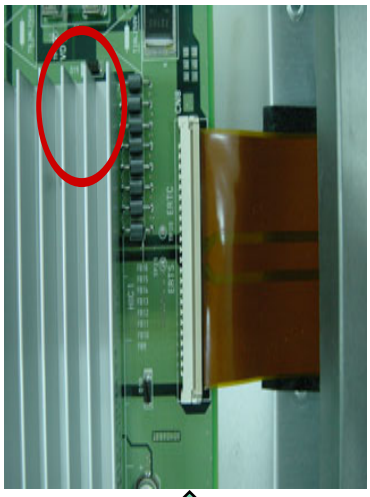
	Data HIC -DATA RELAY BOARD	DIGITAL BOARD -DATA RELAY BOARD	DIGITAL BOARD -DATA RELAY BOARD	SCAN BOARD -SACN DRIVING BOARD
LOCKED				
UNLOCKED				

Each Connectors Condition

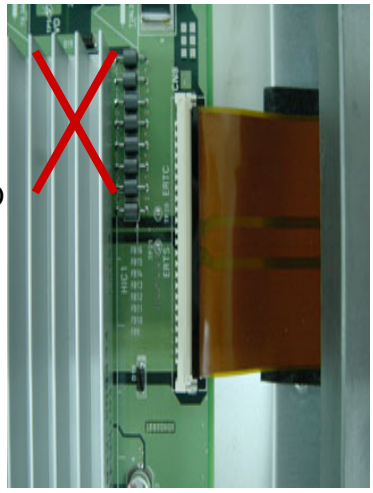
COMMON BOARD

- FLEXIBLE CALBLE

LOCKED



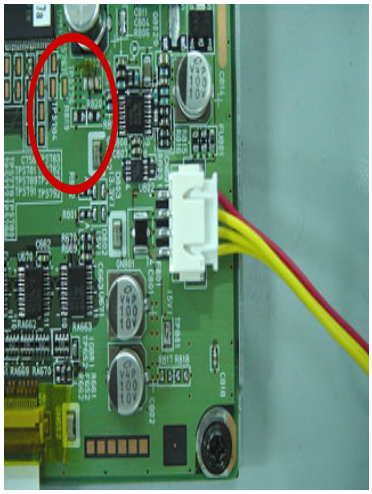
UNLOCKED



DIGITAL BOARD

- FLEXIBLE CALBLE

CONNECTED

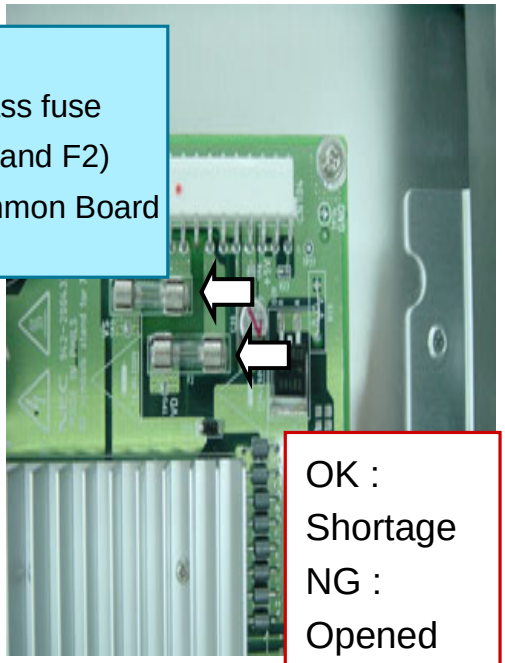


UNCONNECTED

11-6. Tester Checking

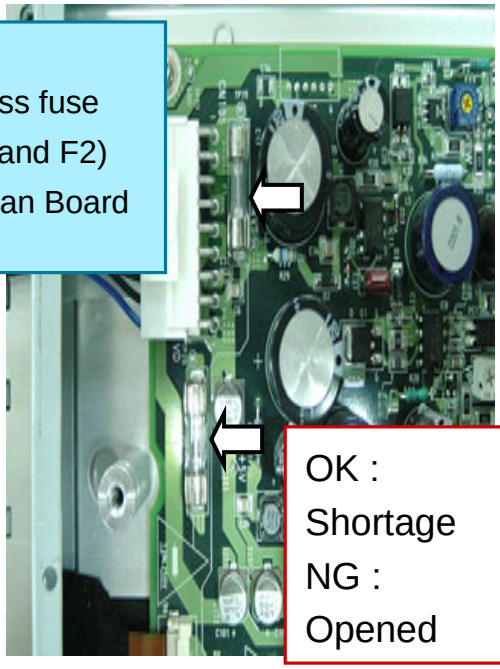
Fuse Checking

Glass fuse
(F1 and F2)
on Common Board



