2005

MITSUBISHI ELECTRIC

Service Manual

PLASMA DISPLAY PANEL

PD-4265
PD-5065

CAUTION:
Before servicing this chassis, it is important that the service person read the "SAFETY INFORMATION" section in this manual.

For details, refer to "Important symbols for good services".

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SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

SAFETY PRECAUTIONS

NOTICE : Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis.

The following precautions should be observed :

1. When service is required, even though the PDP UNIT an isolation transformer should be inserted between the power line and the set in safety before any service is performed.
2. When replacing a chassis in the set, all the protective devices must be put back in place, such as barriers, nonmetallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
3. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
4. Always use the manufacture's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced set to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacture has become defective, or inadvertently defeated during servicing. Therefore, the following checks should be performed for the continued protection of the customer and service technician.
6. Perform the following precautions against unwanted radiation and rise in internal temperature.
   - Always return the internal wiring to the original styling.
   - Attach parts (Gascket, Ferrite Core, Ground, Rear Cover, Shield Case etc.) surely after disassembly.
7. Perform the following precautions for the PDP panel.
   - When the front case is removed, make sure nothing hits the panel face, panel corner, and panel edge (so that the glass does not break).
   - Make sure that the panel vent does not break. (Check that the cover is attached.)
   - Handle the FPC connected to the panel carefully. Twisting or pulling the FPC when connecting it to the connector will cause it to peel off from the panel.
8. Pay attention to the following.
   - When the front case is removed, infrared ray is radiated and may disturb reception of the remote control unit.
   - Pay extreme caution when the front case and rear panel are removed because this may cause a high risk of disturbance to TVs and radios in the surrounding.

Insulation Resistance Check

With the AC plug removed from an AC power source, place a jumper across the two plug prongs. Turn the AC power switch on. (Case of PD-5065/4265, AC power is always on.)

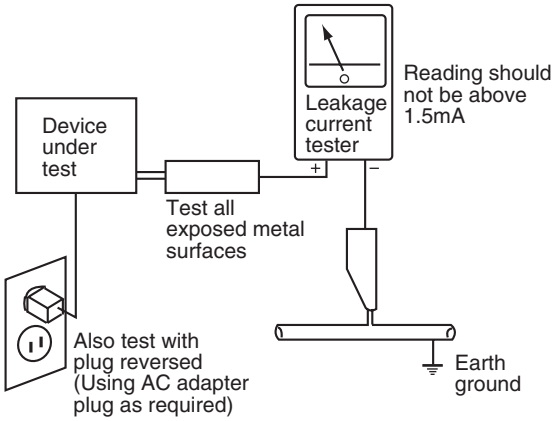
Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.). The resistance shuld be greater than 10MΩ.

Leakage Current Hot Check

Plug the AC line cord directly into an AC power source (do not use an isolation transformer for this check).

Turn the AC power switch on.

Using a "Leakage Current Tester", measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, etc.). Any current measured must not exceed 1.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

SAFETY SERVICE

■ Safety cautions

The matters to be observed without fail are explained below. These matters are indispensable for the preventi on of an accident during the maintenance servicing, the [security of products] after the completi on of servicing work, and the [prevention of the repeated occurrence of similar fault.]

(1) The degree of danger and material damage, caused as a result of wrong use by disregarding the contents of the display" is distinguished and explained in the table below.

WARNING	If this display is disregarded and equipment is handled wrongly, this can be a cause of physical injury and a fire, thus leading a person to death or serious injury.
CAUTION	If this display is disregarded and equipment is handled wrongly, this may lead to personal injury or material damage.

(2) Kinds of the matters to be observed are classified and explained in the icons shown below.

	This icon indicates a dangerous place where an electric shock is anticipated.
	This icon indicates the contents of "caution" that must be borne in mind, without fail.
	This icon indicates the contents of "caution" that must be practiced, without fail.

WARNING

• Observe the caution matter, without fail.

• In the place where a particular caution is needed during maintenance servicing, such a caution note is displayed with a label or a stamp that is given to the cabinet, chassis, PWB, etc. These caution notes and also the caution matters of WARNING given in the instruction manuals, etc., must be observed, without fail.

• Be careful of an electric shock or a burn.

• The PDP module involves the sections where high voltage and high temperature are prevalent. When equipment is energized, therefore, use working gloves in order to prevent an electric shock and a burn. At the time of transportation, disassembly, reassembly, and the replacement of parts, such a servicing job must be done after pulling out all the connector cables that have been connected with external equipment.

• Modification of equipment is absolutely prohibited. Use the specified parts at all times.

• If any modification is performed, the validity of the manufacturer's warranty is lost at that moment. The personnel who did this modification is responsible for the physical injury or the like, if it should occur as a result of the modification. The parts used are given the safety-based characteristics, such as non-flammability or sufficient

• Danger of explosion.

• The lithium battery will give rise to explosion if its polarity is wrongly treated.

CAUTION

• Observe the caution matter, without fail

• The caution matters of given in the delivery specifications, etc., must be observed, without fail.

• Do not give shocks and vibration.

• The panel surface (display plane) of the PDP module is made of glass. If any shocks or vibration is applied, it may be broken and the scattered glass chips will be a cause of injury

• Do not put anything.

• Do not put anything on the PDP module. Otherwise, this can be a cause of injury as a result of falling down or dropping caused by imbalance.

• Transportation must be done by enough personnel.

• The PDP module is heavy. In the case of transportation, unpacking, or packing, more than two persons should do it by supporting the top and the bottom of the product.

■ Miscellaneous caution matters

(1) This PDP module uses highly integrated semiconductor parts. Since these parts are fragile to electrostatic charges, earth bands should be used for handling. The product should be handled where measures have been taken against electrostatic charges.

(2) For this product, the PDP modules and the PWBs are repaired by replacement in a unit. Therefore, the units of the PWBs must not be repaired or disassembled. Otherwise, the validity of warranty will be lost.

(3) If this PDP module is used for the fixed character display or the like as in the case of a character display board, a phenomenon of burning (not warranted) will occur. Burning is a phenomenon that the unevenness in the brightness is caused in the display. In such a case, the brightness in the section where the integrated display time is longer becomes lower than the brightness in another section where the integrated display time is shorter. This phenomenon is in proportion to the integrated display time and the brightness. For this reason, to relieve this difficulty during servicing, do not use any still picture, but use a display by motion pictures of a video or the like. In addition, use “STANDARD” for the screen mode and avoid using any display by “NARROW”, or “TRUE”,*1 etc. If it is necessary to use only a still picture for unavoidable reasons, use a burning relief function such as “PLE LOCK”, “ORBITER”, etc.

(4) When a PDP module is operated after a long time of storage, it may encounter a difficulty like a failure in displaying a screen or unstability according to the condition of storage. In such a case, the PDP module should be incorporated in the product and aging treatment should be carried out for about two hours (all screen display).

(5) Sulfides will deteriorate the PDP module and this is a cause of malfunction. Therefore, it is absolutely prohibited to put any vulcanized rubber or a material containing sulfur in the vicinity of the PDP module.

(6) When taking out a PDP module from the maintenance package box, do it slowly so that the panel surface does not get any shock or stress.

(7) If one touches the connector of the flexible cable exposed to the rear side of the PDP module, there is danger of causing a poor contact. As such, it must be handled with utmost care. In addition, the flexible cable is very weak in mechanical strength. Therefore, this cable must not be touched during handling.

(8) The panel surface of the PDP module is easy to be hurt and generate cracks. Therefore, it should be handled very carefully. Never press or rub it with a hard thing. Never put it on a hard thing with the panel surface faced downwards.

(9) When the panel surface of the PDP module is contaminated, gently wipe off the contaminant with a piece of soft dry cloth. Liquid-state contamination can be removed by lightly pressing it, without rubbing it. If it is difficult to remove the contamination, use a piece of cloth soaked with a neutral detergent. The cloth for wiping off should be clean. Never use the same cloth repeatedly. If a cleansing detergent or water drops should enter the module interior or be attached to the module surface other than the display plane at the time of cleaning, this will give rise to the destruction of the product when the product is energized.

(10) When transporting this PDP module, use the packing materials specified in the list of parts. Once used, such packing materials should not be used again.

(11) The PDP module is composed of a variety of parts, such as those made of materials like glass, metal, plastics, etc. Therefore, when abandoning the PDP module, this should be done in accordance with the relevant law of the nation or an autonomous body.

(12) This product is composed of a variety of parts, such as those made of materials like glass, metal, plastics, etc., and those like a lithium battery , etc. Therefore, when abandoning this product, this should be done in accordance with the relevant law of the nation or an autonomous body.

CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to above the Instructions.

*1 Only PD-5065 supports "TRUE" mode. "TRUE" mode is available, when "PICTURE SIZE" is set to off in the "factory adjustment menu".

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity.

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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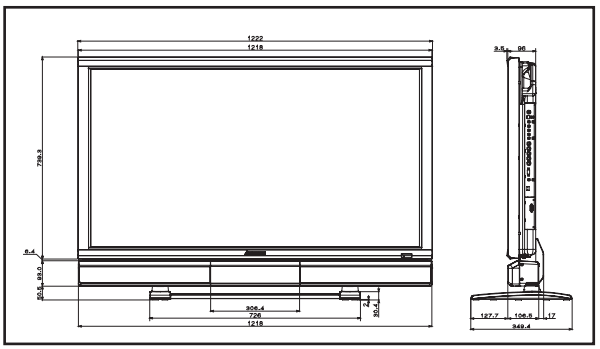
1. SPECIFICATIONS
1.1 SPECIFICATIONS
• PD-5065 Specifications

Screen Size	43.5"(H) x 24.5"(V) inches 1106(H) x 622(V) mm diagonal 50"
Aspect Ratio	16 : 9
Resolution	1365(H) x 768(V) pixels
Pixel Pitch	0.032"(H) x 0.032"(V) inches 0.81(H) x 0.81(V) mm
Color Processing	4,096 steps, 68.7 billion colors
Signals	
Synchronization Range	Horizontal : 15.5 to 110 kHz (automatic : step scan) Vertical : 50.0 to 120 Hz (automatic : step scan)
Input Signals	RGB, NTSC (3.58/4.43), PAL (B,G,M,N), PAL60, SECAM, HD*1 , DVD*1 , DTV*1
Input Terminals	
RGB	
RGB 1 (Analog)	mini D-sub 15-pin 1
RGB 2 (Analog)	BNC (R, G, B, H/CS, V) 1*2
MONLINK (Digital)	HDMI
Video	
INPUT 1	BNC 1
INPUT 2	RCA-pin 1
INPUT 3	S-Video: DIN 4-pin 1
DVD/HD/DTV	
COMP 1	RCA-pin (Y, PB[CB], PR[CR]) 1*1
COMP 2	BNC (Y, PB[CB], PR[CR]) 1*1, *2
MONLINK	HDMI
Audio	Stereo RCA 3 (Selectable)
External Control	D-sub 9-pin 1 (RS-232C)
Sound output	9W+9W at 6 ohm
Power Supply	AC100-240V 50/60Hz
Current Rating	7.6A (maximum)
Power Consumption	435W (typical), 1.5W (stand-by)
Dimensions	48.1 (W) x 35 (H) x 13.8 (D) inches 1222 (W) x 889 (H) x 350(D) mm
Weight	127 lbs / 57.6 kg(Net), 148 lbs / 67.4 kg(Gross)
Environmental Considerations	
Operating Temperature	0°C to 40°C / 32°F to 104°F
Humidity	20 to 80% (no condensation)
Altitude	0 to 9180 feet / 0 to 2800 m
Storage Temperature	-10°C to 50°C / 14°F to 122°F
Humidity	10 to 90% (no condensation)
Altitude	0 to 9840 feet / 0 to 3000 m
Front Panel User Controls	Input Source Select Volume up/down/OSM Control
Remote Control Functions	Power on/off, Input source select, Menu/ Exit,Volume up/down, Adjust (UP, DOWN,LEFT, RIGHT), Zoom up/down, Picture control buttons
OSM Functions	PICTURE(PICTURE MEMORY/CONTRAST/ BRIGHTNESS/SHARPNESS/COLOR/TINT/NR/ COLOR TEMP./WHITE BALANCE/GAMMA/ LOW TONE/SET UP LEVEL/COLOR ADJUST/ FILMMODE/PICTURE MODE), AUDIO (BASS/ TREBLE/BALANCE/AUDIO INPUT1/AUDIO INPUT2/AUDIO INPUT3/MONITORLINK), IMAGE ADJUST (ASPECT MODE/V-POSITION/ H-POSITION/V-HEIGHT/H-WIDTH/AUTO PICTURE/FINE PICTURE/PICTURE ADJ.), SETUP (LANGUAGE*/BNC INPUT/HD SELECT/RGB SELECT/HDMI SET UP/COLOR SYSTEM/BACK GROUND/GRAY LEVEL/S1/ S2/DISPLAY MENU/MENU ADJUST/ALL RESET), FUNCTION (POWER MGT./INPUT SKIP/LONG LIFE [PEAK BRIGHT / ORBITER / INVERSE WHITE / SOFT FOCUS / ORBITER MENU / MENU CONTRAST]), SIGNAL INFO.



Bezel color is black.

The features and specifications may be subject to change without notice.

***1 HD/DVD/DTV input signals supported on this system**

480P (60 Hz)	480I (60 Hz)	525P (60 Hz)
525I (60 Hz)	576P (50 Hz)	576I (50 Hz)
625P (50 Hz)	625I (50 Hz)	720P (60 Hz)
1035I (60 Hz)	1080I (50 Hz)	1080I (60 Hz)

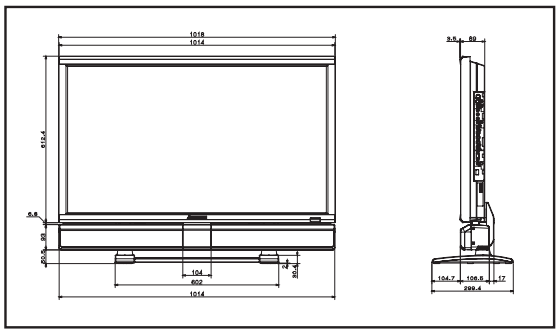
***2 The 5-BNC connectors are used as RGB/PC2 and COMP2 input. Select one of them under "BNC INPUT".**

Other Features	Motion compensated 3D Scan Converter (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-3 pull down Converter (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function (100-900% Selectable), Self Diagnosis, Image Burn reduction tools (PEAK BRIGHT, INVERSE WHITE, ORBITER), Color Temperature select (high/medium/mid low/low, user has 4 memories), Auto Picture, Input Skip, Color Adjust, Low Tone (3 mode), Gamma Correction (4 mode), Plug and play (DDC1, DDC2b, RGB3: DDC2b only),
Accessories	Remote control with two AAA batteries, Power cord, Owner's Guide, Safety metal fittings, Ferrite cores, Cable clamps, Registration Card, BNC-RCA Adapters
Regulations	UL Approved (UL 60065 and CAN/CSA-C22.2 No. 60065-03 Meets ICES–003 Class B requirements Meets FCC Class B requirements

*English, German, French, Italian, Spanish, Swedish, Chinese, Russian

• PD-4265 Specifications

Screen Size	36.1"(H) x 20.4"(V) inches 918(H) x 518(V) mm diagonal 42"
Aspect Ratio	16 : 9
Resolution	1024(H) x 768(V) pixels
Pixel Pitch	0.036"(H) x 0.027"(V) inches 0.897(H) x 0.675(V) mm
Color Processing	4,096 steps, 68.7 billion colors
Signals	
Synchronization Range	Horizontal : 15.5 to 110 kHz (automatic : step scan) Vertical : 50.0 to 120.0 Hz (automatic : step scan)
Input Signals	RGB, NTSC (3.58/4.43), PAL (B,G,M,N), PAL60, SECAM, HD*1 , DVD*1 , DTV*1
Input Terminals	
RGB	
RGB 1 (Analog)	mini D-sub 15-pin 1
RGB 2 (Analog)	BNC (R, G, B, H/CS, V) 1*2
MONLINK (Digital)	HDMI
Video	
INPUT1	BNC 1
INPUT 2	RCA-pin 1
INPUT 3	S-Video: DIN 4-pin 1
DVD/HD/DTV	
COMP 1	RCA-pin (Y, PB[CB], PR[CR]) 1*1
COMP 2	BNC (Y, PB[CB], PR[CR]) 1*1, *2
MONLINK	HDMI
Audio	Stereo RCA 3(Selectable)
External Control	D-sub 9-pin 1(RS-232C)
Sound output	8W+8W at 6 ohm
Power Supply	AC100-240V 50/60Hz
Current Rating	5.2A (maximum)
Power Consumption	305W (typical), 1.5W(stand-by)
Dimensions	40 (W) x 30 (H) x 11.8 (D) inches 1018 (W) x 763 (H) x 300(D) mm
Weight	95 lbs / 43 kg(Net), 113 lbs / 51.0 kg(Gross)
Environmental Considerations	
Operating Temperature	0°C to 40°C / 32°F to 104°F
Humidity	20 to 80% (no condensation)
Altitude	0 to 9180 feet / 0 to 2800m
Storage Temperature	-10°C to 50°C / 14°F to 122°F
Humidity	10 to 90% (no condensation)
Altitude	0 to 9840 feet / 0 to 3000 m
Front Panel User Controls	Input source select, Volume up/down, OSM Control
RemoteControl Functions	Power on/off, Input source select, Menu/ Exit,Volume up/down, Adjust (UP, DOWN,LEFT, RIGHT), Zoom up/down, Picture control buttons
OSM Functions	PICTURE(PICTURE MEMORY/CONTRAST/ BRIGHTNESS/SHARPNESS/COLOR/TINT/ NR/COLOR TEMP./WHITE BALANCE/ GAMMA/LOW TONE/SET UP LEVEL/ COLORADJUST/FILM MODE/PICTURE MODE), AUDIO (BASS/TREBLE/BALANCE/ AUDIO INPUT1/AUDIO INPUT2/AUDIO INPUT3/MONITORLINK), IMAGE ADJUST (ASPECT MODE/V-POSITION/H-POSITION/ V-HEIGHT/H-WIDTH/AUTO PICTURE/FINE PICTURE/PICTURE ADJ.), SETUP (LANGUAGE*/BNC INPUT/HD SELECT/RGB SELECT/HDMI SET UP/ COLOR SYSTEM/BACK GROUND/GRAY LEVEL/S1/S2/DISPLAY MENU/MENU ADJUST/ALL RESET), FUNCTION (POWER MGT./INPUT SKIP/LONG LIFE [PEAK BRIGHT/ ORBITER / INVERSE WHITE / SOFT FOCUS / ORBITER MENU/MENU CONTRAST]), SIGNAL INFO.



