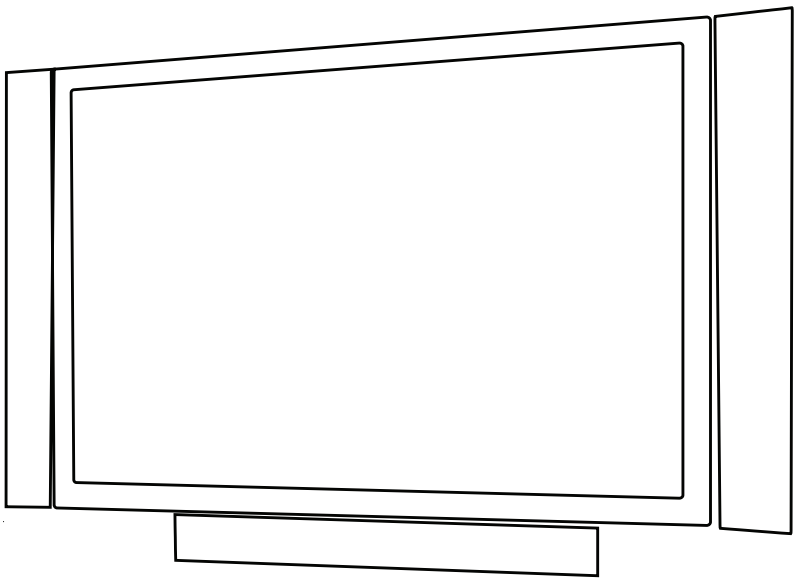
S/M NO. : DPP221PEF0

Service Manual

42" PLASMA PDP TV

CHASSIS : SP-221P, 221M

Model : DPP-42A1GCSB
DPM-42A1GCSB



Caution
: In this Manual, some parts can be changed for improving. their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List)in Service Information Center.

DAEWOO ELECTRONICS

Contents

I. Parts with exception of MODULE

II. Parts of MODULE

I. Parts with the exception of MODULE

1. Safety Precautions

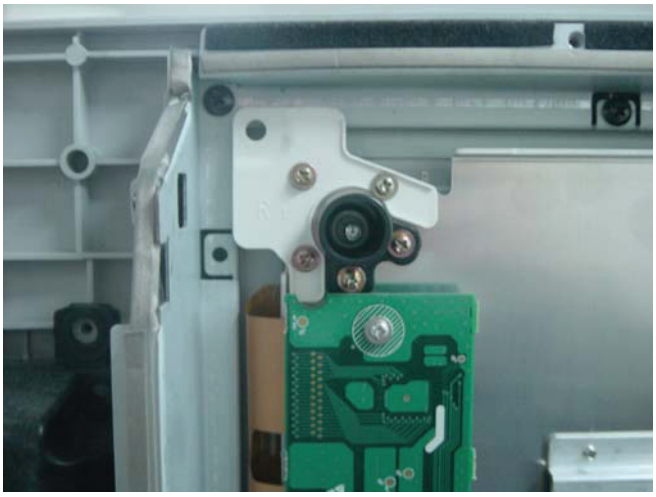
(1) When moving or laying down a PDP Set, at least two people must work together.
Avoid any impact towards the PDP Set.

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

(3) When opening the BACK COVER, you must turn off power(AC) to prevent any electric shock. When PDP is operating, high voltage and high current inside the Set can cause electric shocks.

(4) When loosening screws, check the position and type of the screw.
Sort out the screws and store them separately for reassembling.
Because screws holding PCBs are working as electric circuit GROUNDING, make sure to check if any screw is missing when assembling / reassembling.
Do not leave any screws inside the set.

(5) If you open the BACK COVER, you will see a Panel Gas Exhaust Tube (Picture. 1-1) inside the bracket.
If this part is damaged, the entire PDP PANEL must be replaced. Therefore, when working with the set, be careful not to damage this part.



Picture.1-1 Panel Gas Exhaust Tube

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

(7) Connect / disconnect the connectors slowly with care especially FFC(film) cables and FPC cables.
Do not connect or disconnect connectors instantaneously with force, and handle them carefully for reassembling.

(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, check their kind, position, and direction.

2. Product Specification

2-1. SPECIFICATION

ITEM	SPECIFICATION	REMARK
1. GENERAL		
1-1. MODEL NO	DPP-42A1GCSB, DPM-42A1GCSB	
1-2. CHASSIS NO	DPP-42A1GCSB : SP-221P, DPM-42A1GCSB : SP-221M	
1-3. SCREEN SIZE	42”(16 : 9)	
1-4. COUNTRY	Europe	
1-5. RESOLUTION	1024(H) x 768(V)	
1-6. REMOCON TYPE	R-53J17	
1-7. SAFETY STANDARD	CE(CLASS B), CB	
1-8 .TUNIG METHOD	VS	
1-9. MEMORY CHANNEL	99CH	
2. MECHANICAL		
2-1. APPEARANCE		
1) WITHOUT STAND	W x H x D = 1260 x 653 x 91 mm	
2) WITH STAND	W x H x D = 1260 x 748.5 x 300 mm	
2-2. WEIGHT		
1) WITHOUT STAND	33 Kg	
2) WITH STAND	38.75 Kg	
3. ELECTRICAL		
3-1. VIDEO INPUT	COMPOSITE(NTSC, PAL, SECAM, PAL-M/N, NTSC4.43) & S-VHS(50/60Hz Y/C) 1 Port	
3-2. DTV/DVD INPUT	1080i, 720P, 480P , 480i, 576P, 576i (Y, Pb/Cb, Pr/Cr COMPONENT SIGNAL) 2 Ports	
3-3. SCART INPUT	SCART(COMPOSITE, R,G,B, SOUND R/L) 2 Ports	
3-4. PC INPUT	VGA ~ SXGA(Dot clock : 110MHz), 15 PIN D-SUB 1 Port	
3-5. DVI INPUT	DVI-D INPUT(DVI Jack) 1 Port	
3-6. TV INPUT		
1) COLOR STANDARD	PAL B / G+I / I+D / K, L-SECAM, L’-SECAM	
2) ANTENNA IN	ONE INPUT 75 Ω Unbalanced(DIN Standard)	
3) RECEPTION CHANNEL		
	VHF LOW : E2 ~ S6 Ch.	
	VHF HIGH : S7 ~ S36 Ch.	
	UHF : S37 ~ E69 Ch.	
	L’-SECAM : FB, FC1, FC	
4) IF & SUBCARRIER	PIF : 38.90MHz(PAL, L-SECAM)	
	33.9 MHz(L’-SECAM)	
	SIF : 33.40MHz(B/G), 32.90MHz(I/I),	
	32.4MHz(D/K, L-SECAM), 40.4MHz(L’-SECAM)	
3-7. SOUND INPUT	VIDEO 1 Port, DTV/DVD 2 Ports, PC 1 Port, DVI 1 Port	
3-8. SPEAKER OUTPUT	10W(R) + 10W(L)	
3-9. POWER REQUIREMENT	AC 100V~240V, 50/60Hz	
3-10. POWER CONSUMPTION	310W	
3-11. RS-232 CONTROL	RS-232 Communication(EXTERNAL UPGRADE)	

Product Specification

ITEM	SPECIFICATION	REMARK
3-12. AV OUTPUT	SCART(CVBS, SOUND R/L) 2 Ports	
3-13. FUNCTION		
1) SCALING	DVI : Screen Mode(16 : 9, 4 : 3, Panorama) PC : Screen Mode(16 : 9, 4 : 3, Panorama), H/V Position, Auto TV / VIDEO / DVD(480, 576 i/p) : Screen Mode(16 : 9, 4 : 3, Panorama, LB(16 : 9), LBS(16 : 9), 14 : 9, LB(14 : 9), LBS(14 : 9) Auto)	
2) OSD	* DPP-42A1GCSB : 17 Languages(English, Greek, Dutch, German, Russian, Rumanian, Swedish, Danish, Finnish, Norwegian, Spanish, Italian, Franch, Polish, Portuguese, Czech, Hungarian) * DPM-42A1GCSB : 19 Languages / up listed 17 languages +2 languages(PERSIAN, ARABIC)	
3) PIP / POP	TV, Video, S-Video / TV, Video, S-Video	
4) OTHERS	Still, Sleep Mode, Sound Mode, Timer, Screen Mode, Teletext(Level 1.5), WSS	
4. OPTICAL		
4-1. SCREEN SIZE	42”(106 cm) DIAGONAL	
4-2. ASPECT RATIO	16 : 9	
4-3. NUMBER OF PIXELS	1024(H) x 768(V)	
4-4. DISPLAY COLOR	1,073,000,000 Colors(10bits for each RGB)	
4-5. CELL PITCH	300um(H) x 676um(V)(Green Cell basis)	
4-6. PEAK LUMINANCE	1200cd/m^2(WITHOUT FILTER GLASS)	
4-7. CONTRAST RATIO	8000 : 1(Dark Room)	
4-8. VIEWING ANGLE	160 degree(VERTICAL/HORIZONTAL)	
5. USERCONTROL & ACCESSORIES		
5-1. CONTROL BUTTON(SET)	PUSH-PULL S/W : AC POWER BUTTON SOFT S/W : MOVE/CH(UP, DOWN), VOLUME(LEFT, RIGHT), MENU, INPUT SELECT	
5-2. REMOTE CONTROL (R-53J17)	Power, Universal Selection(TV, VIDEO/DVD, CATV/SAT), 10 KEYS(0~10), Recall, VCR / DVD KEY (F.R/SLOW, Play, F.F / SLOW, Stop, PAUSE, OPEN/CLOSE, PREV, NEXT), MENU, TV, AV, Component, PC/DVI, STILL, PREV PR, MUTE, PR(UP/DOWN), VOL(UP/DOWN), SCREEN MODE / MIX, Screen Size, Sleep Timer, I-II / CYAN, Sound Mode / Index, Red, Green, Yellow, TXT, Reveal, Update, Expand, Subpage, Hold, PIP, SWAP, PR+, PR-, Position, Sourse	
5-3. ACCESSORIES	REMOTE CONTROL, INSTRUCTION MANUAL, POWER CORD	
5-4. OPTIONAL PARTS	STAND, WALL HANGER	

2-2. Available Input Signal

(1) PC & DVI

Resolution	H Freq.(KHz)	V Freq.(Hz)	Remark	DVI	PC
640 X 480	31.469	59.940	DOS	O	O
	37.861	72.809	VESA	O	O
	37.500	75.000	VESA	O	O
720 X 400	31.469	70.087	IBM	O	O
800 X 600	35.156	56.250	VESA	O	O
	37.879	60.317	VESA	O	O
1024 X 768	48.363	60.004	VESA	O	O

(2) Component

- 1080i - 50 / 60Hz
- 720p - 50 / 60Hz
- 576p - 50 / 60Hz
- 480p - 50 / 60Hz

(3) Video

- PAL, PAL - M, PAL - N
- NTSC, NTSC 4.43
- SECAM

2-3. Remote Control Setup Code

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ADELSOUND	078
ADIBA	029
ADYSON	029
AGASHI	155
AIOSTAY	148
AIWA	033 039 044 055 073 090 112 116 148 152 166
AKAI	028 033 044 053 056 061 090 092 103 112 113 124 133 155
	192
AKIBA	029
AKURA	029 112 090
ALBA	021 028 029 033 039 059 061 064 072 073 114 119 120 124
	136 166 171
ALBIRAL	155
ALLORGAN	056
ALLSTAR	065
AMBASSADOR	061 171
AMSTRAD	021 029 039 107 119 148 180 181
ANGLO	148
ANITECH	029 155
ANITSCH	030
ANSONIC	078
APHEL SOUND	148
ARC EN CIEL	044 090
ARISTONA	049 065
ASA	054 055 065 148 175
ASBERG	155
ASTRA	148
ASTRO SOUND	155
ASUKA	029 036 039 055 065
ATLANTIC	155
AUDIOSONIC	021
AUDIOTON	061
AWA	021 053 055 056 155
AWATRON	148
BAIRD	015 021 039 044 064 090 103 104 112 130
BANG & OLUFSEN	044 155
BASIC LINE	021 029 061 064 073 171
BAUR	051 054 155 158
BESTAR	021 061
BLACK PANTHER	021
BLAUPUNKT	065 107 137 147 163 164 174 179 183
BLOKSONIC	002
BLUE SKY	029 033 055 166
BONDSTEC	029 061
BOSCH	163
BRANDT	016 023 090 165
BRANDT ELECTRONIC	112
BRANDT ELECTRONIQUE	044 090
BRAUN	147
BRINKMANN	166
BRION VEGA	160
BUSH	021 028 029 033 039 061 064 072 073 119 120 136 166
C.EDISON	160

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
CANON	147
CAPEHART	061
CARENA	065
CARREFOUR	009
CASIO	039 148
CATHAY	021
CATRON	061 171
CGE	039 044 090 133 148 155
CIHAN CLARIVOX	155
CIMLINE	029
CLATRONIC	029 061 171
COMBITECH	033
CONDOR	021 061 155 171
CONTINENTAL EDISON	044 090
CORVUS	148
CRAIG	008 056
CROSLEY	160
CROWN	009 021 029 061 064 171
CROWN/ONWA	148
CURTISMATHES	060
CYRUS	175
DAEWOO	001 009 021 033 061 064 155 171
DANSAI	021 029 055
DAWA	155
DAYTRON	021 061
DE GRAAF	113 177
DECCA	039 044 047 065 090 148 155 166 175
DECCA(UK)	054
DEGRAAF	015 039 049 054 065 113 148
DEITRON	021
DENKO	029
DENON	113
DESMET	155
DIAMANT	055
DIXI	078
DOMOH	155
DORIC	160
DUAL	021 039 044 065 090 112 148 155
DUMONT	015 039 054 065 148 155 175 189
DYNATECH	039 148
ELBE	021 036 148
ELCATECH	029
ELIN	056 113 155
ELSAY	029
ELTA	021 029 148
EMERSON	009 011 029 032 039 060 073 127 148 155
ESC	021 056 057 061 064
ESSELTE	148
ETZUKO	029
EUROMAN	155
EUROPHON	061
FENNER	061 155
FERGUSON	016 021 023 039 044 090 094 100 104 108 112 130 131 165
FIDELITY	029 039 056 148 162
FINLANDIA	015 039 049 054 065 113 175

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
FINLUX	015 019 039 044 049 053 054 065 103 107 113 143 146 147
	148 159 175 189
FIRST LINE	009 021 029 053 055 072 073 113 148 155 166
FISHER	008 015 019 032 034 036 061 160
FORMENTI	155 159
FORMENTI-P HOENIX	054
FRONTECH	061 171
FUJITSU	039 148
FUNAI	039 148
GALAXY	039
GBC	029 061 155 159
GBC(UK)	054
GE	060
GEC	065 160 175
GELOSO	029 159
GENERAL	061 148 171
GENERAL TECHNIC	166
GENEXXA	015
GOLDHAND	029
GOLDMEDAL	148
GOLDSTAR(LG)	021 036 039 055 148 155 178
GOODMANS	021 029 039 050 054 055 056 061 064 065 072 073 148 155
	166 171 183
GRAETZ	015 019 044 056 057 090 112
GRAETZ(ITT)	160
GRANADA	015 019 039 049 055 056 065 113 147 155 160 162 175 192
GRANADA(UK)	054 107 113
GRANDIN	021 029 039 055 061 160
GRONIC	155
GRUNDIG	029 054 065 072 107 143 164 165 166 175 183 190 191
HANIMEX	033
HANSEATIC	021 054 055 065 155 160
HANTOR	061
HARMAN/KARDON	036
HARWOOD	029
HCM	029 072
HIFIVOX	044 090
HINARI	011 021 029 030 033 057 072 073 078 090 112 127
HISAWA	033
HITACHI	015 039 044 056 057 065 078 090 112 113 160 177 189 192
HORNYPHONE	065
HYPER	155
HYPSON	021 029 033 155
IMPEGO	061
IMPERIAL	039 056 096 148 155
INGELEN	019 044 090
INGERSOL	056 078
INNO HIT	021 029 054 056 061 160
INTERBUY	029 055
INTERFUNK	015 054 065 155 160 175
INTERFVIDEO	148
INTERNAL	021
INTERNATIONAL	021
INTERVISION	021 039 055 148 155 166
IRRADIO	029 055 065

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ITT	015 019 044 056 057 090 103 112 133
ITT NOKIA	015 019 044 049 056 090 103 113 133 155 160 162
ITV	021 055 061 064 171
JENSEN	044
JVC	044 047 090 112 115 133 170
KAISUI	029
KAMBROOK	148
KANSAI	148
KAPSCH	160
KARCHER	021 054 056 155
KENDO	028 029 055 073 103 166
KENWOOD	019 036 044 047 090 112
KIMARI	008
KNEISSEL	033 055 166
KOENIG	159
KOERTING	155
KOLSTER	155
KORPEL	029
KRIESLER	049
KUBA	008 147 148
KYOTO	029
LENCO	064
LENOIR	155
LEYCO	029 155
LIPETEC	166
LLOYD	039 148
LOEWE	055 065 078 137 175
LOEWE OPTA	054 155
LOGIK	029 056 057 073 078 103
LUMA	032
LUMATRON	021
LUXON	148
LUXOR	008 015 019 029 049 050 053 103 113 160
LXI	055
MAGNADFON	160
MAGNADYNE	054 155 159 160
MAGNASONIC	019
MAGNAVOX	060 065
MANESTH	009 029 065 148
MARANTZ	036 050 054 059 065 073 175 176
MARK	021 061
MATSUI	011 032 033 039 055 056 059 073 078 114 127 136 160 166
MATSUSHITA	187
MAXWELL	155
MEDIATOR	065
MEDION	033 166
M ELECTRONIC	036 039 055 148 155
MEMOREX	008 015 019 039 049 055 148
MEMPHIS	029
METZ	055 065 137 164 179 191
MGA	053
MICORMAY	166
MIGROS	039
MINERVA	164

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
MINOLTA	113
MITSUBISHI	047 053 054 065 154 155 175
MONEXE	148
MTC	039 056 148
MULTITECH	015 021 029 039 054 061 064 148 155
MURPHY	039 148 160
MYRYAD	175
N.E.I	054
NAD	015
NAKAMURA	148
NAONIS	044 090
NATIONAL	107 137
NEC	015 036 044 047 055 090 112
NECKERMANN	011 019 044 051 054 056 065 090 127 133 155 158 160 175
NEI	155
NESCO	029 033 039 148
NEWTECH	155
NIKKAI	021 029 061
NOKIA	015 019 021 028 044 049 056 057 065 090 103 112 113 133
NORDMENDE	014 016 020 023 039 044 047 090 102 112 133 142 159 161
	165 185
OCEANIC	015 039 049 065 090 112
OCEANIC(ITT)	160
OCEANUIC	113
OKANO	021 028 029 124 166
OLYMPUS	107 147
OMAGA	148
OPTIMUS	187
OPTONICA	049 050
ORAVA/OTF	155
ORION	011 032 033 059 073 078 119 120 127 148 155 166
ORSON	039
OSAKI	029 039 055 148 155
OSUME	072
OTAKE	119 120
OTTO VERSAND	051 054 065 147 155 158 159 175
PALLADIUM	028 029 055 056 078 090 112 148 160
PALSONIC	029 039
PANAMA	155
PANASONIC	107 137 147 148 160 179 187
PATHE CINEMA	053 078 127
PATHE MARCONI	044 090 112
PCM	155
PENTAX	113 189
PERDIO	039 148
PHILCO	029 036 148 155 160
PHILIPS	044 049 050 054 065 079 145 146 155 175 176 183 184
PHONOLA	049 054 065 175
PIONEER	047 054 065 113 145 175
PLANTRON	160
PORTLAND	021 061 171
PRINZ	039
PROFEX	030
PROFITRONIC	056 057 065
PROLINE	039 072 148 165

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
PROSCO	021 148
PROSONIC	021 039
PROTECH	065
PROVISION	021
PYE	049 054 065 175
QUALREAFT	056 148
QUARTZ	019
QUASAR	187
QUELLE	011 044 054 055 056 065 107 127 175
RADIALVA	029 049 055 065
RADIOLA	049 065 175
RADIONETTE	160
RANK	090
RCA	060
REALISTIC	008 015 019 039 049 050 056 147 148
RECOR	155
REDIFFUSION	160
REOC	166
REX	044 090 112
RFT	029 061 183
ROADSTAR	021 029 055 056 057 064 148
ROYAL	029
SABA	009 014 016 021 023 044 047 090 102 112 115 133 142 165
	185
SAISHO	011 032 073 078 090 114 127 136 148 166
SALORA	015 019 053 103 162
SAMBERS	148
SAMSUNG	009 054 056 057 060 067 092 096 155
SAMURAI	061
SANSUI	029 044 047 090 112 166
SANWA	078
SANYO	008 015 019 047 049 073 113 151 160
SAVILLE	021 033 056
SBR	054 065 079 175 176
SCAN SONIC	056
SCHAUB LORENZ	015 019 028 039 044 090 112 160
SCHNEIDER	021 029 039 049 054 055 056 065 096 148 155 160 175
SEAWAY	021
SEG	021 029 030 056 057 096 148
SEI	175 078
SEI-S INUDYNE	065 078
SELECO	044 055 061 090 107 112 115 155
SEMIVOX	009
SENTRA	029 061 072 113 171
SETRON	029
SHARP	049 050 055 127 148
SHINKO	148
SHINTOM	015 029 148
SHIVAKI	055
SHORAI	078
SIAREM	159 160
SIEMENS	015 019 034 055 065 164 175 176
SIERA	049 065
SILVA	055
SILVER	021

VCR

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SIMKO	148
SINGER	009 155
SINUDYNE	054 065 078 146 155 160 175
SOLAVOX	061 113 160 162 171
SONAMIC	148
SONITRON	008
SONNECLAIR	029
SONOKO	021 064 155
SONOLOR	019 049 050
SONTEC	055 155
SONY	039 051 158 172 173 174 186
SOUNDWAVE	055
SSANGYONG	029
STANDARD	021
STARLITE	015 055
STERN	021 044 090
STRONG	148
STS	113
STZ	148
SUNKAI	021 073 166
SUNSTAR	039 148
SUNTRONIC	039
SUNWOOD	029
SUPERTEC	148 155
SUPRA	055 056 148 155
SYLVANIA	039 053 148
SYMPHONIC	029 039 053 148
TAISHO	078
TANDBERG	021 032 127
TANDY	039 015
TASHIKO	039 049 055 056 065 148
TATUNG	033 039 044 049 053 065 090 112 148 166 175
TEAC	021 039 044 055 064 065 090 116 148 183
TEAK	155
TEC	021 029 061 148 155 171
TECHNICS	107 137 147
TECHNISAT	166
TEINEL	155
TEKNIKA	039 148
TELEAVIA	016 044 090 112
TELEFUNKEN	014 016 021 023 044 090 112 133 165 185
TELERENT	147 148
TELETECH	021 029 039
TELEVIDEON	155 159 160
TEMPEST	056 061
TENOSAL	029
TENSAI	029 030 039 055 078 148 155
TETUNG	054
TEVION	166
THOMSON	014 016 020 023 044 047 090 112 133 165 185
THORN	015 044 055 090 112 127
THORN-F ERGUSON	023 044 051 090 094 100 104 108 113 130 131 133 155 158
	160 162
TIVO HDD	012
TMK	127

DVD

Maker (Brand) Name	Code Number (3 digit) List
3DLAB	372
AFREEY	386
AIWA	375
AKAI	312
ALBA	387 400
AMSTRAD	385
APEX DIGITAL	361
A-T REND	386
BLUE SKY	380
BUSH	379 382 385
CALIFORNIA AUDIO	340
CINEULTRA	382
CLASSIC	327
CYBERHOME	386
DAEWOO	383 402
DANSAI	402
DECCA	402
DENON	302 322 330 344 351
DENVER	382
DENZEL	377
DIAMOND	376
DIVIDO	383
DMTECH	310
DUAL	376 377
ELTA	379
ENZER	377
FISHER	313
GE	303 304
GOLDSTAR(LG)	305 339 355 370 401
GO-V IDIO	311
GREENHILL	400
GRUNDIG	372 380 383
HANSEATIC	339
HARMAN KARDON	366 554 332
HITACHI	354 377
JATON	377
JMB	380
JVC	306
KENWOOD	307 344 343 350 369 390
KISS	377
KLH	368
LAWSON	383
LECSON	381
LENCO	382
LIFETEC	376
LOGIX	383
LOTTE	308
MAGNAVOX	309 333 356
MANHATTAN	383
MARANTZ	333 359 372
MATSUI	376 380
MBO	331

DVD

Maker (Brand) Name	Code Number (3 digit) List
MEDION	376 383
MICROMEDIA	309
MICROMEGA	372
MINOWA	383
MITSUBISHI	323 336
MONYKA	377
NAD	302 362
NAKAMICHI	334
NEUFUNK	377
ONKYO	309 315 348 393
OPTIMUS	341 350
ORION	380
ORITRON	376 396
PANASONIC	324 325 330 335 344 352
PHILCO	379
PHILIPS	309 333 356 372 395
PHONOTREND	382
PIONEER	302 320 341 346 365
PROCEED	360
PROLINE	376
PROSCAN	303 304 337
PROVISION	382
RAITE	377
RCA	303 304 318 337
REC	344 397
REVOY	382
ROADSTAR	379 382 397
ROTEL	306
RUNCO	326
SALORA	339
SAMSUNG	353 354
SANSUI	380
SANYO	349
SCAN	383
SCHNEIDER	376
SEG	377 385
SHARP	321 328 350
SHERWOOD	329
SHINCO	387
SKYMASTER	327
SM ELECTRONIC	379
SONY	314 315 343 345 367 389
STANDARD	376
TATUNG	402
TEAC	387 341 400
TECHNICS	326 344
TENSAI	376 379
TEVION	376
THOMPSON	303 304
THOMSON	373 388 391
TOKAI	377
TOKIWA	383
TOSHIBA	302 309 333 357 358

DVD

Maker (Brand) Name	Code Number (3 digit) List
UMAX	379
UNIVERSUM	339 385
WALKVISION	387
WESDER	382
WHARFEDALE	381
XBOX	388
YAMAHA	316 317 330 344 363
YAMAKAWA	377 384
ZENITH	305 309 333 339 355 383
ZENITH DIVX	339

CABLE

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ALCATEL	036 037
AUSTAR	032
BIRMINGHAM CABLE COMMUNICATIONS	032
BRITISH TELECOM	041
BT	035
CABLETIME	008 011 012 033 034
CANAL PLUS	020
CLYDE CABLE VISION	017
COMCRYPT	020
CRYPTOVISION	015
DECSAT	010
DECSAT CANAL	010
FILMNET	018 020
FRANCE TELECOM	013 029 036 037 044
GEC	017
GENERAL-I NSTRUMENTS	032
GRUNDIG	007 016
HYPERVISION	045
JERROLD	001 030 032 041
KABELVISION	030
MACAB	029
MNET	020 042
MOVIE TIME	028
MR ZAPP	029
NOKIA	046
NOOS	029
NSC	028
NTL CABLETELL	032
OPTUS	032
PACE	047
PHILIPS	013 023 029 045 048
PIONEER	002
PVP STEREO VISUAL MATRIX	041
PVP STEREO-V ISUAL	030
SAGEM	029
SALORA	003
SAMSUNG	002 024
SATBOX	004
SCIENTIFIC ATLANTA	005 006 026
STS	028
SUPERCABLE	032
TELE PLUS ONE	020
TELEPIU	020
TELESERVICE	011 014
TORX	041
TUDI	027
UNITED CABLE	001 030 041
VIDEOTRON	031
VIDEOWAY	031
VISIOPASS	009 013 029
WESTMINSTER	035
ZENITH	014