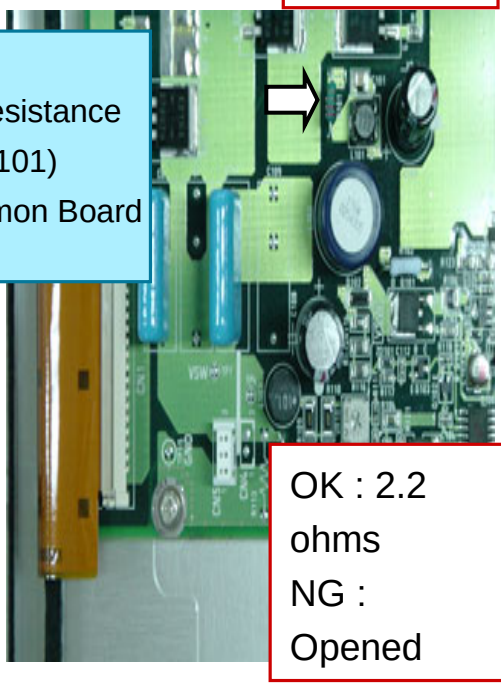
OK :
Shortage
NG :
Opened

Glass fuse
(F1 and F2)
on Scan Board



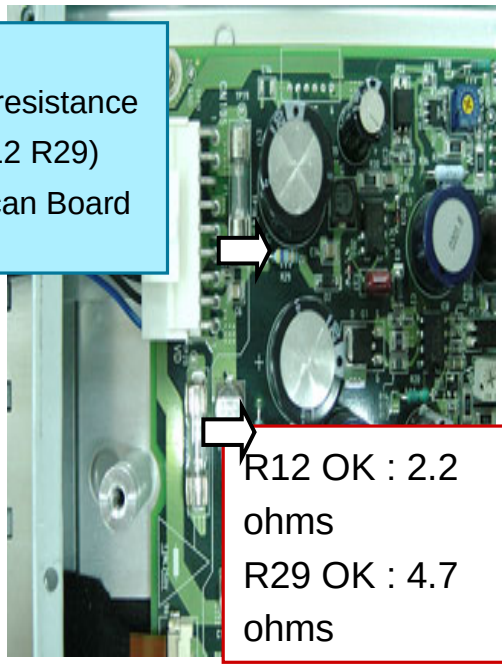
OK :
Shortage
NG :
Opened

Fuse resistance
(R101)
on Common Board



OK : 2.2
ohms
NG :
Opened

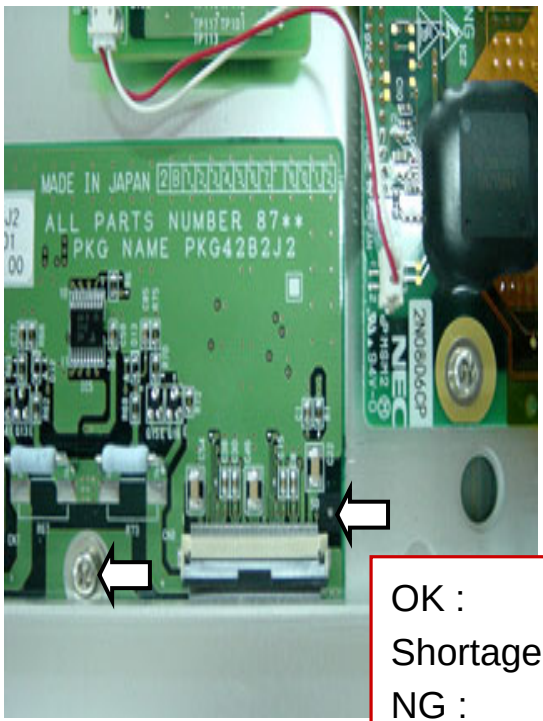
Fuse resistance
(R12 R29)
on Scan Board



R12 OK : 2.2
ohms
R29 OK : 4.7
ohms

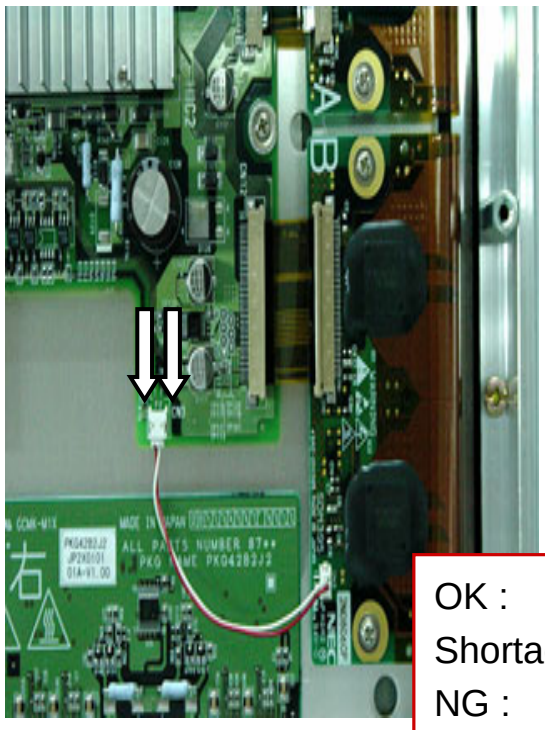
Alarm Line Checking

Glass Alarm
At #50 pin on CN8
On Data Relay Board
(Right-Down)



OK :
Shortage
NG :
Opened

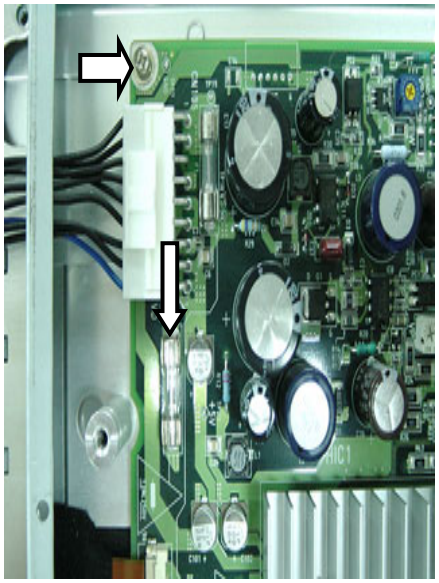
Glass Alarm
between pins on CN3
On Scan Board