Bezel color is black.

Thefeatures and specifications may be subject to change without notice.

*1 **HD/DVD/DTV input signals supported on this system**

480P (60 Hz)	480I (60 Hz)	525P (60 Hz)
525I (60 Hz)	576P (50 Hz)	576I (50 Hz)
625P (50 Hz)	625I (50 Hz)	720P (60 Hz)
1035I (60 Hz)	1080I (50 Hz)	1080I (60 Hz)

*2 **The 5-BNC connectors are used as RGB/PC2 and COMP2 input. Select one of them under "BNC INPUT"**

Other Features	Motion compensated 3D Scan Converter (NTSC, PAL, 480I, 576I, 525I, 625I, 1035I, 1080I), 2-3 pull down Converter (NTSC, 480I, 525I, 1035I, 1080I (60Hz)), 2-2 pull down Converter (PAL, 576I, 625I, NTSC, 480I, 525I), Digital Zoom Function (100-900% Selectable), Self Diagnosis, Image Burn reduction tools (PEAK BRIGHT, INVERSEWHITE, ORBITER), Color Temperature select (high/middle/middle low/low, user has 4 memories), Auto Picture, Input Skip, Color Adjust, Low Tone (3 mode), Gamma Correction (4 mode), Plug and play (DDC1, DDC2b, RGB3: DDC2b only)
Accessories	Remote control with two AAA batteries, Power cord, Owner's Guide, Safety metal fittings, Ferrite cores, Cable clamps, Registration Card, BNC-RCA Adapters
Regulations	UL Approved (UL60065,and CAN/CSA– C22.2) No.60065-03 Meets ICES-003 Class B requirements Meets FCC Class B requirements

*English, German, French, Italian, Spanish, Swedish, Chinese, Russian

TABLE OF SIGNAL SUPPORTED

Supported resolution (PD-5065)

- When the screen mode is NARROW, each signal is converted to a 1024 dots 768 lines signal. (Except for *2, *3)
- When the screen mode is STANDARD, each signal is converted to a 1365 dots 768 lines signal. (Except for *2)

Computer input signals supported by this system

Model / Signal Type	Dots x lines	Vertical frequency (Hz)	Horizontal frequency (kHz)	Sync Polarity		Presence		Screen mode		RGB select*4	Memory
				Horizontal	Vertical	Horizontal	Vertical	NARROW (4:3)	STANDARD (16:9)		
	640 x 400	70.1	31.5	NEG	NEG	YES	YES	– –	YES	YES	4
IBM PC/AT*7 compatible computers	640 x 480	59.9	31.5	NEG	NEG	YES	YES	YES	YES	STILL	5
		72.8	37.9	NEG	NEG	YES	YES	YES	YES	– –	7
		75.0	37.5	NEG	NEG	YES	YES	YES	YES	STILL	8
		85.0	43.3	NEG	NEG	YES	YES	YES	YES	– –	9
		100.4	51.1	NEG	NEG	YES	YES	YES	YES	– –	41
		120.4	61.3	NEG	NEG	YES	YES	YES	YES	– –	42
	848 x 480	60.0	31.0	POS	POS	YES	YES	– –	YES	WIDE2	19
	852 x 480*1	60.0	31.7	NEG	NEG	YES	YES	– –	YES	WIDE1	17
	800 x 600	56.3	35.2	POS	POS	YES	YES	YES	YES	STILL	11
		60.3	37.9	POS	POS	YES	YES	YES	YES	STILL	12
		72.2	48.1	POS	POS	YES	YES	YES	YES	– –	13
		75.0	46.9	POS	POS	YES	YES	YES	YES	– –	14
		85.1	53.7	POS	POS	YES	YES	YES	YES	– –	15
		99.8	63.0	POS	POS	YES	YES	YES	YES	– –	43
		120.0	75.7	POS	POS	YES	YES	YES	YES	NO	44
	1024 x 768	60.0	48.4	NEG	NEG	YES	YES	YES*2	YES	STILL	24
		70.1	56.5	NEG	NEG	YES	YES	YES*2	YES	– –	25
		75.0	60.0	POS	POS	YES	YES	YES*2	YES	STILL	26
		85.0	68.7	POS	POS	YES	YES	YES*2	YES	– –	27
		100.6	80.5	NEG	NEG	YES	YES	YES*2	YES	– –	45
	1152 x 864	75.0	67.5	POS	POS	YES	YES	YES	YES	STILL	51
	1280 x 768	56.2	45.1	POS	POS	YES	YES	– –	YES	WIDE1	52
		59.8	48.0	POS	NEG	YES	YES	– –	YES	WIDE3	80
	1280 x 768*8	69.8	56.0	NEG	POS	YES	YES	– –	YES	WIDE1	66
	1280 x 800*8	60.0	49.7	NEG	NEG	YES	YES	– –	YES	WIDE1	21
	1280 x 854*8	60.0	53.1	NEG	NEG	YES	YES	– –	YES	WIDE2	37
	1360 x 765	60.0	47.7	POS	POS	YES	YES	– –	YES*2	WIDE1	22
	1360 x 768	60.0	47.7	POS	POS	YES	YES	– –	YES*2	WIDE1	22
	1376 x 768	59.9	48.3	NEG	POS	YES	YES	– –	YES	WIDE2	53
	1280 x 1024	60.0	64.0	POS	POS	YES	YES	YES*3	YES	STILL	29
		75.0	80.0	POS	POS	YES	YES	YES*3	YES	– –	30
		85.0	91.1	POS	POS	YES	YES	YES*3	YES	– –	40
		100.1	108.5	POS	POS	YES	YES	YES*3	YES	– –	47
	1680 x 1050*8	60.0	65.3	NEG	NEG	YES	YES	– –	YES	WIDE4	38
	1600 x 1200	60.0	75.0	POS	POS	YES	YES	YES	YES	– –	54
		65.0	81.3	POS	POS	YES	YES	YES	YES	– –	55
		70.0	87.5	POS	POS	YES	YES	YES	YES	– –	56
		75.0	93.8	POS	POS	YES	YES	YES	YES	– –	57
		85.0	106.3	POS	POS	YES	YES	YES	YES	– –	58
	1920 x 1200*8	60.0	74.6	NEG	NEG	YES	YES	– –	YES	WIDE2	81
	1920 x 1200RB*8	60.0	74.0	NEG	NEG	YES	YES	– –	YES	WIDE3	88
Apple Macintosh*5 *7	640 x 480	66.7	35.0	Sync on G	Sync on G	– –	– –	YES	YES	– –	6
	832 x 624	74.6	49.7	Sync on G	Sync on G	– –	– –	YES	YES	– –	16
	1024 x 768	74.9	60.2	Sync on G	Sync on G	– –	– –	YES*2	YES	WIDE1	28
	1152 x 870	75.1	68.7	Sync on G	Sync on G	– –	– –	YES	YES	WIDE1	39
	1440 x 900*8	60.0	56.0	NEG	NEG	YES	YES	– –	YES	– –	89
Work Station (EWS4800)*7	1280 x 1024	60.0	64.6	NEG	NEG	YES	YES	YES*3	YES	– –	29
		71.2	75.1	NEG	NEG	YES	YES	YES*3	YES	– –	48
Work Station(HP)*7	1280 x 1024	72.0	78.1	– –	– –	– –	– –	YES*3	YES	– –	59
Work Station (SUN)*7	1152 x 900	66.0	61.8	C Sync	C Sync	– –	– –	YES	YES	– –	60
		76.0	71.7	C Sync	C Sync	– –	– –	YES	YES	– –	61
	1280 x 1024	76.1	81.1	C Sync	C Sync	– –	– –	YES*3	YES	– –	30
Work Station (SGI)	1024 x 768	60.0	49.7	– –	– –	– –	– –	YES*2	YES	– –	62
	1280 x 1024	60.0	63.9	– –	– –	– –	– –	YES*3	YES	– –	29
IDC-3000G											
PAL625P	768 x 576	50.0	31.4	NEG	NEG	YES	YES	YES*6	YES*6	– –	31
NTSC525P	640 x 480	59.9	31.5	NEG	NEG	YES	YES	YES*6		MOTION	32

*1 Only when using a graphic accelerator board that is capable of displaying 852 x 480.
*2 The picture is displayed in the original resolution.
*3 The aspect ratio is 5:4. This signal is converted to a 960 dots x 768 lines signal.
*4 Normally the RGB select mode suite for the input signals is set automatically. If the picture is not displayed properly, set the RGB mode prepared for the input signals listed in the table above.
*5 To connect the display to Macintosh computer, use a monitor adapter (NOT INCLUDED).
*6 Other screen modes (EXPAND and STRETCH) are available as well.
*7 When viewing a moving picture at a vertical frequency greater than 65Hz, the picture may sometimes be unstable (jumpy). If this occurs, please set the refresh rate of the external equipment to 60Hz.
To view 480I@60Hz (480 interlaced lines, 60Hz refresh rate) or 576I@50Hz (567 interlaced lines, 50Hz refresh rate) when sync polarity is “Sync on Green”, set “RGB SELECT” to “MOTION”.
*8 CVT standard compliant.

NOTE:

- *While the input signals comply with the resolution listed in the table above, you may have to adjust the position and size of the picture or the fine picture because of errors in synchronization of your computer.*
- *When a 1280 dots x 1024 lines signal or 1600 dots x 1200 lines signal is input to the monitor, the picture will be compressed.*
- *This display has a resolution of 1365 dots x 768 lines. It is recommended that the input signal should be XGA, wide XGA, or equivalent.*
- *With digital input some signals are not accepted.*
- *The sync may be disturbed when a nonstandard signal other than the aforementioned is input.*
- *If you are connecting a composite sync signal, use the HD terminal.*

- “IBM PC/AT” and “XGA” are registered trademarks of International Business Machines, Inc. of the United States.
- “Apple Macintosh” is a registered trademark of Apple Computer, Inc. of the United States.

Supported resolution (PD-4265)

• When the screen mode is NARROW, each signal is converted to a 768 dots 768 lines signal. (Except for *3)
• When the screen mode is STANDARD, each signal is converted to a 1024 dots 768 lines signal.

Computer input signals supported by this system

Model / Signal Type	Dots x lines	Vertical frequency (Hz)	Horizontal frequency (kHz)	Sync Polarity		Presence		Screen mode		RGB select*4	Memory
				Horizontal	Vertical	Horizontal	Vertical	NARROW (4:3)	STANDARD (16:9)		
	640 x 400	70.1	31.5	NEG	NEG	YES	YES	– –	YES	YES	4
IBM PC/AT*7 compatible computers	640 x 480	59.9	31.5	NEG	NEG	YES	YES	YES	YES	STILL	5
		72.8	37.9	NEG	NEG	YES	YES	YES	YES	– –	7
		75.0	37.5	NEG	NEG	YES	YES	YES	YES	STILL	8
		85.0	43.3	NEG	NEG	YES	YES	YES	YES	– –	9
		100.4	51.1	NEG	NEG	YES	YES	YES	YES	– –	41
		120.4	61.3	NEG	NEG	YES	YES	YES	YES	– –	42
	848 x 480	60.0	31.0	POS	POS	YES	YES	– –	YES	WIDE2	19
	852 x 480*1	60.0	31.7	NEG	NEG	YES	YES	– –	YES	WIDE1	17
	800 x 600	56.3	35.2	POS	POS	YES	YES	YES	YES	STILL	11
		60.3	37.9	POS	POS	YES	YES	YES	YES	STILL	12
		72.2	48.1	POS	POS	YES	YES	YES	YES	– –	13
		75.0	46.9	POS	POS	YES	YES	YES	YES	– –	14
		85.1	53.7	POS	POS	YES	YES	YES	YES	– –	15
		99.8	63.0	POS	POS	YES	YES	YES	YES	– –	43
		120.0	75.7	POS	POS	YES	YES	YES	YES	NO	44
	1024 x 768	60.0	48.4	NEG	NEG	YES	YES	YES*2	YES	STILL	24
		70.1	56.5	NEG	NEG	YES	YES	YES*2	YES	– –	25
		75.0	60.0	POS	POS	YES	YES	YES*2	YES	STILL	26
		85.0	68.7	POS	POS	YES	YES	YES*2	YES	– –	27
		100.6	80.5	NEG	NEG	YES	YES	YES*2	YES	– –	45
	1152 x 864	75.0	67.5	POS	POS	YES	YES	YES	YES	STILL	51
	1280 x 768	56.2	45.1	POS	POS	YES	YES	– –	YES	WIDE1	52
		59.8	48.0	POS	NEG	YES	YES	– –	YES	WIDE3	80
	1280 x 768*8	69.8	56.0	NEG	POS	YES	YES	– –	YES	WIDE1	66
	1280 x 800*8	60.0	49.7	NEG	NEG	YES	YES	– –	YES	WIDE1	21
	1280 x 854*8	60.0	53.1	NEG	NEG	YES	YES	– –	YES	WIDE2	37
	1360 x 765	60.0	47.7	POS	POS	YES	YES	– –	YES*2	WIDE1	22
	1360 x 768	60.0	47.7	POS	POS	YES	YES	– –	YES*2	WIDE1	22
	1376 x 768	59.9	48.3	NEG	POS	YES	YES	– –	YES	WIDE2	53
	1280 x 1024	60.0	64.0	POS	POS	YES	YES	YES*3	YES	STILL	29
		75.0	80.0	POS	POS	YES	YES	YES*3	YES	– –	30
		85.0	91.1	POS	POS	YES	YES	YES*3	YES	– –	40
		100.1	108.5	POS	POS	YES	YES	YES*3	YES	– –	47
	1680 x 1050*8	60.0	65.3	NEG	NEG	YES	YES	– –	YES	WIDE4	38
	1600 x 1200	60.0	75.0	POS	POS	YES	YES	YES	YES	– –	54
		65.0	81.3	POS	POS	YES	YES	YES	YES	– –	55
		70.0	87.5	POS	POS	YES	YES	YES	YES	– –	56
		75.0	93.8	POS	POS	YES	YES	YES	YES	– –	57
		85.0	106.3	POS	POS	YES	YES	YES	YES	– –	58
	1920 x 1200*8	60.0	74.6	NEG	NEG	YES	YES	– –	YES	WIDE2	81
	1920 x 1200RB*8	60.0	74.0	NEG	NEG	YES	YES	– –	YES	WIDE3	88
Apple Macintosh*5 *7	640 x 480	66.7	35.0	Sync on G	Sync on G	– –	– –	YES	YES	– –	6
	832 x 624	74.6	49.7	Sync on G	Sync on G	– –	– –	YES	YES	– –	16
	1024 x 768	74.9	60.2	Sync on G	Sync on G	– –	– –	YES*2	YES	WIDE1	28
	1152 x 870	75.1	68.7	Sync on G	Sync on G	– –	– –	YES	YES	WIDE1	39
	1440 x 900*8	60.0	56.0	NEG	NEG	YES	YES	– –	YES	– –	89
Work Station (EWS4800)*7	1280 x 1024	60.0	64.6	NEG	NEG	YES	YES	YES*3	YES	– –	29
		71.2	75.1	NEG	NEG	YES	YES	YES*3	YES	– –	48
Work Station(HP)*7	1280 x 1024	72.0	78.1	– –	– –	– –	– –	YES*3	YES	– –	59
Work Station (SUN)*7	1152 x 900	66.0	61.8	C Sync	C Sync	– –	– –	YES	YES	– –	60
		76.0	71.7	C Sync	C Sync	– –	– –	YES	YES	– –	61
	1280 x 1024	76.1	81.1	C Sync	C Sync	– –	– –	YES*3	YES	– –	30
Work Station (SGI)	1024 x 768	60.0	49.7	– –	– –	– –	– –	YES*2	YES	– –	62
	1280 x 1024	60.0	63.9	– –	– –	– –	– –	YES*3	YES	– –	29
IDC-3000G											
PAL625P	768 x 576	50.0	31.4	NEG	NEG	YES	YES	YES*6	YES*6	– –	31
NTSC525P	640 x 480	59.9	31.5	NEG	NEG	YES	YES	YES*6		MOTION	32

*1 Only when using a graphic accelerator board that is capable of displaying 852 x 480.
*2 The picture is displayed in the original resolution. The picture will be compressed for other signals.
*3 The aspect ratio is 5:4. This signal is converted to a 720 dots x 768 lines signal.
*4 Normally the RGB select mode suite for the input signals is set automatically. If the picture is not displayed properly, set the RGB mode prepared for the input signals listed in the table above.
*5 To connect the monitor to Macintosh computer, use the monitor adapter (D-Sub 15-pin) to your computer's video port.
*6 Other screen modes (EXPAND and STRETCH) are available as well.
*7 When viewing a moving picture at a vertical frequency greater than 65Hz, the picture may sometimes be unstable (jumpy). If this occurs, please set the refresh rate of the external equipment to 60Hz.
To view 480I@60Hz (480 interlaced lines, 60Hz refresh rate) or 576I@50Hz (567 interlaced lines, 50Hz refresh rate) when sync polarity is "Sync on Green", set "RGB SELECT" to "MOTION".
*8 CVT standard compliant.