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
ABSAT	466 469
AEGIR	479
AIWA	441
AKAI	333 404
ALBA	345 317 324 356 367 370 404 411 426 467 480 495 501
ALDES	433 468 479 495 501
ALLANTIDE	492
ALLSAT	333 348 359 377 501
ALLSONIC	433 468 526
ALLTECH	345 437 525
ALPHA	333
ALTAI	347
AMITRONICA	345
AMPERE	347 457 507
AMSTRAD	345 306 347 371 397 432 465 474 475 457 512 516 449 527 528
ANGLO	345
ANKARO	345 351 433 461 462 467 468 526
ANTTRON	317 377 480
APOLLO	317
ARCON	325 351 379 432 436 461
ARMSTRONG	333 475
ARTHUR MARTIN	430
ASA	309
ASAT	325 333
ASLF	345
AST	427 494
ASTACOM	471 472
ASTON	332 395
ASTRA	313 321 325 398 399 464 475 478 490 522 523
ASTRO	306 391 394 418 476 477 479 480 481 482 483 526
ATLANTIDE	492
AUDIOTON	359 480
AUSTAR	512
AVALON	347
AXIS	354 510 523 526
BARCOM	321 351
BEKO	367
BEST	351 526
BLAUPUNKT	390 476
BLUE SKY	345 449
BOCA	463 469 475 457 499 507 522
BRAIN WAVE	394 461
BRANDT	369
BRITISH SKY BROADCASTING	350 527
BROADCAST	313
BROCO	345 523
BRUNS	433
BSKYB	527
BT	404 471 472 529
BT SATELLITE	471
BUBU SAT	345
BUSH	324 348 356 370 377 406 426 495
BVV	461
CAMBRIDGE	306 404 499
CAMBRIDGE ARD200	404
CANAL DIGITAL	428

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
CANAL SATELLITE	428 491 511
CANAL PLUS	428
CANARY	437
CARAT.SOM	354
CHANNEL MASTER	495
CHAPARRAL	312 434
CHESS	497
CITYCOM	435 464 503 504 530
CLARK	480
CLATRONIC	394
CLEMENS KAMPHUS	433 492 510
CNT	479
COMMANDER	461 462
COMMLINK	468
COMMUNICADO	354
COMTEC	354 468
CONDOR	464 526
CONNEXIONS	347 396 526
CONRAD	306 310 464 469 526 530
CONTEC	354 435 469
COSAT	359
CROWN	475
CRYPTOVISION	367
CYBERMAXX	416
CYRUS	337
DAERYUNG	347
DAEWOO	342 345 317 325
DANSAT	348 377
DAUMLING	463
D- BOX	366 514
DDC	495
DECCA	338
DELFA	512
DEW	325 354
DIAMOND	525
DIRECTV	444
DISCOVERER	497
DISEQC	471 472
DISK EXPRESS	351
DISMOND	525
DISTRATEL	419 446 447 449 459 485
DISTRISAT	333 359
DNR	461
DNT	333 337 347
DRAKE	329
DST	317
DUAL	325
DUNE	526
DYNASAT	496
ECHOSTAR	345 321 347 372 386 388 428 511 513
EIF	314 498
EINHELL	345 306 317 397 463 468 469 475 457 492 522
ELEKTA	479
ELSAT	371
ELTA	317 333 359 526
ELTASAT	359
EMANON	317

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
EMME ESSE	433 513 526
ENGEL	345
EP SAT	367
EURIEULT	485 449
EUROCRYPT	321 367
EURODEC	410 532
EUROPA	306 333 461 462 464 469 512
EUROPEAN	463
EUROSAT	475 525
EUROSKY	464 475 457 526
EUROSTAR	341 464 515 533 534
EUTRA	437 503
EXATOR	317 404 480
FAGOR	359
FERGUSON	323 348 367 377 406 408 411 424 506
FIDELITY	306 371 397
FINLANDIA	321 367
FINLUX	309 310 321 367 520
FINNSAT	410
FLAIR MATE	345
FORCE	368
FOXTEL	535
FRACARRO	317 387 496 513
FREECOM	317 493 501
FREESAT	437
FTE	345 360 380 436 437 469 496 499 512 526
FUBA	310 314 317 321 347 351 388 435 476 520 526
G SAT	377 430 492
GALAXI	351
GALAXIS	354 359 364 433 461 468 509 510 511 512 523 526 536 537 538
GALAXISAT	427
GARDINER	504
GIUCAR RECORD	307 389
GMI	475
GOLDBOX	428 491 511
GOLDSTAR(LG)	379 407 493
GOODMANS	367 411
GRAETZ	388 399
GRANADA	321 399
GRANDIN	485 539
GROTHUSEN	317 493
GRUNDIG	302 303 367 390 397 471 472 476 449 527 540 541 542
HANSEATIC	497
HANTOR	317 394
HANURI	479
HARTING UND HELLING	433 492
HASE & IGEL	461
HELIOCOM	464
HIGH PERFORMANCE	385 422
HINARI	317 377 495
HIRSCHMANCE	390
HIRSCHMANN	306 309 310 347 381 413 433 471 472 476 492 496 503 516 519 543
HISAWA	394
HITACHI	367 406 411 420
HNE	465

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
HOUSTON	359 371 461 462 471
HUMAX	512 536 544
HUTH	313 354 359 394 433 436 461 462 463 464 468 469 475 457
ICX	438
IKUSI ALLSAT	436
IMEX	485
IMPERIAL	426
INGELEN	388 399
INNOVATION	416
INTERNATIONAL	457
INTERTRONIC	475
INTERVISION	359 464 470
INVIDEO	513
ITALTEL	513
ITT	321 367 388 399 420 423
ITT NOKIA	309 310 321 367 388 399 420 423 514
JEEMON	359
JERROLD	438
JOHANSSON	359 394
JOK	471 472 500 529
JSR	359
JVC	303 404
KAMM	345 515
KATHREIN	345 333 337 380 381 384 390 391 394 396 412 414 418 435
	466 476 480 492 496 504 518 546
KEY WEST	463
KOLON	317
KONIG	464
KOSCOM	510
KOSMOS	380 381 433 493
KR	359 437 480 503
KREISELMEYER	476
K- SAT	345
KYOSTAR	317 480
KYOTO GMI ATLAN	443
L&S ELECTRONIC	526
LASAT	354 464 475 479 457 499 522 526
LEMON	461 462 547
LENCO	345 317 325 360 379 461 462 464 493 521 523 526
LENNOX	359
LENSON	306
LEXUS	333
LEYCO	404
LIFESAT	497 526
LIFETEX	416
LION	492
LOEWE	475
LOKIA	388
LORENZEN	461 462 463 464 465 457
LORRAINE	493
LUPUS	526
LUXOR	306 310 321 388 397 399 420 423 425 430 514
LYONNAISE	410
M&B1	497
MACAB	384 525 532 548
MAGAI	380
MANATA	345 471 472

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
MANHATTAN	359 367 406 411 451 471 472 479 510 521
MARANTZ	333 337
MASCOM	381
MASPRO	345 302 303 393 396 406 408 413 437 461 476 542
MASTER_S	435
MATSUI	303 320 409 471 472 476 495
MAX	464
MB	497
MEDIABOX	491 511
MEDIAMARKT	475
MEDIASAT	306 428 491 511 523
MEDION	345 526
MEDISON	345
MEGA	333
MELECTRONIC	504
MEMPHIS	354 434
METRONIC	345 317 417 419 421 431 446 447 449 450 451 438 453 454
	456 457 458 459 468 475 479 480 485 504
MICRONIK	549
METZ	390 476
MICRO	464 480
MICRO ELECTRONIC	345
MICRO MAXX	416
MICRO STAR	416
MICRO TECHNOLOGY	345 490 492 523
MICRO TEC	345
MINERVA	303 390
MITSUBISHI	367 390
MITSUMI	522
MORGAN	345 333 359 432 463 469 475 457 499 507 522 550
MULTICHOICE	400 535
MULTISTAR	380
MURATTO	427 493
MYSAT	345
MYRYAD	337
NAVEX	394
NEC	330 373
NEIRU	379
NETA P562 / P563	439
NETWORK	377
NEUHAUS	345 306 359 461 462 464 469 510 523
NEUSAT	345 461 510
NEXTWAVE	438
NIKKO	345 475 501
NOKIA	309 310 321 352 353 355 361 366 367 388 399 405 420 423
	511 514 542 551
NOMEX	521
NORCO	521
NORDMENDE	317 367 479 495 506
NOVIS	394
NTC	433 503
OCEANIC	492 525
OCTAGON	317 325 354 461 462 480
OKANO	380 433 475
OLYMPIC	433
ONDIGITAL	487 488 489
OPTEX	359 435 496 508

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
OPTIMA	433
ORBIT	325 492 494
ORBITECH	306 317 403 469 481 524
ORIGO	426 521
OSAT	397
OTTO VERSAND	390
OXFORD	404
PACE	311 344 348 350 362 367 377 398 408 424 489 502 527 542 552 553
PACE MSS SERIES	367
PACIFIC	525
PACKSAT	471 472
PALCOM	392 495
PALLADIUM	303 306 317 475
PALSAT	306
PANASAT	535 554
PANASONIC	331 367 424 527
PANDA	321 348 367 464 476 510
PATRIOT	404
PHILIPS	302 303 319 333 337 351 367 377 424 428 444 456 461 462 469 471 472 476 480 487 488 491 504 511 518 529 542
PHOENIX	354 377
PHONOTREND	359 433 442 468 512
PIONEER	428 491 511
PIXX	555
PK SAT	492
PLANET	426 513
POLSAT	410
POLYTRON	347 435
PREDKI	317 394
PREISNER	347 403 463 469 475 457 499 522
PREMIER	359 433
PREMIERE	491 511 514
PROMAX	367
PROSAT	356 468 495 470
PROSONIC	465
PROTEK	492 525
PROTON	492
PROVISAT	501
PROVISION	479
PYE	303
PYXIS	508 510
QUADRAL	467 468 469 470 471 472 473 495 526
QUELLE	390 397 464 465
QUIERO	410
RADIOLA	333 337
RADIX	347 437 516
RAINBOW	437 480
RC	438
RC- 1000	404
RED STAR	526
REDPOINT	523
REDSTAR	526
RFT	333 337 461 462 468 524
ROADSTAR	345
ROVER	345 470
SABA	377 408 461 464 471 472 479 500 501 506 449 529

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
SABRE	367
SAGEM	365 505
SAKURA	354 357
SALORA	321 388 399 420 430
SAMSUNG	317 380 427 432 511 543
SAT	306 371 427 494 495
SAT PARTNER	317 394 433 479 480 493 501
SAT TEAM	345
SATCOM	313 464 497
SATEC	345 377 542
SATECO	317
SATELCO	526
SATFORD	313
SATLINE	470
SATMASTER	313
SATPARTNER	317 379 394 433 479 480 493 501
SATSTATION	451
SAVA	377 408 461 464 471 472 479 500 501 506 449
SCHACKE	480
SCHAUB LORENZ	388 399
SCHNEIDER	471 472 518
SCHWAIGER	364 377 414 435 461 464 469 497 449 555
SEDEA- ELECTRONIQUE	317
SEEMANN	347 404 475 523
SEG	317 394 465 478 490 497 526
SELECO	359 513
SEPTIMO	446 451 454
SERVI SAT	359
SIEMENS	390 476 499
SILVA	379 493
SINTRACK	313
SKANTIN	345
SKARDIN	523
SKINSAT	306
SKR	345
SKY	334 350 489 527
SKY MASTER	345 433 467 468 470 497 515
SKYLAB	351
SKYMAX	333 492
SKYSAT	497
SKYVISION	359
SL	461 465 475 457
SMART	457
SM ELECTRONIC	345
SONY	367 511 527
SR	522
STARLAND	345
STARRING	394
STARSAT	380
STRONG	317 325 335 336 339 479 480 457 496 511 526 535
STV	314
STVI	314 437
SUMIDA	475
SUNNY SOUND	526
SUNSAT	345 523
SUNSTAR	463 475 457 522 526
SUPERNOVA	489

SAT

Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
TAGRA	359
TANDBERG	308
TANDY	385 422
TANTEC	367 408
TATUNG	374 367
TCM	416
TECHNILAND	313 359
TECHNISAT	305 306 328 333 347 384 402 403 481 484 524
TECHNOWELT	464
TECO	325 475 522
TELASAT	464 497
TELECIEL	480 501
TELECOM	345
TELEDIREKT	377
TELEFUNKEN	317 383 471 472
TELEKA	302 306 347 381 403 480 461 464 475 503 510
TELEMASTER	479
TELEMAX	318
TELESAT	464 497
TELESTAR	306 340
TELETECH	515
TELEVES	306 367
TELEWIRE	359
TENSAI	325 394
TEVION	416
THOMSON	345 349 367 428 455 464 471 472 491 505 506 511
THORENS	525
THORN	367
THORN- FERGUSON	323 348 367
TIOKO	435 475
TLEWIRE	359
TOKAI	333
TONNA	345 306 313 359 367 471 510
TOSHIBA	367 445
TPS	505
TRENDLINE	522
TRENDPLAIN	522
TRGRA	388
TRIACL	384
TRIAD	385 401 427 492 493 494
TRIASAT	306 520
TRIAX	345 306 333 347 511 520 530
TRISTAR	325
TWINNER	415 419
UNIDEN	316 358 371 375 376 380 448 508
UNISAT	333 354 475
UNITOR	351 394
UNIVERSUM	303 309 371 464 465 476
VAIADIGITAL	378
VARIOSAT	476
VARIOSTAT	476
VECTOR	478 492
VENTANA	333 337
VESTEL	465
VIDEOCRYPT	323
VIDIO WAY	315
VIPER	354

SAT

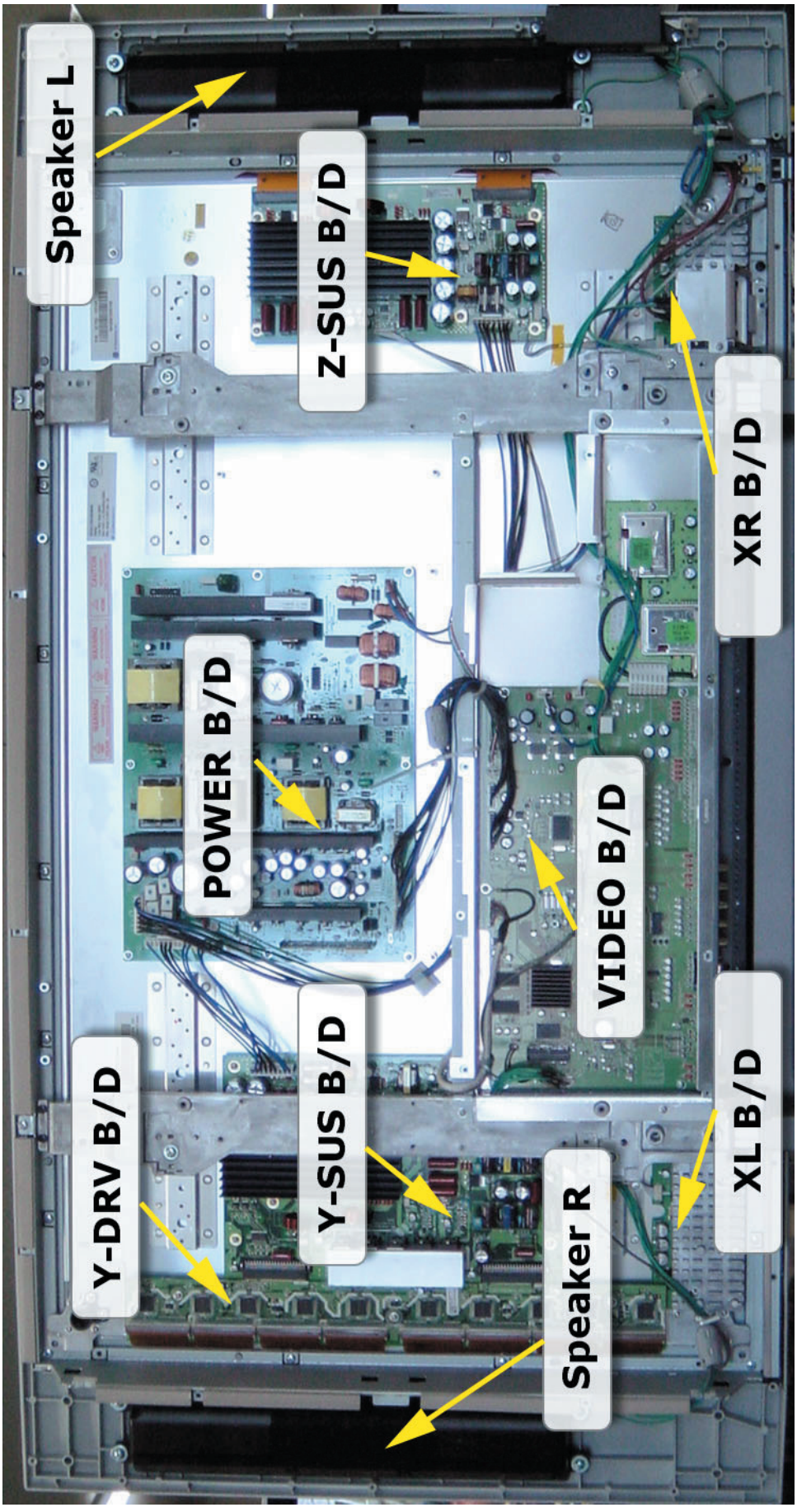
Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
VISIOSAT	345 494 500
VIVA	461 462
VORTEC	317 382 383 432 442
VTECH	427 494 500 504
WELA	345 463 469 457
WETEKOM	306 497 507
WEVASAT	492
WEWA	367 492
WIBO	475
WINERSAT	394
WINTERGARTEN	468
WISI	304 306 322 326 327 343 347 367 388 423 427 464 469 476 494 500 510
WITTENBERG	371
WOLSEY	385 422
WOORISAT	479
WORLD	394
WORLDSAT	471 472
XCOM	469
XRYPTON	526
XSAT	345 346 466 469
XCOM MULTIMEDIA	346
YES	489
ZAUNKONIG	461
ZEHNDER	340 351 380 414 427 435 465 479 504 526 555
ZENITH	334
ZETA- TECHNOLOGY	333
ZODIAC	480
ZWERGNASE	463 475

VCR

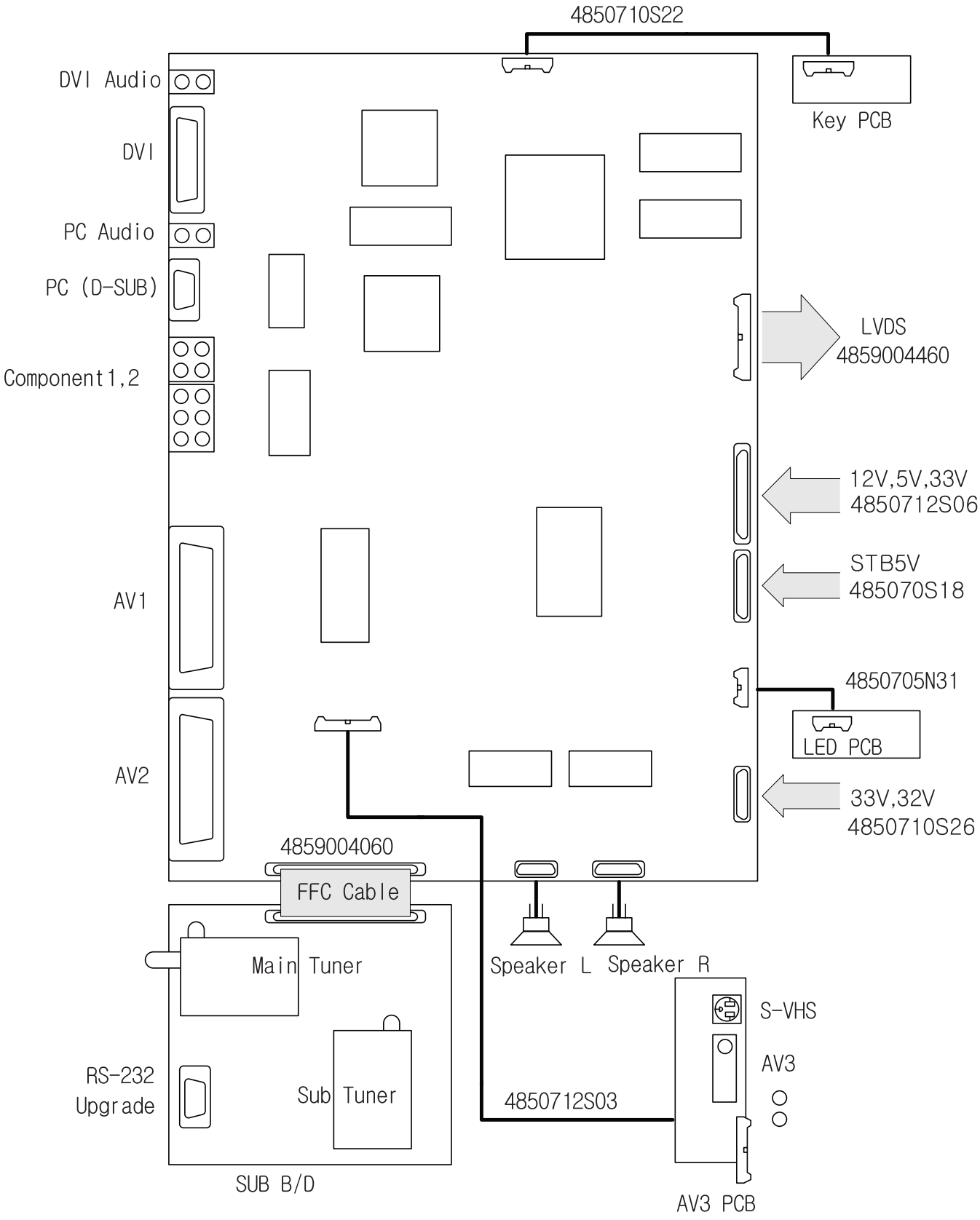
Maker (BRAND) NAME	CODE NUMBER (3DIGIT) LIST
TOKAI	015 029 055 090
TOKIWA	029
TOPLINE	166
TOSHIBA	009 044 053 065 090 112 153 155 175
TOTEVISION	056
TOWADA	029 030
TRAKTON	061
TRANSONIC	155
TRIUMPH	011
TVA	061
UHER	044 055 056 057 096
ULTRAVOX	021 155 159 160
UNIC RADIO	148
UNITECH	056
UNITED QUICK STAR	021
UNIVERSUM	039 051 055 056 057 065 103 113 147 148 155 158 160 164
	166 175 180
UNIVOX	155
URANYA	155 160
VEXA	155
VICTOR	044 047
VICTOR RESEARCH	036
VIDEO TEC	148
VIDEOMAGIC	055
VIDITAL	160
VILLAIN	039
WARDS	060
WATSON	033 065 155 159
WATTRADIO	159 160
WELTBLICK	055 155
WHITE WESTINGHOUSE	160
XENON	032
YAMAHA	036 044
YAMISHI	021 029
YOKAN	029
YOKO	029 055 056 057 061 148 155 171
ZANELA	148
ZANUSSI	044 090
ZENDER	090
ZOPPAS	044

3. The Features of Inside

DPP(M)-42A1GCSB Inside Features



4. Block Diagram



5. Default Setting in User Menu OSD

5-1. Picture Mode

(1) Mode

	Normal	Dynamic	Cinema	User
Brightness	50	40	55	Undefined
Contrast	50	80	35	Undefined
Sharpness	8	10	6	Undefined
Colour	50	55	45	Undefined
Tint	50	50	50	Undefined

- DVI & PC Input - Only brihgtness and contrast are available.

(2) Default value of other functions in picture mode

Function	Default Value
Colour Temp	Normal
N.R.	NR1
CTI	On

- N.R. means the noise reduction
- DVI & PC don't support N.R. and CTI functions

5-2. Sound

(1) Mode

	Normal	Movie	Music	News	User
120 Hz	32	50	48	15	Undefined
500 Hz	32	38	38	32	Undefined
1.5 kHz	32	28	15	50	Undefined
5 kHz	32	40	42	32	Undefined
10 kHz	32	48	56	15	Undefined

(2) Default value of other functions in sound mode

Function	Default Value
Balance	0
Effect	Off
AVC	Off

Default Setting in User Menu OSD

5-3. Screen

	16 : 9	4 : 3	Panorama	LB (16:9)	LBS (16:9)	14 : 9	LB (14:9)	LBS (14:9)	Auto
Component	O	O	O	X	X	X	X	X	X
TV	O	O	O	O	O	O	O	O	O
AV	O	O	O	O	O	O	O	O	O
PC	O	O	O	X	X	X	X	X	X
DVI	O	O	O	X	X	X	X	X	X

- H. Position, V. Position, and Auto screen size is available only in PC mode.

5-4. Features

(1) Mode

Function	Background	Language	Child Lock	MGDI	Auto Power
Default Value	10	English	Off	On	Off

- DVI & PC don't support MGDI function.

(2) Time Setting

Function	Clock	Auto Clock	Off Timer	Off Time	Wake Timer	Wake Time	Wake Prog.	Wake Vol.
Default Value	Undefined	On	Off	PM 12:00	Off	PM 12:00	1	20

(3) ISM

Function	Pixel Shift	Low Bright	Image Invert
Default Value	Off	Off	Off

6. Service Mode

To enter SERVICE MODE,

A. Press ***"◄ VOL" -> "MUTE " -> "RECALL" -> "MUTE"*** button of remote controller (R-53J17)

or

B. Press ***"S9"*** button of SERVICE REMOTE CONTROLLER.

[Note] In the first line, there is the model name and the version of the upgraded program on the PDP set.

6-1. Default Value of Pw318B_1 and Pw318B_2

	Sub Bias	Sub Gain	Bias R	Bias G	Bias B	Gain R	Gain G	Gain B
Pw318B_1	32	13	25	23	38	12	16	20
Pw318B_2	32	12						

(1) Pw318B_1

- Sub Bias : For BRIGHTNESS adjustment(All inputs)
- Sub Gain : For CONTRAST adjustment(All inputs)
- Bias R : For R BRIGHTNESS adjustment(All inputs)
- Bias G : For G BRIGHTNESS adjustment(All inputs)
- Bias B : For B BRIGHTNESS adjustment(All inputs)
- Gain R : For R CONTRAST adjustment(All inputs)
- Gain G : For G CONTRAST adjustment(All inputs)
- Gain B : For B CONTRAST adjustment(All inputs)

(2) Pw318B_2

- Sub Bias : For DVI BRIGHTNESS adjustment
- Sub Gain : For DVI CONTRAST adjustment

6-2. Pw3300_1

Function	R Offset	G Offset	B Offset	R Gain	G Gain	B Gain
Default Value	100	100	100	94	97	94
Function	Y Offset	Pb Offset	Pr Offset	Y Gain	Pb Gain	Pr Gain
Default Value	105	125	125	90	203	196

- RGB offset values will be set by executing 'RGB Auto Cal' in service mode.
- YPbPr offset values will be set by executing 'YPbPr Auto Cal' in service mode.

- The automatically set offset values may different from the default value depend on B/D. However, the main B/D should be replaced or contact Kunpo R&D center in Korea if the **OFFSET** values differ more than ±20 from default value.

6-3. Pw3300_2 & Pw2250

	AV Brt	AV Cont
Pw3300_2	127	75
Pw2250	127	75

6-4. Msp34X0

Function	Sc pScale	Fm pScale	Nic pScale
Default Value	255	22	51

- In Msp34X0,
  - Sc pScale : Prescale adjustment for external input(AV, Component, PC, DVI etc.)
  - Fm pScale : FM/AM prescale adjustment
  - Nic pScale : NICAM prescale adjustment

6-5. Misc

Function	TV Auto Off	TXT Lang	TXT T/F
Default Value	On	Auto	TOP

- Tst Ptrn AT shows five cycled patterns(white, black, red, green, blue) every 1 minute automatically
- Tst Ptrn MA shows five cycled patterns manually by pressing volume up key.