OK :
Shortage
NG :
Opened

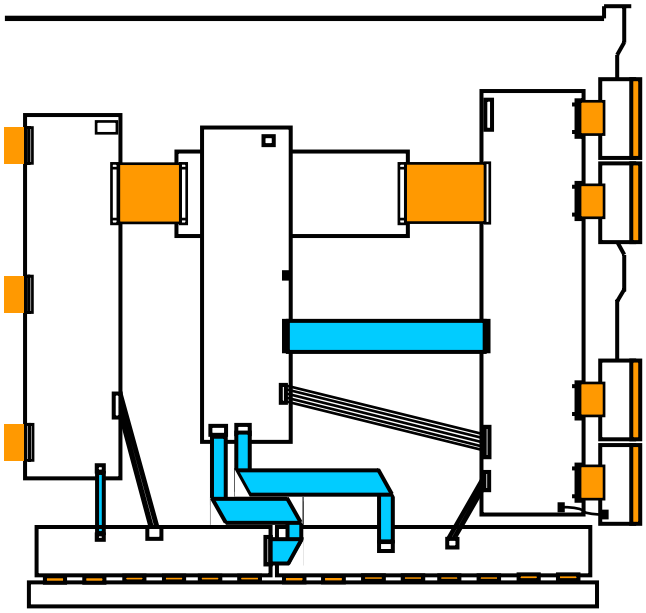
Data HIC line Checking

F2 fuse and GND on scan board

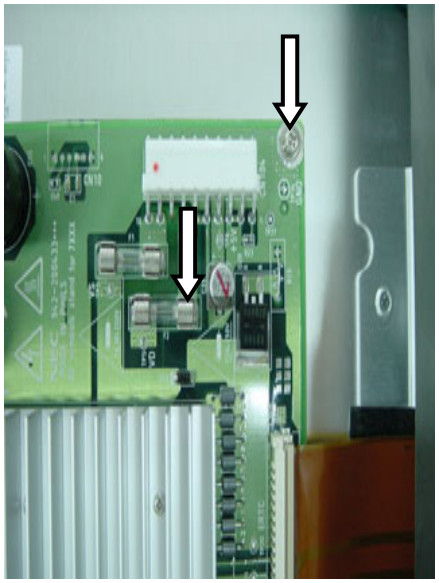


OK : Opened
NG :Short age

Between F2 fuse and GND



F2 fuse and GND on scan board



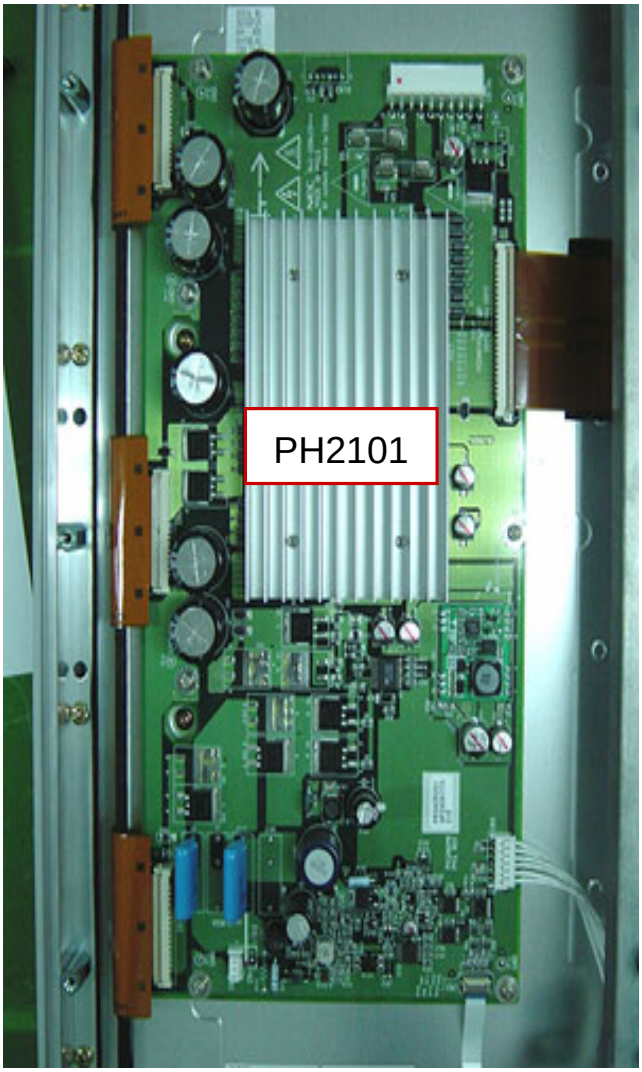
Between F2 fuse and GND

Check between F2 fuse and GND at scan or common board.
If it is shortage,
Remove the heatsink over the data HIC,
And Check the surface of data HIC, the take a picture

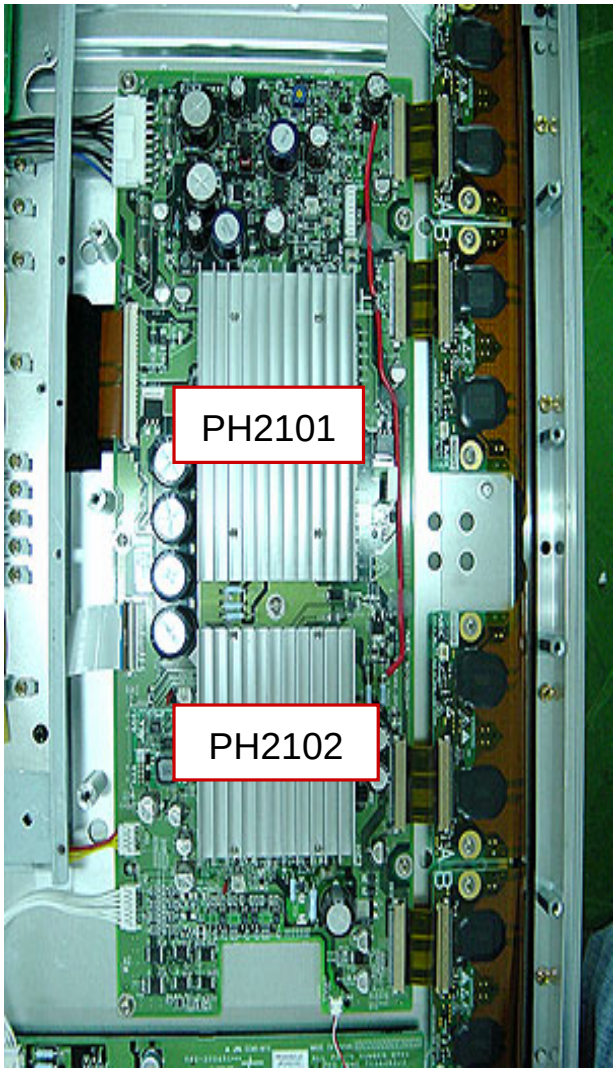
OK : Opened
NG :Shortage

Parts Location

COMMON Board



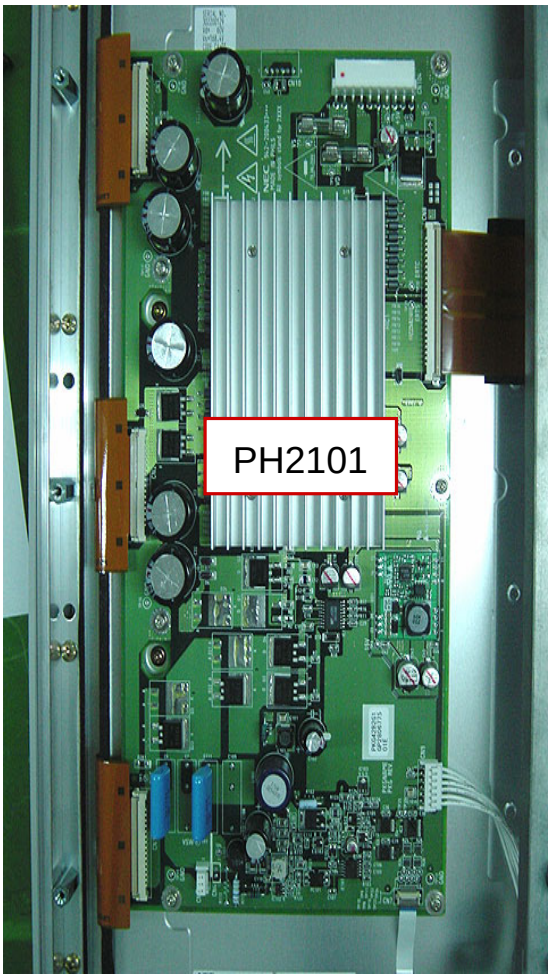
COMMON Board



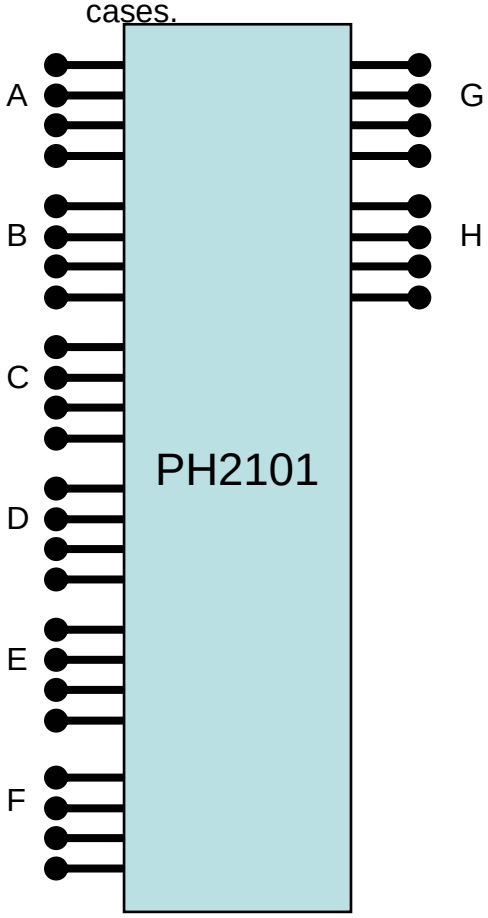
Power HIC Checking

PH2101 on Common board

PH2101 on common board



Check the following cases.