NOTE:

- *While the input signals comply with the resolution listed in the table above, you may have to adjust the position and size of the picture or the fine picture because of errors in synchronization of your computer.*
- *This monitor has a resolution of 1024 dots x 768 lines. It is recommended that the input signal should be XGA, wide XGA, or equivalent.*
- *With digital input some signals are not accepted.*
- *The sync may be disturbed when a nonstandard signal other than the aforementioned is input.*
- *If you are connecting a composite sync signal, use the HD terminal.*

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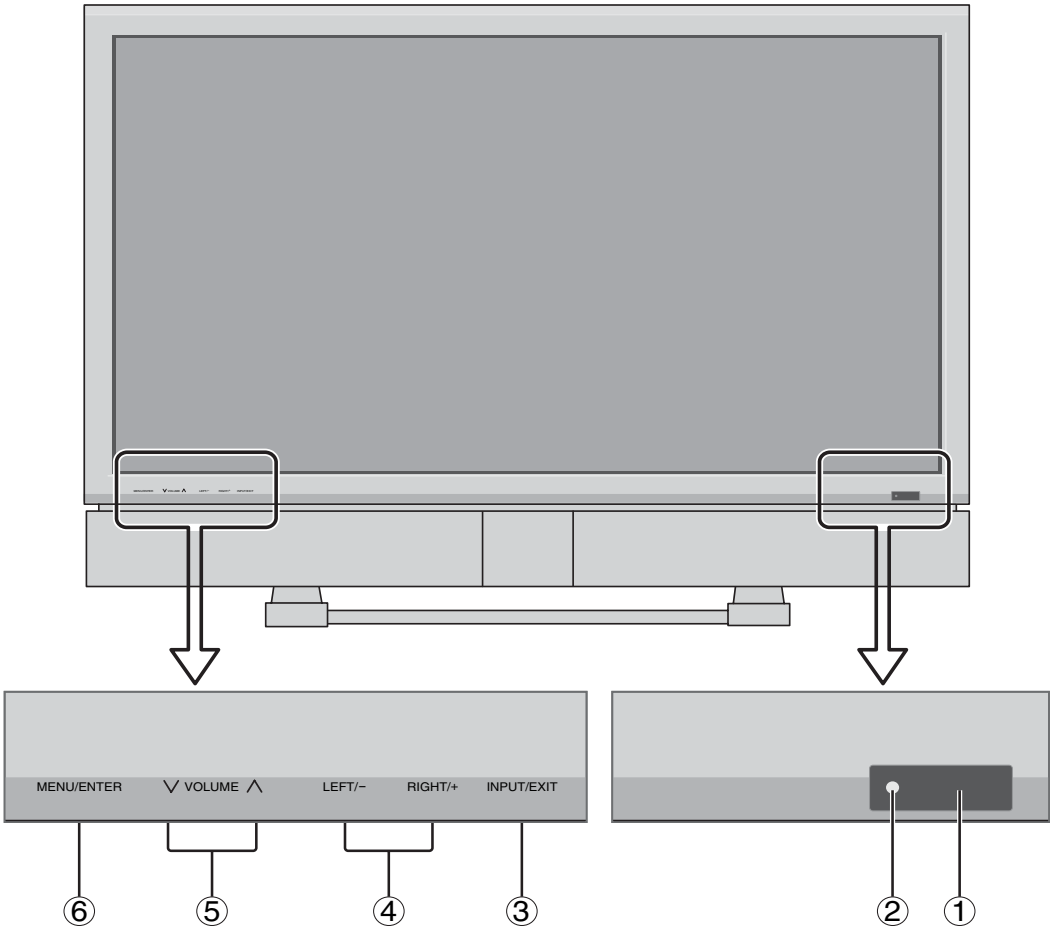
- " A pple Macintosh" is a registered trademark of Apple Computer, Inc. of the United States.

Part Names and Function

Front View



① **REMOTE SENSOR WINDOW**
Receives the signals from the remote control.

② **POWER/STANDBY Indicator**
When the power is on ..... Lights green.
When the power is in the standby mode ... Lights red.

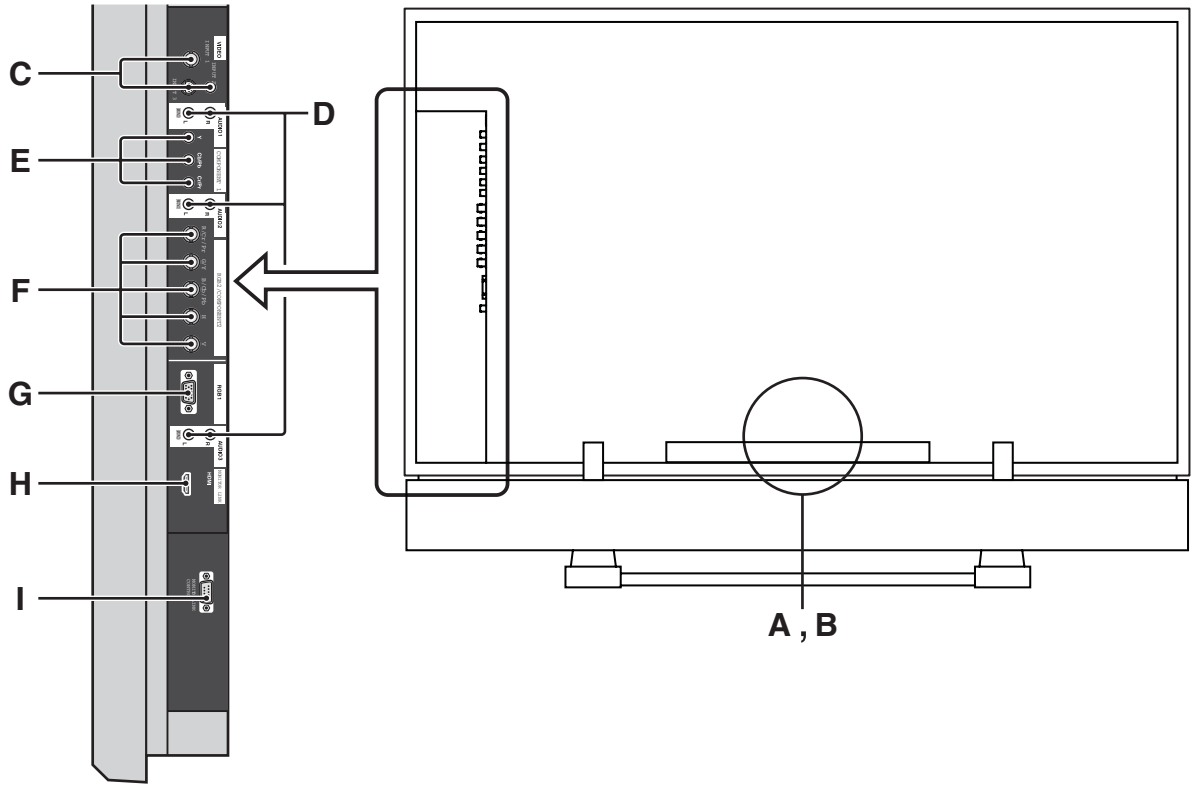
③ **INPUT / EXIT BUTTON**
Switches the input.
The available inputs depend on the setting of "BNC INPUT", "RGB SELECT" and "HDMI SET UP".
Functions as the EXIT buttons in the On-Screen Menu mode.

④ **LEFT/– and RIGHT/+**
Functions as the ADJUST (◄ / ►) buttons in the On-Screen Menu mode.

⑤ **VOLUME ∨ and ∧**
Adjusts the volume. Functions as the ADJUST (▲/▼) buttons in the On-Screen Menu mode.

⑥ **MENU/ENTER BUTTON**
Display the main menu or select a menu item. The MENU/ENTER button can also be used to turn the display on or off.
To turn the display on, press MENU/ENTER button.
To turn the display off, press and hold the MENU/ENTER button for five seconds.

Side View **Rear View**



A AC IN
Connect the included power cord here.

B EXT SPEAKER L and R
Maintain the correct polarity. The ⊕ (positive) speaker wire is connected to the ⊕ EXT SPEAKER terminal and the ⊖ (negative) speaker wire is connected to the ⊖ EXT SPEAKER terminal on both LEFT and RIGHT channels.

C INPUT1, 2, 3 (BNC, RCA, S-Video)
Connect VCR s, DVD s or Video Cameras, etc. here.

D AUDIO1, AUDIO2, AUDIO3
These are audio input terminals.
The input is selectable. Select which video input to assign them to from the audio menu screen.

E COMPONENT1
Connect DVD s, Cable Boxes or High Definition sources, etc. here.

F RGB2 / COMPONENT2
COMP2: You can connect DVDs, High Definition sources, Cable Boxes, etc. here.
This input can be set for use with an RGB or component source.

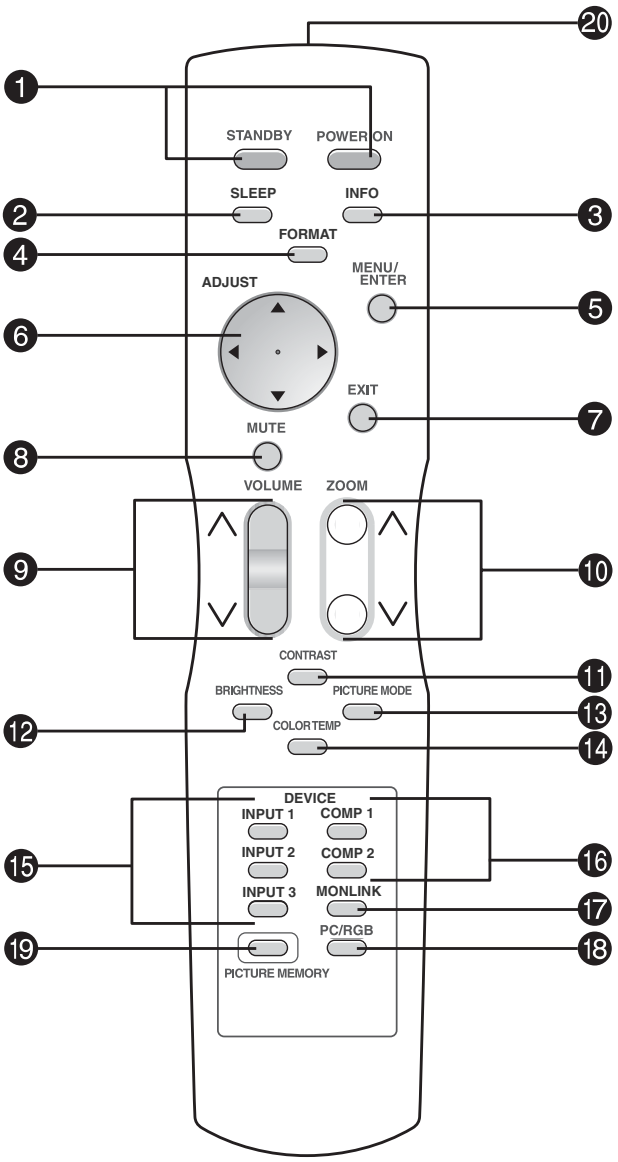
RGB2: You can connect an analog RGB signal and the syncronization signal.

G RGB1 (D-Sub)
Connect an analog RGB signal from a computer, etc. here.

H MONITORLINK/HDMI
Connect a digital signal from a source with a HDMI output.

I MONITORLINK CONTROL (RS-232C)
This terminal is used when operating and controlling the display externally (by external control).

Remote Control



① **POWER ON/STANDBY**
Switches the power to ON or STANDBY mode.

② **SLEEP**
Press this button to activate the off timer.

③ **INFO**
Displays the source settings on the screen.

④ **FORMAT**
Automatically detects the signal and sets the aspect ratio. FORMAT button is not active for all signals.

⑤ **MENU/ENTER**
Press this button to access the Menu.
Press this button during the display of the main menu to go to the sub menu.

⑥ **ADJUST (▲ / ▼ / ◄ / ►)**
Use these buttons to select items or settings and to adjust settings or switch the display patterns.

⑦ **EXIT**
Press this button to exit the MAIN MENU. Press this button during the display of the sub menu to return to the previous menu.

⑧ **MUTE**
Press this button to mute the audio.

⑨ **VOLUME (∧∨)**
Press this button to adjust audio volume.

⑩ **ZOOM (∧∨)**
Press this button to enlarge or reduce the image.

⑪ **CONTRAST**
Press this button to adjust contrast directly.

⑫ **BRIGHTNESS**
Press this button to adjust brightness directly.

⑬ **PICTURE MODE**
Press this button to adjust picture mode directly.

⑭ **COLOR TEMP**
Press this button to adjust color tone directly.

⑮ **INPUT1, 2, 3**
Press one of these buttons to select INPUT1 or INPUT2 or INPUT3 as the source.
INPUT 1-3 can also be selected using the INPUT/EXIT button on the front panel of the display.

⑯ **COMP1, 2**
Press one of these buttons to select COMP1 or COMP2 as the source.
COMP 1-2 can also be selected using the INPUT/EXIT button on the front panel of the display.

⑰ **MONLINK**
Press this button to select MONLINK/HDMI as the source.

⑱ **PC/RGB**
Press this button to select PC/RGB as the source. PC/RGB can also be selected using the INPUT SELECT button on the display.

⑲ **PICTURE MEMORY**
Switches sequentially between picture memory settings 1 to 6

⑳ **Remote control signal transmitter**
Transmits the remote control signal

2. DIAGNOSIS
2.1 TROUBLESHOOTING

• Problems in the power supply, such as "Failure in Power ON" or "LED flashing or lighting (alarm display)"

→ 1. Go to Power failure (P18).

• Problems in the images, such as "No pictures available"

→ 2. Go to Image errors (P24).

• No video loop-out signal is generated.

→ The MAIN PWB is faulty.

• "Remote control not effective"

→ 3. Go to Audio errors (P31).