6-6. Panel

Function	Sync Mode	Bright Mode	Power Mode	Gamma Mode	Panel Temp
Default Value	AUTO	100%	100%	2.2N	**.*

- Panel Temp indicates the current temperature of the panel.

6-7. Reset

- Level 1 - Resets all data in E^2PROM other than HDCP key, EDID, RGB offset and YPbPr offset of Pw3300_1.
- Level 2 - Resets all data in E^2PROM other than the exception of Level 1 and Pw318B_1.
- Factory - Resets the data of auto search, language setting, time setting, and the user menu values that could be reset by ‘Initialize’ function in Feature mode.

7. Power PCB

7-1. Input and Environmental Requirement

Input Requirement	Description
Norminal Input Voltage	AC100V to AC240V
Input Voltage Variation Range	AC85V to AC276V
Nominal Frequency	50 / 60 Hz
Frequency Variation Range	**47Hz to 63Hz**
Phase	Single
Inrush Current	**50A** zero-pk max. at cold start
	and any specified line, load and
	temperature conditions

Environment Requirement	Description
Operating Temperature Range	**0 to 50 deg.**
Operating Humidity Range	**20 to 80 %**
Storage Temperature Range	-20 to 60 deg.
Storage Humidity Range	10 to 90 %
Cooling Condition	Free Air

7-2. Output Characteristics

Output Circuit	Nominal Voltage	Voltage Adjustment [V]	Total Regulation	Nominal Load [V]	Load Variation [A]	Ripple Voltage [mV p-p]
Vs	175	170-200	±5V	1.2	0.1 - 1.7	500 Under
Va	60	55-70	±2V	0.8	0.05 - 1.7	300 Under
5V(ctrl)	5.25	5.0-5.5	±5%	4.0	1.0 - 5.0	100 Under
5V	5.1	----	±5%	2.5	0.5 - 4.5	100 Under
				0.06 *2	0.03 - 0.06	
DTV3.4V	3.4	----	±5%	2.5	0.5 - 4.0	50 Under
				0.06 *2	0.03 - 0.06	
33VT	33.0	----	±7%	0.006	0 - 0.01	500 Under
				0.06 *2	0 - 0.01	
12V	12.0	----	±5%	0.8	0.5 - 1.9	200 Under
				0.06 *2	0.03 - 0.06	
34V(AUDIO)	32.0	----	+5%, -7%	0.75	0.03 - 1.5	500 Under
5V(STBY)	5.0	----	±5%	1.0	0.03 - 2.0	100 Under
				0.06 *1*2	0.03 - 0.06	

7-3. Function of Protection

Protection	Output Circuit	Trip point	Notes
Over Current	Vs	2.2A or more	Shut down by Undr Voltage
	Va	1.71A or more	
	5Vctrl	6.0A or more	
	5V	4.6A or more	
	12V	2.1A or more	
	3.4V	11.5A or more	
	33V	0.011 or more	
	34V	1.7A or more	
	5Vstby	3.0A or more	
Over Voltage	Vs	210V - 225V	Shut down
	Va	73V - 81V	
	5Vctrl	5.6V - 7.5V	
Under Voltage	All Output	----	Shut down
Short Circuit	All Output	----	No hardware failure and No fire

7-4. Connector Specification

CN101

Type : YFW800-02 Maker : YEONHO	
Pin No.	Signal
1	AC(L)
2	AC(N)

P803

Type : 17825-12 Maker : AMP	
Pin No.	Signal
1	GND
2	GND
3	12V
4	12V
5	GND
6	GND
7	5.1V
8	5.1V
9	GND
10	GND
11	3.4V
12	3.4V

P807

Type : 17825-8 Maker : AMP	
Pin No.	Signal
1 ~ 4	3.4V
5 ~ 8	GND

P801

Type : 17825-7 Maker : AMP	
Pin No.	Signal
1	NC
2	NC
3	NC
4	GND
5	5V Stand_by
6	POWER_ON
7	AC_ON

P804

Type : 1-1123723-4 Maker : AMP	
Pin No.	Signal
1	GND
2	GND
3	5V(Vctrl)
4	5V(Vctrl)

P808

Type : 1-1123723-8 Maker : AMP	
Pin No.	Signal
1	5V(Vctrl)
2	GND
3	VA
4	GND
5	GND
6	NC
7	Vs
8	Vs

P802

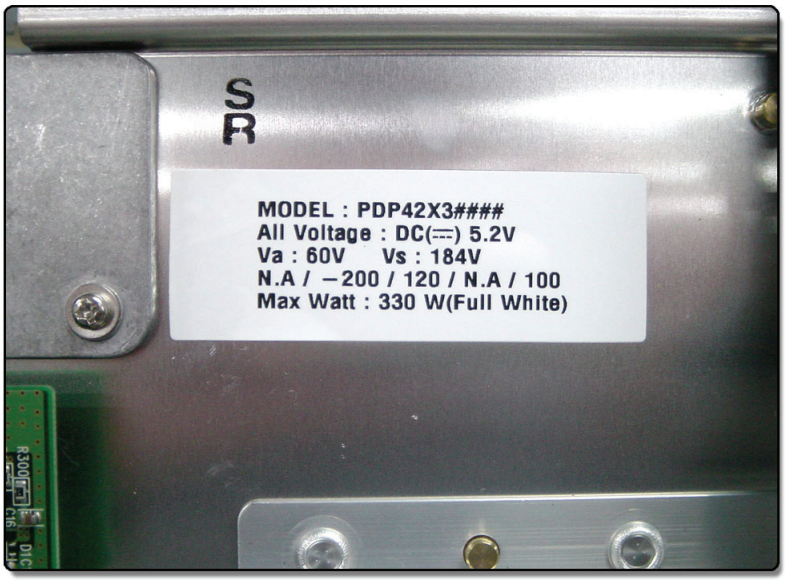
Type : 17825-10 Maker : AMP	
Pin No.	Signal
1	GND
2	33V
3	GND
4	3.4V
5	GND
6	5.1V
7	GND
8	GND
9	34V
10	34V

P805

Type : 1-1123723-10 Maker : AMP	
Pin No.	Signal
1	Vs
2	Vs
3	Vs
4	NC
5	GND
6	GND
7	GND
8	GND
9	Va
10	Va

8. Power Adjustment

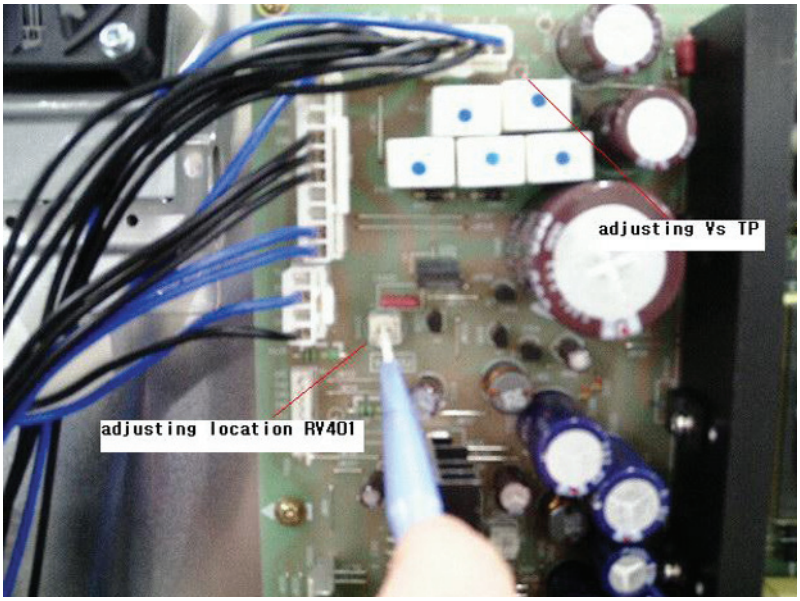
- Power Adjustment - Adjusting to standard power voltages, which are written in the upper right side of PDP module. These values were already adjusted by PDP module makers while producing. Therefore, if there are some problems in picture after adjusting, you should classify that PDP module as a fault and contact to PDP module maker.
- Input Video Pattern - 100 IRE Full White Pattern



Voltage Adjustment Label

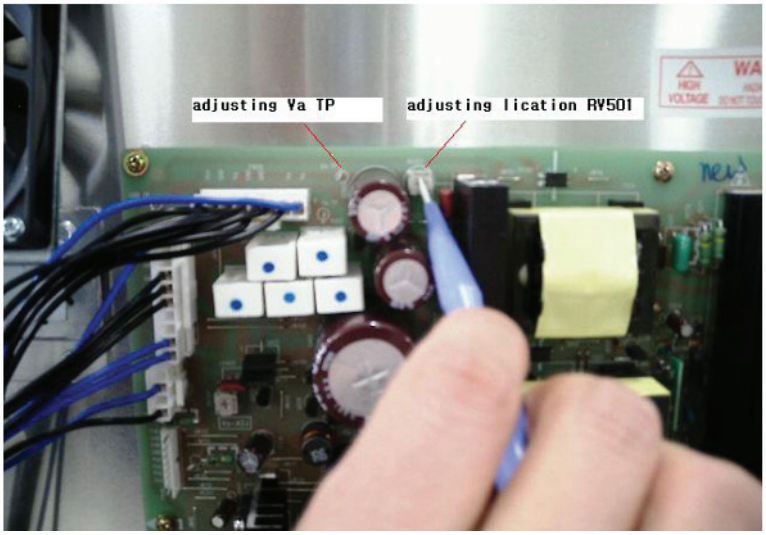
8-1. Vs(Sustain Voltage) : Discharge Sustain Voltage

- Measurement Equipment : Digital Volt Meter(DC volt mode)
- Adjusting TP : **Vs TP**
- Adjusting Location : **RV 401**
- Optimum Adjusting Voltage : The voltage which is written in the label located in upper right side of the PDP module.(Typical Voltage : 184V)



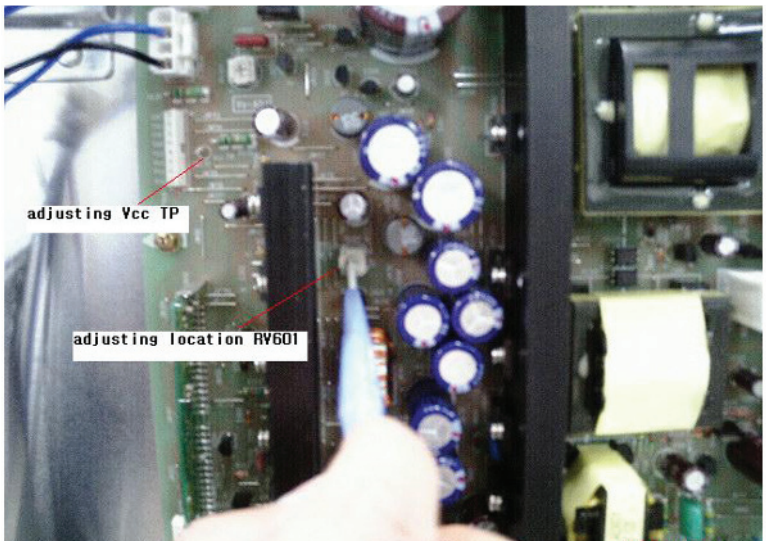
8-2. Va(Address Voltage) : Data Input Voltage

- Measurement Equipment : Digital Volt Meter(DC volt mode)
- Adjusting TP : **Va TP**
- Adjusting Location : **RV401**
- Optimum Adjusting Voltage : The voltage which is written in the label located in upper right side of the PDP module.(Typical Voltage : 60V)



8-3. 5Vcntl(5V control)

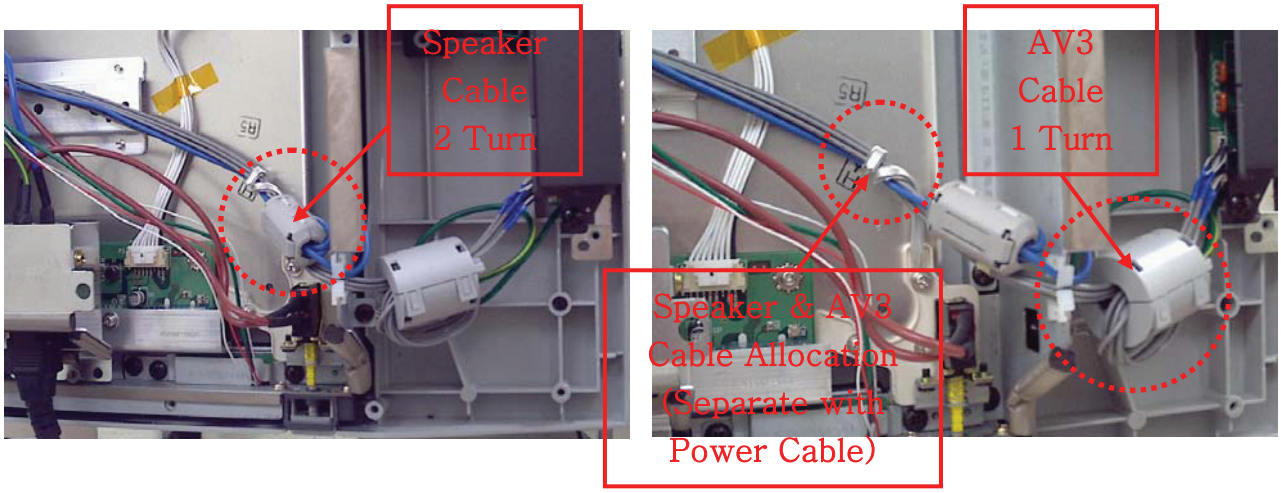
- Measurement Equipment : Digital Volt Meter(DC volt mode)
- Adjusting TP : **Vcc TP**
- Adjusting Location : **RV501**
- Optimum Adjusting Voltage : The voltage which is written in the label located in upper right side of the PDP module.(Typical Voltage : 5.2V)

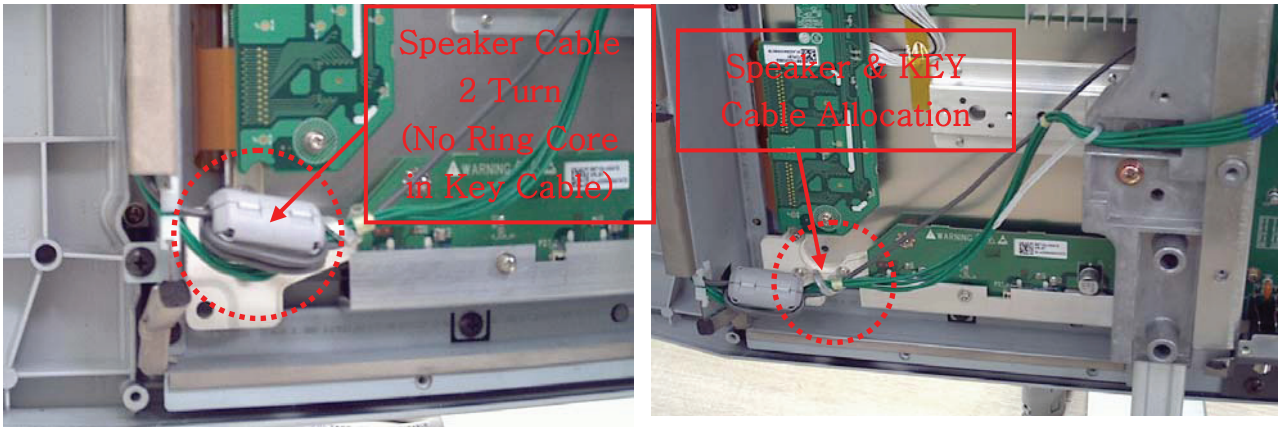


9. Noticeable Points While Assembling

9-1. Insertion of Ring Core(EMI Filter) to Speaker Cable(L, R), AV3 Cable and their position

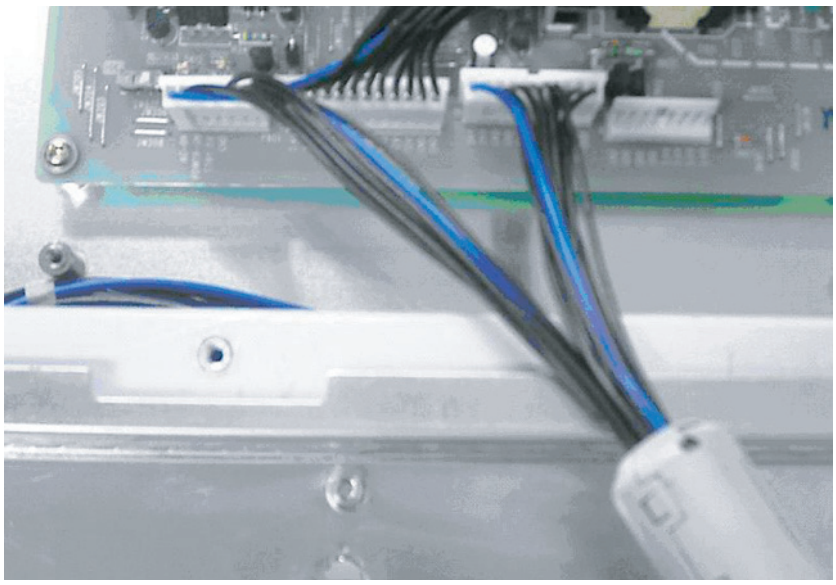
- Coil the Ring Core(Filter EMI, S/N : 5PZCA2009A) 2 turns with Speaker Cable (L, R) as shown in the figure below.
- Coil the Ring Core(Filter EMI, S/N : 5PZCAT3035) 1 Turn with AV3 Cable as shown in the figure below.





9-2. Insertion of Ring Core to the Power Cable

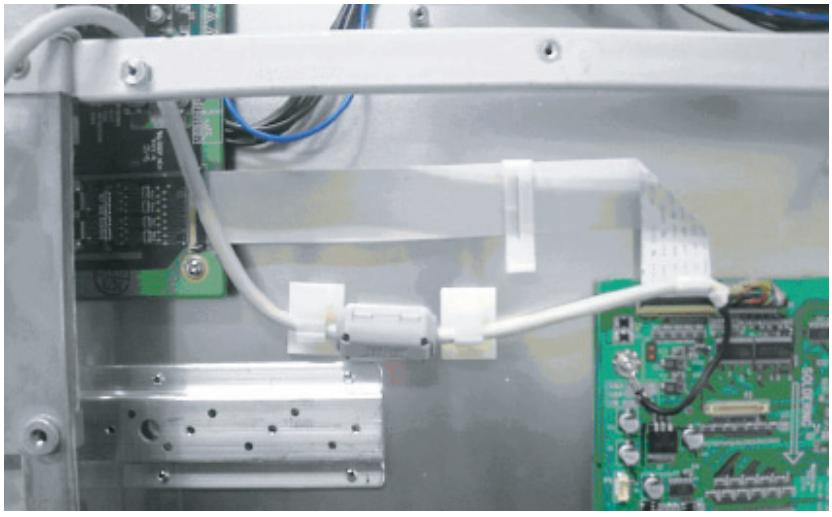
- Insert a Ring Core(Filter EMI, S/N : 5PZCA2009A) to **7** pin and **10** pin Power Cable

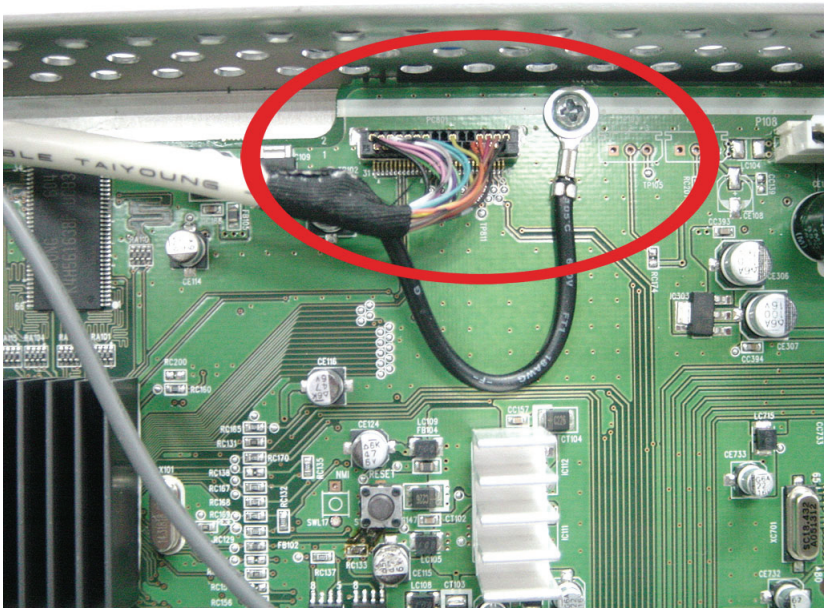


9-3. LVDS Cable Connection

-> CABLE LVDS, S/N : 4856818800
-> DIGITAL B/D part
-> CLAMP WIRE, S/N : 4856818800
-> CLAMP WIRE, S/N : 4856815900
(Place these CLAMP WIRES as shown in the figure below)
* Make LVDS Cable not to touch on the Terminal Plate while connecting.

a. VIDEO B/D part

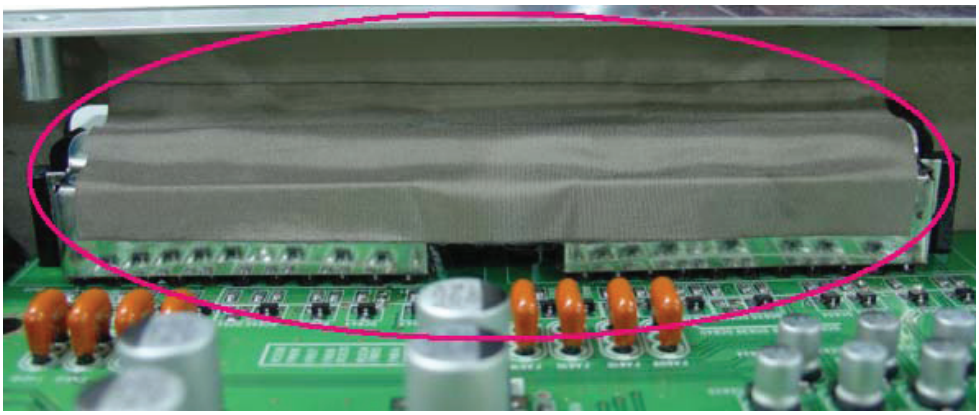




9-4. Shieldron Tape on SCART Input

-> Tape EMI, S/N : 485A100071

(Position : From top of Scart to Terminal Channel Gasket)

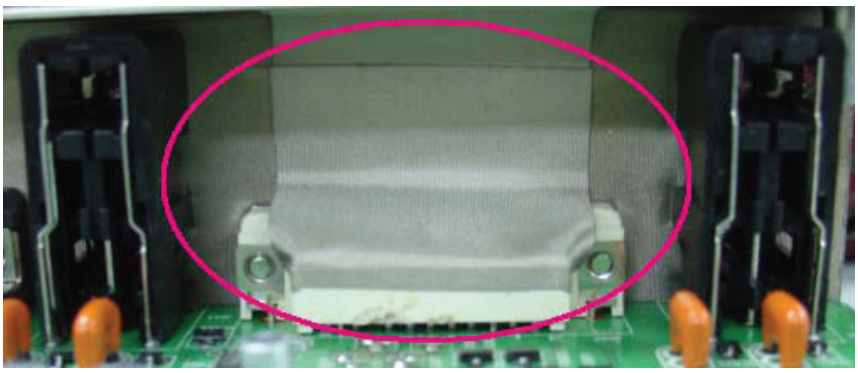


9-5. Shieldron Tape on DVI Input

-> Tape EMI, S/N : 485A100571

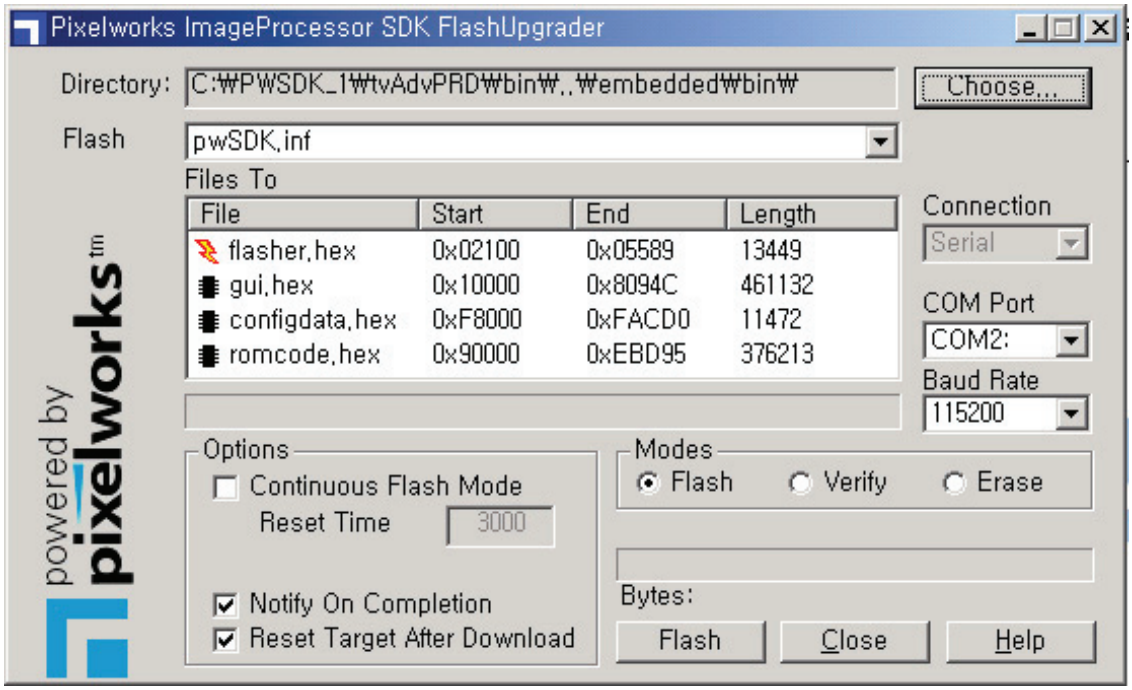
(attach vertically, 3 X 4.2 Cm)

(Position : From top of DVI to Terminal Channel Gasket)



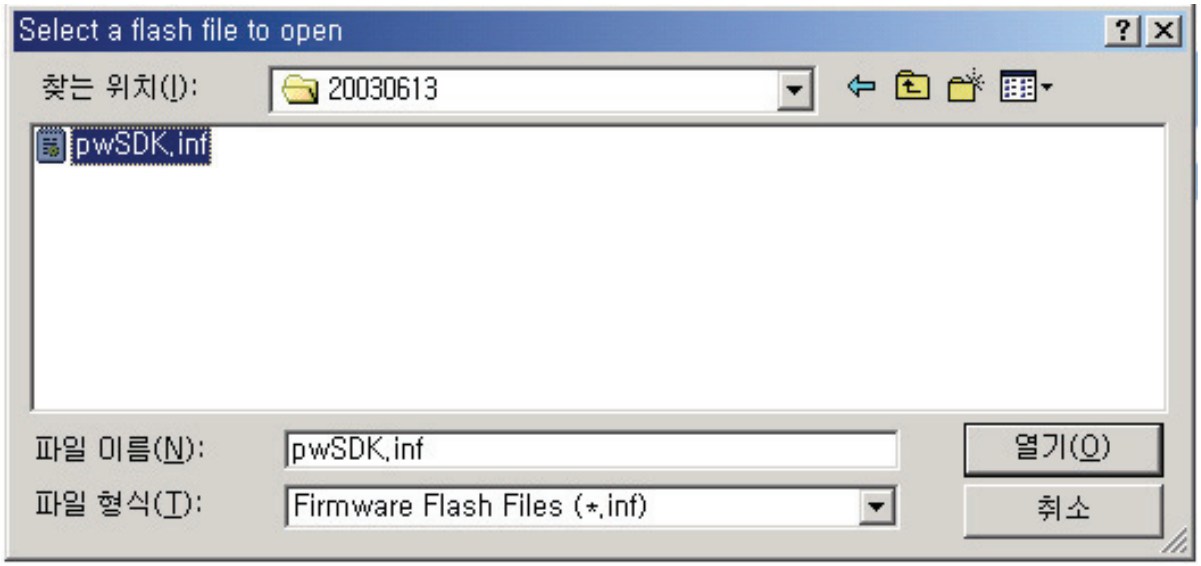
10. Soft ware Upgrade Method

10-1. Check whether MAIN PCB is connected to SUB PCB(PA901 to P901).
10-2. Connect 9-PIN serial cable to the serial port of the computer.
10-3. Connect the opposite end of the serial cable to RS-232C port of SUB PCB.
10-4. Run Flashupgrader.exe in the PC to excute the program as shown below.