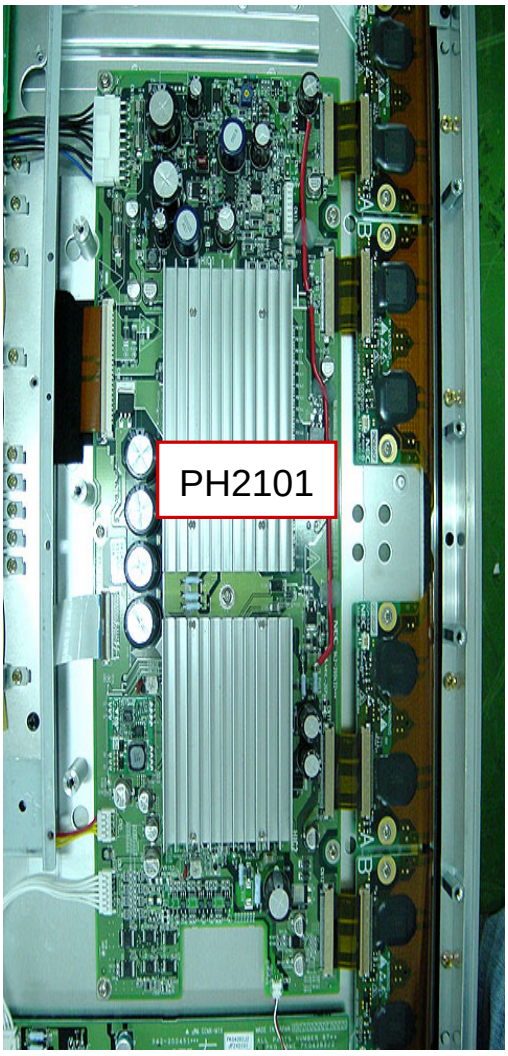
Between A and G
Between B and H
Between C and D
Between E and F

OK : More than K ohm
NG : Shortage

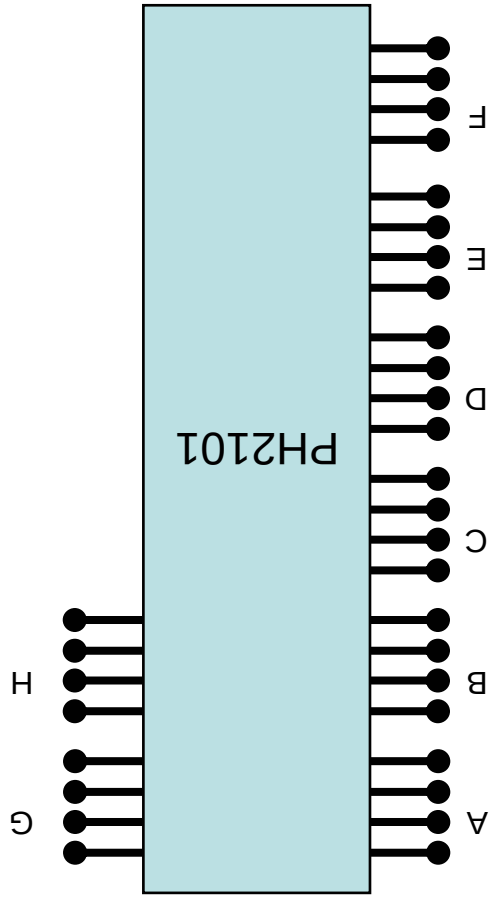
Power HIC Checking

PH2101 on Scan board

PH2101 on scan board



Check the following cases.



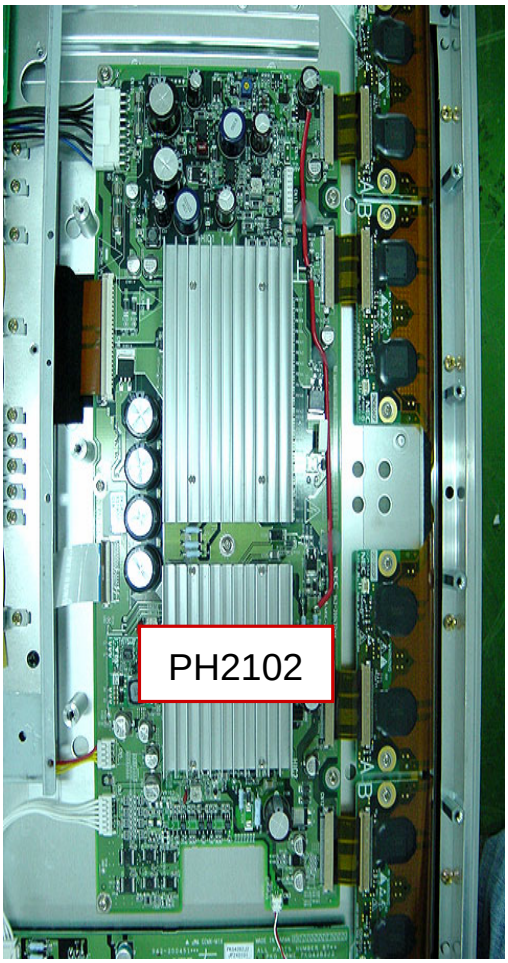
Between A and G
Between B and H
Between C and D
Between E and F

OK : More than K ohm
NG : Shortage

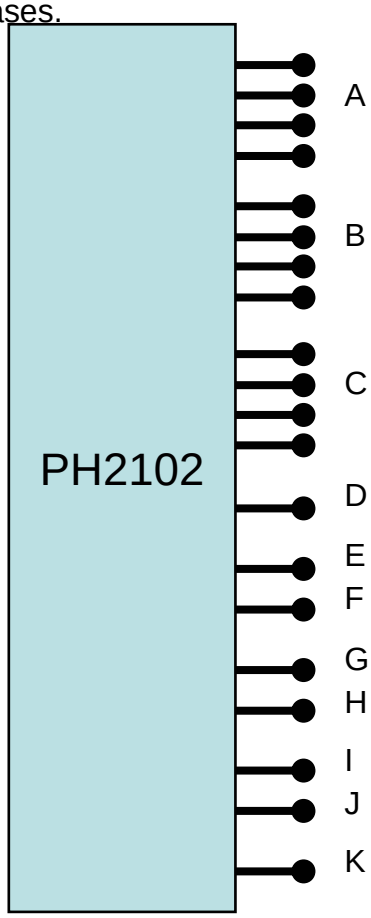
Power HIC Checking

PH2102 on Scan board

PH2101 on common board



Check the following cases.