• "Remote control not effective"

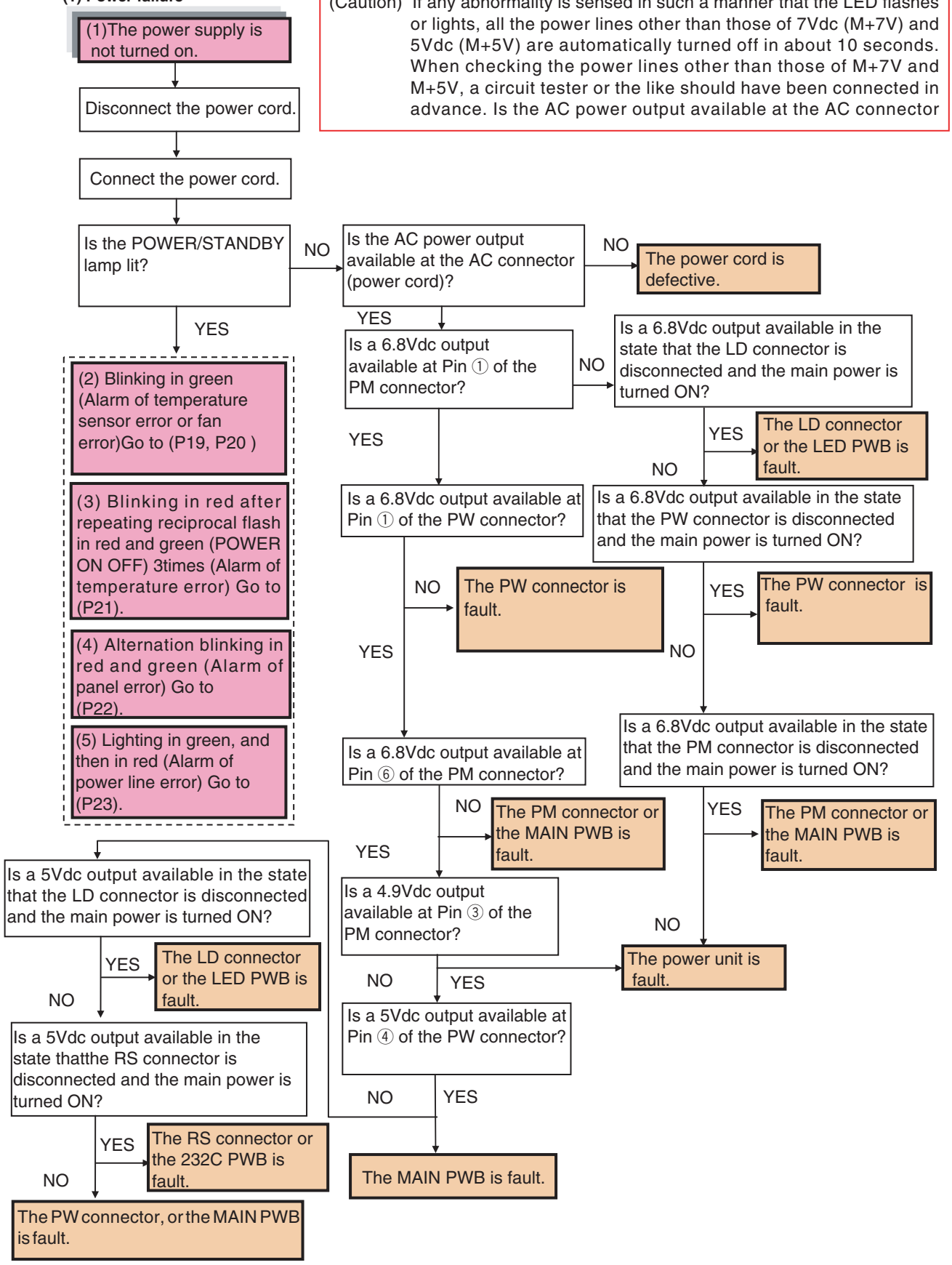
→ 4. Go to Remote control is not effective (P32).

2.2 DIAGNOSIS

1. Power failure

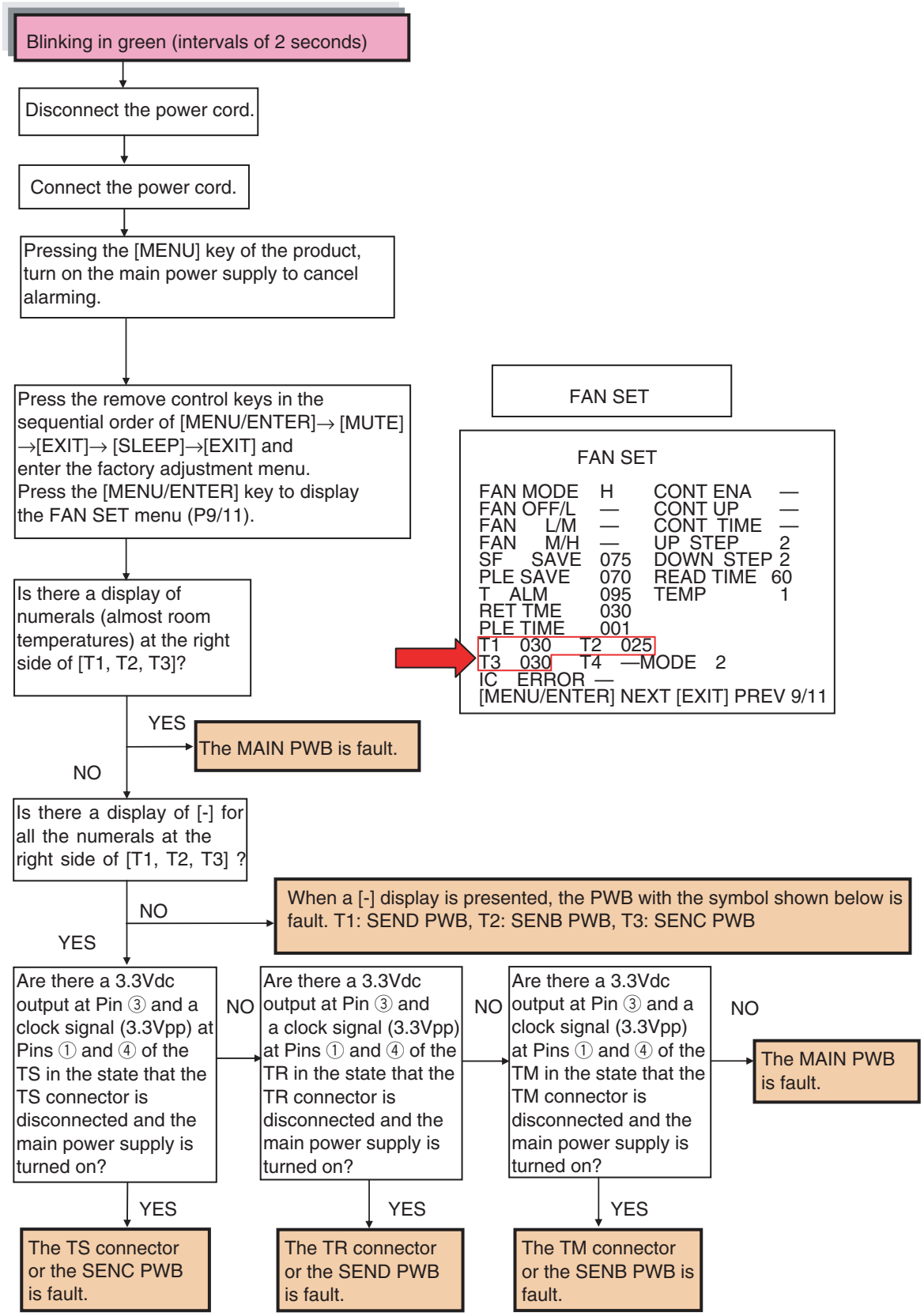
(1) Power failure

(Caution) If any abnormality is sensed in such a manner that the LED flashes or lights, all the power lines other than those of 7Vdc (M+7V) and 5Vdc (M+5V) are automatically turned off in about 10 seconds. When checking the power lines other than those of M+7V and M+5V, a circuit tester or the like should have been connected in advance. Is the AC power output available at the AC connector



(2) Blinking in green

① Alarm of temperature sensor error



② Alarm of fan error

Blinking in green (intervals of 0.5 seconds)

Disconnect the power cord.

Pressing the [MENU] key of the product, Connect the power cord. to cancel alarming.

Is the fan running?

(Caution) When alarming is canceled, [FAN MODE] of FAN SET (P9/11) in the factory adjustment menu automatically moves from [ENA] to [H], thus causing the fan to run.

FAN SET

FAN MODE	ENA	CONT ENA	—
FAN OFF/L	—	CONT UP	—
FAN L/M	—	CONT TIME	—
FAN M/H	—	UP STEP	2
SF SAVE	075	DOWN STEP	2
PLE SAVE	070	READ TIME	60
T ALM	095	TEMP LEVEL	1
RET TME	030		
PLE TIME	001		
T1 030	T2 025		
T3 030	T4 —	MODE	2
IC ERROR	—		

[MENU/ENTER] NEXT [EXIT] PREV 9/11

FAN SET

FAN MODE	H	CONT ENA	—
FAN OFF/L	—	CONT UP	—
FAN L/M	—	CONT TIME	—
FAN M/H	—	UP STEP	2
SF SAVE	075	DOWN STEP	2
PLE SAVE	070	READ TIME	60
T ALM	095	TEMP LEVEL	1
RET TME	030		
PLE TIME	001		
T1 030	T2 025		
T3 030	T4 —	MODE	2
IC ERROR	—		

[MENU/ENTER] NEXT [EXIT] PREV 9/11

YES

Is there a 3.3Vdc output at Pin ③ of the FA and FB, FC connectors?

YES

The fan is out of order on the side where a 3.3Vdc output is generated.

NO

NO

The MAIN PWB is fault.

Is there a voltage output of 11.3Vdc for PD-4265, 11.2Vdc for PD-5065 respectively, at Pin ① of the FA, FB, and FC connectors?

NO

YES

The FAN-A/FAN-B/FAN-C is fault.

(Caution) The FAN-C and FC connectors are used only for the 61XM3 Series.

Is there a voltage output of 11.3Vdc for PD-4265, 11.2Vdc for PD-5065 respectively, when the FA connector is disconnected and the mains power is turned ON?

Is there a voltage output of 11.3Vdc for PD-4265, 11.2Vdc for PD-5065 respectively, when the FB connector is disconnected and the mains power is turned ON?

Is there a voltage output of 11.3Vdc for PD-4265, 11.2Vdc for PD-5065 respectively, when the FC connector is disconnected and the mains power is turned ON?

NO

YES

YES

NO

NO

YES

The MAIN PWB is fault.

The FAN-A is fault.

The FAN-B is fault.

The FAN-C is fault.

(Caution) In the FAN MODE, [ENA] is automatically recovered when the main power is turned OFF→ON.

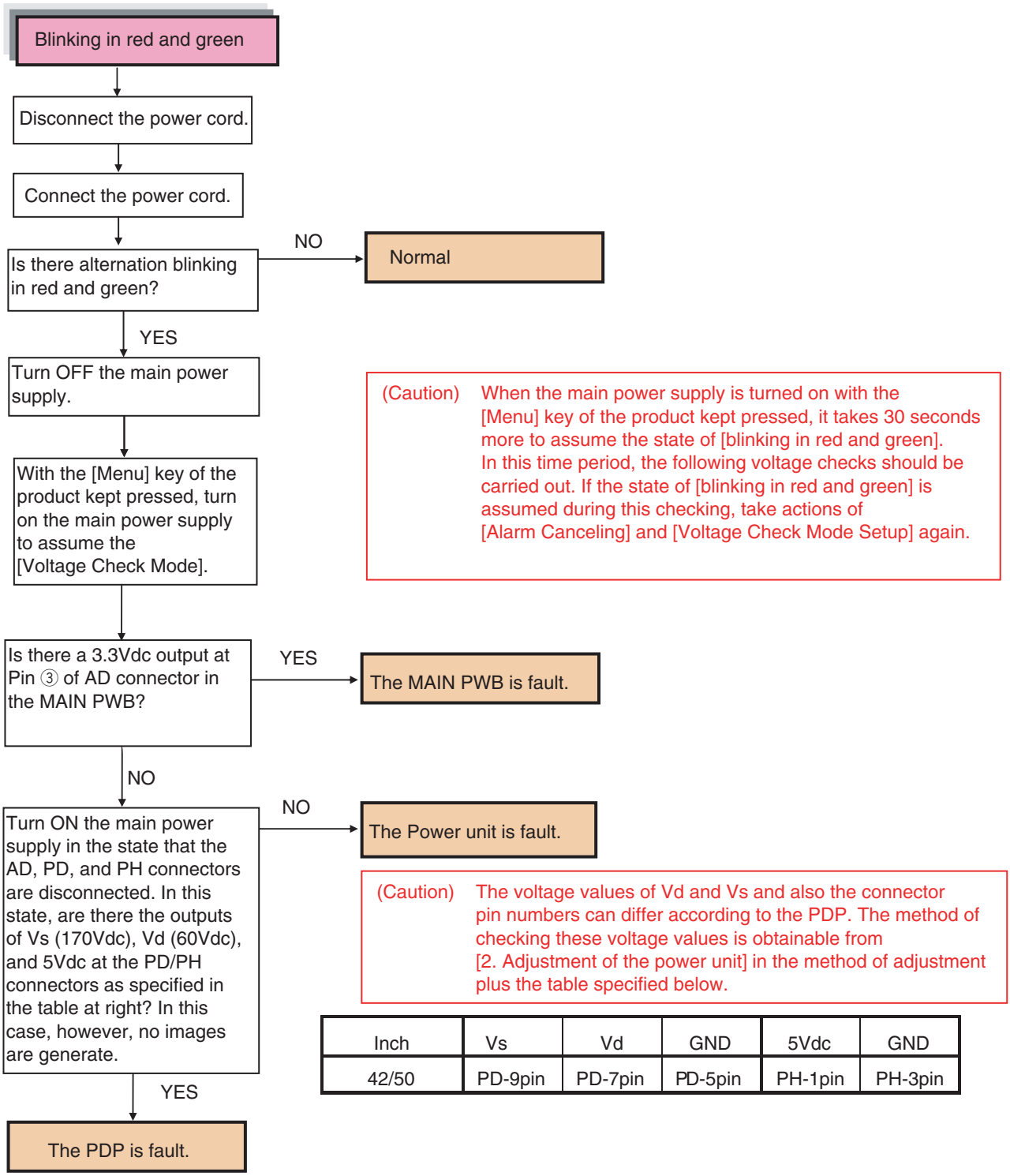
(3) Blinking in red (Alarm of temperature error)

Since the internal temperature is too high in the product, the temperature protector has been actuated. In such a case, the following actions should be taken immediately:

1. Turn off the main power supply and pull out the power cord from the wall outlet.
2. Wait for about 60 minutes until the temperature in the main unit lowers.
3. Check whether the heat discharge port is covered with dust or the like. If yes, remove the clogging substance.
4. If the unit is used where the ambient temperature is high, it should be moved to an adequate place (air temperature ranging from 5°C to 35°C).

(4) Alternation blinking in red and green (Alarm of PDP error)

(Caution) How to reset the alarming condition.
Pressing the [INPUT/EXIT] key of the product, turn on the main power supply of the main unit. In this state, keep pressing the [Input Select] key for more than 2 seconds until alarming is canceled. Make confirmation by the method specified below.



(To the separate PDP service manual)

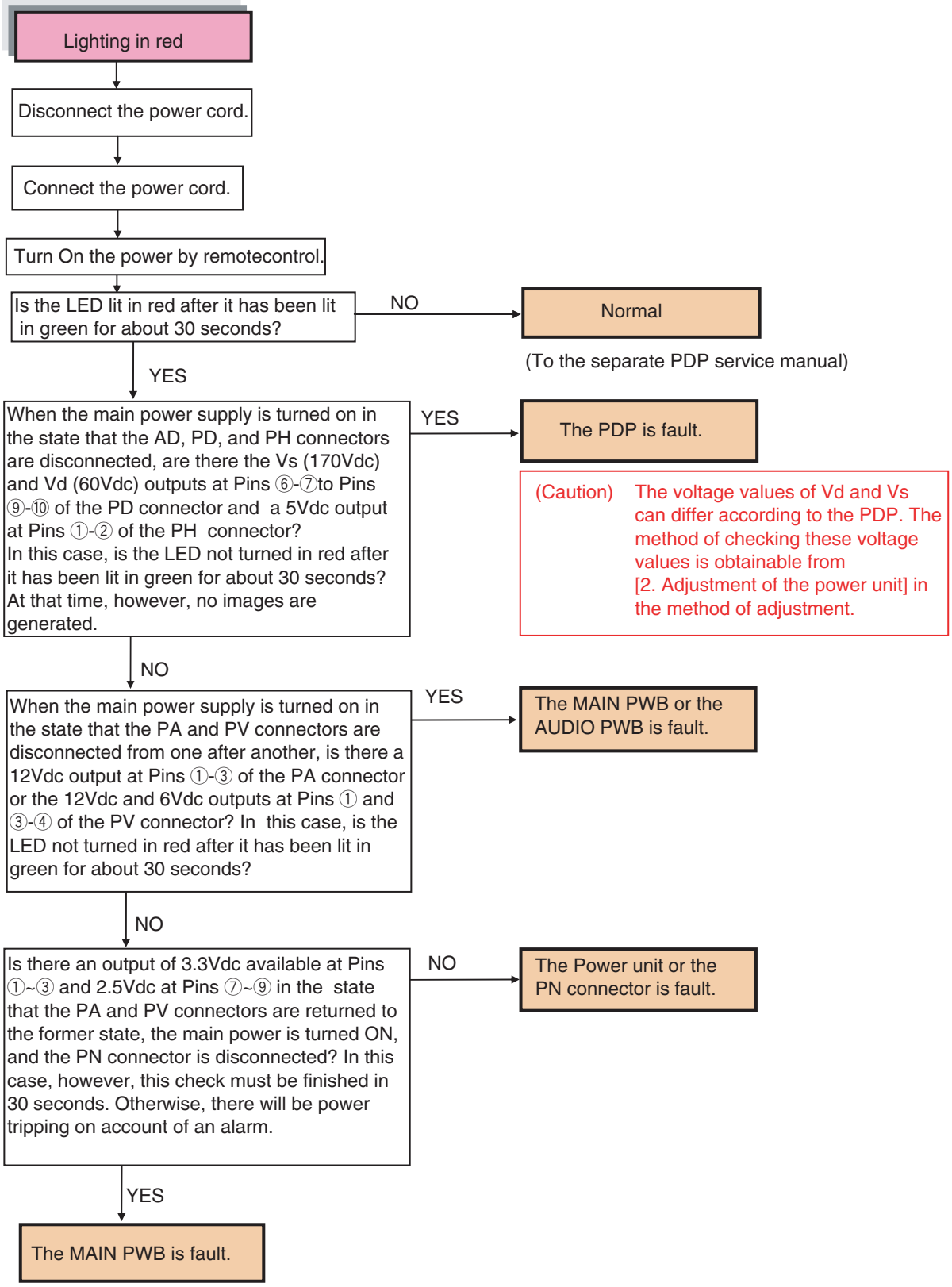
(Caution) When the main power supply is turned on with the [Menu] key of the product kept pressed, it takes 30 seconds more to assume the state of [blinking in red and green]. In this time period, the following voltage checks should be carried out. If the state of [blinking in red and green] is assumed during this checking, take actions of [Alarm Canceling] and [Voltage Check Mode Setup] again.