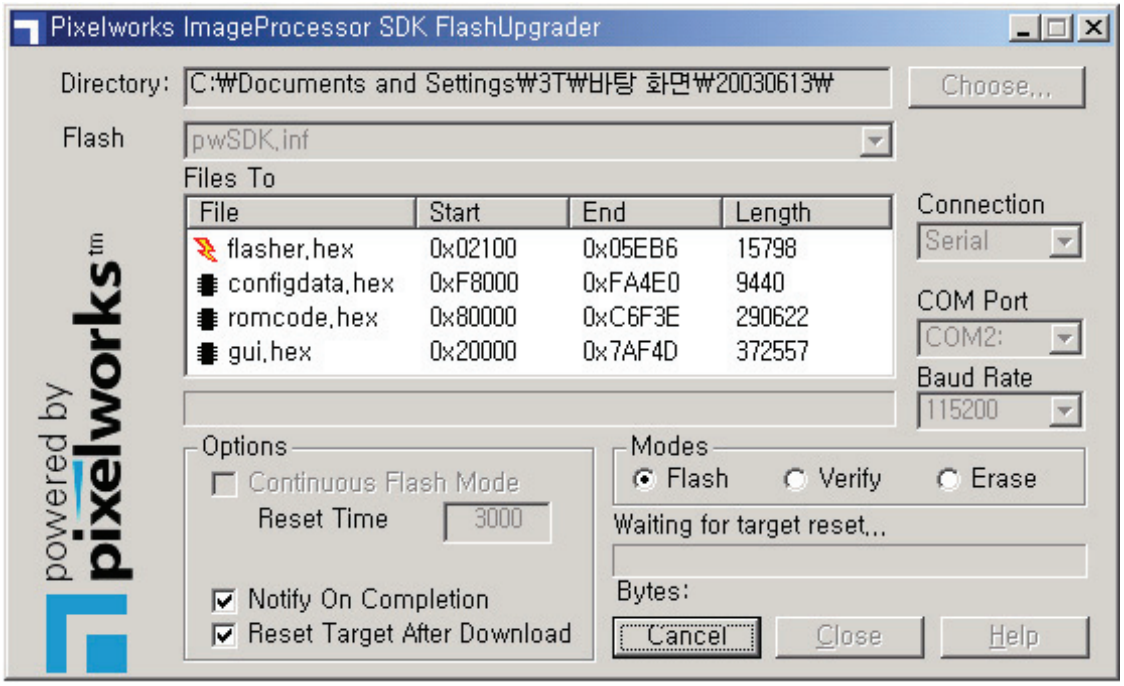


10-5. Select current Upgrade file

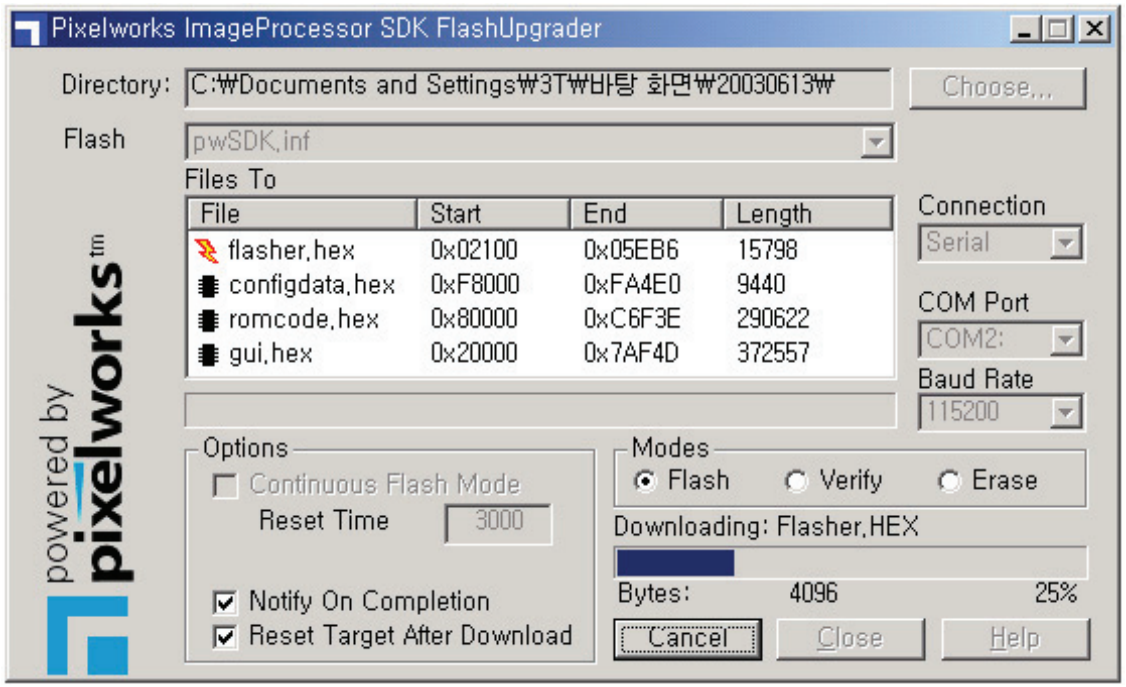
- Click “Choose...” button to select the file you want to upgrade.
- Select the file(pwSDK.inf) that you want to upgrade.



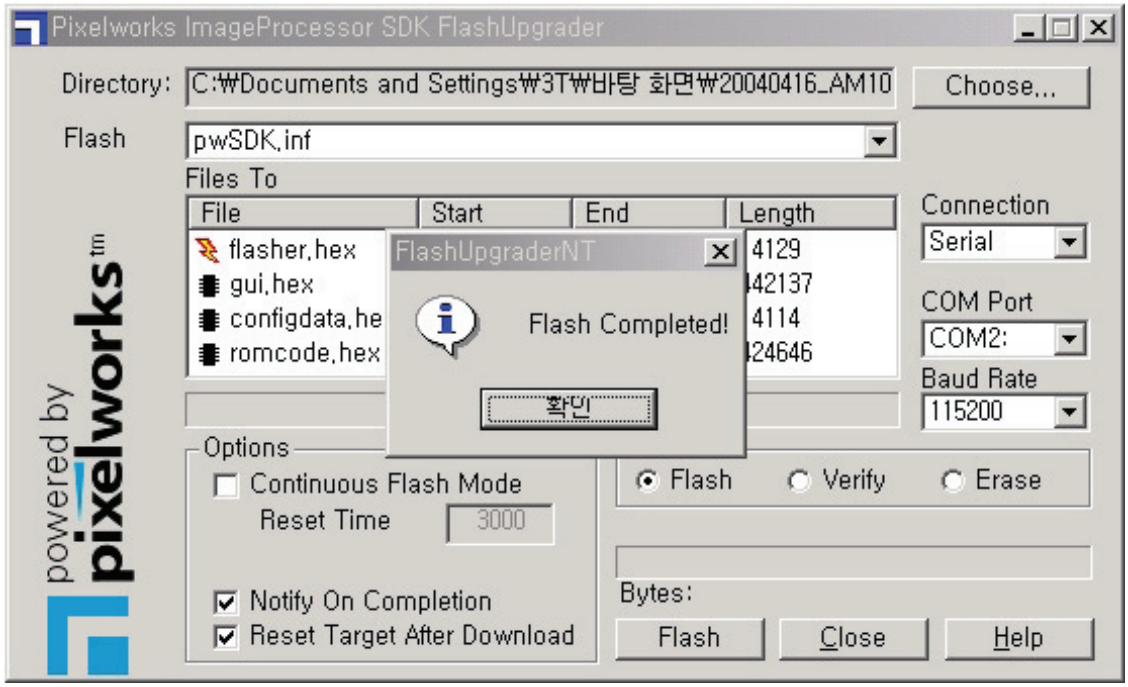
10-6. Select correct COM Port and Baud Rate(115200) as shown below. Then press Flash button to finish setup.



10-7. Turn on the ac power and then upgrade program will start the download as shown below.



10-8. When the upgrading is complete, a window(below) will be opened.
Press “Finish” button to complete the process.



11. Trouble Shooting

Before starting Trouble Shooting

- Trouble diagnosing and repairing of set mean find out which PCBs or blocks are not working and replace them with new PCBs.
  Repairing the broken PCBs are not necessary. Keep the broken PCBs and return them to service center or R&D center.
- This Trouble Shooting list only contains representative and simple PCB trouble diagnosis and Module Exchange method.
  Therefore, if you find sets that are difficult to diagnose or to repair, contact R&D center.
- Basic Trouble Diagnosis procedure
  1) Check problem Symptoms
  2) Open Back Cover
  3) Trouble Diagnosis & Replace broken PCB
  4) Adjust new PCB module
  5) HEATRUN for at least 30 minutes, inputting Full White test pattern
  6) Full Function test
  7) Repair Complete
- Required Equipment for trouble diagnosis
  1) Digital Multimeter(User Mode : measure DC Voltage, measure Diode Voltage, Short-open test)
  2) Screwdriver(or electric screwdriver), Plastic adjusting tool
  3) Oscilloscope(for detailed examination only)
- Before replacing PCBs, you MUST turn the AC switch “OFF”.
- After replacing High Voltage Board(Power PCB, Y-SUS, Z-SUS, Data B/D, Scan B/D), and Main & Sub PCB, extra adjustment might be needed.(Refer to Power Adjustment)
- Dust or extraneous materials may cause bad connections.
  Therefore, try to apply soft brush, air fresher, or breath to clean the dust or extraneous materials.
- While assembling the set in factory, it could have bad connection.
  Try to reassemble the necessary connectors and also check the state of the connectors.
- After the set is repaired, leave Back Cover open for followings.
  Run HEAT RUN for at least 30 minutes by displaying Full White test pattern of Service Mode(Refer to Service Manual ‘6. Service Mode’ part).
  Check the screen conditions and basic functions(remote control operation etc.)
- After Back Cover is closed, redo HEAT RUN for at least one hour with Full White input using Test Pattern of Service Mode. Check the screen conditions and basic functions.

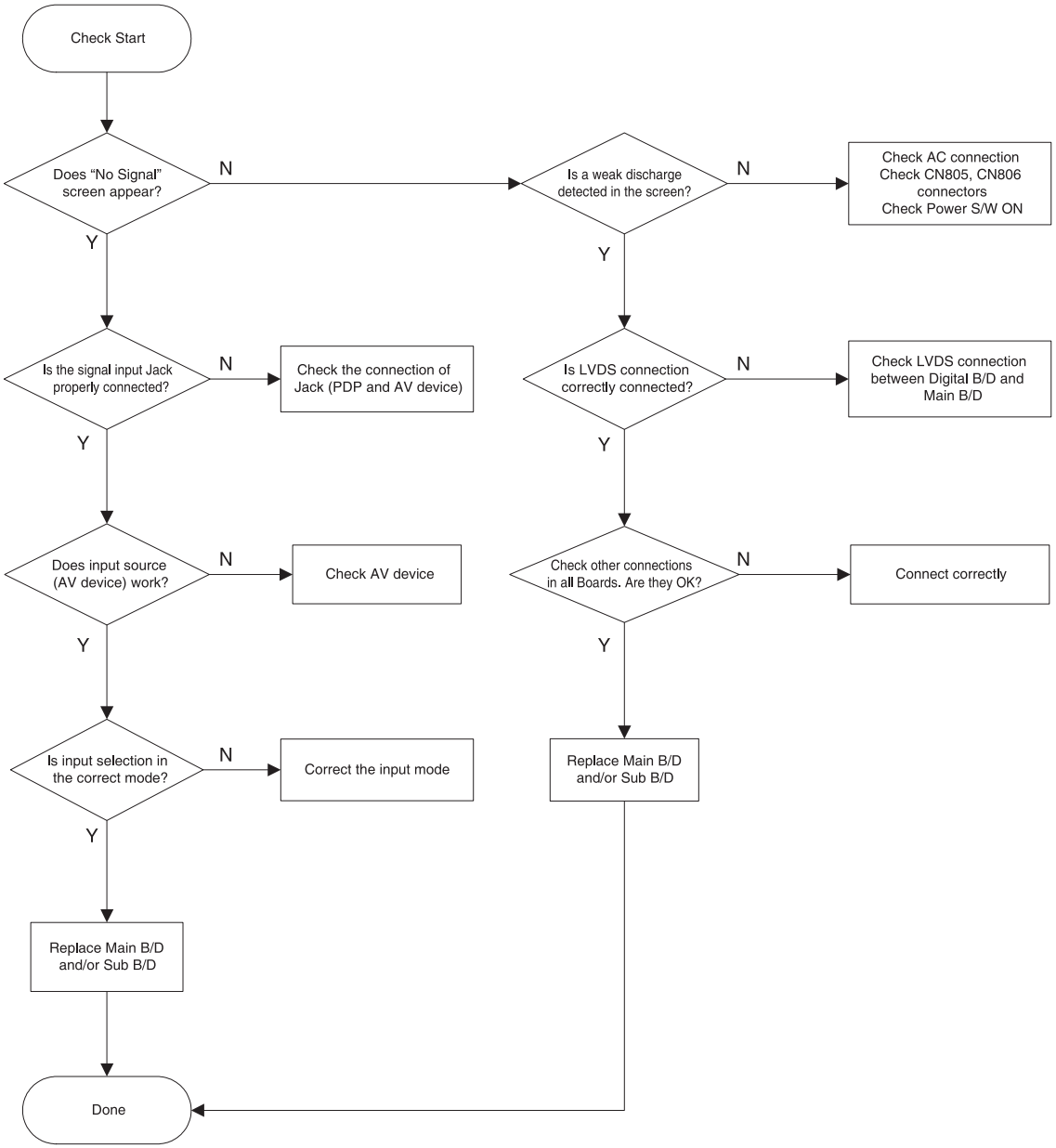
Trouble Shooting

- Caution 1 !!
  When disconnecting / connecting connectors, you MUST turn “OFF” the AC power and check the direction and position of the connectors before working.
- Caution 2 !!
  Whenever you reassemble connectors connecting High Voltage Board and POWER PCB (CN805, CN806), remaining voltage still exists in the POWER PCB could cause electric shock and damage the set.
  Therefore always reassemble the connectors several minutes after AC power is off.
  To be more careful, using a Multimeter you should check to see if Vs is less than 10V and then connect connectors.

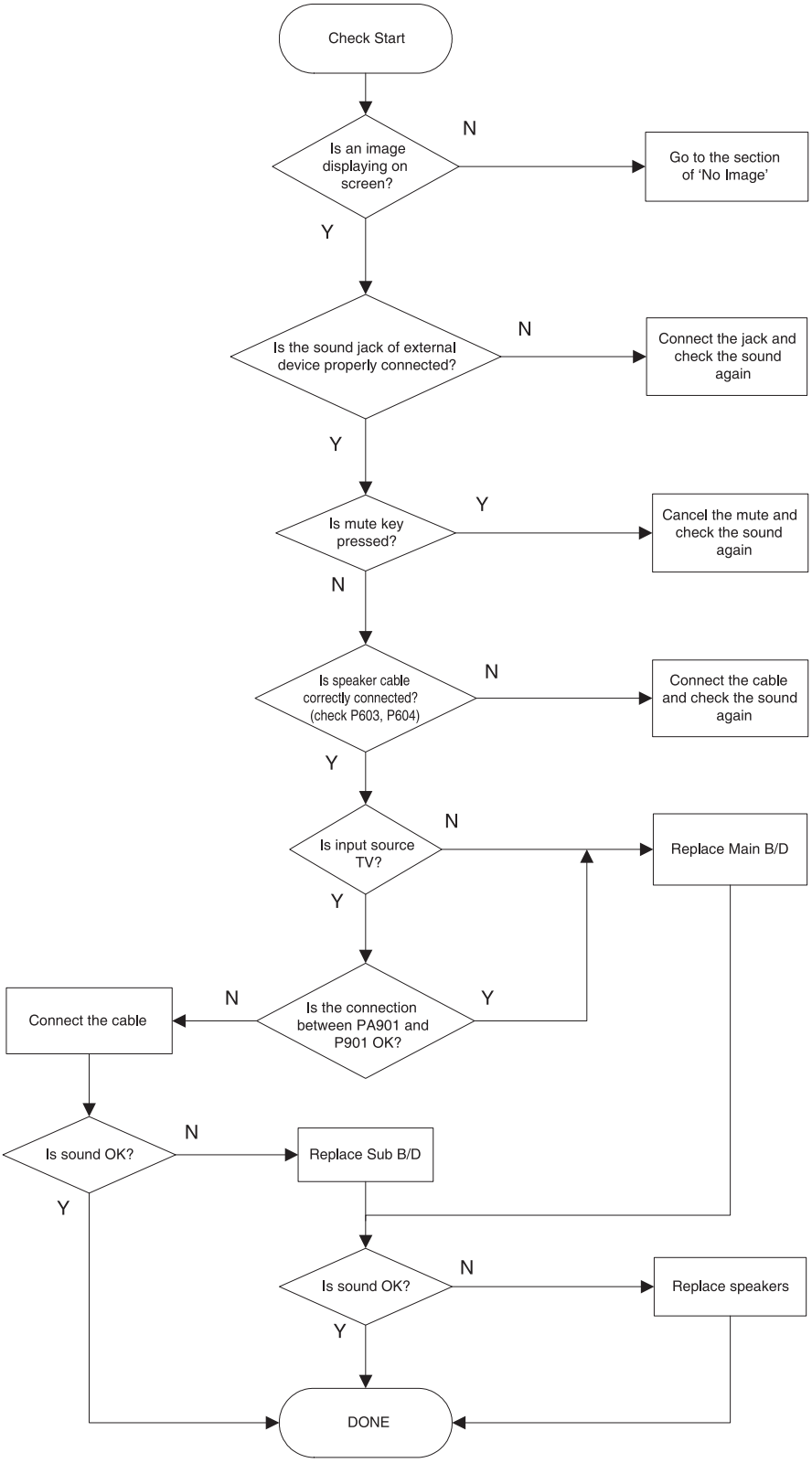
Definition

- Red LED - Stand by state(ready for operating)
- Green LED - The set is turned on and operating
- Shut Down - While green LED, power PCB does not make any operating sound or noise (i.e. Power relay does not operate normally)
- Weak Discharge - The screen looks like BLACK, but there are little discharged cells on the screen
- Abnormal Discharge - Shows unexpected discharged cells on the image
- No Signal - OSD is working but no images are displaying
- No Raster - Not even OSD is displaying

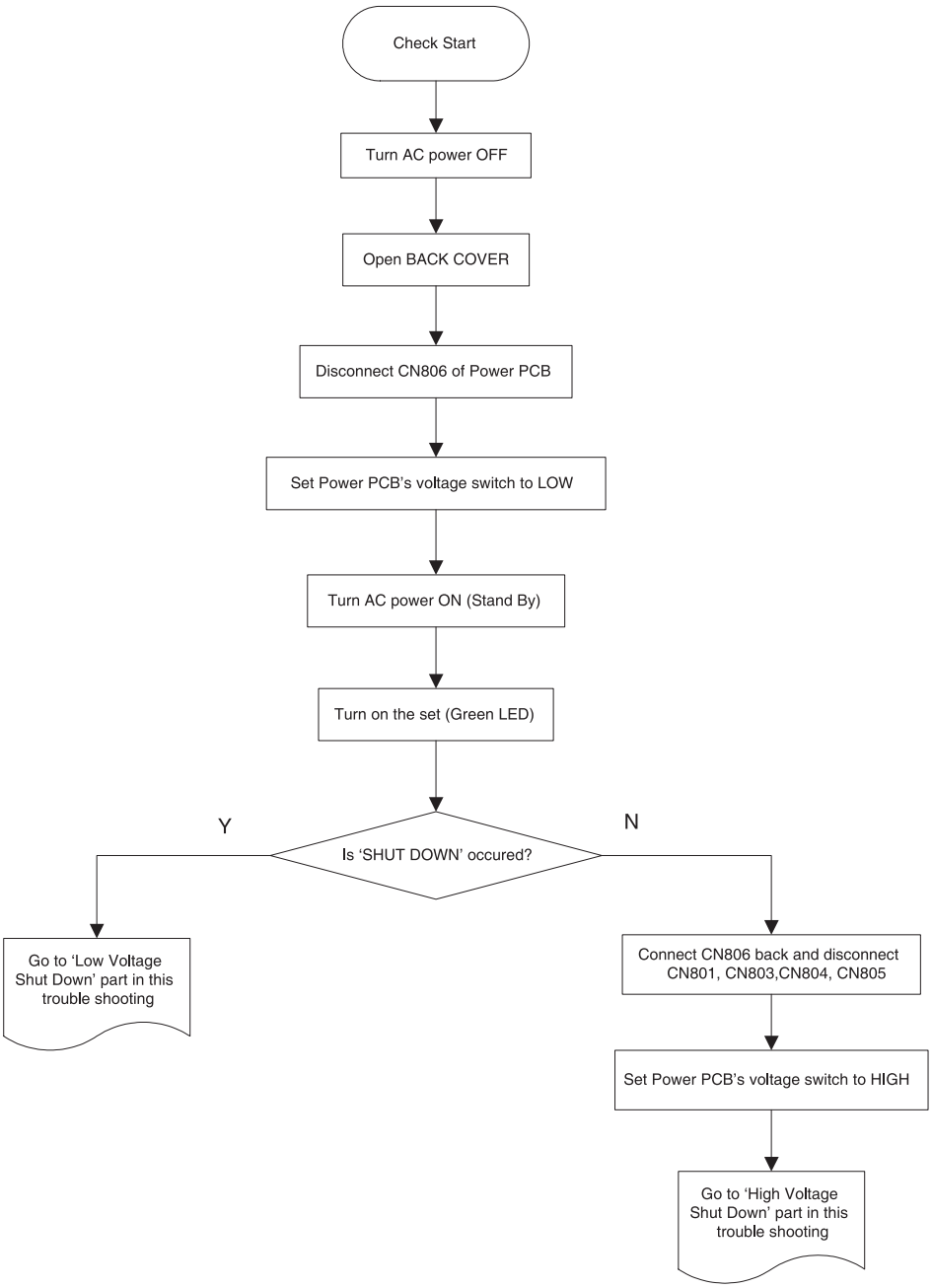
11-1. No Signal or No Raster



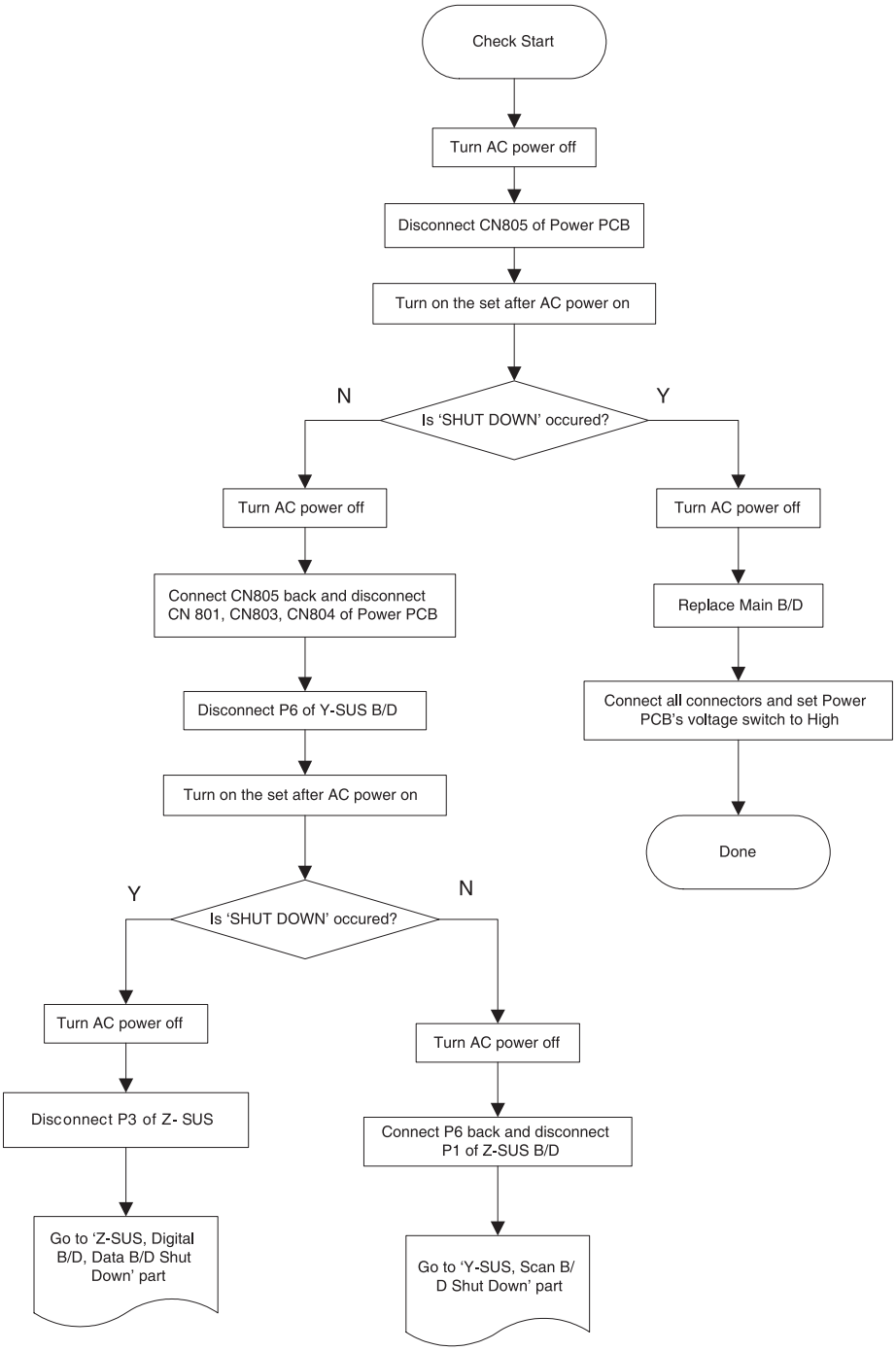
11-2. No Sound


Check Start
Is an image displaying on screen?
N
Go to the section of 'No Image'
Y
Is the sound jack of external device properly connected?
N
Connect the jack and check the sound again
Y
Is mute key pressed?
Y
Cancel the mute and check the sound again
N
Is speaker cable correctly connected? (check P603, P604)
N
Connect the cable and check the sound again
Y
Is input source TV?
N
Replace Main B/D
Y
Is the connection between PA901 and P901 OK?
N
Y
Connect the cable
Is sound OK?
N
Replace Sub B/D
Y
Is sound OK?
N
Replace speakers
Y
DONE