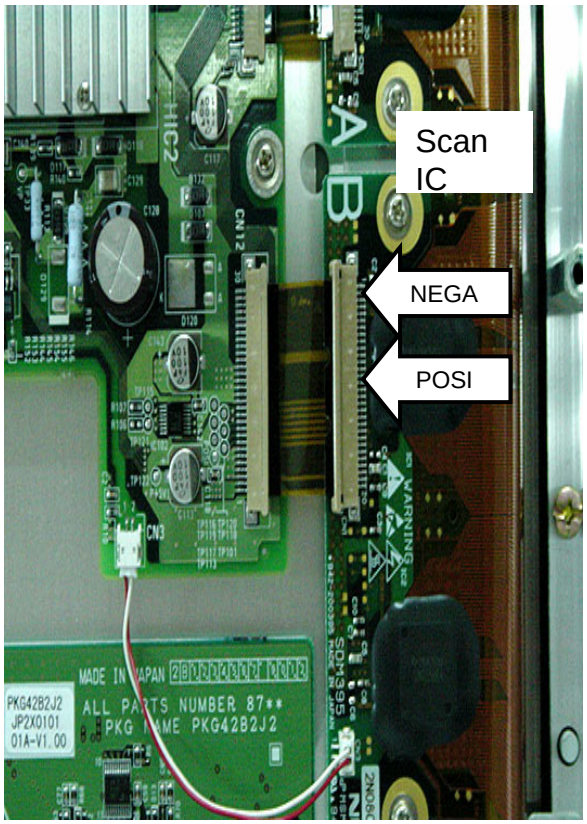
Between A and B
Between B and C
Between D and E
Between F and G
Between H and I
Between J and K

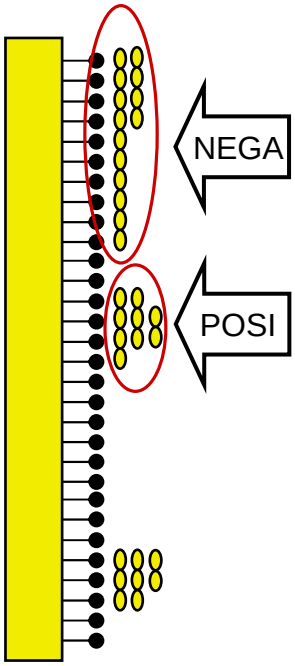
OK : More than K ohm

NG : Shortage

SCAN IC Driver Checking

Scan IC





OK : More than K ohm

NG : Shortage

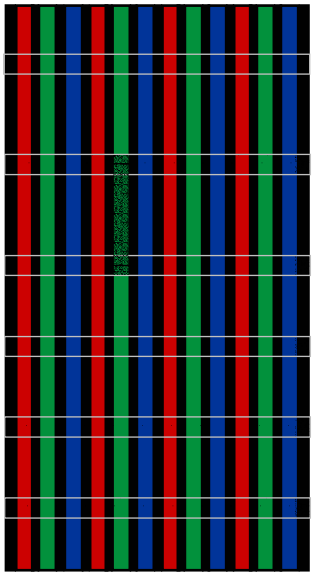
Check the following cases.