(Caution) The voltage values of Vd and Vs and also the connector pin numbers can differ according to the PDP. The method of checking these voltage values is obtainable from [2. Adjustment of the power unit] in the method of adjustment plus the table specified below.

Inch	Vs	Vd	GND	5Vdc	GND
42/50	PD-9pin	PD-7pin	PD-5pin	PH-1pin	PH-3pin

(5) Lighting in green, and then in red (Alarm of power voltage error)

Unlike [lighting in red] in the STANDBY mode, [lighting in green] continues for about 30 seconds without any output of images and audio signals. Since then, the mode turns into [lighting in red].



2. Image errors

(Caution) Typical abnormal images are shown below. All errors do not always fall on these error samples.

(1) Image burn and deterioration in brightness

Residual images are seen without signal entry.

This is not a fault.

No signal

Deterioration in brightness

This is not a fault.

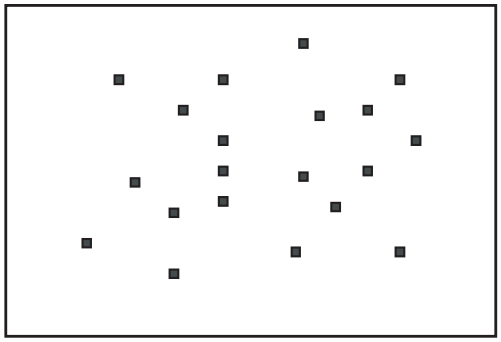
All-white signal

(2) Failure in writing

Failure in writing

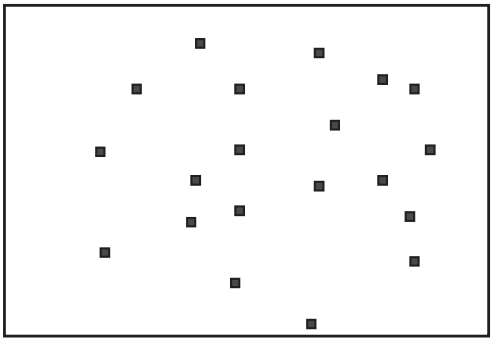
The PDP is fault.

(To the separate PDP service manual)



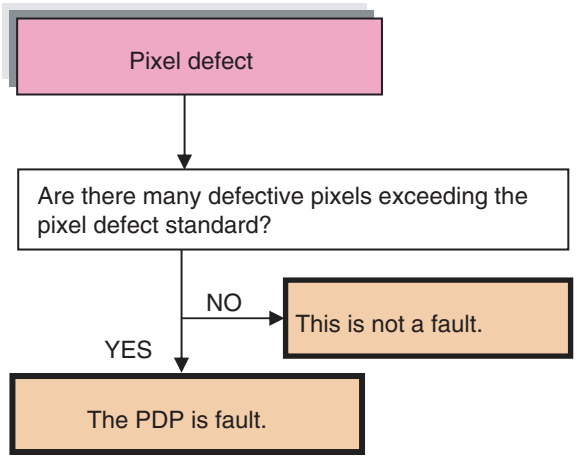
All-white signal

Dot errors change with no continuity.

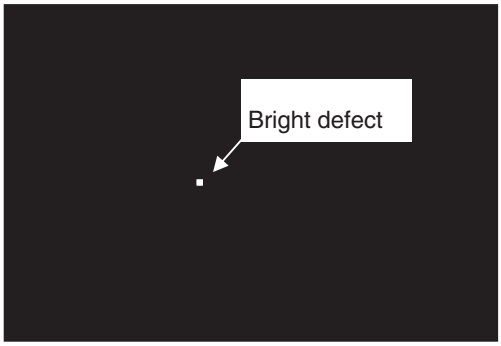


All-white signal

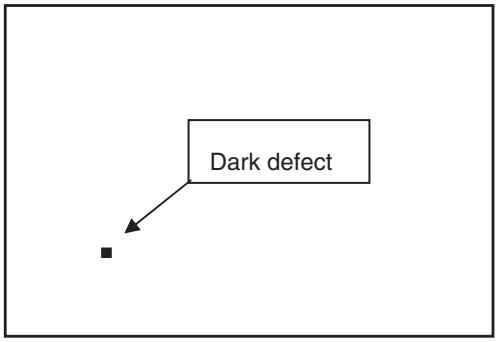
(3) Pixel defect



(To the separate PDP service manual)

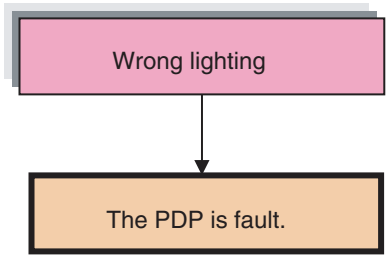


(Fig. 1) All-Black Signal

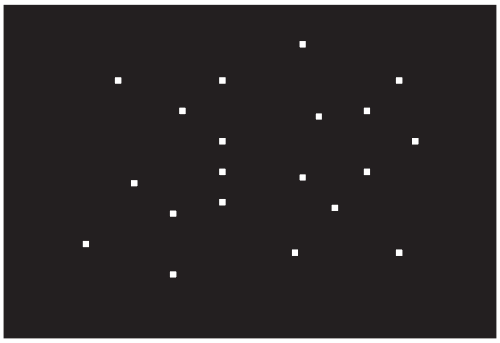


(Fig. 2) All-White Signal

(4) Wrong lighting

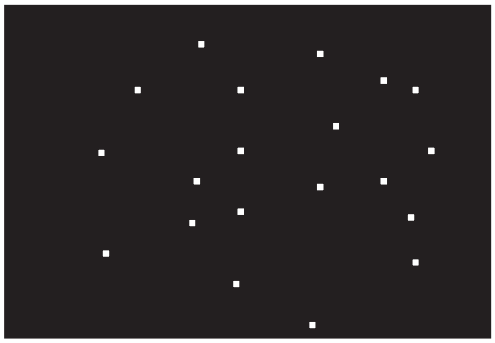


(To the separate PDP service manual)



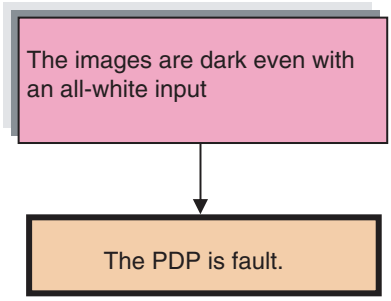
All-black signal

Dot errors change with no continuity.



All-black signal

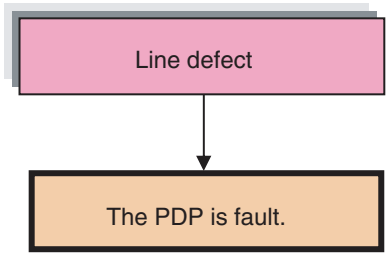
(5) Dark images [Other than the deterioration in brightness as per (1) above]



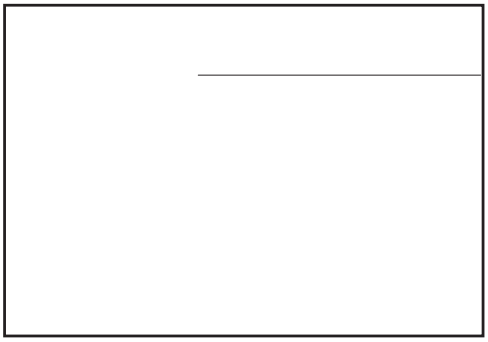
(To the separate PDP service manual)

All-white signal

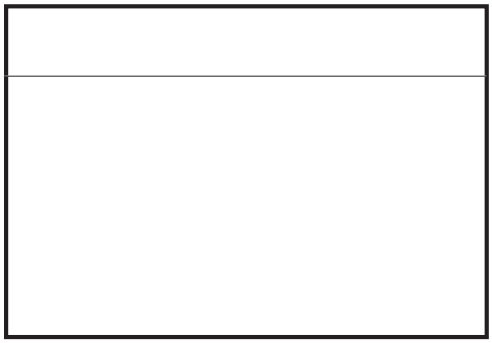
(6) Defect in horizontal lines



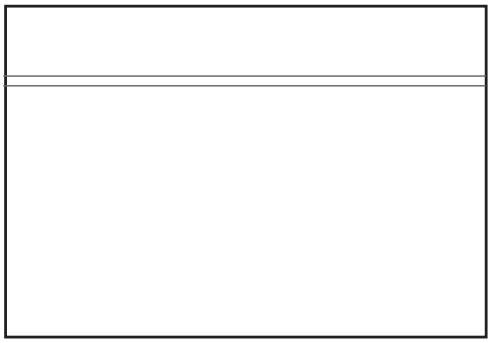
(To the separate PDP service manual)



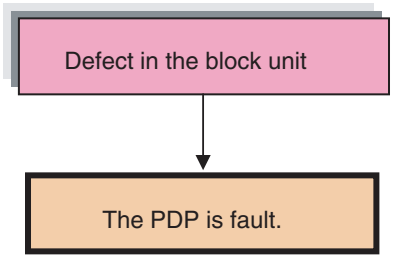
All-white signal



All-white signal



All-white signal

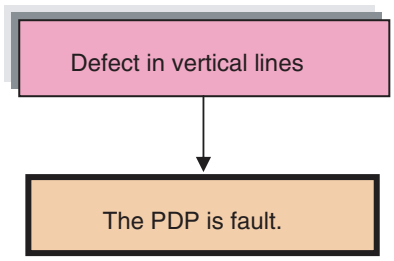


(To the separate PDP service manual)

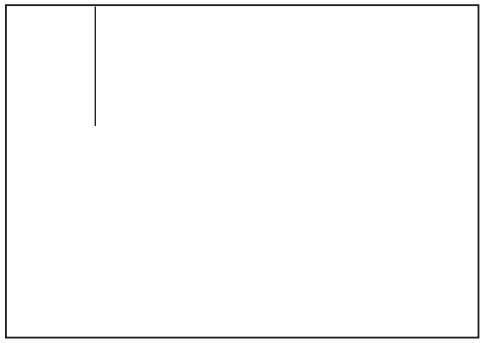
All-white signal

All-white signal

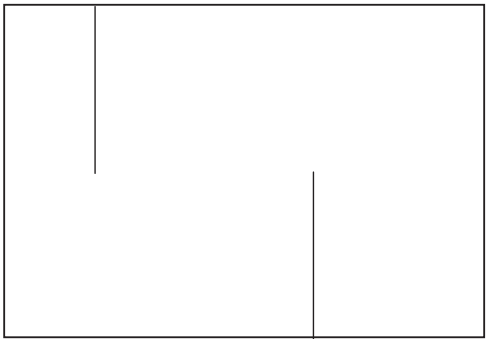
(7) Defect in vertical lines



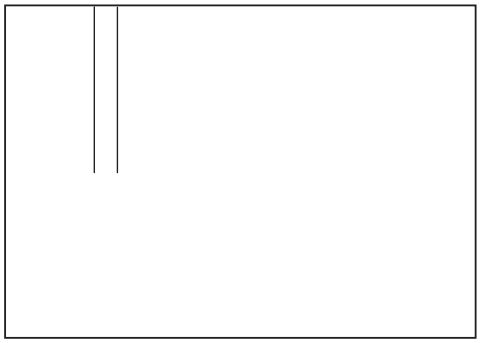
(To the separate PDP service manual)



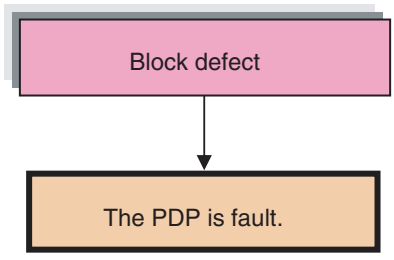
All-white signal



All-white signal

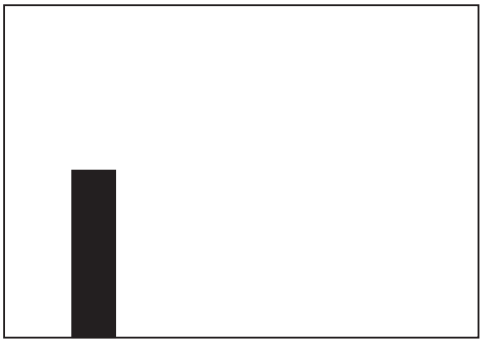


All-white signal



(To the separate PDP service manual)