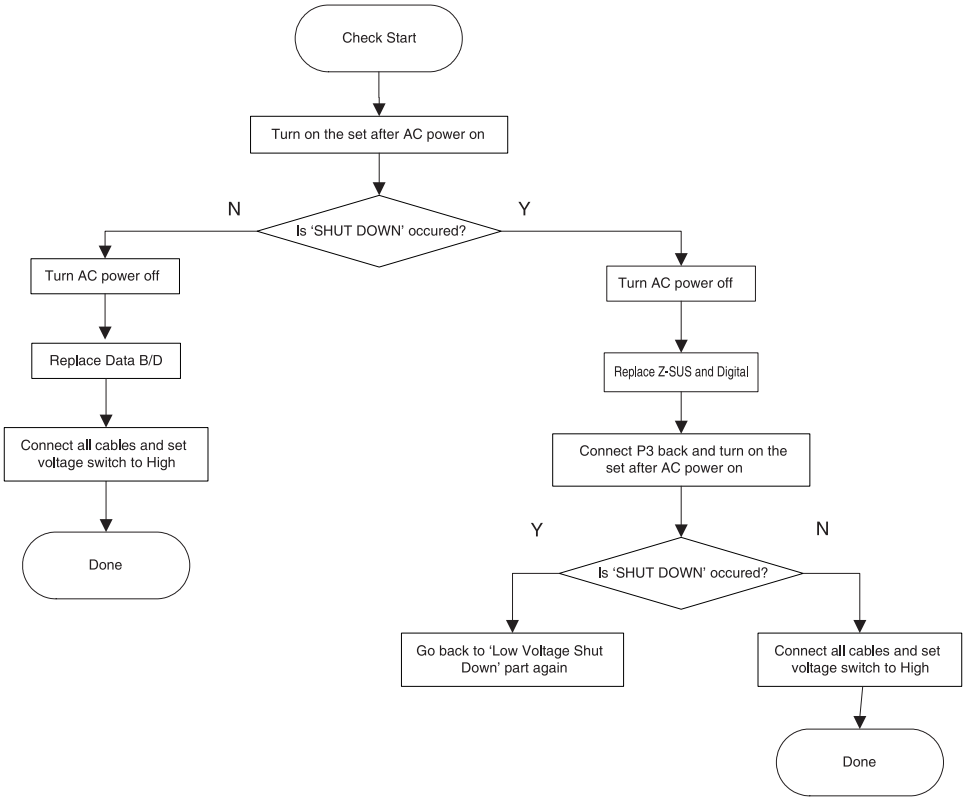
11-3. Shut Down



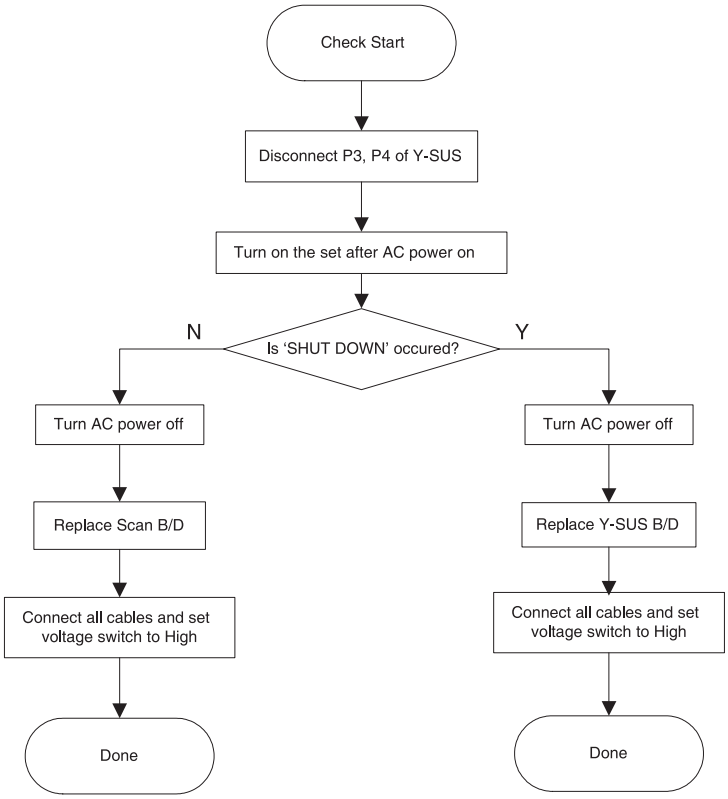
A) Low Voltage Shut Down



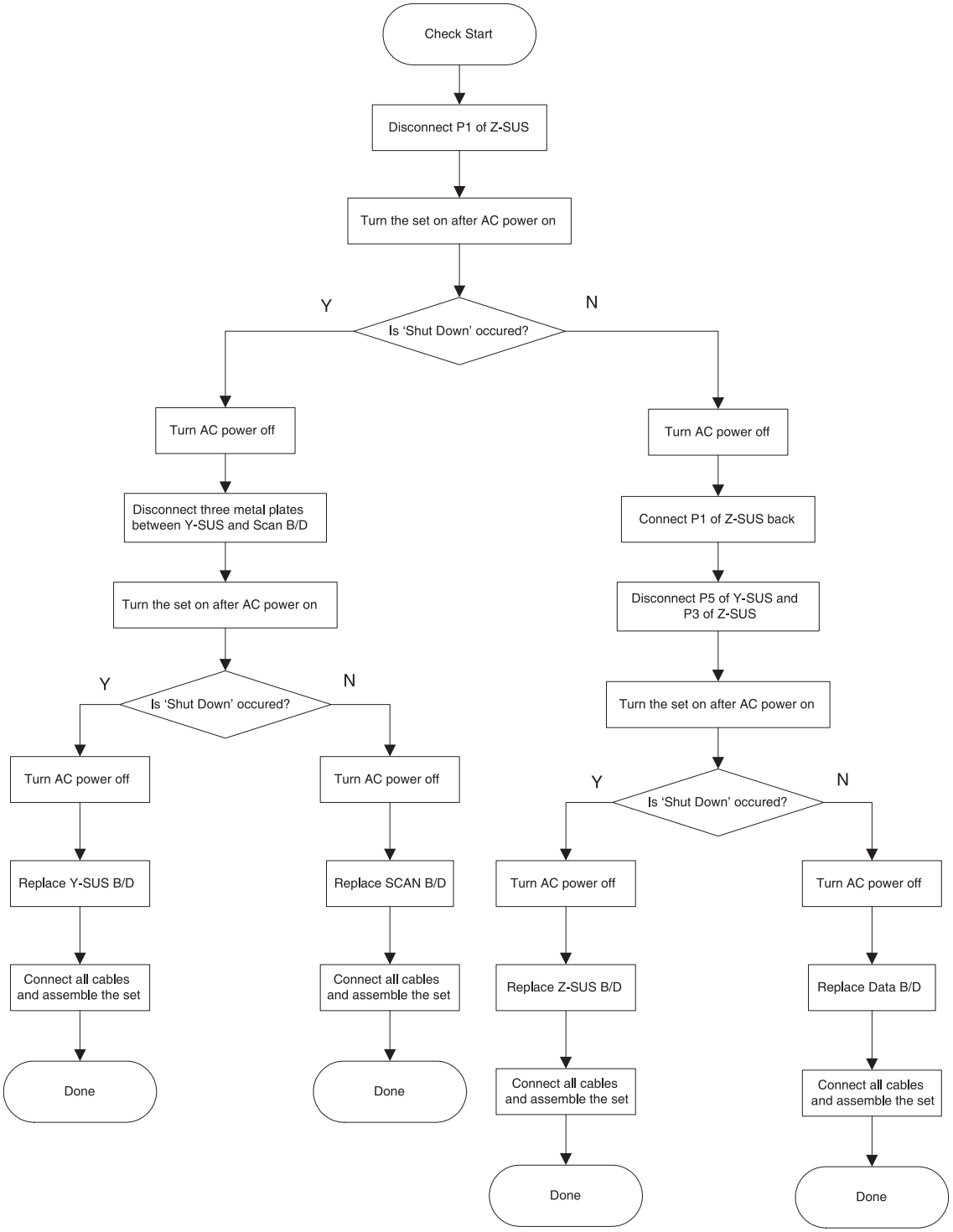
B) Z-SUS, Digital B/D, Data B/D Shut Down



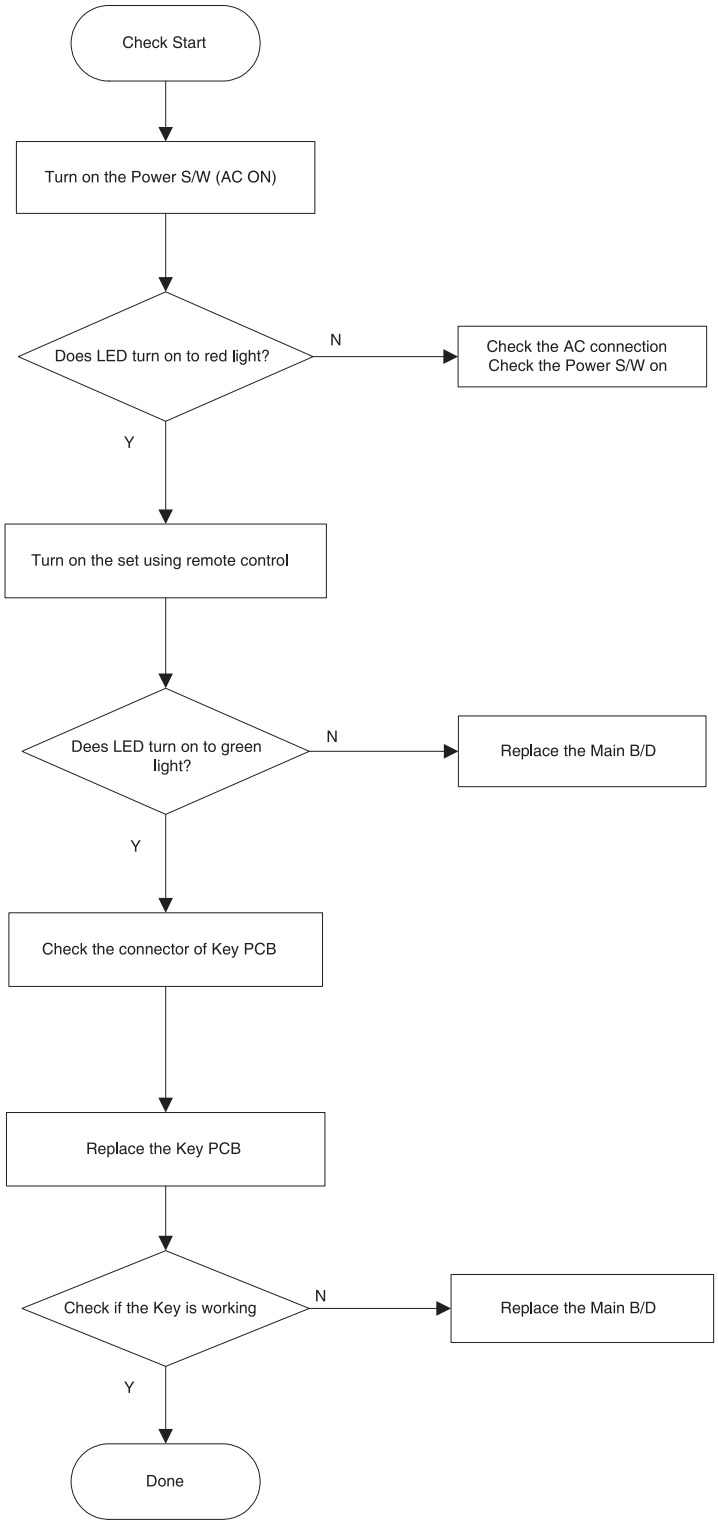
C) Y-SUS, Scan B/D Shut Down



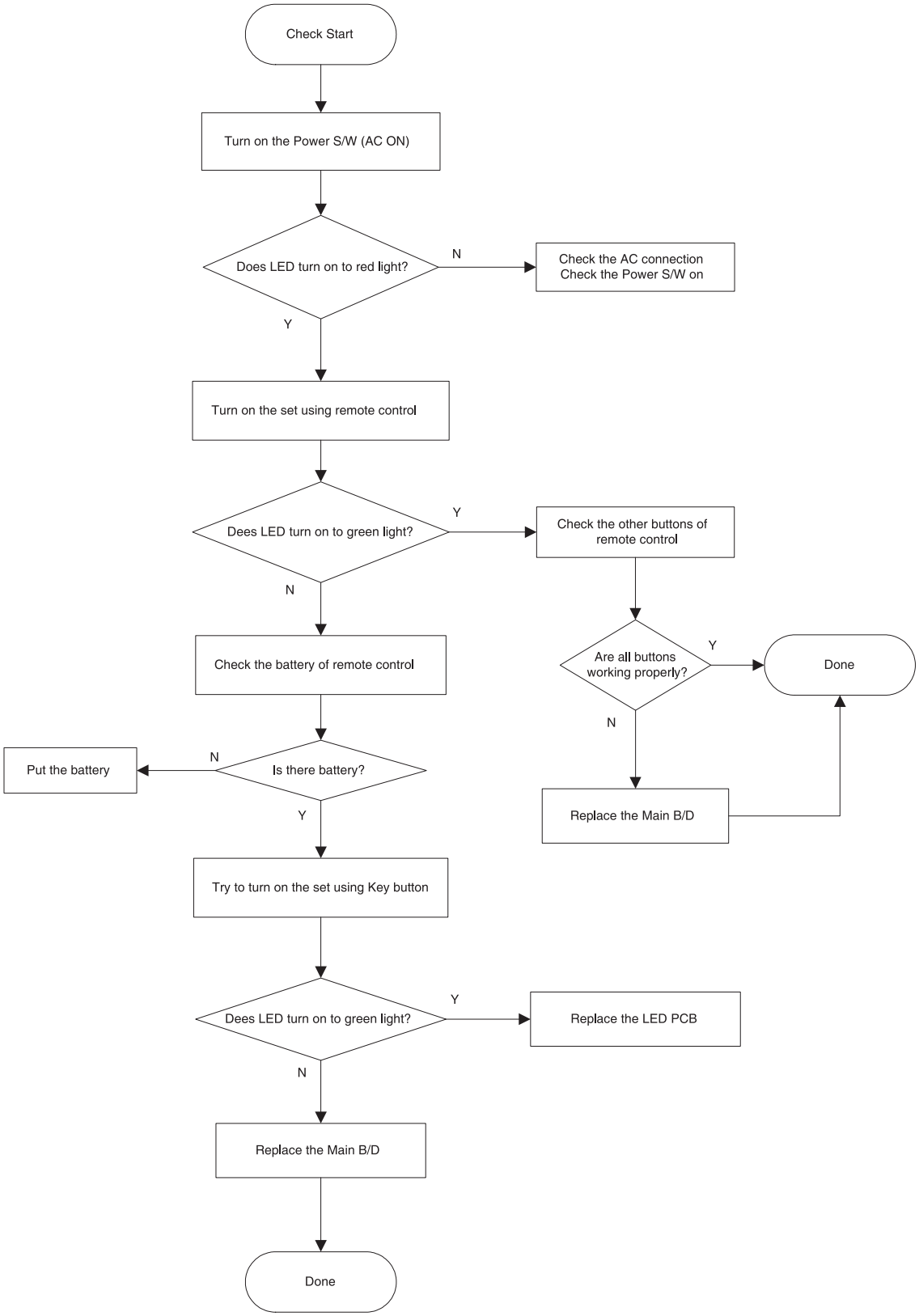
D) High Voltage Shut Down



11-4. No Key Operation

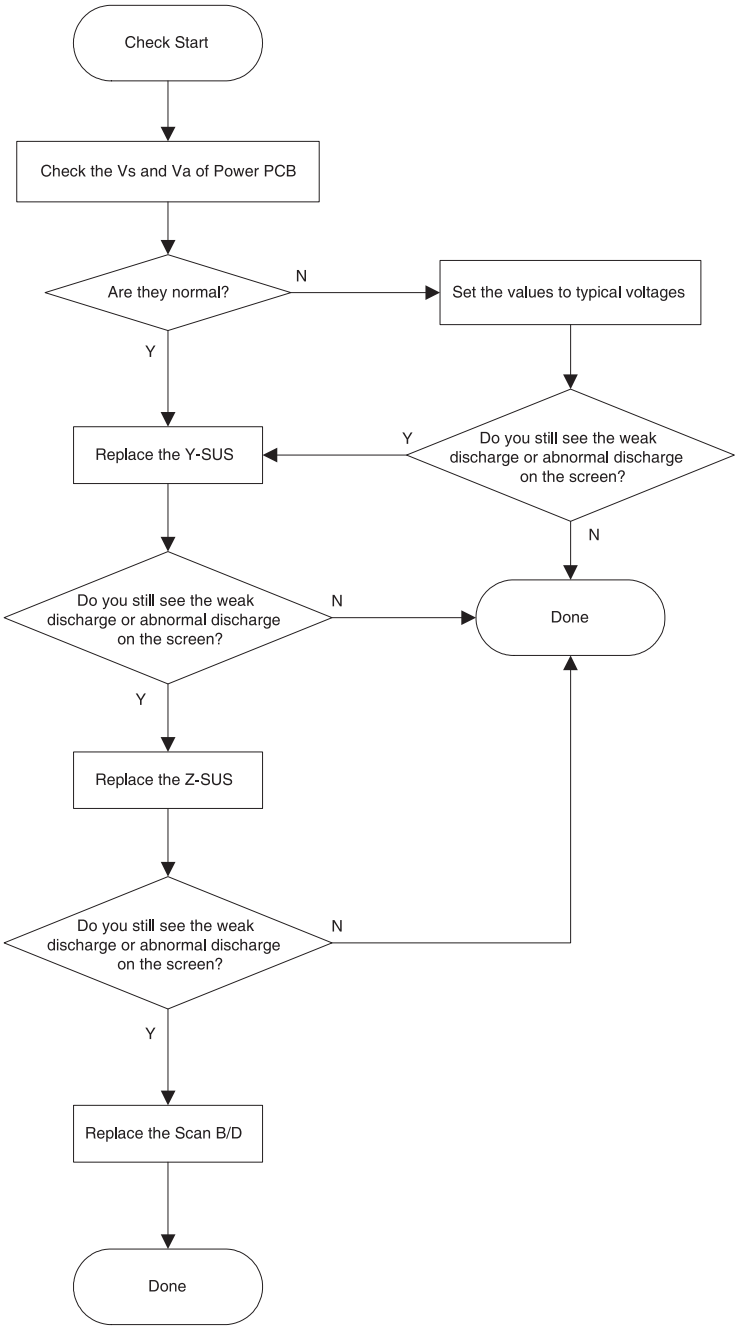


11-5. No Remote Control Operation

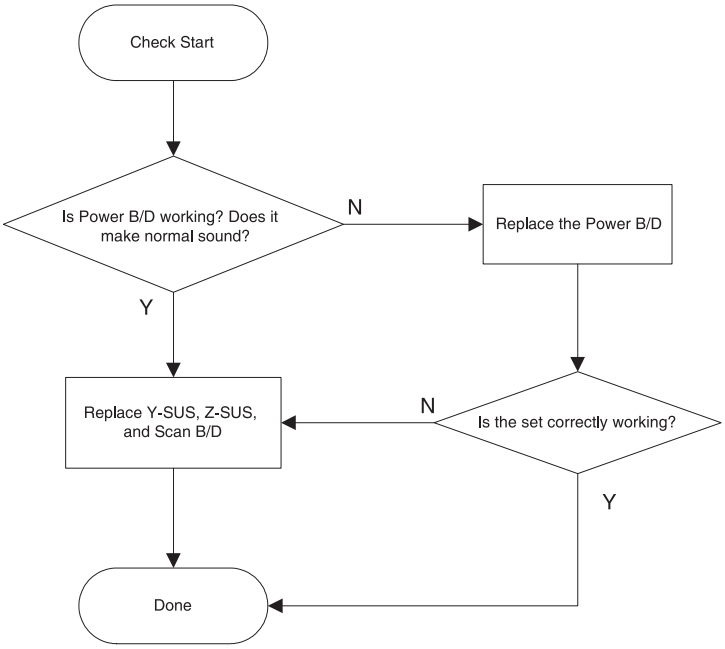


11-6. No Key and Remote Control Operation

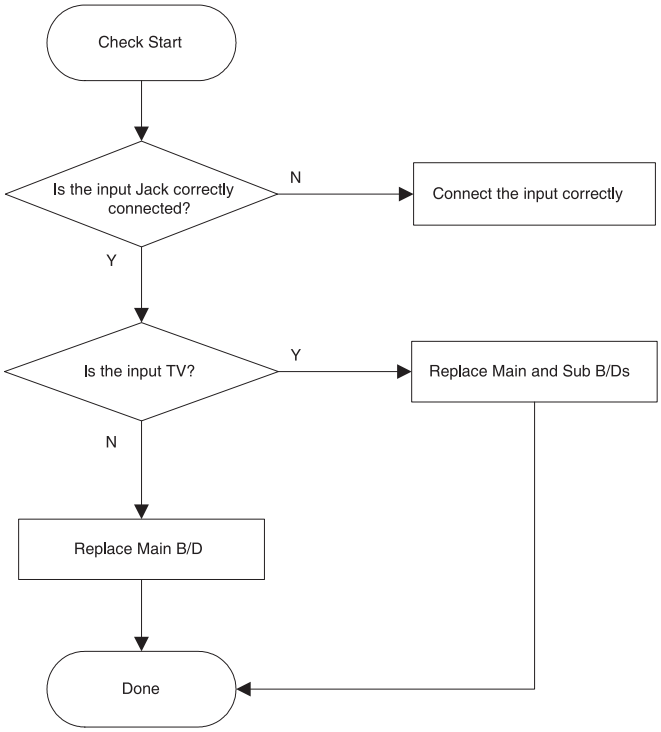
11-7. Abnormal Discharge



11-8. Not Even Weak Discharge



11-9. Particular Input Signal(Video, PC, TV, or Component) Does Not Work



11-10. Others

A) Set Is Making Unusual Noise

-> Check the connection of Power PCB and Module. If they are OK, replace the Power PCB and check the symptom again.

B) Occasionally, the set does not operate normally.

Turning off and on the AC power make the set to operate normal again

-> Upgrade the software first.
If you still see the same symptom, replace the Main and Sub B/D.

C) Images are abnormal

-> Check the default values of service mode and user mode. If they are OK, replace the Main and Sub B/D.
If they are not OK, upgrade the software and check the symptom again.

12. Assembly List

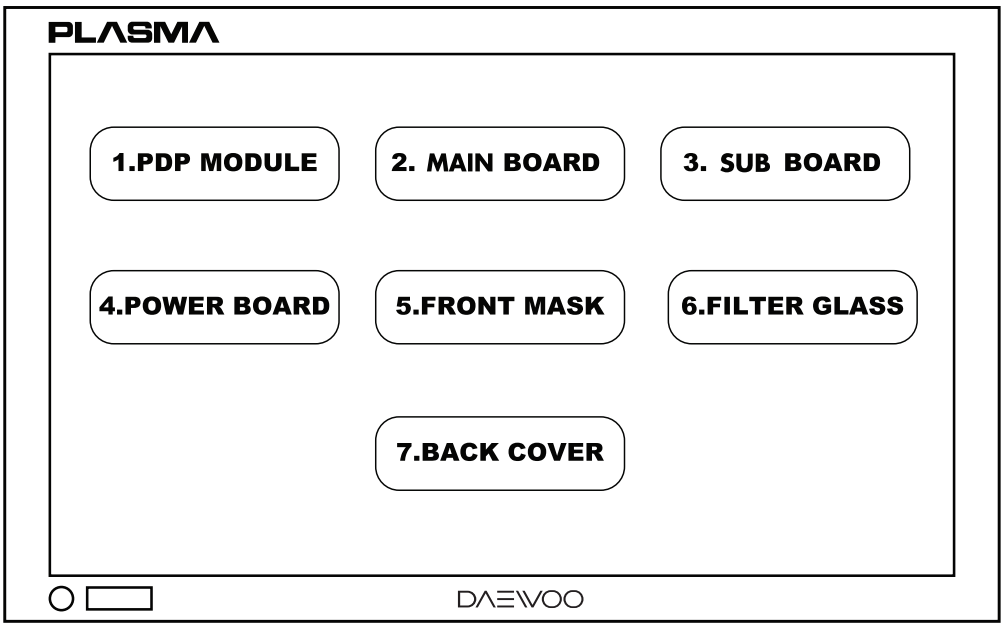
* Ass'y of module is listed on the next page.