Between NEGA and POSI

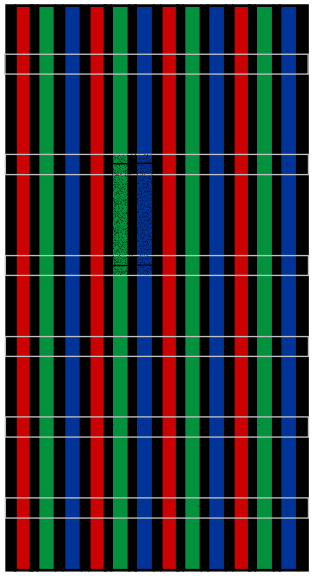
11-7. Strip Defect

Strip Defect

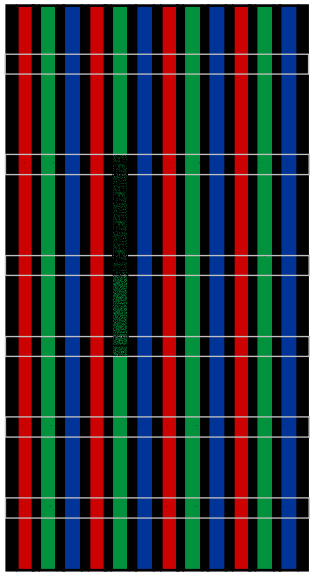
Compare with specification



1 Strip

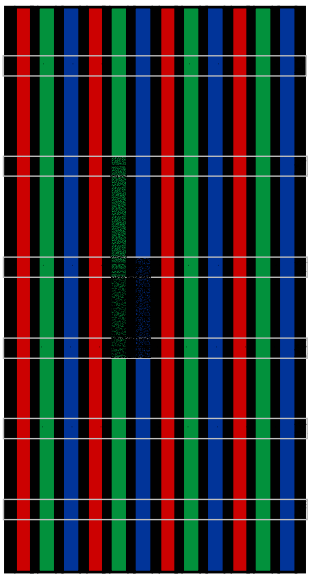


2 Strip

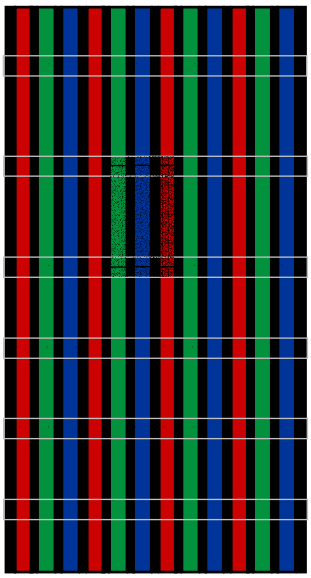


2 Strip

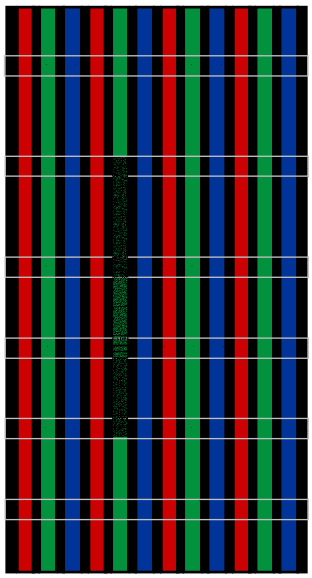
Strip Defect



3 Strip



3 Strip

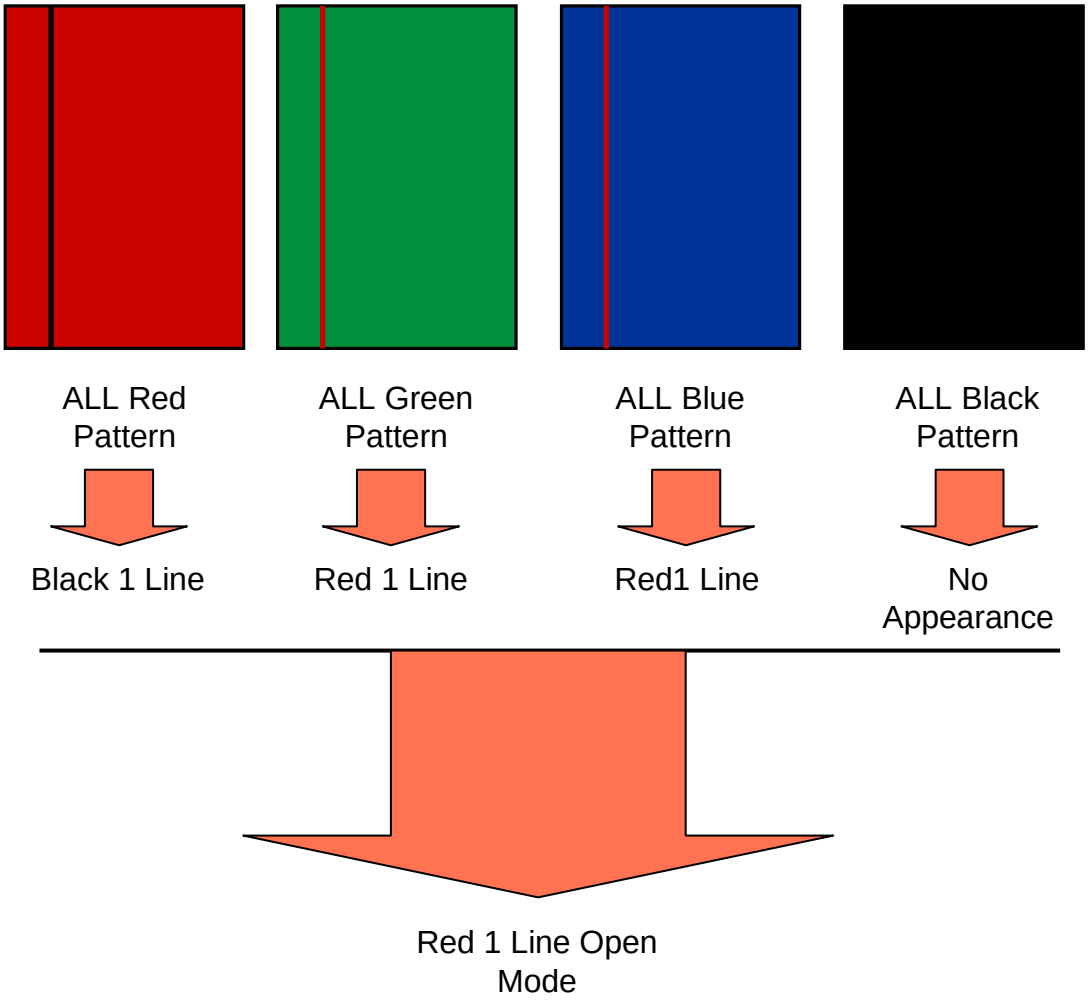


3 Strip

11-8. Vertical Line

Vertical Line Single line

Open Mode

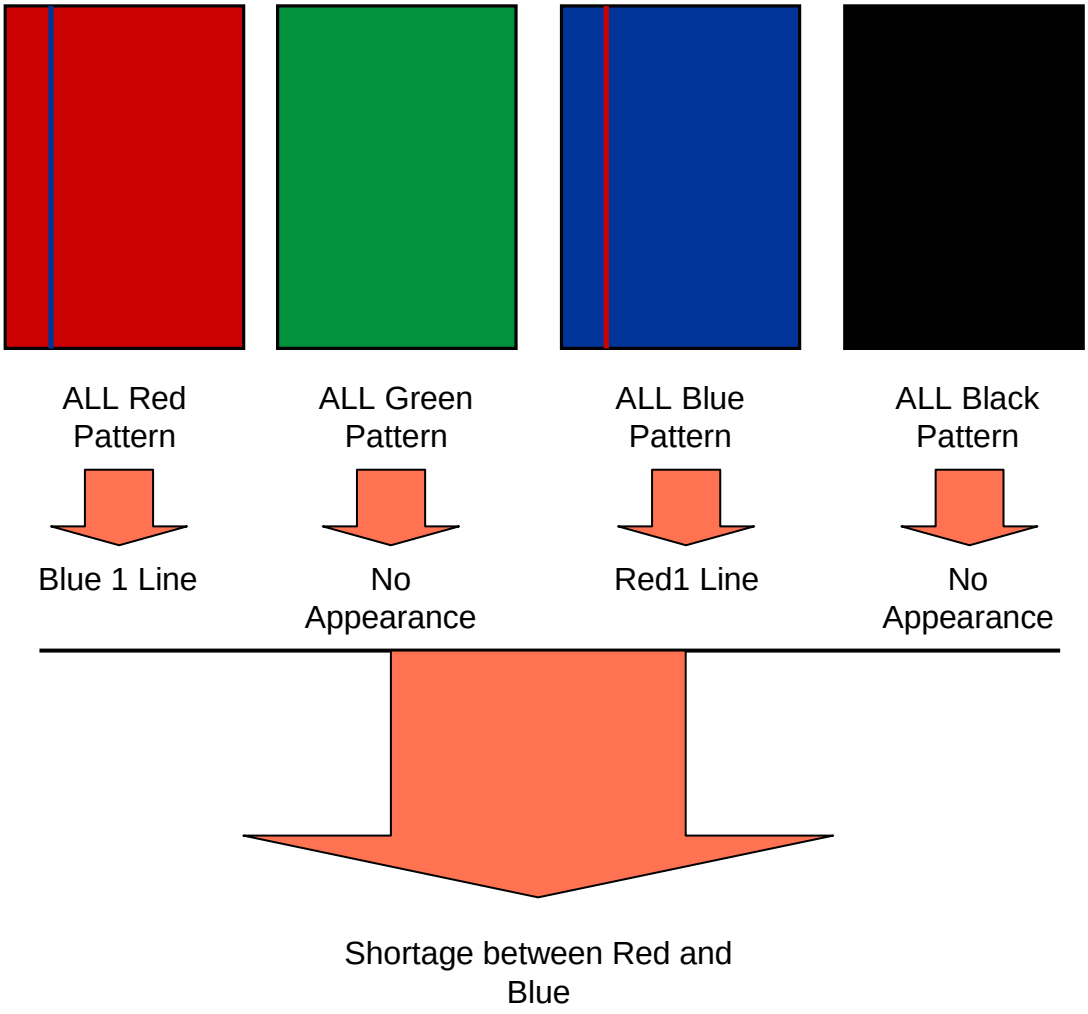


[Check Point] a) The broken data flexible cable.
If OK, Data IC Broken.