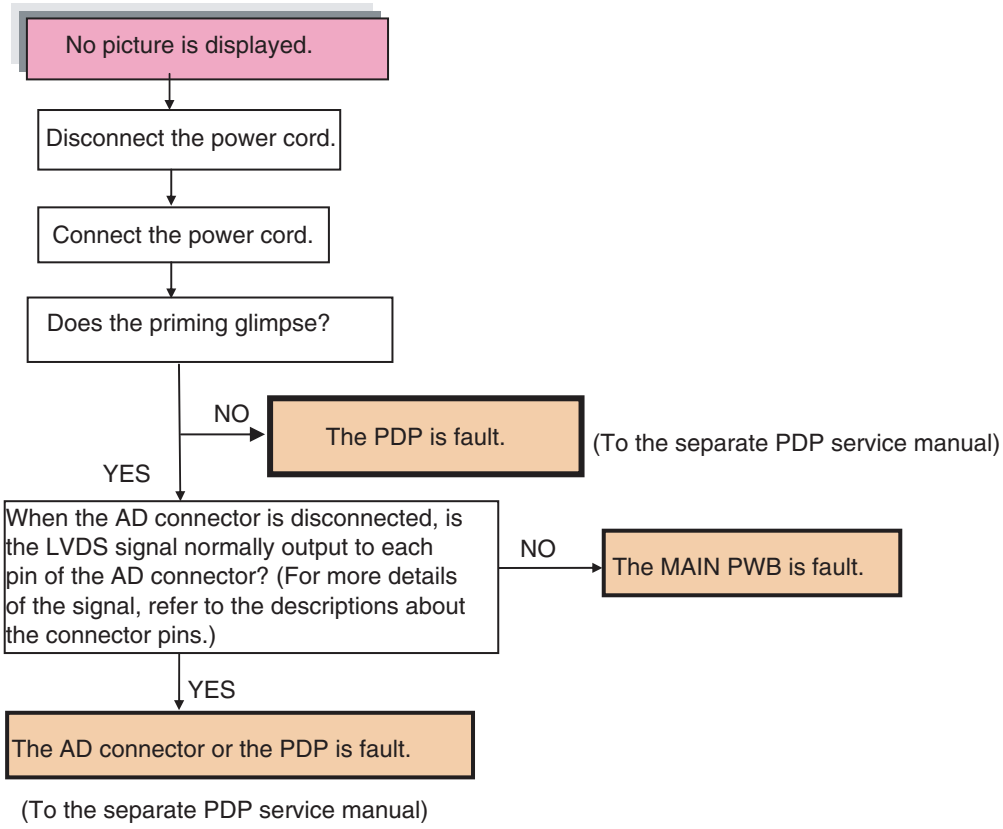
All-white signal



All-white signal

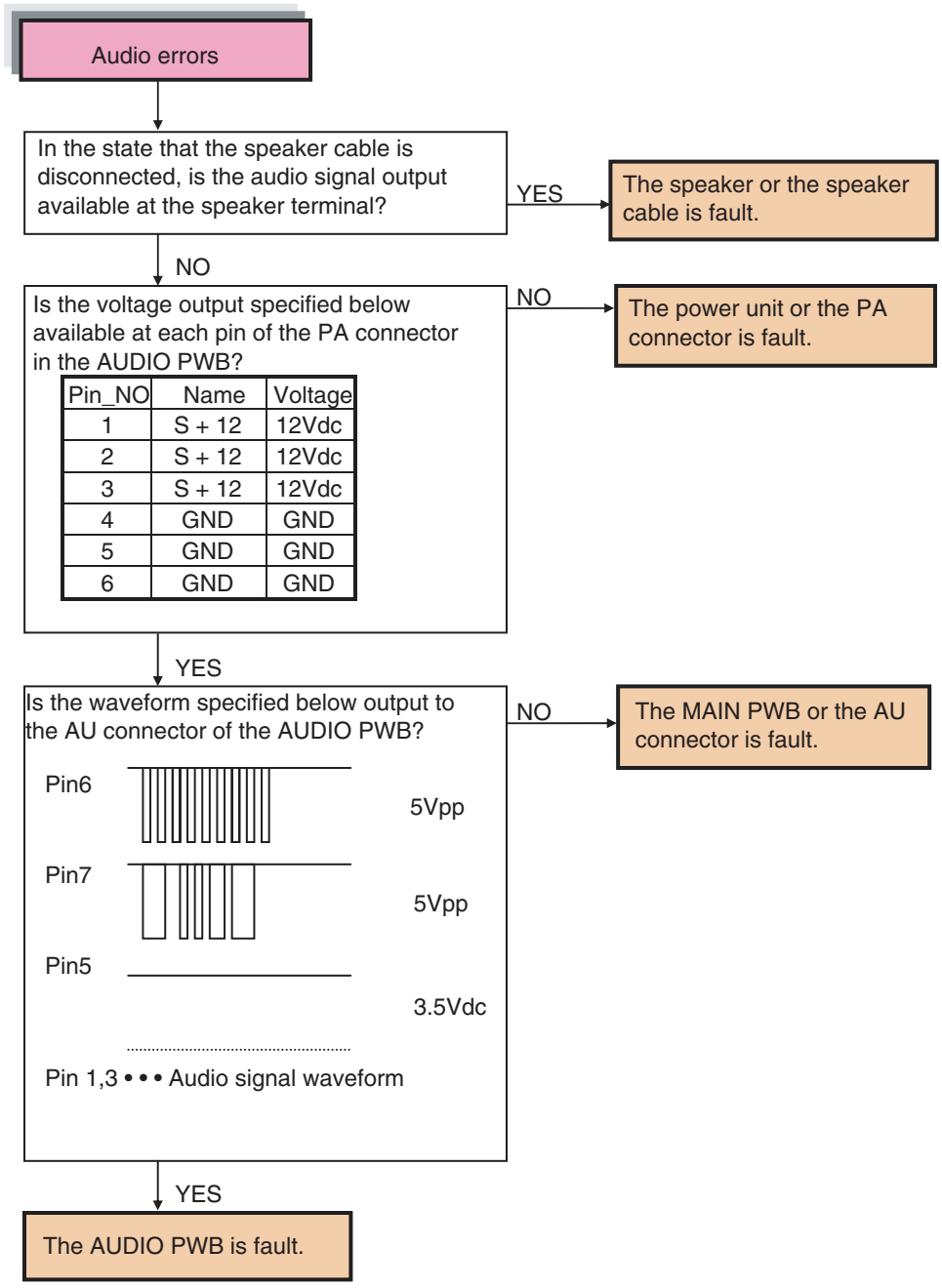
All-white signal

(8) No pictures [(Caution) The voltage outputs of Vs = 170V and Vd = 64V, 5Vdc are always generated, but the LED is not flashing or lighting for alarming. However, the voltage values can differ according to the MODULE.]



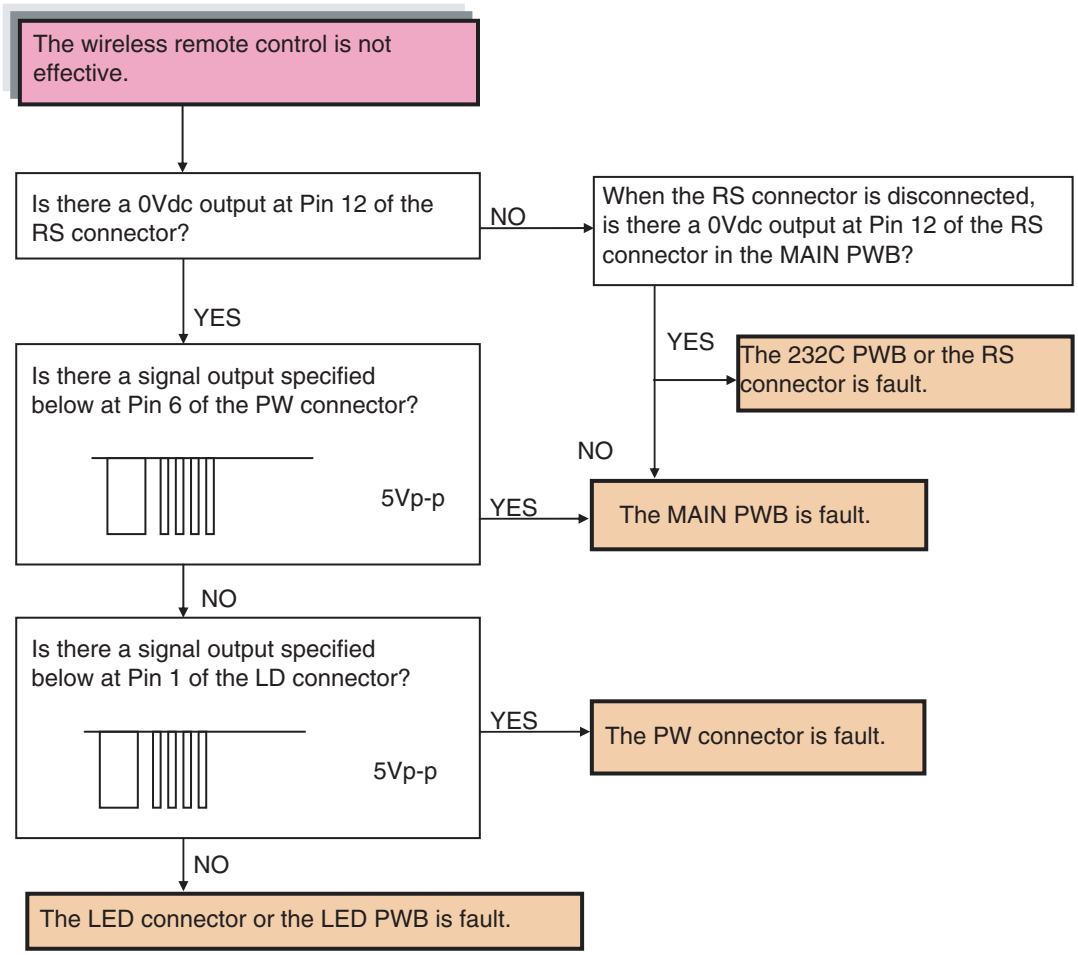
3. Audio errors

(Caution) In regard to the method of audio input setting, refer to the specifications and the instruction manual to confirm that all the setting is free from errors. Since then, troubleshooting can be carried out. It must be noted that the protector functions and no audio output is available if the opposing electrodes of the speaker output or the speaker output and the ground (GND) are short-circuited. In such a case, turn off the main power supply and make the connections correctly. The protector is reset when the main power supply is turned on after that



Pin_NO	Name	Voltage
1	S + 12	12Vdc
2	S + 12	12Vdc
3	S + 12	12Vdc
4	GND	GND
5	GND	GND
6	GND	GND

4. Remote control is not effective.



3. ADJUSTMENT

3.1 ADJUSTING CONDITIONS

Adjustments should be carried out in the procedures of A to C specified below. However, any adjustments other than the items A to C below are not required.

A. When the "PDP module " is replaced, adjustments should conform to the adjusting items of [1 and 2] specified below.

B. When the "POWER UNIT" is replaced, adjustments should conform to the adjusting item of [2] specified below.

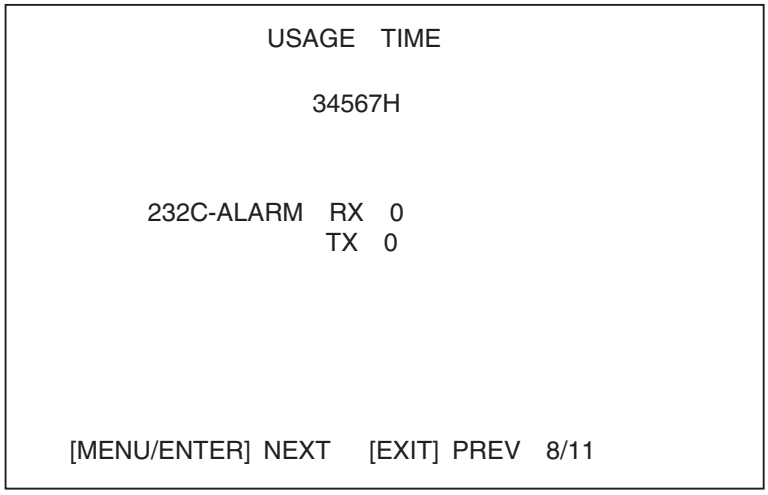
C. When the "MAIN PWB" is replaced, adjustments should conform to the adjusting item of [3] specified below.

3.2 ADJUSTING ITEMS

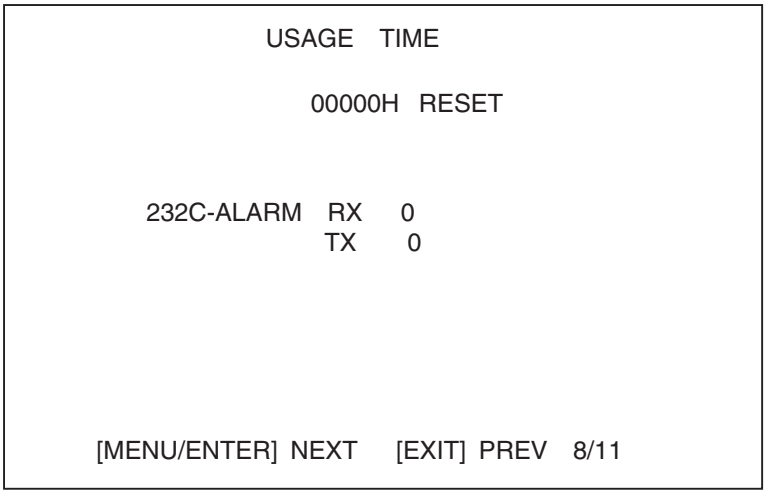
1. Clearing of the usage time (Using the remote control)

(1) Press the keys in the order of [MENU/ENTER] → [MUTE] → [EXIT] → [SLEEP] → [EXIT] in order to enter the factory adjustment menu.

(2) Press the [MENU/ENTER] key to select the [USAGE TIME] menu (8/11). Then, the integrated time [34567 (hours)] (example) accumulated till the present time is displayed when the main power supply is turned on (except for the standby mode).



(3) When the keys are pressed in the order of [MUTE] → POSITION/CONTROL [▲] → POSITION/CONTROL [▼] → [SLEEP], the display is cleared to [00000H]. At that time, the characters of [RESET] are displayed for about 5 seconds on the right side of time display.



2. Adjustment of the power unit (Using a screwdriver for general-purpose adjustments)

- **PD-5065**

2-1. Adjustment of the Vs voltage

(1) Enter a color bar input by means of either video signal of VIDEO input, or DVD/HD input, or RGB input, and turn on the power switch of the main unit.

(2) Turn the volume control (VS ADJ VR151) in the power unit and make adjustments until the voltages of Vs and D, GND of the power unit attain the voltage values specified for the PDP (Vs value of the voltage regulation indicator label on below the figure) ±1V.

2-2. Adjustment of the Vd voltage

(1) Enter a color bar input by means of either video signal of VIDEO input, or DVD/HD input, or RGB input, and turn on the power switch of the main unit.

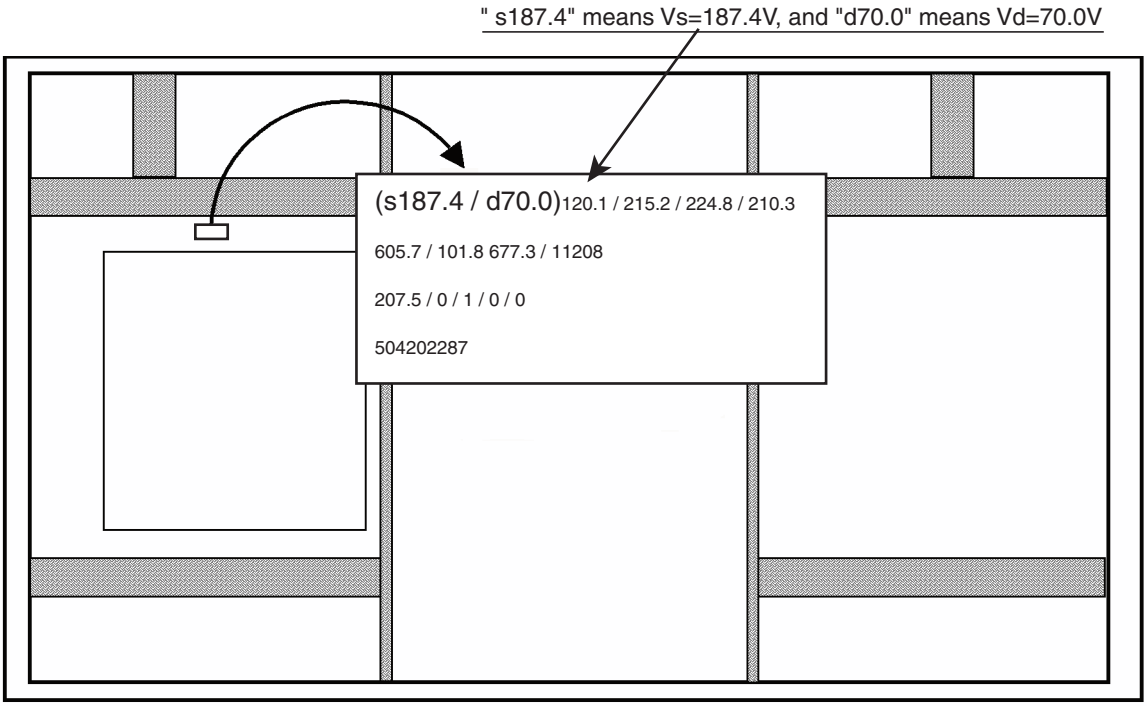
(2) Confirm that the voltages of Vd and D, GND of the power unit are maintained at the voltage values specified for the PDP (Vd value of the voltage regulation indicator label on below the figure) ±1V.

Otherwise, turn the volume control (Vd ADJ VR161) until the voltage attains the voltage values specified for the PDP (Vd value of the voltage regulation indicator label on below the figure) ±1V.

2-3. Adjustment of the +5V voltage

(1) Display a color bar by means of either video signal of VIDEO input, or DVD/HD input, or RGB input.