No.	PCB ASS'Y CODE	ASS'Y NAME	ASS'Y DESCRIPTION
1	4851413800	BACK COVER ASSY	21728+26162
2	4853293700	BRKT DR	ALDCS 8
3	4854962100	BUTTON CH	ABS GY
4	4859004060	CABLE FFC	1.0-K-30P-50MM
5	4859004460	CABLE LVDS	1001-31FC+1001-31FC+42A1LASB=560
6	4859003750	CABLE PHONE PLUG	PLUG+CABLE 1365AWG26=150B
7	4856815900	CLAMP WIRE	EGI T0.4+TUBE+PIE 3.2
8	4850705N31	CONNECTOR	12505HS-05+12505TS+ULW=650
9	4850710S22	CONNECTOR	12505HS-10+12505HS-10+USW=600
10	4850710S26	CONNECTOR	YMH025-10R+1-171822-0+ULW=600
11	4850712S06	CONNECTOR	YMH025-12R+1-171822-2+ULW=350
12	4850707S18	CONNECTOR	YMH025-07R+171822-7+ULW=300
13	4850703N40	CONNECTOR	25045HP-03+25048HS-03+ULW=150
14	4850709S18	CONNECTOR	YH396-09V+YH396-10V+YH396-04+ULW=160
15	4850708S24	CONNECTOR	YH396-08V+YH396-08+ULW=850
16	4850701S30	CONNECTOR	90017TS+90017TS=ULW=280
17	4850712S03	CONNECTOR	12505HS-12+12505HS-12+USW=850
18	48599DM001 (DPP-42A1GCSB)	CORD POWER AS	EU LP-33+LS-60=2.0M(LF)
19	48599PM003 (DPM-42A1GCSB)	CORD POWER AS	UK LP-61L+LS-60=2.0M
20	4855553900	DECO SENSOR	PC
21	5PZCAT3035	FILTER EMI	ZCAT3035-1330
22	5PZCA2009A	FILTER EMI	ZCAT2035-0930A
23	PTFEPWG122	FILTER EMI AS	DPP-42A1LCSB
24	4853823100	FRAME HORIZENTAL	SECC T1.6
25	4851C02800	FRAME SUPPORT L AS	38232+38234
26	4851C02900	FRAME SUPPORT R AS	38233+38234
27	485A102280	GLASS FILTER	DFM4203P3
28	4957000800	HEAT SINK	AL ANODIZHG+TAPE
29	4852090701	MASK FRONT	ABS GY
30	PTFEPWG122	MODULE PDP	PDP42X3XXXX

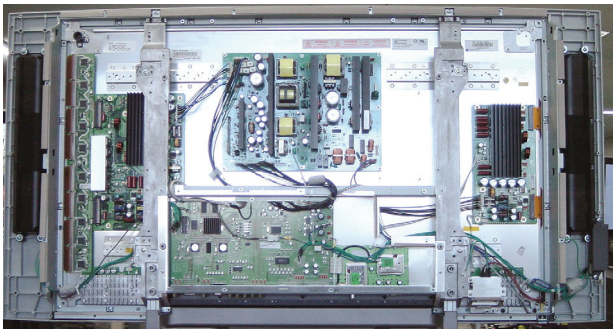
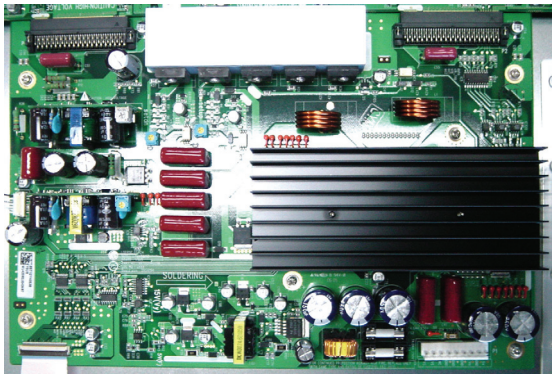
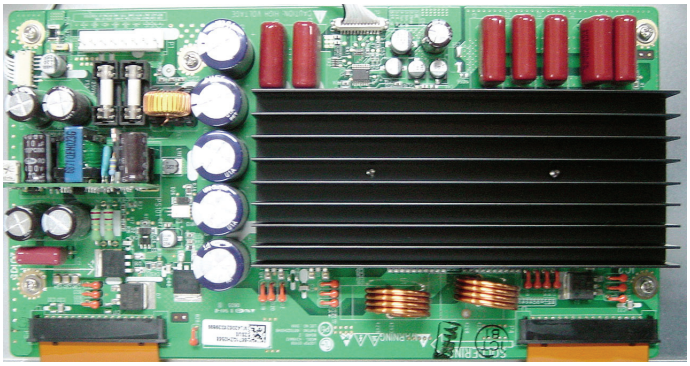
Assembly List

No.	PCB ASS'Y CODE	ASS'Y NAME	ASS'Y DESCRIPTION
31	4850M10710	MODULE POWER	1H308W
32	PTMPMSG127	PCB MAIN MANUAL AS	DPP-42A1GCSB
33	PTSBMSG122	PCB SUB MANUAL AS	DPP-42A1LCSB
34	485A106070	SHIELDRON	(5 AND 3)X85X1T(ANGLE)
35	485A106270	SHIELDRON	41X53X18T
36	48A8311800	SPEAKER SYSTEM	SS-63A02RC
37	485A100071	TAPE EMI	CU+NI T0.13 VER1
38	485A100571	TAPE EMI	CU+NI 30X42XT0.2
39	4853633300	TERMINAL COVER	A5052 T1.0
40	4853635200	TERMINAL PLATE	A5052 T1.0
41	48B5353J17	TRANSMITTER REMOCON	R-53J17 (AAA)
42X32000.ASLGB			
42	485AS11790	CTRL BOARD AS	6871QCH077D
43	485AS11890	Y DRV BOARD AS	6871QDH117A
44	485AS11990	XL BOARD AS	6871QLH059A
45	485AS12090	XR BOARD AS	6871QRH068A
46	485AS12190	Y SUS BOARD AS	6871QYH053B
47	485AS12290	Z SUS BOARD AS	6871QZH056B
48	485AS12390	PSU BOARD AS	3501Q00201A
42X32000.ASLTB			
49	485AS12490	CTRL BOARD AS	6871QCH077D
50	485AS12590	Y DRV BOARD AS	6871QDH117A
51	485AS12690	XL BOARD AS	6871QLH067A
52	485AS12790	XR BOARD AS	6871QRH077A
53	485AS12890	Y SUS BOARD AS	EBR31493401
54	485AS12990	Z SUS BOARD AS	EBR31872801
55	485AS13090	PSU BOARD AS	3501Q00201A

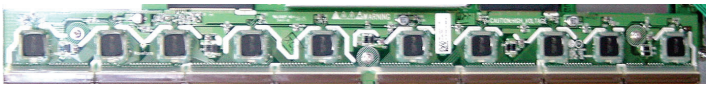
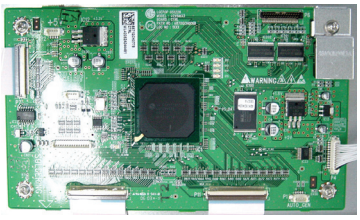
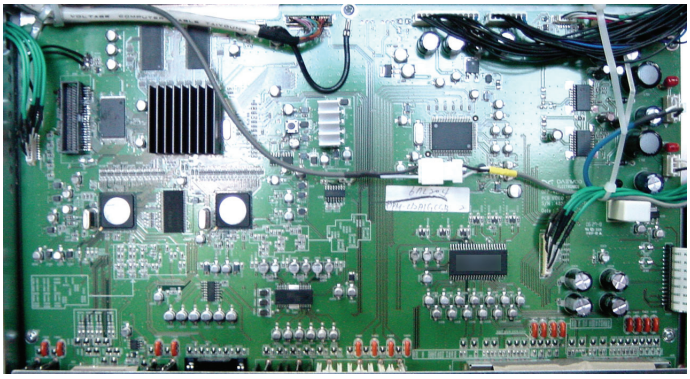
13. STRUCTURE OF PDP SET



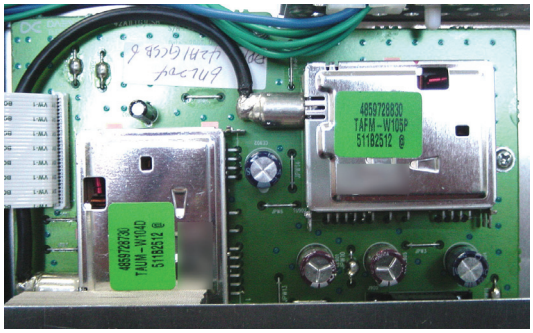
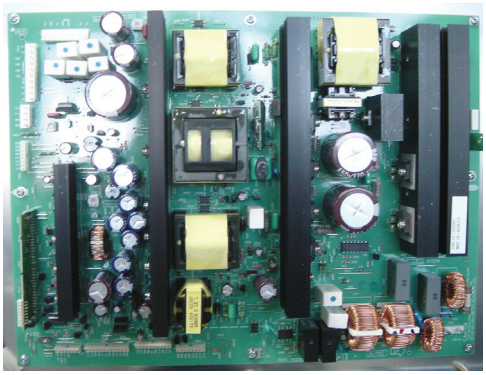
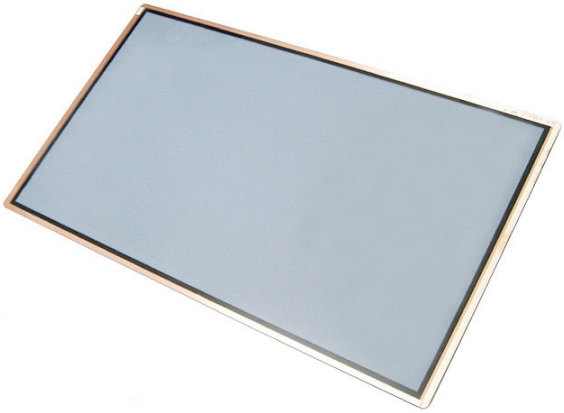
STRUCTURE OF PDP SET

COMPONENT	PICTURE	REMARK
1). PDP MODULE (With F/SUPPORT)		
1a) Y-SUS B/D		
1b) Z-SUS B/D		
1c) X LEFT B/D ASSY		

STRUCTURE OF PDP SET

COMPONENT	PICTURE	REMARK
1d) X RIGHT B/D ASSY		
1e) Y DRV B/D ASSY		
1f) CTRL B/D ASSY		
2) MAIN BOARD		

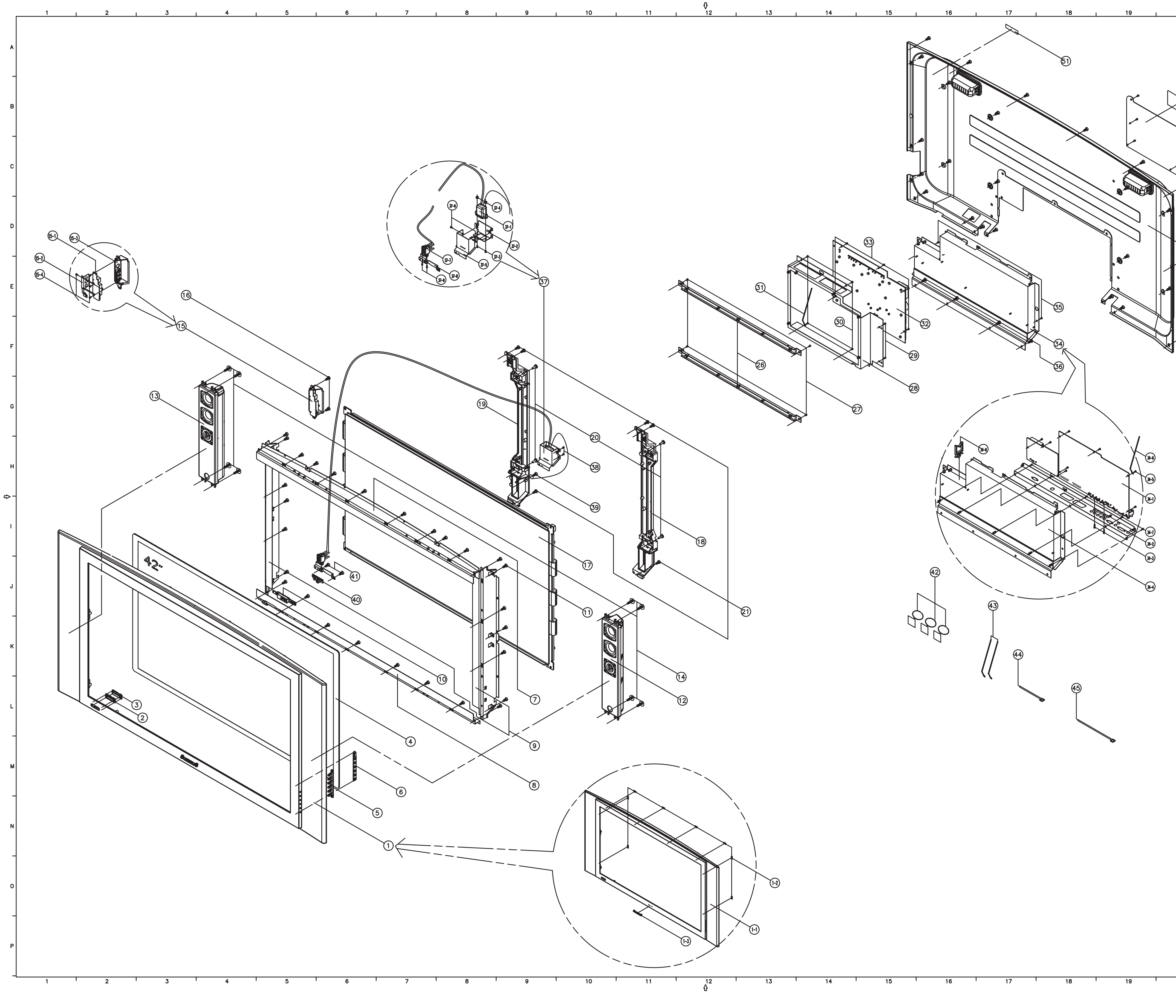
STRUCTURE OF PDP SET

COMPONENT	PICTURE	REMARK
3) SUB BOARD		
4) POWER BOARD		
5) FRONT MASK		
6) FILTER GLASS		

STRUCTURE OF PDP SET

COMPONENT	PICTURE	REMARK
7) BACK COVER		

14. EXPLODED VIEW



REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
⚠					
⚠					

NO		PART CODE	PART NAME	QTY	MATERIAL	REMARKS
57						
56						
55						
54						
53						
52						
51		4855800022	LABEL SERIAL	1	ART 90	
50		4955400100	SPEC PLATE	1	P.E FILM 91.5X63	
49		7063300612	SCREW MACHINE	8	M BIN 3X6 MFZN BK	
48		4853633300	TERMINAL COVER	1	A5052 t1.0	
47		7172401212	SCREW TAPPTITE	25	TT2 TRS 4X12 MFZN BK	
46		4851413800	BACK COVER ASSY	1	21728+26162	
45		4856813100	CABLE TIE	1	DA-140	
44		4856812001	TIE CABLE	1	NYLON66 DA100	
43		4856815900	CLAMP WIRE	2	EGI T0.4+TUBE+PIE 3.2	
42		4856818800	CLAMP WIRE	3	AKKL-3140-A-RT	
41		7172401412	SCREW TAPPTITE	2	TT2 TRS 4X14 MFZN BK	
40			PCB LED	1		
39		7053401011	SCREW MACHINE	1	M/C BIN 4X10 MFZN SW	
38		7178300811	SCREW TAPTITE	2	TT2 WAS 3X8 MFZN	
	37-9	7063300612	SCREW MACHINE	2	M/C BIN 3X6 MFZN BK	
	37-8	4853293900	BRKT POWER SW	1	EGI T1.0	
	37-7		SW POWER PUSH	1		
	37-6	7178300811	SCREW TAPTITE	2	TT2 WAS 3X8 MFZN	
	37-5	4855217100	PLATE INLET FILTER	1	A5052 T1.0	
	37-4	7392300011	NUT HEX	2	6N-2-3 MFZN	
	37-3	7061301012	SCREW MACHINE	2	M/C SEMS 3X10 MFZN BK	
	37-2	4857B01000	CASE INLET FILTER	1	A5052 T1.0	
	37-1		FILTER CONNECTOR AS	1		
37		PTFEPWG089	FILTER EMI AS	1	DPP-42A1LASB	
36		7172401212	SCREW TAPPTITE	4	TT2 TRS 4X12 MFZNBK	
35		7178300811	SCREW TAPTITE	2	TT2 WAS 3X8 MFZN	
	34-8	4956800200	CLAMP WIRE	1	WS-A-2-19	
	34-7	7008300812	SCREW MACHINE	5	WAS 3X8 MFZN BK	
	34-6	4856815900	CLAMP WIRE	1	EGI T0.4+TUBE+PIE 3.2	
	34-5	7008300811	SCREW MACHINE	8	WAS 3X8 MFZN	
	34-4	4853635200	TERMINAL PLATE	1	A5052 T1.0	
	34-3	7173301012	SCREW TAPTITE	2	TT2 BIN 3X10 MFZN BK	
	34-2	4853634400	TERMINAL PLATE CH B	1	EGI T0.8	
	34-1		PCB MAIN_SUB	1		
34			PCB MAIN_SUB AS	1		
33		7008300811	SCREW MACHINE	5	WAS M3X8MFZN	
32			MODULE POWER	1		
31		4856815900	CLAMP WIRE	1	EGI T0.4+TUBE+PIE 3.2	
30		7008300811	SCREW MACHINE	4	WAS M3X8MFZN	
29		7178300811	SCREW TAPTITE	2	TT2 WAS 3X8 MFZN	
28		4853220100	BRKT POWER MODULE	1	SECC T1.0	
27		7178300811	SCREW TAPTITE	4	TT2 WAS 3X8 MFZN	
26		4853823100	FRAME HORIZONTAL	2	SECC T1.6	
25						
24						
23						
22						
21		7003401012	SCREW MACHINE	6	BIN 4X10 MFZN BK	
20		4856017100	SCREW SPECIAL	4	WAS M5X14	
19		4851C02900	FRAME SUPPORT R AS	1	38233+38234	
18		4851C02800	FRAME SUPPORT L AS	1	38232+38234	
17		4850M10410	MODULE PDP	1	PDP42V7	
16		7172401212	SCREW TAPPTITE	2	TT2 TRS 4X12 MFZNBK	
	15-4	7178300811	SCREW TAPPTITE	4	TT2 WAS 3X8 MFZN	
	15-3	4852331100	PANEL AV	1	HIPS BK	
	15-2	4857255600	SHIELD JACK	1	SPTH T0.3	
	15-1		PCB AV3	1		
15			PCB AV3 AS	1		
14		4856013600	SCREW SPKR FIX	8	SWRM+SECC	
13		48A8311100	SPEAKER SYSTEM	1	SS-063A01(L)	
12		48A8311000	SPEAKER SYSTEM	1	SS-063A01(R)	
11		7172401212	SCREW TAPPTITE	27	TT2 TRS 4X12 MFZNBK	
10		4853293700	BRKT DR	1	ALDCS 8	
9		4851C04100	FRAME SIDE L/R AS	2	38262	
8		4851C04700	FRAME SIDE B AS	1	[illegible]	
7		4851C04800	FRAME SIDE T AS	1	38261+774452+A10457+A10467+A10477+A10487	
6			PCB KEY	1		
5		4854962100	BUTTON CH	1	ABS GY	
4		485A100380	GLASS FILTER (PDP)	1	PDF-69J06H (921X518.4)	
3		4855553900	DECO SENSOR	1	PC	
2		4853537210	HOLDER SENSOR	1	FR ABS GY	
	1-3	4855618400	BRAND MARK	1	COPPER ABS	
	1-2	4857942300	RUBBER FILTER	8	CR60 18X8XT3.0 BK	
	1-1	4852090701	MASK FRONT	1	ABS GY	
1		PTFMSJG089	MASK FRONT AS	1	DPP-42A1LASB	

UNITS	mm	Designed by	Checked by	Inspected by	Approved by	ASSY NAME
SCALE	0.250	G.B.LEE 05.11.02	HONG.K.P			DEVELOPMENT DWG (1/1)

DAEWOO ELECTRONICS Corp. Mechanical Design Team, DISPLAY R & D

MODEL	DPP-42A1LASB	D/N	485009S4
CHASSIS			

A0(1189mm X 841mm)

DAEWOO ELECTRONICS CORP.
686, AHYEON-DONG, MAPO-GU,
SEOUL, KOREA.
C.P.O. BOX 8003 SEOUL KOREA
PRINTED DATE : Dec. 2006

PDP MODULE
SERVICE MANUAL

MODEL : PDP42X3####

English

CAUTION

1. BEFORE SERVICING THE PDP MODULE,
   READ THE SAFETY PRECAUTIONS IN THIS MANUAL.
2. WHEN REPLACEMENT PARTS ARE REQUIRED, BE SURE TO USE
   REPLACEMENT PARTS SPECIFIED BY THE MANUFACTURER.

[PDP42X3#### Module]

CONTENTS

Ⅰ. Safety Precautions

When servicing of PDP Module, it should be not enforced into another way aside next rule, or a unaccustomed person should not repairing.
When using/handling this PDP Module, pay attention to the below warning and cautions.

⚠ Warning
Indicates a hazard that may lead to death or injury if the warning is ignored and the product is handled incorrectly.

⚠ Caution
Indicates a hazard that can lead to injury or damage to property if the caution is ignored and the product is handled incorrectly.

1. WARNING
(1) Do not touch Signal and Power Connector while this product operates.
Do not touch EMI ground part and Heat Sink of Film Filter.

(2) Do not supply a voltage higher than that specified to this product. This may damage the product and may cause a fire.

(3) Do not use this product in locations where the humidity is extremely high, where it may be splashed with water, or where flammable materials surround it.
Do not install or use the product in a location that does no satisfy the specified environmental conditions. This may damage the product and may cause a fire.

(4) If a foreign substance (such as water, metal, or liquid) gets inside the product, immediately turn off the power.
Continuing to use the product, it is may cause fire or electric shock.

(5) If the product emits smoke, and abnormal smell, or makes an abnormal sound, immediately turn off the power.
Continuing to use the product, it may cause fire or electric shock.

(6) Do not disconnect or connect the connector while power to the product is on. It takes some time for the voltage to drop to a sufficiently low level after the power has been turned off.
Confirm that the voltage has dropped to a safe level before disconnecting or connecting the connector.

(7) Do not pull out or insert the power cable from/to an outlet with wet hands. It may cause electric shock.

(8) Do not damage or modify the power cable. It may cause fire or electric shock.

(9) If the power cable is damaged, or if the connector is loose, do not use the product : otherwise, this can lead to fire or electric shock.

(10) If the power connector or the connector of the power cable becomes dirty or dusty, wipe it with a dry cloth. Otherwise, this can lead to fire.

(11) PDP Module uses a high voltage (Max.450V dc). Keep the cautions concerning electric shock and do not touch the Device circuitry when handling the PDP Unit. And because the capacitor of the Device circuitry may remain charged at the moment of Power OFF, standing by for 1 minute is required in order to touch the Device circuitry.

2. CAUTIONS
(1) Do not place this product in a location that is subject to heavy vibration, or on an unstable surface such as an inclined surface. The product may fall off or fall over, causing injuries.

(2) Before disconnecting cable from the product, be sure to turn off the power. Be sure to hold the connector when disconnecting cables. Pulling a cable with excessive force may cause the core of the cable to be exposed or break the cable, and this can lead to fire or electric shock.

(3) This product should be moved by two or more persons. If one person attempts to carry this product alone, he/she may be injured.

(4) This product contains glass. The glass may break, causing injuries, if shock, vibration, heat, or distortion is applied to the product.

(5) The temperature of the glass of the display may rise to 80°C or more depending on the conditions of use.
If you touch the glass inadvertently, you may be burned.

(6) If glass surface of the display breaks or is scratched, do not touch the broken pieces or the scratches with bare hands. You may be injured.

(7) PDP Module requires to be handled with care not to be touched with metal or hard materials, and must not be stressed by heat or mechanical impact.

(8) There are some exposed components on the rear panel of this product. Touching these components may cause an electric shock.

(9) When moving the product, be sure to turn off the power and disconnect all the cables. While moving the product, watch your step. The product may be dropped or all, leading to injuries of electric shock.

English

(10) In order to protect static electricity due to C-MOS circuitry of the Drive part, wear a wrist band to protect static electricity when handling.

(11) If cleaning the Panel, wipe it with a soft cloth moistened with water or a neutral detergent and squeezed, being careful not to touch the connector part of the Panel. And don't use chemical materials like thinner or benzene.

(12) If this product is used as a display board to display a static image, "image sticking" occurs. This means that the luminance of areas of the display that remain lit for a long time drops compared with luminance of areas that are lit for a shorter time, causing uneven luminance across the display.
The degree to which this occurs is in proportion to the luminance at which the display is used. To prevent this phenomenon, therefore, avoid static images as much as possible and design your system so that it is used at a low luminance, by reducing signal level difference between bright area and less bright area through signal processing.

(13) Because PDP Module emits heat from the Glass Panel part and the Drive circuitry, the environmental temperature must not be over 40°C.
The temperature of the Glass Panel part is especially high owing to heat from internal Drive circuitry. And because the PDP Module is driven by high voltage, it must avoid conductive materials.

(14) If inserting components or circuit board in order to repair, be sure to fix a lead line to the connector before soldering.

(15) If inserting high-power resistor(metal-oxide film resistor or metal film resistor) in order to repair, insert it as 10mm away as from a board.

(16) During repairs, high voltage or high temperature components must be put away from a lead line.

(17) This is a Cold Chassis but you had better use a cold transformer for safety during repairs. If repairing electricity source part, you must use the cold transformer.

(18) Do not place an object on the glass surface of the display. The glass may break or be scratched.

(19) This product may be damaged if it is subject to excessive stresses (such as excessive voltage, current, or temperature). The absolute maximum ratings specify the limits of these stresses.

(20) The recommended operating conditions are conditions in which the normal operation of this product is guaranteed. All the rated values of the electrical specifications are guaranteed within these conditions.
Always use the product within the range of the recommended operating conditions. Otherwise, the reliability of the product may be degraded.

(21) This product has a glass display surface. Design your system so that excessive shock and load are not applied to the glass. Exercise care that the vent at the corner of the glass panel is not damaged.
If the glass panel or vent is damaged, the product is inoperable.

(22) Do not cover or wrap the product with a cloth or other covering while power is supplied to the product.

(23) Before turning on power to the product, check the wiring of the product and confirm that the supply voltage is within the rated voltage range. If the wiring is wrong or if a voltage outside the rated range is applied, the product may malfunction or be damaged.

(24) Do not store this product in a location where temperature and humidity are high. This may cause the product to malfunction. Because this product uses a discharge phenomenon, it may take time to light (operation may be delayed) when the product is used after it has been stored for a long time. In this case, it is recommended to light all cells for about 2 hours (aging).

(25) This product is made from various materials such as glass, metal, and plastic. When discarding it, be sure to contact a professional waste disposal operator.

(26) If faults occur due to arbitrary modification or disassembly, LG Electronics is not responsible for function, quality or other items.

(27) Use of the product with a combination of parameters, conditions, or logic not specified in the specifications of this product is not guaranteed. If intending to use the product in such a way, be sure to consult LGE in advance.

(28) Within the warranty period, general faults that occur due to defects in components such as ICs will be rectified by LGE without charge. However, IMAGE STICKING due to misapplying the above (12) provision is not included in the warranty. Repairs due to the other faults may be charged for depending on responsibility for the faults.

(29) In assembling Module into SET, in case Film Filter and as a protective film is bared, static electricity of exfoliated protective film which is bared from beginning X-Board down ward getting TCP to no getting TCP should not influence on TCP. Also Filter after protective film is bared or in the storage can be charged with electricity, so the EMI ground part of Film Filter should be used after Grounding.

3. Warning label for PDP Module

1) PCB Warning label

(1)Warning

Warning against any dangers under certain circumstance.

(2)Hot surface

Warning against any possibilities of injury or burn due to high temperature under certain circumstance.

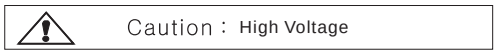
(3)Dangerous voltage

Warning against the possibility of electric shock under certain circumstance.

(4)Electrostatic sensitive devices

Warning against any possibilities of electric shock/high temperature by touching under certain circumstance

(5)Caution sentence



Warning against high voltage under certain position.

(6) Fuse Caution sentence

The fuse should be replaced with the same type and rating to prevent fire under certain circumstance

2) Safety precautions on Module

(1)High Voltage

Warning against the danger of electric shock when touching due to dangerous high voltage.

(2)Hot Surface

Warning against the danger of burn when touching due to high temperature parts.

(3)Wound

Caution against the danger of mechanical injuries.

English

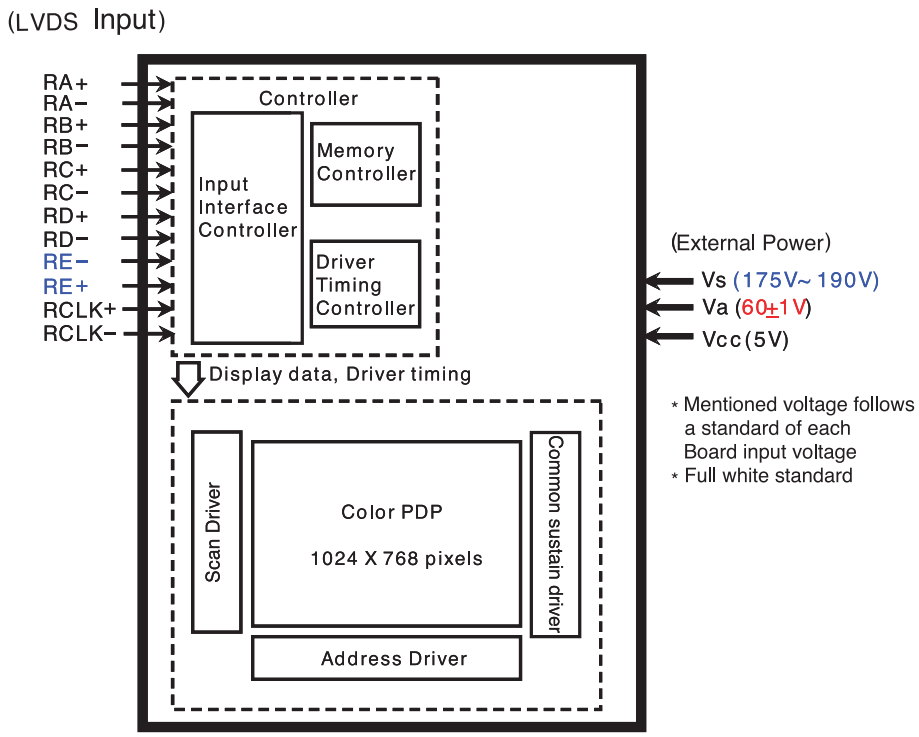
Ⅱ. Technical Feature

PDP Module is a display device to be divided into a Panel part and a Drive part. The Panel part consists of Electrodes, Phosphor, various dielectrics and gas, and the Drive part includes electronic circuitry and PCB.
PDP42X3#### model produced in the LG electronics is 42inches color Plasma display module of Wide XGA(1024(H) x 768(V)), and it is a display device giving concrete to bright image by using AC Plasma technology of LG electronics.