Vertical Line

Two line

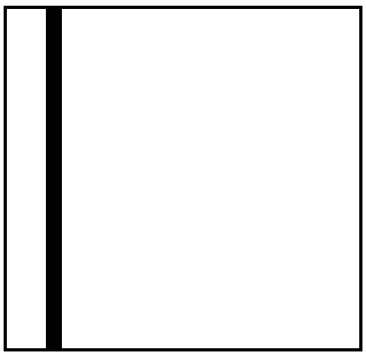
Shortage Mode



[Check Point] a) This phenomenon is caused by panel issues.

Vertical Line

Block



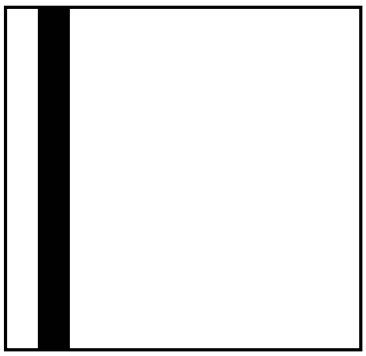
1/2 data IC Block (width 30mm)

[Check Point]

a) The broken surface IC on data IC.

b) The broken data flexible cable.

Vertical Line Block

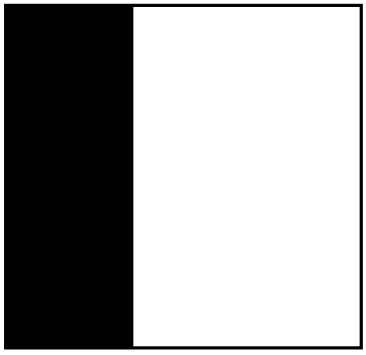


1 data IC Block

[Check Point] a) Lacking connector between Data Relay board and Data IC.

b) The broken data flexible cable.

Vertical Line Block



Many data IC Block

[Check Point]

a) Lacking connector between Data Relay board and Scan or Common board

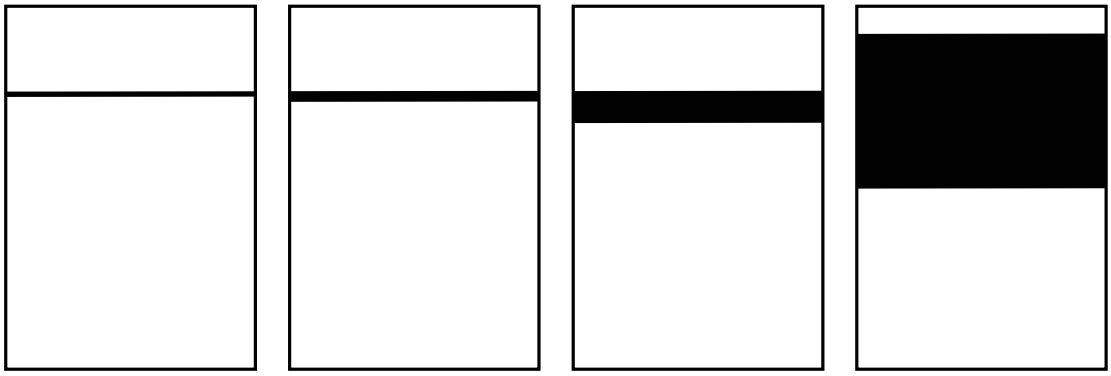
b) The broken data flexible cable

c) Shortage between leads in connector.

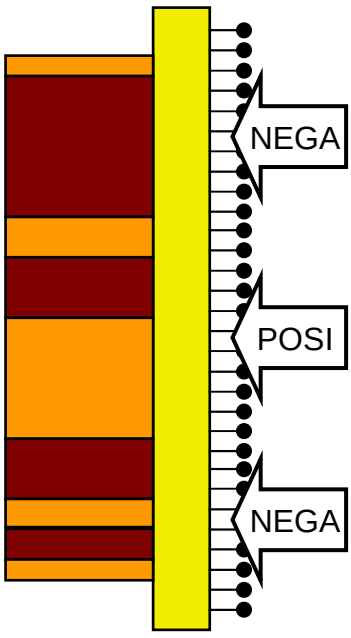
Foreign Material etc.

11-9. Horizontal Line

Horizontal Line Single line, two lines or block



Single Two Line Block Block



[Check Point]

a)The broken surface IC on scan IC driver.

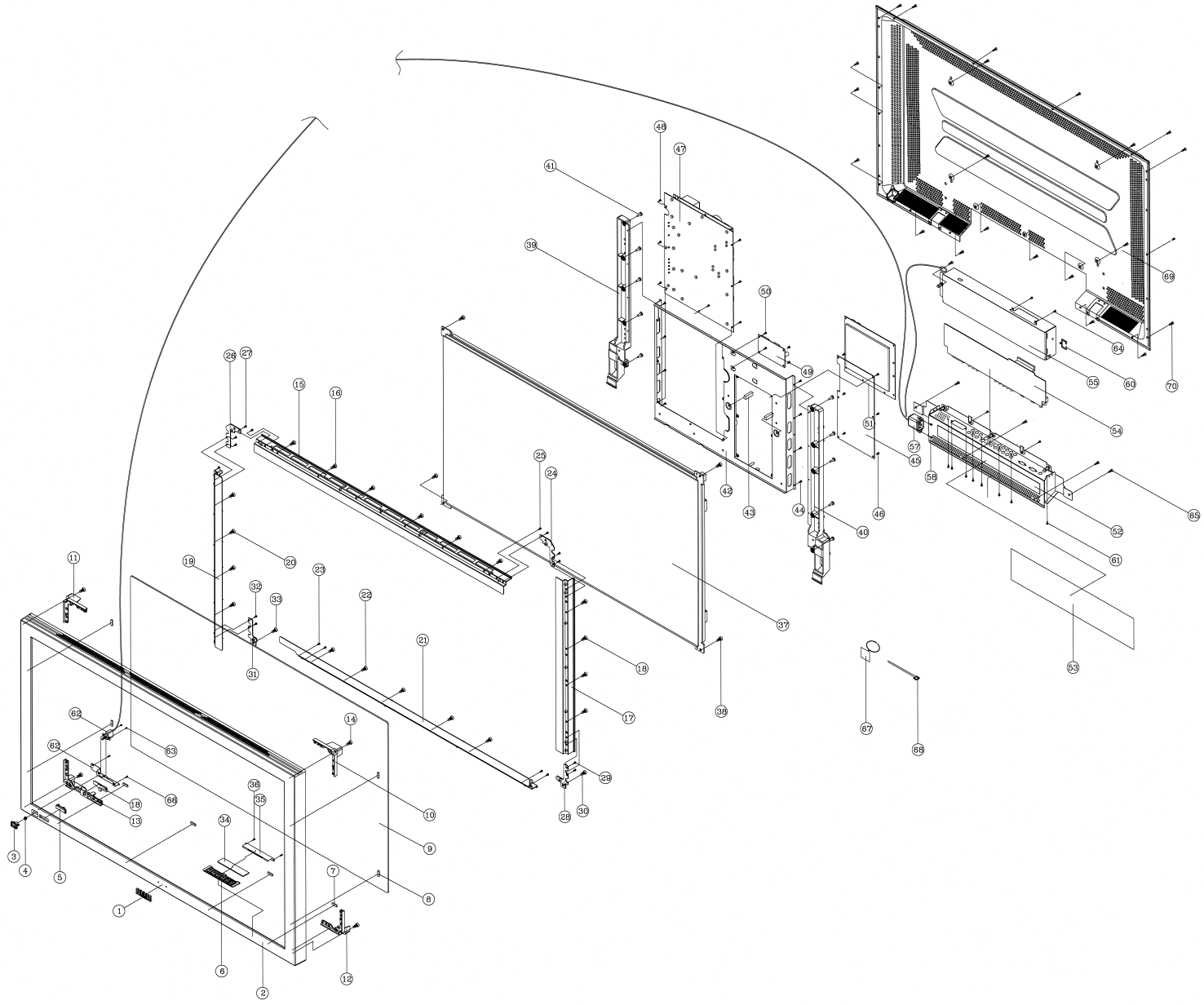
Check the resistance between NEGA and POSI on scan IC board. (Normal : K ohm Level)