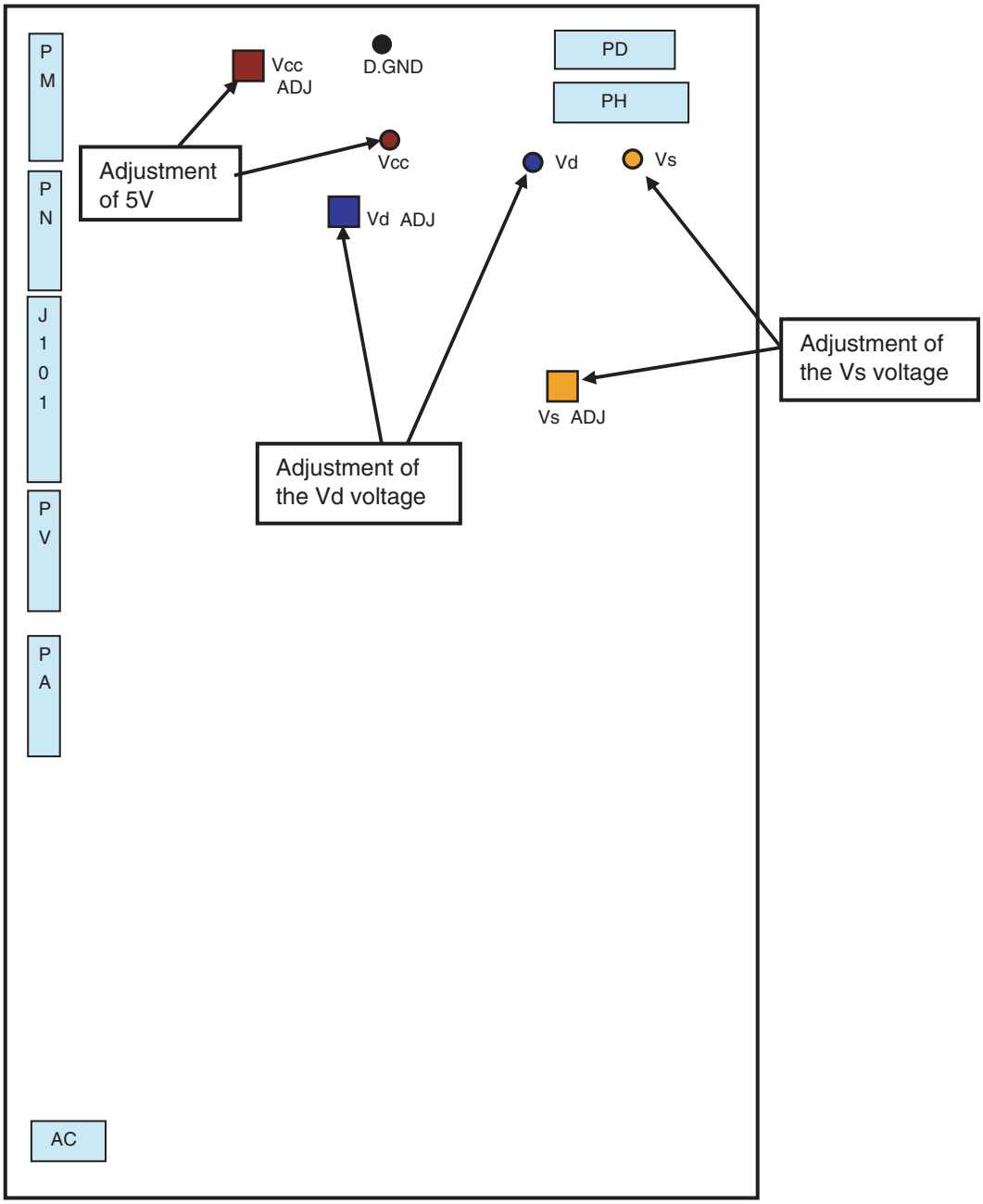
(2) Confirm that the voltages of Vcc and D, GND of the power unit are maintained at "5.15 ± 0.1V". Otherwise, turn the volume control (Vcc ADJ VR121) until the voltage attains "5.15 ± 0.1V".



(Caution) Rear-side view when the back cover is removed The label is concealed between the MAIN PWB and PDP. Check it by peeping through the space from above. The label position can be changed, without notice.

*** Top view of the power unit (Adjustment VR location)**

- **PD-5065**



- **PD-4265**

2-1. Adjustment of the Vs voltage

(1) Enter a color bar input by means of either video signal of VIDEO input, or DVD/HD input, or RGB input, and turn on the power switch of the main unit.

(2) Turn the volume control (VS ADJ VR151) in the power unit and make adjustments until the voltages of Vs and D, GND of the power unit attain the voltage values specified for the PDP (Vs value of the voltage regulation indicator label on below the figure) ±1V.

2-2. Adjustment of the Vd voltage

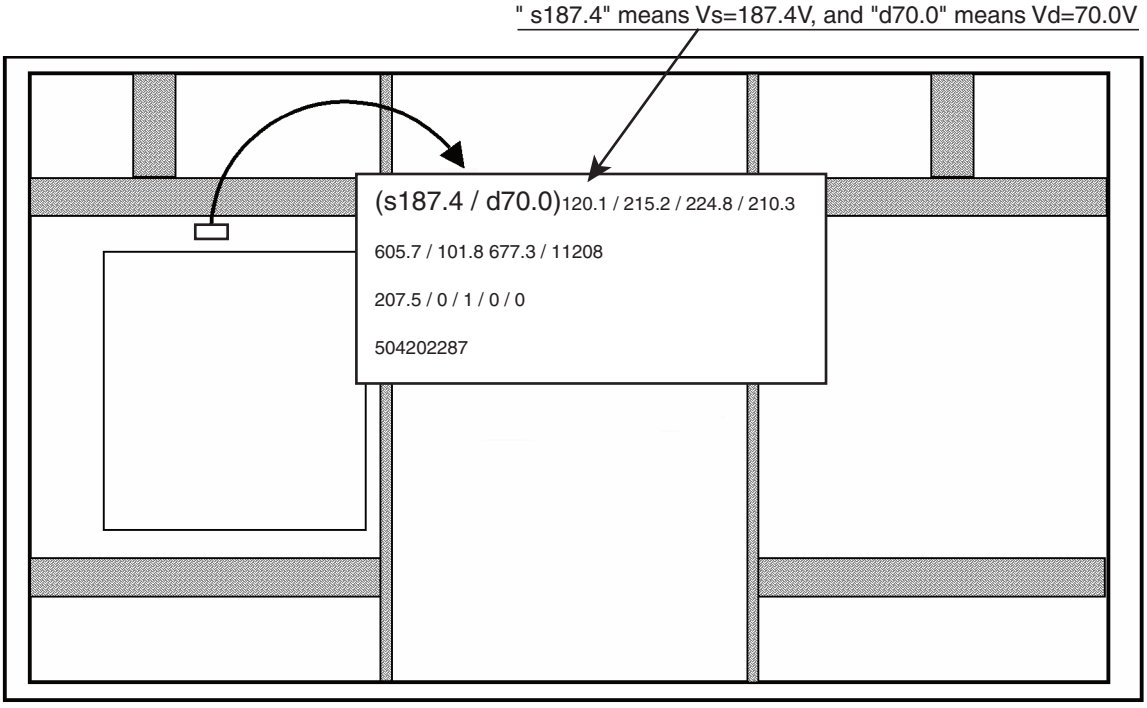
(1) Enter a color bar input by means of either video signal of VIDEO input, or DVD/HD input, or RGB input, and turn on the power switch of the main unit.

(2) Turn the volume control (Vd ADJ VR161) in the power unit and make adjustments until the voltages of Vs and D, GND of the power unit attain the voltage values specified for the PDP (Vd value of the voltage regulation indicator label on below the figure) ±1V.

2-3. Adjustment of the +5V voltage

(1) Display a color bar by means of either video signal of VIDEO input, or DVD/HD input, or RGB input.

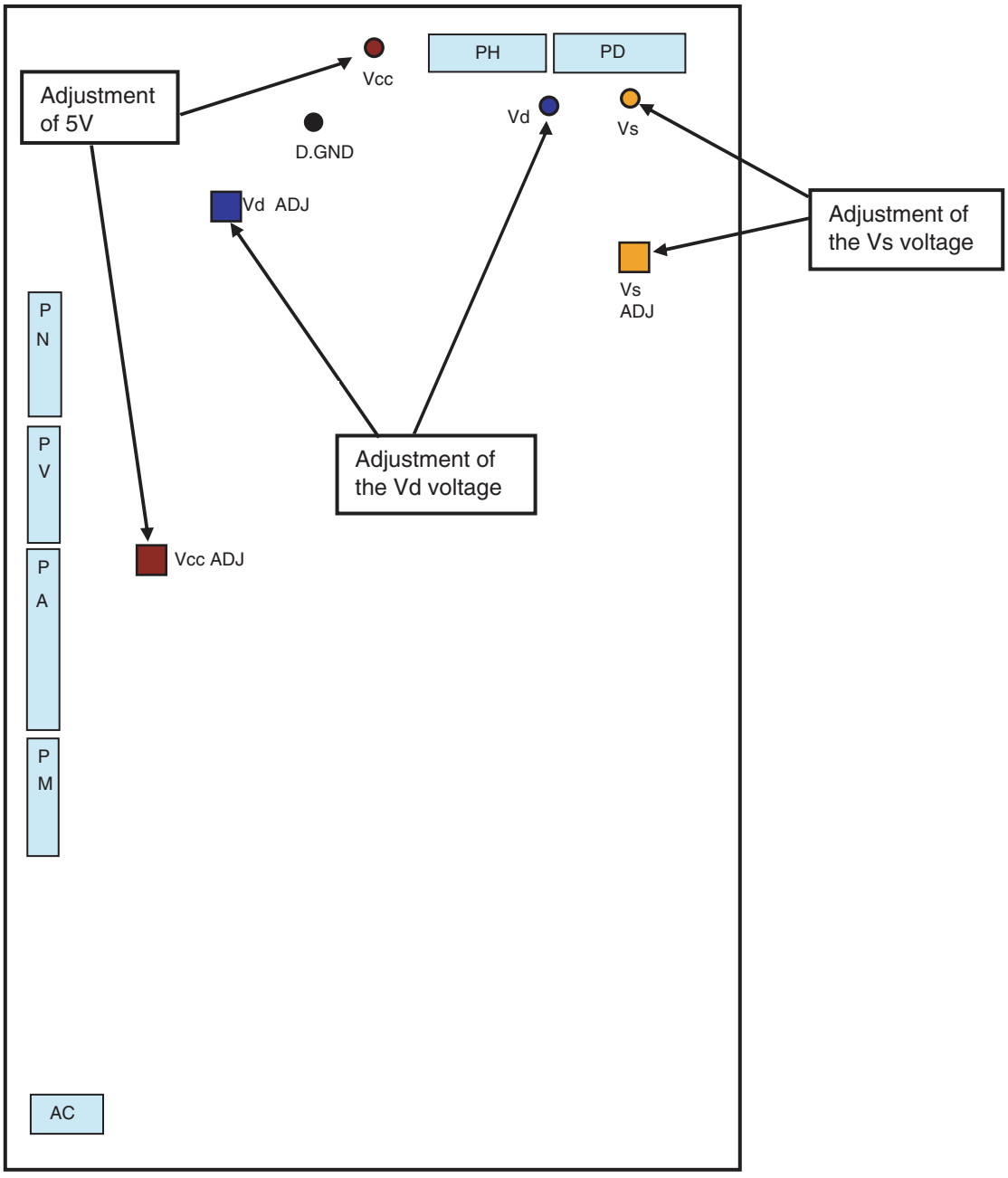
(2) Confirm that the voltages of Vcc and D, GND of the power unit are maintained at "5.15 ± 0.1V". Otherwise, turn the volume control (Vcc ADJ VR121) until the voltage attains "5.15 ± 0.1V".



(Caution) Rear-side view when the back cover is removed The label is concealed between the MAIN PWB and PDP. Check it by peeping through the space from above. The label position can be changed, without notice.

*** Top view of the power unit (Adjustment VR location)**

- **PD-4265**

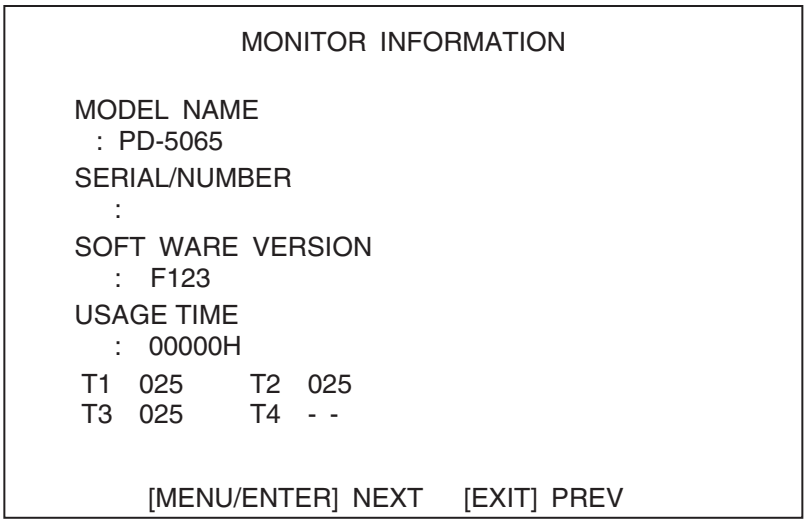


3. Adjustments after the replacement of the MAIN PWB (Using the remote control)

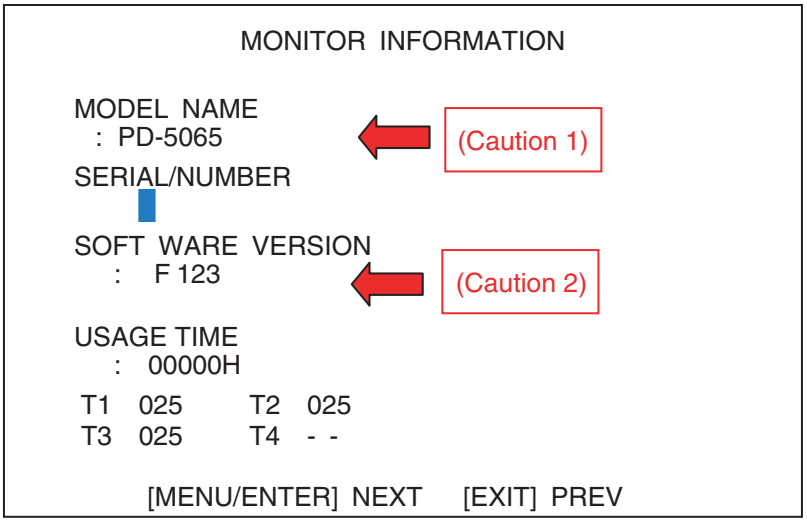
3-1. Product serial No. registration

(1) Press the keys in the order of [MENU/ENTER] → [MUTE] → [EXIT] → [SLEEP] → [EXIT] in order to enter the factory adjustment menu.

(2) Press the [MENU/ENTER] key to select the [MONITOR INFORMATION] No. menu. (Example : PD-5065)



(3) Press the [FORMAT] key 4 times to display a cursor in the lower column of [SERIAL/NUMBER].



(Caution 1) No modification is possible here because this modification is already finished by 3-2. Factory shipment setting (initial setting).

(Caution 2) No modification is possible here because registration is already finished at the time of shipment in terms of maintenance parts.

(4) Moving the POSITION/CONTROL keys of [▲] and [▼], select the numerals and characters of the serial number that is listed in the serial label located on the rear surface of the product. Register the serial number. (Blank → 0 – 9→A – Z)

(5) Moving the POSITION/CONTROL keys of [◀] and [▶], select the next digit by means of a cursor.

(6) Repeat the processes of (4) and (5) above and register the serial number completely.

(Example) When entering a serial number of [DISS00001XX]

Move the POSITION/CONTROL keys of [▲] and [▼] to select [D].

```
MONITOR INFORMATION

MODEL NAME
  : PD-5065
SERIAL/NUMBER
  : D
SOFT WARE VERSION
  : F 123

USAGE TIME
  :  00000H
T1  025     T2  025
T3  025     T4  - -

     [MENU/ENTER] NEXT    [EXIT] PREV
```

Move the POSITION/CONTROL keys of [◀] and [▶] to select the next digit.

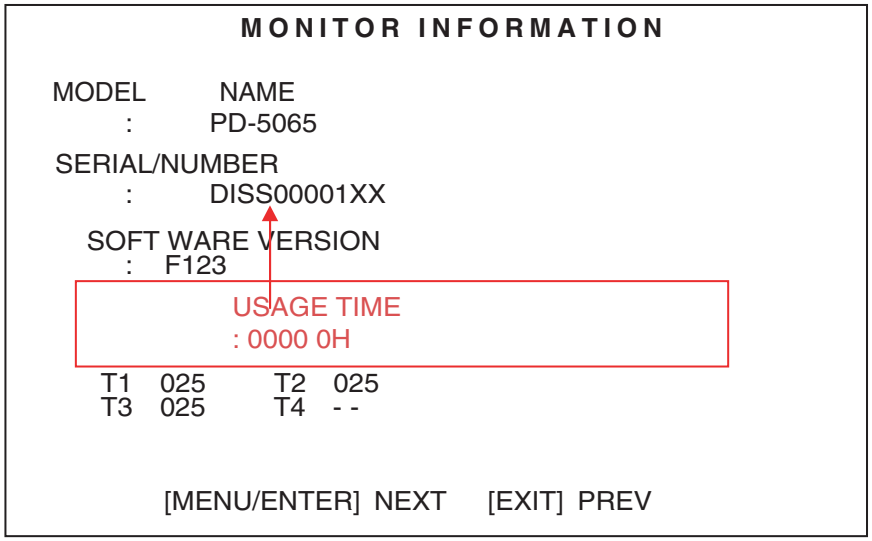
```
MONITOR INFORMATION

MODEL NAME
  : PD-5065
SERIAL/NUMBER
  : D
SOFT WARE VERSION
  : F 123

USAGE TIME
  :  00000H
T1  025     T2  025
T3  025     T4  - -

     [MENU/ENTER] NEXT    [EXIT] PREV
```

③ Repeat the procedures of ① and ② above, and enter all inputs of [DISS00001XX] from the left side.