1) General Specification

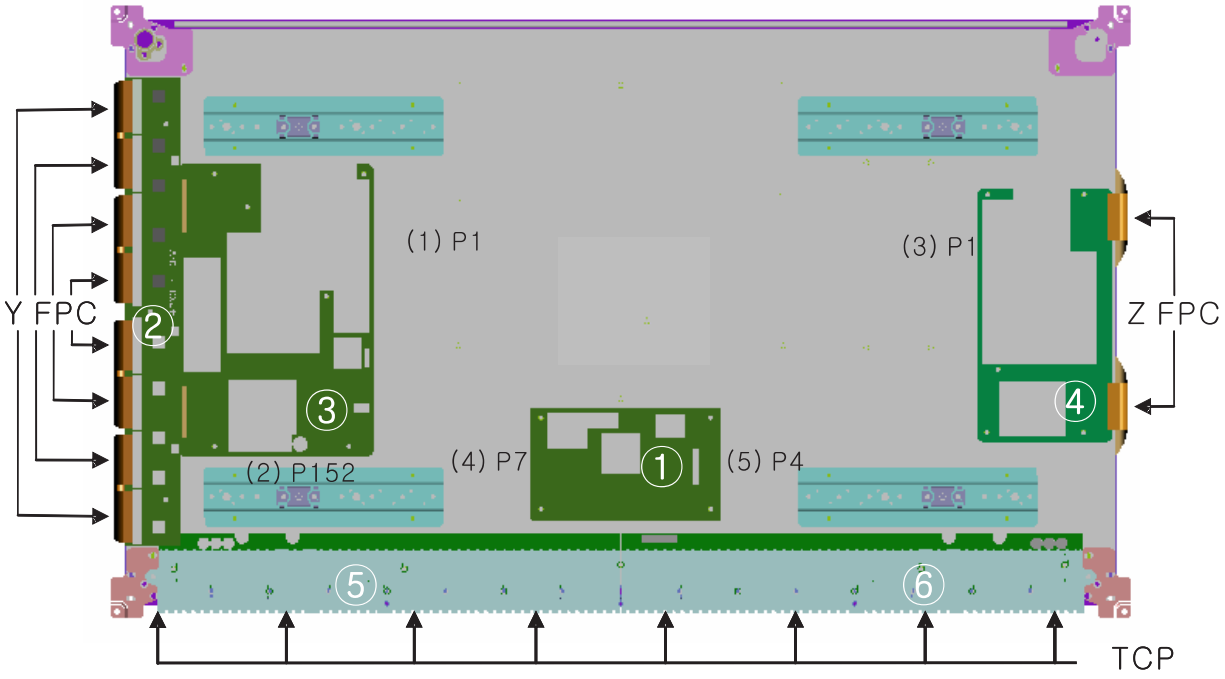
(1) Model Name	:	PDP42X3####
(2) Number of Pixel	:	1024(H) × 768(V) (1pixel=3 RGB cells)
(3) Pixel Pitch	:	900㎛(H) × 676㎛(V)
(4) Cell Pitch	:	300㎛(H) × 676㎛(V) (Base : Green Cell)
(5) Display area	:	921.6(H) × 519.2(V) ±0.5(mm)
(6) Outline dimension	:	1005(H) × 597(V)x 61.2(D) ±1(mm)
(7) Color arrangement	:	RGB Closed(Well) type
(8) Number of COLRO	:	(R)1024 × (G)1024 × (B)1024(10,737,400,000)
(9) Weight	:	15.3 ±0.5(Kg) : Net
	:	113.5 ±5(Kg) : 5EA/1BOX
(10) Aspect Ratio	:	16:9
(11) Peak Brightness	:	Typical 1200cd/㎡(1% White Window)
	:	Typical 140:1(Light room 100 Lx at center)
(12) Contrast Ratio	:	Typical 10,000:1(Dark room 1% White Window) (White Window Pattern at Center)
(13) POWER CONSUMPTION	:	Max 330 W(Full White)
(14) Lifetime	:	Over 60,000 Hrs (Initial brightness 1/2)

2) Block Diagram



Ⅲ. Formation and Specification of Module

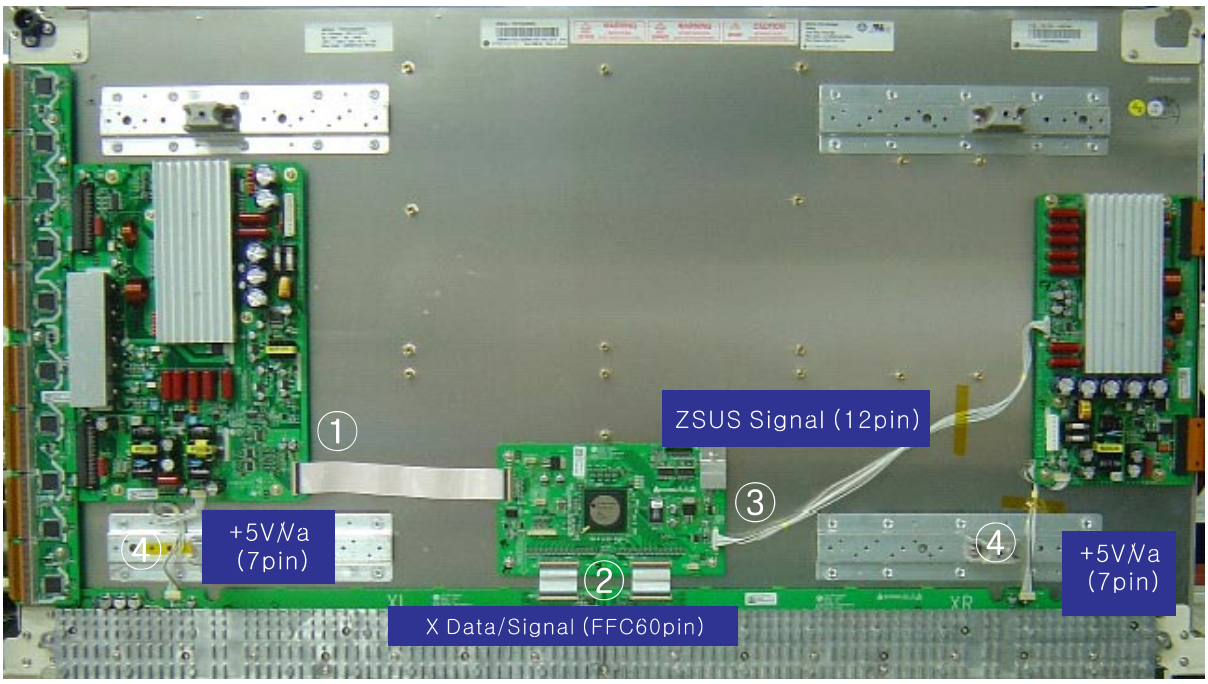
1. Formation of Module



No	Connector	Input Voltage & Signal
(1)	P1 [Y SUS B/D]	5V, Va, Vs
(2)	P152 [Y SUS B/D]	5V, Va
(3)	P1 [Z SUS B/D]	5V, Va, Vs
(4)	P7 [CTRL B/D]	5V
(5)	P4 [CTRL B/D]	Video Signal

No	Part No		Description
①	6871QCH077A	PWB(PCB) ASS'Y	CTRL B/D ASS'Y
②	6871QDH117A	PWB(PCB) ASS'Y	Y DRV B/D ASS'Y
③	6871QYH053A	PWB(PCB) ASS'Y	Y SUS B/D ASS'Y
④	6871QZH056A	PWB(PCB) ASS'Y	Z SUS B/D ASS'Y
⑤	6871QLH059A	PWB(PCB) ASS'Y	XL B/D ASS'Y
⑥	6871QRH068A	PWB(PCB) ASS'Y	XR B/D ASS'Y

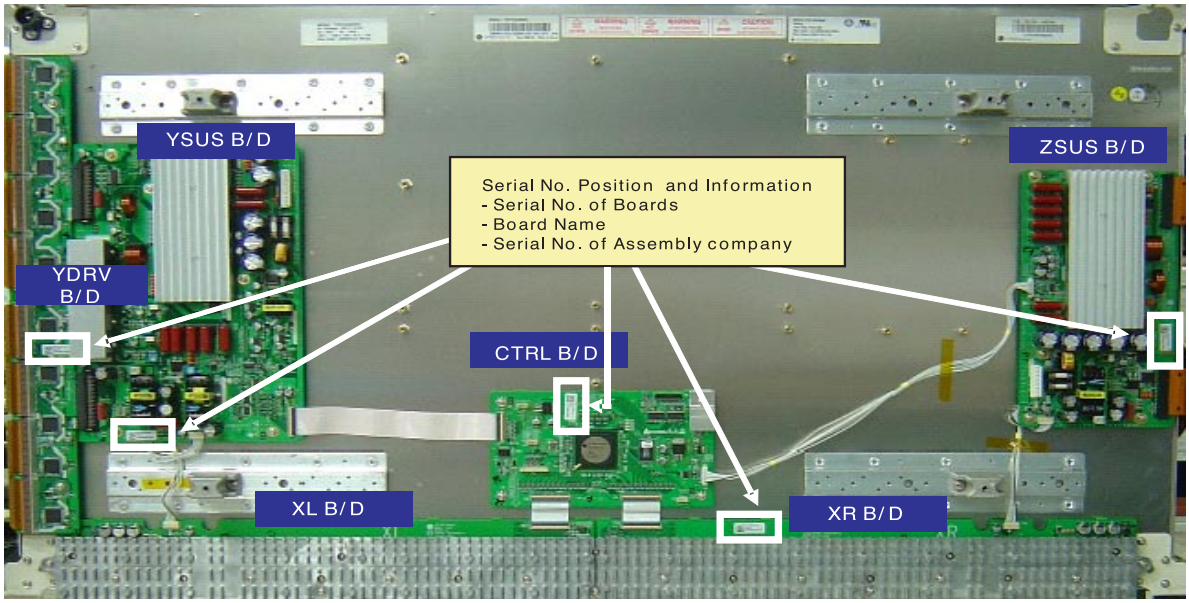
English



No	Part No.	EA	SPECIPICATION	Note
①	6850QV0006A	1EA	Y B/D<-->CTRL B/D P=0.5MM 50PIN L180MM AU PLATING	
②	6850QX0014P	1EA	X B/D <-->CTRL B/D P=0.5MM 60PIN L60MM AU	
③	6631Q12005N	1EA	1.25MM PITCH 12PIN L360MM UL1061-28AWG YEON-HO	
④	6631Q15003F	2EA	1.5MM PITCH 7PIN L150MM UL1061-26AWG YEON-HO	

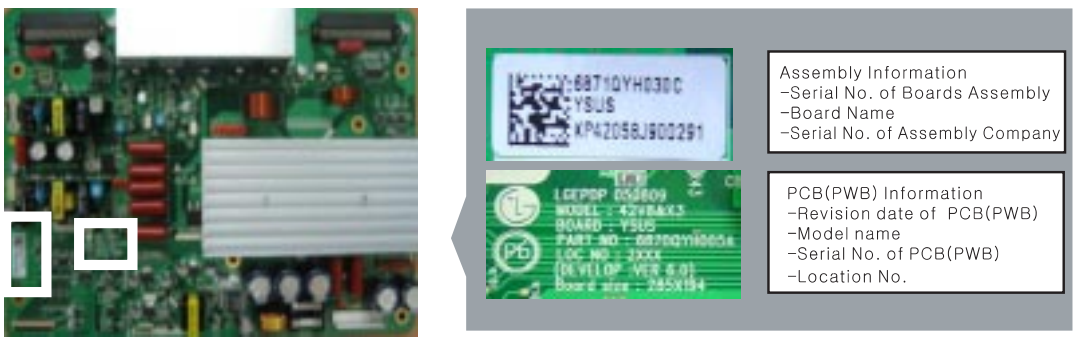
2. Information of Boards

1) 42X3 PDP Module



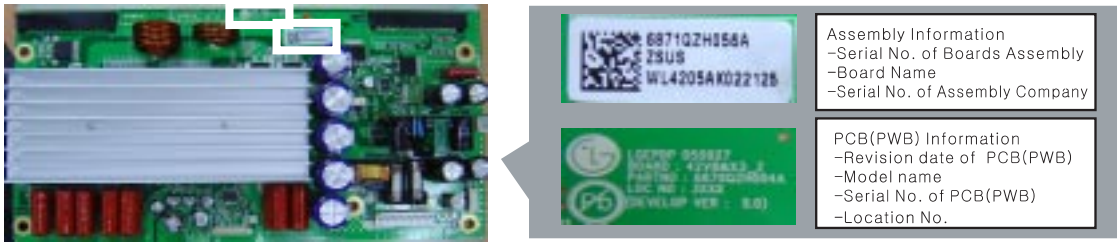
2) CTRL B/D

3) Y SUS B/D

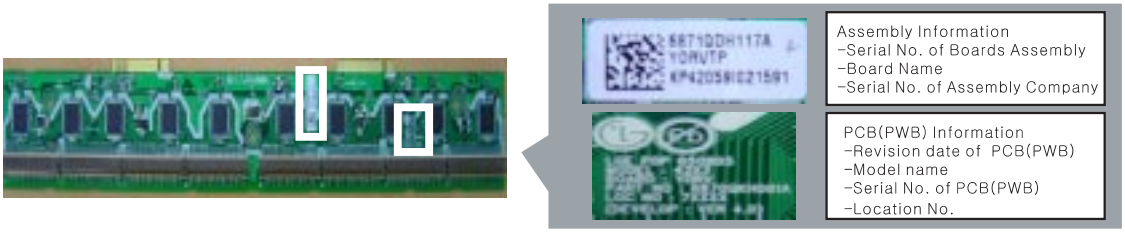


English

4) Z SUS B/D



5) Y DRV B/D

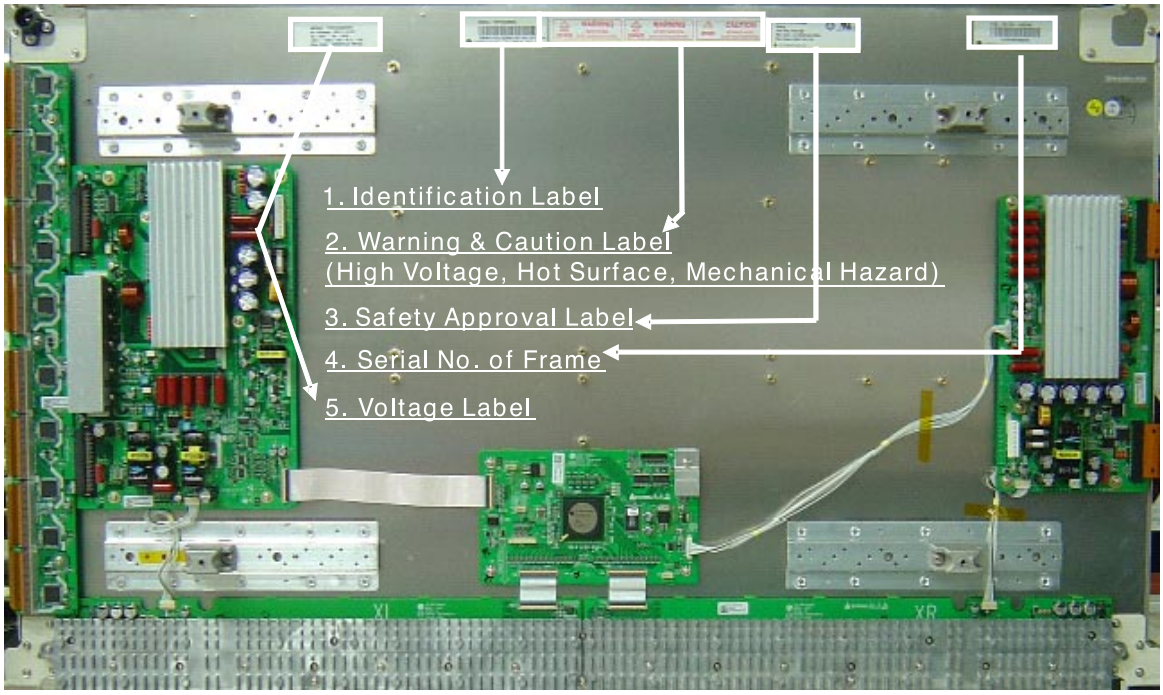


6) XL, XR B/D

XL

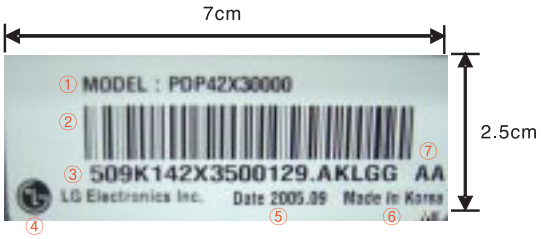
XR

3. Label Information of Module



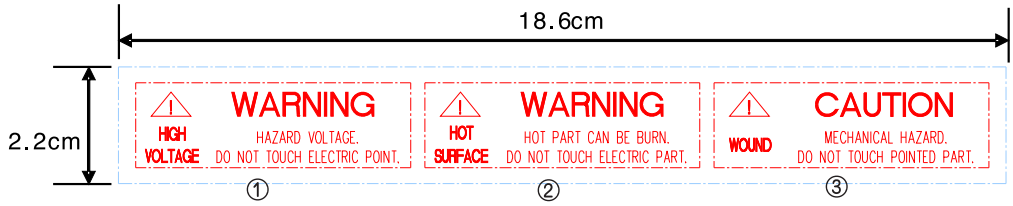
English

1) Identification Label



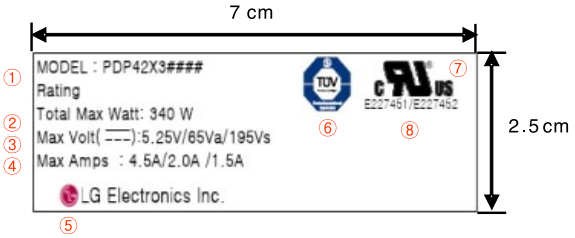
① Model Name
② Bar Code (Code 128, Contains the manufacture No.)
③ Manufacture No.
④ The trade name of LG Electronics
⑤ Manufactured date (Year & Month)
⑥ The place Origin
⑦ Model Suffix

2) Warning & Caution Label (High Voltage, Hot Surface, Mechanical Hazard)



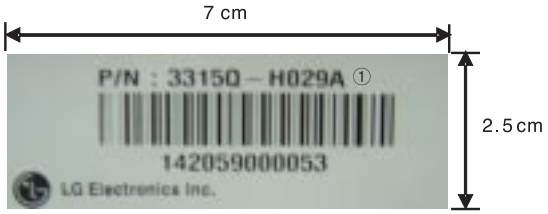
① Warning (High Voltage, Hazard Voltage)
② Warning (Hot Surface, Hot part can be burn)
③ Caution (Wound, Mechanical Hazard)

3) Safety Approval Label



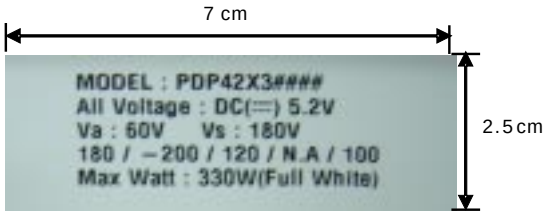
① Model Name
② Max. Watt (Full White)
③ Max. Volts
④ Max. Amps
⑤ The Trade Name of LG Electronics
⑥ TUV Approval Mark
⑦ UL Approval Mark
⑧ UL Approval No.

4) Serial No. of Frame



① Serial No. of Frame Ass'y

5) Voltage Label (Model Name & Operational Voltage)



Ⅳ. Adjustment

1. Application Object

This standard is applied to the PDP42X3#### PDP Module which is manufactured of PDP promotion department or elsewhere.

2. Notes

(1) Without any special specification, the Module should be at the condition of preliminaries more than 10minutes before adjusting.
- ① Service signal : 100% Full White signal
- ② Service DC voltage : Vcc : 5V, Va : 60V, Vs : 180V
- ③ DC/DC Pack voltage : Vsc : 120V, Vzb : 100V, -Vy : -200V
- ④ Preliminaries environment : Temp (25±5°C), Relative humidity (65±10%)

(2) Aging shall be performed of module in order for characteristics stabilization after completion of assembling adjustment. Conditions of aging are as follows.
- ① Service signal : 100% Full White, Red, Green, Blue pattern signal(Service time of each pattern : within 5minutes/cycle)
- ② Service DC voltage : Match the voltage with the set up voltage in the first adjustment.
- ③ Aging time : More than 4Hrs
- ④ Aging environment : Temp (25±2°C), Relative humidity- Less than 75%

(3) Module adjustment should be followed by below sequence.
- ① Initial voltage setting.(Vs : 180V, Va : 60V, Vcc : 5V)
- ② Vscan Voltage adjustment (120V)
- ③ -Vy Voltage adjustment (200V)
- ④ Y set_up Waveform adjustment.
- ⑤ Y set_down Waveform adjustment.
- ⑥ Vzb Voltage adjustment (100V)

But the above item may be altered by consideration of mass productivity.
(There shall be consultation and agreement of Research Office / Development Office / QA / Production Department in case when altering sequence order.)

(4) Without any special specification, you should adjust the Module in the environment of Temp (25±5°C) and Relative humidity (65±10%)

Caution) If you let the still image more than 10 minutes(especially The Digital pattern or Cross Hatch Pattern which has clear gradation), after image can be presented in the black level part of screen.

3. Adjustment after Assembling

3-1. Using Tools

Conditions of aging are as follows.
(1) Digital oscilloscope : More than 200MHz
(2) DVM(Digital Multimeter) : Fluke 187 or similar one
(3) Signal generator : VG-828 or similar one
(4) DC power supply
- DC power supply for Vs (1) : Should be changeable between 0V to 200V/ more than 10A
- DC power supply for Va (1) : Should be changeable between 0V to 100V/ more than 5A
- DC power supply for 5V (1) : Should be changeable between 0V to 10V/ more than 10A
- DC-DC Convertor Jig(1) : Vs, Va, 5V Jig with corresponding output to each voltage Pin arrangement of PDP42X3#### Module after the input of voltage.
- Voltage stability of power supply : Within ±1% for Vs/Va, within ±3% for 5V

3-2. Connection diagram of measuring instrument and setting up the initial voltage

(1) The Connection diagram
Refer to (Fig.1) Connection diagram of measuring instrument.
(2) Setting up the initial voltage : Refer to Voltage Label
Vcc : 5V, Va : 60V, Vs : 180V
But, Initially setting up voltage can be changed by the set up range according to the Module's characteristic.

3-3. How to Adjust

1. Connect the measuring instrument to be (Fig.1).

2. How to adjust Y SUS(Adjustment should be done after setting Vs/Va to the set voltage)

(1) -Vy Voltage adjustment
- ① Measure and adjust the voltage between -Vy TP on top of the DD_pack on theY SUS B/D .
- ② Turn the variable resistor of -Vy DD_pack(PS101) on Y SUS B/D to set to (-200 ±0.5V).

(2) Vscan Voltage adjustment
- ① Measure and adjust the voltage between Vsc TP on right of the P4 on the Y SUS B/D .
- ② Turn the variable resistor of Vscan DD_pack(PS102) on Y SUS B/D to set to (120 ±0.5V).

(3) Connect the oscilloscope probe Waveform point on Y DRV B/D and the GND.

English

(4) Y set-up voltage waveform adjustment.

①Turn the VR3 on Y SUS B/D so that Vsp voltage A of (Fig. 2) be 150 ±1V.

(5) Y set-down voltage waveform adjustment.

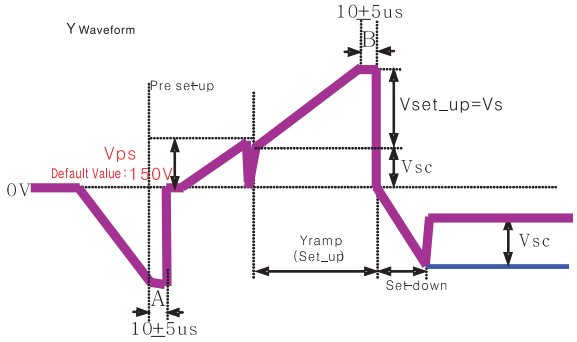
①Turn the VR2(Set _dn_Vy)on Y SUS B/D so that waveform A of (Fig. 2) be 10 ±5㎲.

3. How to adjust Z SUS (Adjustment should be done after setting Vs/Va to the set voltage)

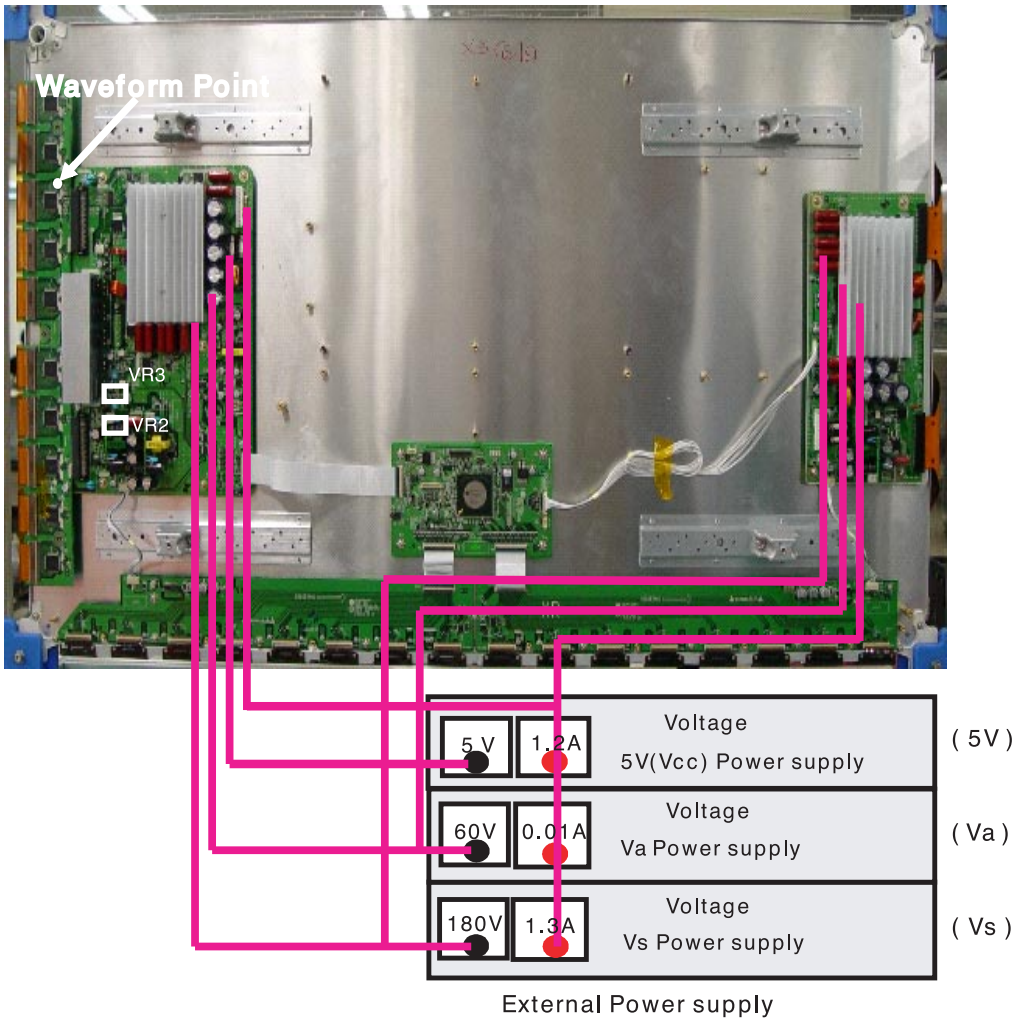
(1) Vzb(Z bias) voltage adjustment.

①For the Vzb voltage, measure and adjust the voltage between the frame GND and Vzbias point(Q18 Drain) in left side on Z SUS B/D.

②Turn the variable resistor of Vzb DD_Pack(PS101) on Z SUS B/D to set to 100 ±0.5V.