b) The broken data flexible cable.

c) Lacking connector between scan IC and scan board.

4950000330

REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR.
A			/ /		
B			/ /		
C			/ /		



No.	PART CODE	PART NAME	Q'TY	MATERIAL	REMARKS
70	7003401012	SCREW MACHINE	4	M BIN 4X10 MFZN BK	
69	4951400100	COVER BACK AS	1	DSP-4280	
68	4856812001	TIE CABLE	2	NYLON66 DA100	
67	4956801100	CLAMP WIRE	5	KSK-3140-KT	
66	7178300612	SCREW TAPTITE	2	TT2 BIN 3X8 BK	
65	7003401012	SCREW MACHINE	4	M BIN 4X10 MFZN BK	
64	7008300811	SCREW MACHINE	2	WAS M3X8MFZN	
63	7003350612	SCREW MACHINE	2	M BIN 3X6 MFZN BK	
62		POWER S/W	1		
61	4953201000	BRACKET POWER S/W	1	SECC t0.8	
60	4956800200	CLAMP WIRE	1	WS-A-2-19	
59	7003401012	SCREW MACHINE	1	M BIN 4X10 MFZN BK	
58		SCREW MACHINE	2	M FLT 3X12 MFZN	
57		EMI FILTER	1		
56	7178301212	SCREW TAPTITE	10	TT2 WAS 3X12 MFZN BK	
55	4957502700	CASE JACK	1	A5052 t0.5	
54		PCB JACK	1		
53	4957906900	INSULATION TERMINAL	1	PET t0.35	
52	4851619400	TERM ANT ASSY	1	DSP-4280NV	
51		PCB VIDEO	1		
50	7008300811	SCREW MACHINE	4	WAS M3X8MFZN	
49		PCB CONNECT	1		
48	7008300811	SCREW MACHINE	7	WAS M3X8MFZN	
47		PCB POWER	1		
46	7008300811	SCREW MACHINE	6	WAS M3X8MFZN	
45		PCB DIGITAL	1		
44	7008300811	SCREW MACHINE	8	WAS M3X8MFZN	
43	4957300400	SUPPORT CIRCUIT BOARD C	2	PCBEHE2-25M-01	
42	4853954100	BRKT MAIN	1	SECC t1.0	
41	4856016700	SCREW SPECIAL	10	WAS(PVC t1.0) M4 * 14	
40	4851C00200	FRAME SUPPORT R AS	1	DSP-4280NV	
39	4851C00100	FRAME SUPPORT L AS	1	DSP-4280NV	
38	7063401211	SCREW MACHINE	4	M/C BIN 4X12 MFZN SW	
37		MODULE FDP	1		
36	7178301011	SCREW TAPTITE	2	TT2 WAS 3X10 MFZN	
35	4957502800	COVER BUTTON PCB	1	SPTH t0.3	
34		PCB CH	1		
33	7063401211	SCREW MACHINE	1	M/C BIN 4X12 MFZN SW	
32	7178301011	SCREW TAPTITE	2	TT2 WAS 3X10 MFZN	
31	4853216900	BRKT D R	1	SECC T2.0	
30	7063401211	SCREW MACHINE	1	M/C BIN 4X12 MFZN SW	
29	7178301011	SCREW TAPTITE	2	TT2 WAS 3X10 MFZN	
28	4853215100	BRKT D L	1	SECC T2.0	
27	7178301011	SCREW TAPTITE	4	TT2 WAS 3X10 MFZN	
26	4853216800	BRKT T R	1	SECC T2.0	
25	7178301011	SCREW TAPTITE	4	TT2 WAS 3X10 MFZN	
24	4853215000	BRKT T L	1	SECC T2.0	
23	7178301011	SCREW TAPTITE	4	TT2 WAS 3X10 MFZN	
22	7173401211	SCREW TAPTITE	5	TT2 BIN 4X12 MFZN	
21	4951800800	FRAME SIDE DOWN AS	1	DSP-4280	
20	7173401211	SCREW TAPTITE	4	TT2 BIN 4X12 MFZN	
19	4951800700	FRAME SIDE R AS	1	DSP-4280	
18	7173401211	SCREW TAPTITE	4	TT2 BIN 4X12 MFZN	
17	4951800600	FRAME SIDE L AS	1	DSP-4280	
16	7173401211	SCREW TAPTITE	6	TT2 BIN 4X12 MFZN	
15	4951800600	FRAME SIDE TOP AS	1	DSP-4280	
14	7173401211	SCREW TAPTITE	4	TT2 BIN 4X12 MFZN	
13	4951800400	BRACKET CLAMP DR AS	1	DSP-4280	
12	4951800300	BRACKET CLAMP DL AS	1	DSP-4280	
11	4953401100	BRACKET CLAMP UR	1	ADC10	
10	4953401000	BRACKET CLAMP UL	1	ADC10	
9	4952400200	GLASS FILTER	1	PDF-69H02	
8	4924400100	RUBBER FILTER	4	CR60 18X5XT3.0 BK	
7	4924400101	RUBBER FILTER	4	CR60 18X4.5XT3.0 BK	
6	4954901500	BUTTON CH	1	ABS BK	
5	4955500900	DECO SENSOR	1	PMMA	
4	4956700300	SPRING POWER S/W	1	SUS304WPB	
3	4954800900	BUTTON POWER	1	ABS BK	
2	4952002300	MASK FRONT	1	PC+ABS BK	
1	4955618400	BRAND MARK	1	COPPER ABS	

UNITS	mm	DESIGNED BY	CHECKED BY	INSPECTED BY	APPROVED BY	PART NAME	SIZE OF DRAWING
SCALE	N/S	L.G.B Apr-18-2005				DEVELOPMENT DWG	1 OF 1
DIGITAL TV RESEARCH CENTER					MODEL NAME	DSP-4280NV	D / T
DAEWOO ELECTRONICS CO., LTD.					REFERENCE		485009ME

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