(Fig. 2) Y set-up Waveform



<Caution>

(1) The power of the signal generator should be turned on before turning on the power of DC power supply.
(2) The voltage of DC power supply, in standard of Module input voltage, should be preset as below. (Vs dc : 180V, Va dc : 60V, 5V dc :5V)
(3) The power of power supply must turned ON/OFF by this sequence.
* Module on : 5V → Va → Vs, * Module off : Vs → Va → 5V
(4) Signal generator should be selected with 1024 x 768 mode.

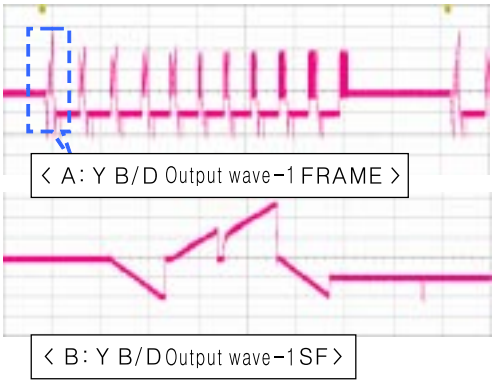
(Fig. 1) Connection diagram of measuring instrument

Ⅴ. Trouble Shooting

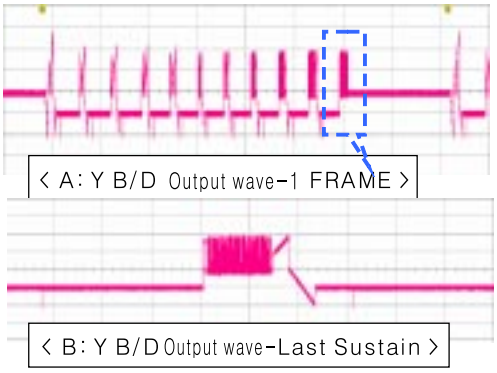
1. Checking for No Picture

A screen doesn't display at all and condition of black pattern or power off.

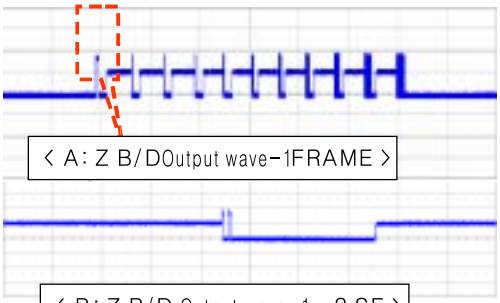
(1) Check whether the CTRL B/D LED(D12, D13, D14) is turned on or not.
(2) Check the power and signal cable of CTRL B/D.
(3) X B/D, Y B/D, Z B/D is well plugged in.
(4) Check the connection of X B/D, Y B/D and Z B/D to CTRL B/D.
(5) Measure the output wave of X, Y, Z B/D with oscilloscope(more than 200MHz) and find the trouble of B/D by comparing the output wave with below figure.
- Measure Point fo Y B/D : TP(Waveform on Y DRV B/D)
- Measure Point fo Z B/D : TP(Bead B28)
(6) Check the SCAN(Y side) IC
(7) Check the DATA(X side) TCP IC
(8) Replace the CTRL B/D.



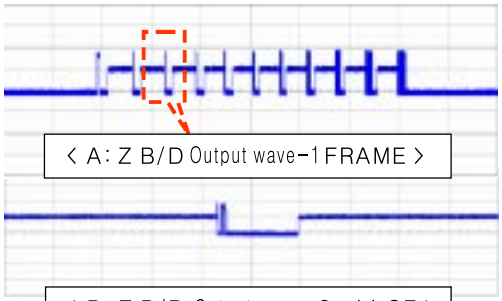
< B : Y B/D Output wave-1 SF >



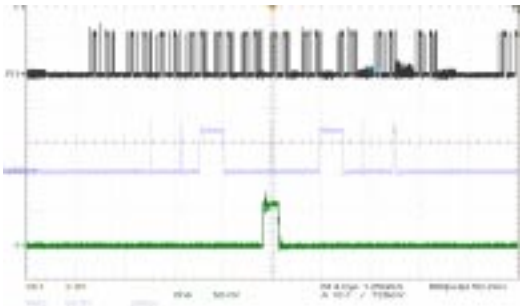
< B : Y B/D Output wave-Last Sustain >



< B : Z B/D Output wave-1 ~ 2 SF >



< B : Z B/D Output wave-3 ~ 11 SF >



< X B/D Output wave-1 FRAME >

< X B/D Output wave-1 SF >

< X B/D Output wave-Extension >

2. Hitch Diagnosis Following Display Condition

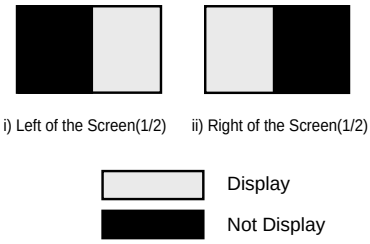
2-1. 1/2 of the screen doesn't be shown

(1) Check the power connector of X B/D, corresponding to the screen failure part.
(2) Check the connector between CTRL B/D and X B/D, corresponding to the screen failure part.
(3) Replace the corresponding X B/D. For X B/D replacement, check the TCP is correctly connected .

※ Relationship between screen and X B/D

Screen	X B/D
Left of the Screen 1/2	↔ Right X B/D
Right of the Screen 1/2	↔ Left X B/D

※ Screen Display Form



2-2. 1/4 of the screen doesn't be shown

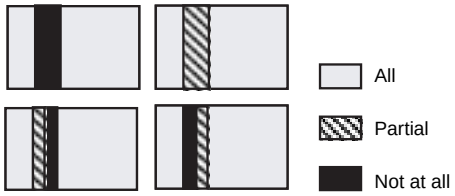
Identical to 2-1

2-3. Screen doesn't be shown as Data TCP(Include not be shown part of Data TCP quantity or a part)

(1) If there is no change after replacement of cable between CTRL B/D and X B/D, replace CTRL B/D.
(2) Check Data TCP failures, corresponding part to screen failure, and if no defects, connect the corresponding TCP again.
(3) If the corresponding Data TCP fails, Module should be replaced.

※ Screen display form

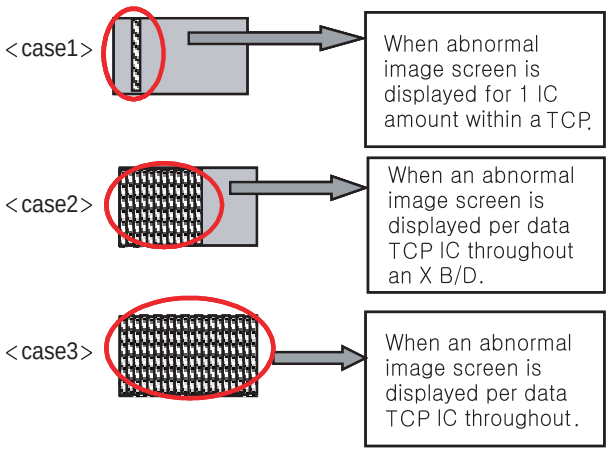
(Anything of the 16 Data TCP can be shown beside below pictures)



2-4. It is generated Unusual Pattern of Data TCP IC unit

(1) If it happens as line shape or dot shape, screw the X B/D again, and if no change, replace the X B/D.
(2) In case of <case 1>
- Check the connection of Data TCP connector
- Replace the corresponding X B/D or CTRL B/D.
(3) In case of <case 2>, <case 3>
- Check connector connecting the CTRL B/D to relevant X B/D.
- Replace the relevant X B/D or CTRL B/D.

※ Screen Display Form



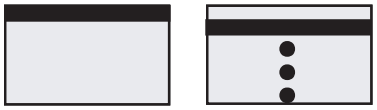
※ After separating TCP HEAT SINK, replace Silicon tape when the TCP IC marks in Silicon tape of H/S feel hard.(silicon tape, 7250SC0010A, TP-2460 DOW CORNING 8.0MM T0.75 NON GRAY (L 218.4) THERMAL PAD FOR 42X3 H/S)

English

2-5. Screen doesn't be shown at all as Scan FPC.

(1) It's may be a problem between Scan FPC and Y DRV B/D.
(2) Check the connection of Y DRV B/D and Scan FPC.
(3) If the Scan IC is failed, replace the Y DRV B/D.

※ Screen Display Form

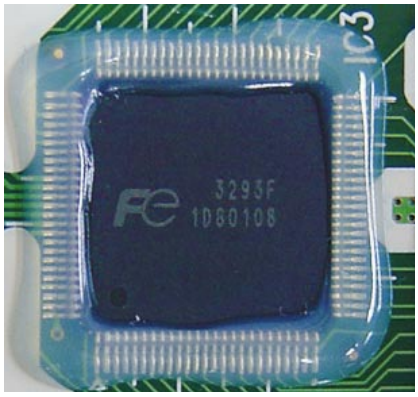


one ten of screen

The screen display is very good

The screen display is poor

※ Check a method of SCAN IC

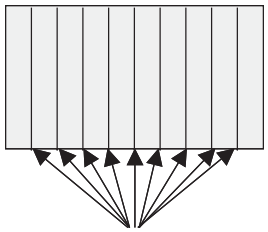


Change the Vpp Pin into ANODE and GND Pin into CATHOD and then test the Diode with forward or reverse direction.

2-6. Regular stripe is generated at regular internal on the whole screen. (A vertical stripe flash at especial color)

(1) This is a problem about CTRL B/D.
(2) Replace the CTRL B/D.

※ Screen Display Form



The screen has a vertical line with regular gap

2-7. Data copy is generated to stripe direction.

(1) In this case, it's due to incorrect marking of scan wave.
(2) Replace the Y DRV B/D or Y B/D.

※ Screen Display Form

<Display Pattern>

<Case 1 : Entire Copy>

<Case 2 : Top Copy>

<Case 3 : Bottom Copy>

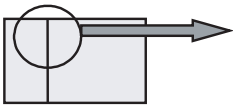
<Case 2 : Entire Copy>

2-8. The screen has one several vertical line.

(1) In this case, It isn't a problem about CTRL B/D or X B/D.
(2) It may cause followings.
- It's out of order a panel
- Open or short of DATA TCP attached panel
- It's out of order a DATA TCP IC attached panel

(3) Replace Module.

※ Screen Display Form



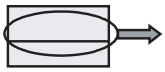
It may show several vertical lines in a quarter or other division part of screen including left case.

2-9. The screen has one or several horizontal line.

(1) In this case, it isn't a problem about CTRL B/D or Y B/D.
(2) It may cause followings.
- It's out of order a panel
- Open or short of SCAN FPC attached panel
- It's out of order a SCAN IC attached panel

(3) Replace Module.

※ Screen Display Form



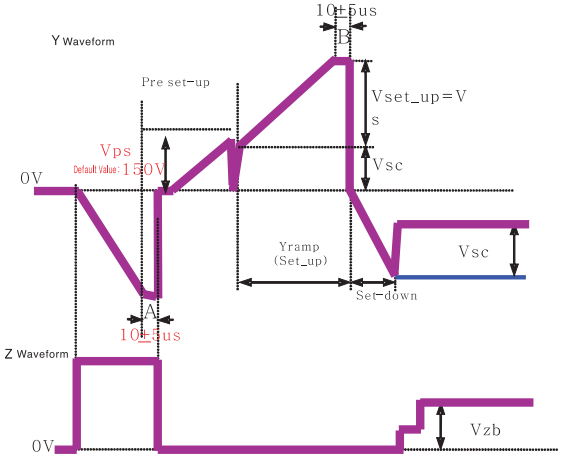
It may show several horizontal lines including left case.

2-10. Lightness of screen is wholly darken though there is input-signal-pattern

(1) In this case, Z B/D operation isn't complete.
(2) Check the power cord of Z B/D.
(3) Check the connector of Z B/D and CTRL B/D.
(4) Replace the CTRL B/D or Z B/D.

2-11. The screen displays other color partially on full white screen or happens Mis-discharge partially on full black screen.

(1) Check the declination of Y B/D set up, set down wave.
(2) Measure each output wave with oscilloscope(more than 200MHz) and compare the data with below figure data. The slope of set_up in B/D is VR3, The slope of set_down is VR2, The voltage of -Vy and Vscan is respectively PS101 and PS 102. for these, Vzd of Z B/D adjust as indicated in Label by making Z B/D of Waveform variable.
- Measuring Point of Y B/D : Waveform on Y DRV B/D
- Measuring Point of Z B/D : B28



※ The set value of above A and B can be adjusted with in the variable range considering the mass production capability because it is a Typ. Value.

2-12. It doesn't display a specified brightness at specified color

(1) Check the connector of CTRL B/D input signal.
(2) Replace the CTRL B/D.

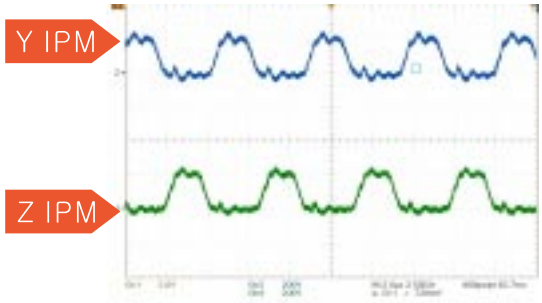
English

3. Checking for Component Damage

3-1. Y IPM(IC18) or Z IPM(IC2) Damage

(1) When the internal Sustain FET or ER FET of Y B/D IPM(IC18) or Z B/D IPM(IC2) is damaged, screen doesn't be shown or Mis - discharge of partial screen is generated.

- Test Point : Enlarge after measuring
  GND ~ Waveform(Y DRV B/D),
  GND ~ B28(Z B/D).
- Wave format : Y DRV B/D in Waveform or B28(Z B/D) has no output wave.

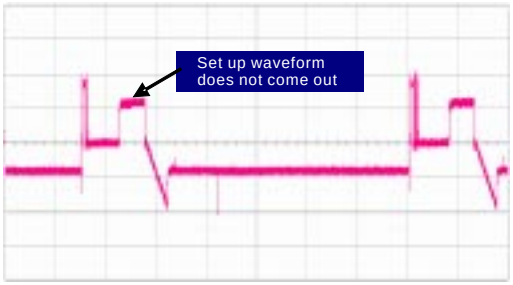


<Fig. 1 IPM Normal Output Wave>

3-2. FET Ass'y(Y B/D : HS2) Damage

(1) When Set_Up FET(2nd FFT of HS2) is damaged, screen doesn't be shown.

- Test Point : Enlarge after measuring
  GND ~ Waveform(Y DRV B/D)
- Wave format : As shown fig. 2



<Fig. 2 When the Set_Up FET is damaged>

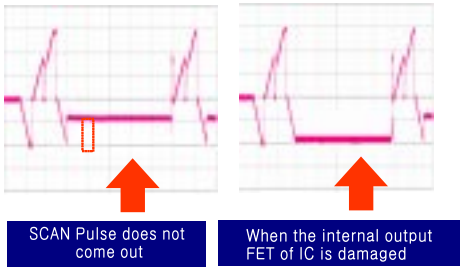
(2) When Set_Down FET/Pass_Top FET(1st, 3rd, 4th, 5th FFT of HS2) is damaged, Mis - discharge of entire screen is generated.

- Test Point : Enlarge after measuring
  GND ~ Waveform(Y DRV B/D)
- Wave format : As shown fig. 3

<Fig. 3 When the Set_Down FET is damaged>

3-3. SCAN IC(Y DRV B/D : IC1~10) Damage

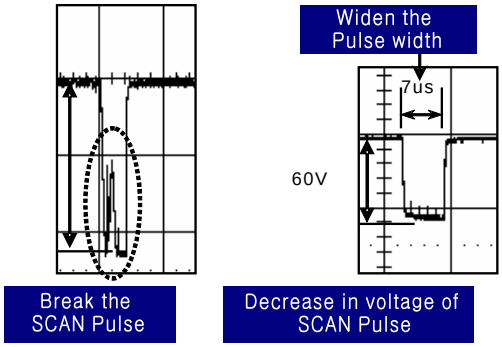
(1) In case of SCAN IC poor, one horizontal line may open at screen.
- Test Point: Enlarge after measuring
  GND ~ Output ICT on Y DRV B/D
- Wave format : As shown fig. 4



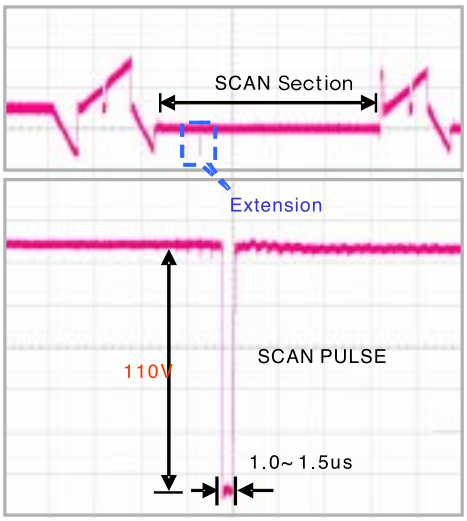
<Fig. 4 When SCAN IC is poor>

(2) Screen may not shown when SCAN IC is damaged by SCAN IC poor, external electricity or spark.
- Test Point : Enlarge after measuring
  GND ~ Output ICT on Y DRV B/D
- Wave format : Output wave format isn't output
  (You can see the damage for Y DRV B/D's SCAN IC)

(3) In case of shorting the SCAN IC output by a dust, foreign substance, it may overlap two horizontal lines on screen.
- Test Point : Enlarge after measuring
  GND ~ Output ICT on Y DRV B/D
- Wave format : As shown fig. 5



<Fig. 5 When SCAN IC output is short>

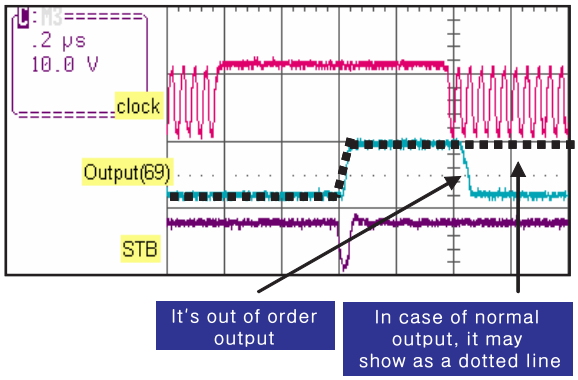


<Fig. 6 SCAN IC Normal Output Wave >

English

3-4. TCP Damage

(1) In case of shorting or opening the IC output of TCP, it may show one or several vertical lines.
- Test Point : Enlarge after measuring
  Output TP of GND ~ TCP
- Wave format : As shown output fig. 7
  In case of normal wave output, when STB signal is generated, maintain High output. And when STB signal is generated again must be fall Low.
  But when IC of TCP is poor, STB signal is not generated Output falls with Low.

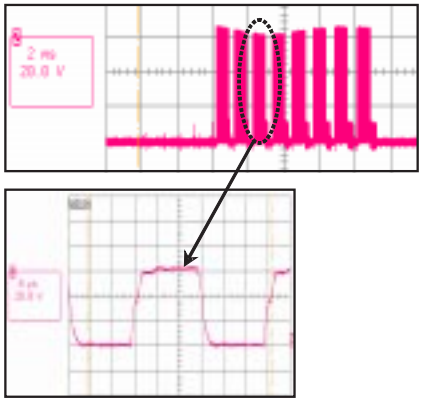


<Fig. 7 When IC output of COF is poor>

※ Remove SR before measuring because the output TP of TCP is covered with SR. Insulate again with insulating tape after measuring.

(2) In case of IC damage, corresponding IC inside of TCP, pictures by IC unit inside of TCP will not appear or Mis - discharge. In most cases, the burnt mark can be seen when IC failure occurs.

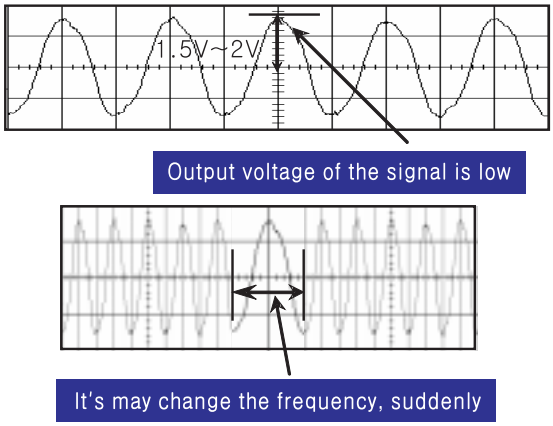
- Test Point : Enlarge after measuring output of GND ~ TCP
- Wave format : Output wave doesn't come out



<Fig. 8 TCP Normal Output Wave >

(2) In case of unusual launch of the Crystal, it may blink the screen.

- Test Point : Enlarge after Measuring
  3pin of GND ~ Crystal(CTRL B/D: X1)
- Wave format : As shown fig. 10

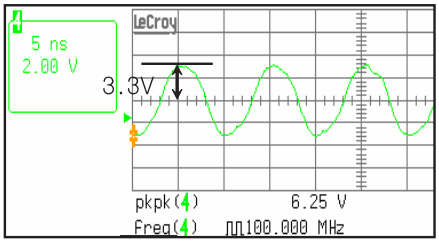


<Fig. 10 When Crystal is poor>

3-5. Crystal(CTRL B/D : X1) Damage

(1) When Crystal is damage, the screen doesn't be shown.

- Test Point : Enlarge after Measuring
  3pin of GND ~ Crystal(CTRL B/D: X1)
- Wave format : Output wave doesn't come out



<Fig. 9 Crystal Normal Output Wave >

Ⅵ. Critical Components List

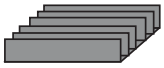
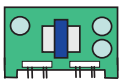
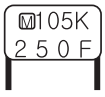
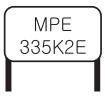
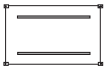
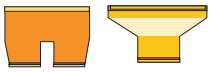
(1) The critical components list of PDP42X3#### Model is as below.

(2) A component of Ⓢ mark is important to keep product's security. Therefore in exchanging a component, appointed component is necessary used.

(3) Ⓢ is an abbreviated word which is instead of <Safety>mark.

	C27, C28, 31, 34, 36	C54, 63	C143
Y Sus B/D	250v 150μF Samwha	350V 33μF Samwha	250v 47μF Samwha
IC101	Ⓢ FS1	Ⓢ Fuse holder(FS2,3)	Ⓢ FS2,3
NATIONAL LM2585S	10A, 125V	Triad 10A, 300V	T4.0AH, 250V
Ⓢ FL1	Ⓢ L1	Ⓢ L2	Ⓢ IC18
·GET Plus 60uH 6200JB8011J	·GET Plus 0.3uH D0019A	·GET Plus 0.75uH D0020A	Heatsink(IPM) 150*62*19.5(mm)
Ⓢ HS2	Ⓢ T101	Ⓢ PS101	Ⓢ T20 on PS101(DD9A)
Heat Sink 111*30*25 (mm)	·GET Plus 6170Q – W007A, 15uH	·LG Innotek YPCD-J009A	·SamWha Tecom. 0047X-F, 1mH ·DONG HEUNG ELECTRONICS LID22-543A, 1mH
Ⓢ PS102	Ⓢ T20 on PS102(DD3D)	Ⓢ T20 on PS102(DD3G)	Ⓢ P20 on PS101, PS102
·LG Innotek YPCD-J003D YPCD-J003G	·SamWha Tecom. 0047W-F, 940uH	·SamWha Tecom. 0047Y-F, 940uH ·DONG HEUNG ELECTRONICS LID22-544A, 940uH	Optical Isolator ·Auk Corp. SPC717M ·NEC LTD PS2701 or PS2701-1 ·LITE-ON Technology Corp. LTV-357T
Ⓢ C8, 9, 10, 16, 37, 41, 42	C4	C51, 55	
MPE 335K2E ·SUNG HO ELECTRONCS CORP. MPE 250V 3.3uF	Ⓢ 105K 400 ·SUNG HO ELECTRONCS CORP. MPE 400V 1.0uF	Ⓜ 105K 250F ·Matsushita Electric Ind. ECQE 250V 1.0uF	
	C7, 10, 11, 12, 13	C29, 30	Ⓢ FS3
Z Sus B/D	250v 150μF Samwha	160v 68μF Samwha	10A, 125V
Ⓢ Fuse holder(FS1, 2)	Ⓢ FS1, 2	Ⓢ FL1	FL2
Triad 10A, 300V	T4.0AH, 250V	·GET Plus 6200JB8011J	NIGATA STC682D

English

L1	L2	IC2	P20 on PS101, PS102
 ·GET Plus 0.3uH D0019A	 ·GET Plus 0.75uH D0020A	 Heatsink(IPM) 150*62*19.5(mm)	 Optical Isolator ·Auk Corp. SPC717M ·NEC LTD PS2701 or PS2701-1 ·LITE-ON Technology Corp. LTV-357T
PS101	T20 on PS101(DD3D)	T20 on PS101(DD3G)	
 ·LG Innotek YPCD-J003D YPCD-J003G	 ·SamWha Tecom. 0047W-F, 940uH	 ·SamWha Tecom. 0047Y-F, 940uH ·DONG HEUNG ELECTRONICS LID22-544A, 940uH	
C111	C1,2,3,4,5,6,9		42″Glass
 ·Matsushita Electric Ind. ECQE 250V 1.0uF	 ·SUNG HO ELECTRONCS CORP. MPE 250V 3.3uF		 Asahi glass Front : 978*550*2.8(mm) Back : 958*570*2.8(mm)
42″Frame	Film Filter(Option)	FPC	
 1005*597 (mm)	 ·LG Chem. ·SKC Co.Ltd. ·Mitsui Chem.	 flammability : 94V-0	·YoungPoong : **YO`serise** ·Daeduck GDS : **F1-0** ·ACT Co.,Ltd. : A1, A2, A3 ·Yeu Hwan Technology Co., Ltd. : D1, M1, N1, T1, mm4, mm5
	Thermal Pad	TCP	TCP Heat Sink
	·Dow Corning **TP 2460**	 ·UBE Industries **(C)S(I)** Flammability : VTM-0	 ·454*70*24 (2EA) ·454*62*24 (2EA)

Ⅶ. Records of Revision for Boards, components and ROM DATA

1. Boards

No.	Date	Board	Part Number	Note
1	2005.09.27	CTRL B/D ASSY(LVDS)	6871QCH077A	Initial Product
2	2005.09.27	Y DRV B/D ASSY	6871QDH117A	Initial Product
3	2005.09.27	Y SUS B/D ASSY	6871QYH053A	Initial Product
4	2005.09.28	Z SUS B/D ASSY	6871QZH056A	Initial Product
5	2005.09.28	X LEFT B/D ASSY	6871QLH059A	Initial Product
6	2005.09.28	X RIGHT B/D ASSY	6871QRH068A	Initial Product

2. COMPONENTS

No.	Date	Board	Part Number	Note
1	2005.10.01	Y SUS IPM(IC18)	4921QP1041A	Initial Product
2	2005.10.01	Z SUS IPM(IC2)	4921QP1041A	Initial Product
3	2005.10.01	Pass TOP/Reset heat-sink Ass'y	4921QF5005A	Initial Product
4	2005.10.01	DDPACK (PS101)	6871QEH029A	Initial Product
5	2005.10.01	DDPACK (PS102)	6871QEH023G	Initial Product
6	2005.10.01	MCM LGPCMx05A	6001QV0007A	Initial Product
7	2005.10.01	CRYSTAL(X1)	6212AB4610A	Initial Product
8	2005.10.01	TCP	0ILNR00150A	Initial Product
9	2005.10.01	80ch scan IC	0ILMRFE001C	Initial Product
10	2005.10.01	98PIN CONNECTORYSUS IPM(IC18)	6630X60132A	Initial Product

3. ROM DATA

No.	Date	ROM Data Version	Contents

English

November, 2005
GPN05SM002D
Printed in Korea