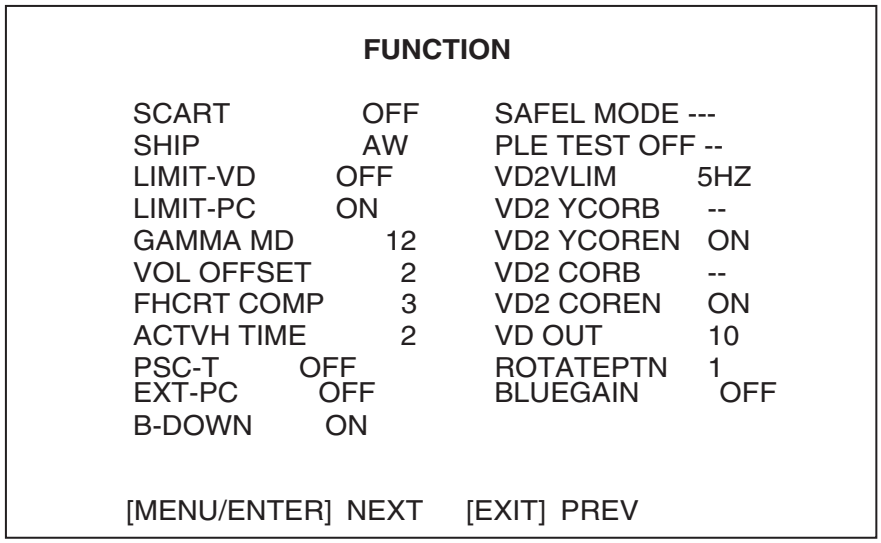
(7) Following the above, setting must be carried out without fail according to "3-2. Factory shipment setting (Initial setting)"

3-2.Factory shipment setting (Initial setting)

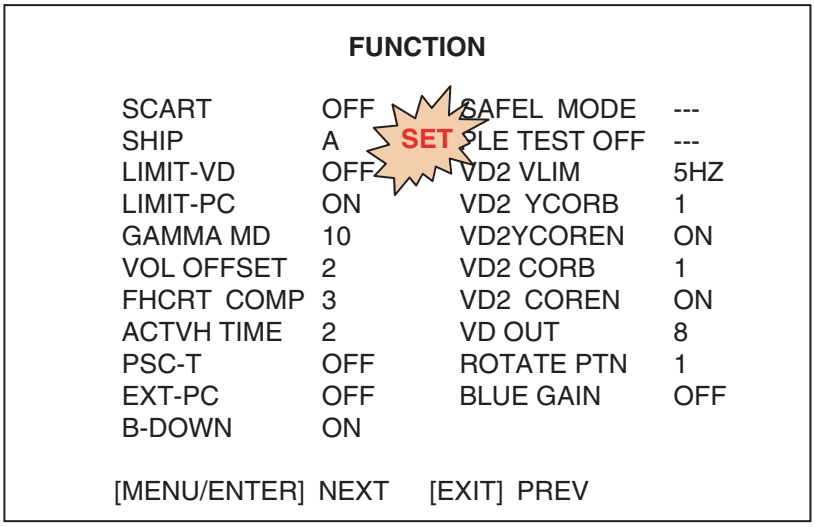
(1) Press the [MENU/ENTER] ke to select the [FUNCTION] menu.

(2) Move the POSITION/CONTROL keys of [▲] and [▼] to the item of [SHIP]. Then, move the POSITION/CONTROL keysof [◀] and [▶] to select [AW] shown below.
(The asterisks * shown below denote the numerals or the characters.)

AW : For use in Japan and North America



(3) Press the keys in the order of [MUTE]→POSITION/CONTROL [▲] → POSITION/CONTROL [▼] →[SLEEP] to make "Factory shipment setting". When "Factory shipment setting" is executed, the red characters of [SET] is shown for about 5 seconds on the right side of the [AW]. The setting is finished when these red characters of [SET] go out. In regard to the factory shipment setting values, refer to the descriptions given below.



(4) Press the keys of the remote control in the order of [MENU/ENTER] → [MUTE] → [EXIT] → [SLEEP] → [EXIT] in order to withdraw from the Factory shipment setting.

[Factory shipment setting values]

1. Initial setting values for the user menu

MENU	AW
POWER ON/OFF	ON
VOLUME	10step
INPUT MODE	INPUT1
WIDE MODE	STRETCH
AUTO PICTURE	OFF(RGB1,2,MONITORLINK)
HD SELECT	1080I
LANGUAGE	ENGLISH
COLOR SYSTEM	AUTO
All items intended to recover the initial valuesthrough the selection of [All Reset] in the user menu	Initial values

2. Field menu initial setup values (applicable in common to all models)

MENU		AW
SERVICE	SHIP	AW
	PSC-LIMIT	OFF
	LIMIT-PC	ON
	U-SCAN	OFF
	V-FREQ OT	AUTO
	V-FREQ VD	AUTO
	SYNCLEVEL1	TTL
	SYNCLEVEL2	TTL
	SUB-ORB *1	ON
	PIC FREEZE *1	ON
MONITOR INFORMATION	MODEL NAME	1*

1*. MONITOR INFORMATION
PD-4265 : **PD-4265**
PD-5065 : **PD-5065**

3. Initial setting values for the Factory shipment setting menu The table shown below specifies only the items that can be changed in the factory adjusting mode. Therefore, any setting values of the items not specified below cannot be modified.

MENU		A,AW
FUNCTION	SHIP	AW
	LIMIT-PC	ON
MONITOR INFORMATION	SERIAL/ NUMBER	-

[Materia ls for reference]

1. Signal generator

(1) Digital RGB

, Component signal generator

- Equivalent to the VIDEO GENERATOR LT1615 (made by LEADER)
- Equivalent to the PANEL LINK ADAPTER LT9217 (made by LEADER)
- Equivalent to the VIDEO ENCODE R LT1606 (made by LEADER)

(2) NTSC signal generator

- Equivalent to the NTSC PATTERN GENERATER LCG-403YC (made by LEADER)

(3) PAL signal generator

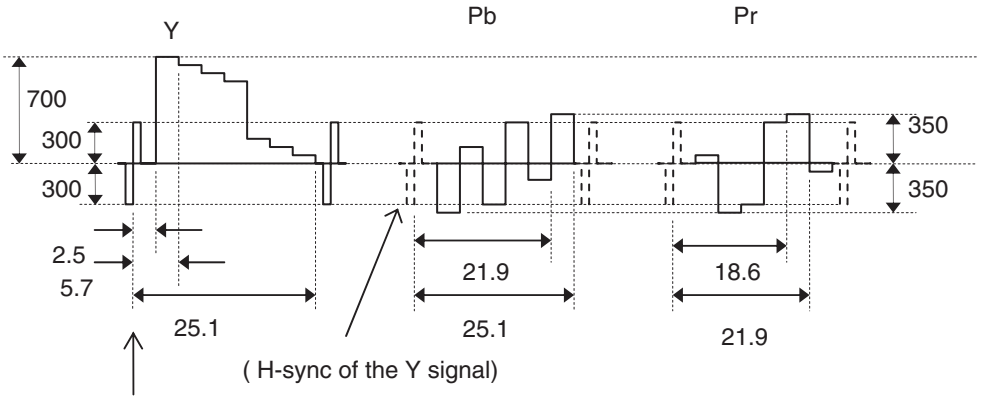
- Equivalent to the COLOR BAR PATTERN GENERATOR PM5518 (made by PHILIPS)

2. VIDEO input

Input: Composite video input or S-terminal input

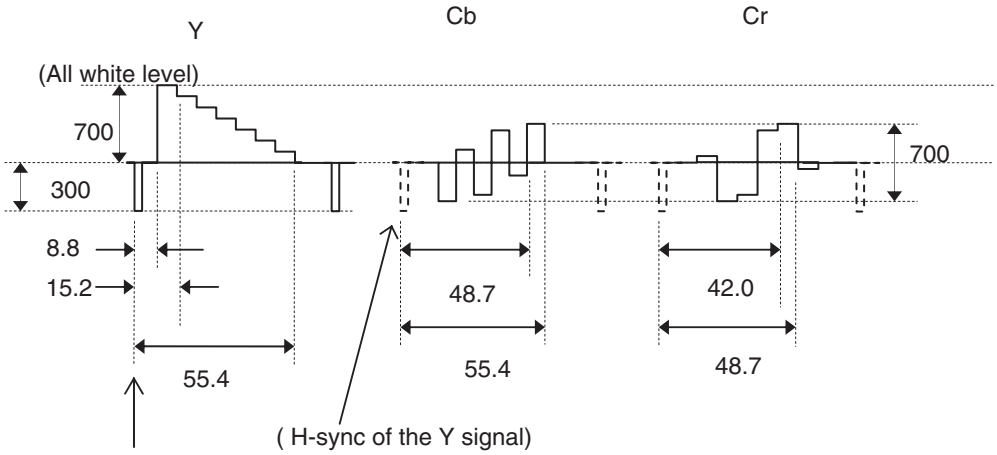
3. DVD/HD/DTV inputs

3-1. HD: Y/Pb/Pr component inputs, ternary sync signals



The time indication is based on the
rise time of the ternary sync signals.

3-2. DVD: Y/Cb/Cr component inputs



The time indication is based on the
lowering of the Horizontal sync signal.

4. RGB inputs

1) Horizontal sync period

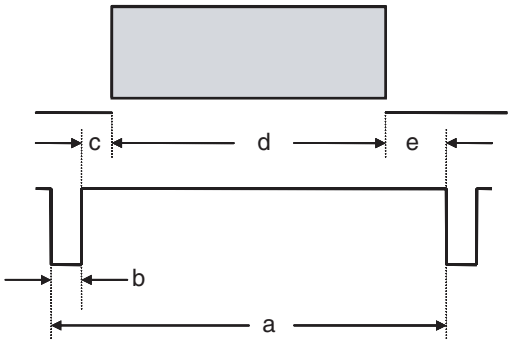
Video signal

0.7Vp-p

Sync signal

TTL level

Positive/negative polarity



2) Vertical sync period

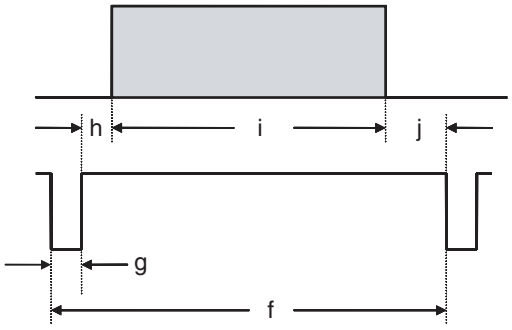
Video gnasil

0.7Vp-p

Sync signal

TTL level

Positive/negative polarity



For the respective inspection signals, the above "a" to "j" shall be listed on the next page and thereafter.

5. RGB/PC signal timing table

(Caution 1) For HDCP non-application products, the signals of the PC mode 1 ~ 89 can be received. For HDCP application products, the signals of the PC mode 1 ~ 98 can be received.

(Caution 2) The received PC mode number specified below is displayed in the memory column of the user menu "Information."

PC mode	1	2	3	4	5
Signal name	VU-6010 NTSC	VU-6010 PAL/SECAM	NOT USED	PC98 400@70Hz	PC98 480@60Hz
Definition	640*240	768*288		640*400	640*480
Dot clock frequency (MHz)	12.214	14.752		25.175	25.175
H frequency (kHz)	15.734	15.557		31.469	31.469
V frequency (Hz)	59.94	50.39		70.086	59.94
H total (uS) [a] (dots)	63.534 776	64.262 948		31.778 800	31.778 800
H display period (uS [d] (dots)	52.4 640	52.06 768		25.422 640	25.422 640
H front porch (uS) [c] (dots)	1.146 14	1.288 19		0.675 17	0.596 15
H sync pulse width (uS) [b] (dots)	8.76 107	8.677 128		2.542 64	3.813 96
H back porch (uS) [e] (dots)	1.228 15	2.237 33		3.138 79	1.946 49
V total (mS) [f] (line)	16.652 262	20.055 312		14.268 449	16.683 525
V display period (mS) [i] (line)	15.3 240	18.513 288		12.711 400	15.253 480
V front porch (mS) [h] (line)	0.191 3	0.321 5		0.413 13	0.191 6
V sync pulse width (mS)[g] (line)	1.144 18	1.093 17		0.064 2	0.064 2
V back porch (mS) [j] (line)	0.064 1	0.064 1		1.08 34	1.176 37
H sync polarity V sync polarity	Neg Neg	Neg Neg		Neg Neg	Neg Neg
Scan type	Interlaced	Interlaced		Non Interlaced	Non Interlaced
Remarks					

PC mode	6	7	8	9	10
Signal name	MAC@13"	VESA 480@72Hz	VESA 480@75Hz	VESA 480@85Hz	
Definition	640*480	640*480	640*480	640*480	
Dot clock frequency (MHz)	30.24	31.5	31.5	36.0	
H frequency (kHz)	35	37.861	37.5	43.269	
V frequency (Hz)	66.667	72.809	75	85.008	
H total (uS) (dots)	28.571 864	26.413 832	26.667 840	23.111 832	
H display period (uS (dots)	21.164 640	20.317 640	20.317 640	17.778 640	
H front porch (uS) (dots)	2.116 64	0.762 24	0.508 16	1.556 56	
H sync pulse width (uS) (dots)	2.116 64	1.27 40	2.032 64	1.556 56	
H back porch (uS) (dots)	3.175 96	4.064 128	3.81 120	2.222 80	NOT USED
V total (mS) (line)	15 525	13.735 520	13.333 500	11.764 509	
V display period (mS) (line)	13.714 480	12.678 480	12.8 480	11.093 480	
V front porch (mS) (line)	0.086 3	0.237 9	0.027 1	0.023 1	
V sync pulse width (mS)(line)	0.086 3	0.079 3	0.08 3	0.069 3	
V back porch (mS) (line)	1.114 39	0.739 28	0.427 16	0.578 25	
H sync polarity V sync polarity	Sync on G Sync on G	N e g N e g	N e g N e g	N e g N e g	
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	
Remarks					

PC mode	11	12	13	14	15
Signal name	VESA 600@56Hz	VESA 600@60Hz	VESA 600@72Hz	VESA 600@75Hz	VESA 600@85Hz
Definition	800*600	800*600	800*600	800*600	800*600
Dot clock frequency (MHz)	36	40	50	49.5	56.25
H frequency (kHz)	35.156	37.879	48.077	46.875	53.674
V frequency (Hz)	56.25	60.317	72.188	75	85.061
H total (uS) (dots)	28.444 1024	26.4 1056	20.8 1040	21.333 1056	18.631 1048
H display period (uS (dots)	22.222 800	20 800	16 800	16.162 800	14.222 800
H front porch (uS) (dots)	0.667 24	1 40	1.12 56	0.323 16	0.569 32
H sync pulse width (uS) (dots)	2 72	3.2 128	2.4 120	1.616 80	1.138 64
H back porch (uS) (dots)	3.556 128	2.2 88	1.28 64	3.232 160	2.702 152
V total (mS) (line)	17.778 625	16.579 628	13.853 666	13.333 625	11.756 631
V display period (mS) (line)	17.067 600	15.84 600	12.48 600	12.8 600	11.179 600
V front porch (mS) (line)	0.028 1	0.026 1	0.77 37	0.021 1	0.019 1
V sync pulse width (mS)(line)	0.057 2	0.106 4	0.125 6	0.064 3	0.056 3
V back porch (mS) (line)	0.626 22	0.607 23	0.478 23	0.448 21	0.503 27
H sync polarity V sync polarity	Pos. Pos.	Pos. Pos.	Pos. Pos.	Pos. Pos.	Pos. Pos.
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	16	17	18	19	20
Signal name	MAC@16"	I/O data wide	VESA	VESA wide (NEC1)	
Definition	832*624	852*480		848*480	
Dot clock frequency (MHz)	57.2832	34.006		33.75	
H frequency (kHz)	49.725	31.722		31.02	
V frequency (Hz)	74.55	59.966		60	
H total (uS) (dots)	20.111 1152	31.524 1072		32.237 1088	
H display period (uS (dots)	14.524 832	25.055 852		25.126 848	
H front porch (uS) (dots)	0.559 32	0.659 22		0.474 16	
H sync pulse width (uS) (dots)	1.117 64	3.764 128		3.319 112	
H back porch (uS) (dots)	3.91 224	2.047 70	NOT USED	3.319 112	NOT USED
V total (mS) (line)	13.414 667	16.676 529		16.667 517	
V display period (mS) (line)	12.549 624	15.132 480		15.474 480	
V front porch (mS) (line)	0.02 1	0.378 12		0.193 6	
V sync pulse width (mS)(line)	0.06 3	0.095 3		0.258 8	
V back porch (mS) (line)	0.784 39	1.072 34		0.741 23	
H sync polarity V sync polarity	Sync on G Sync on G	Neg Neg		Pos. Pos.	
Scan type	Non Interlaced	Non Interlaced		Non Interlaced	
Remarks					

PC mode	21	22	23	24	25
Signal name	NOT USED	VESA wide (NEC4)	NOT USED	VESA 768@60Hz	VESA 768@70Hz
Definition		1360*768		1024*768	1024*768
Dot clock frequency (MHz)		85.5		65	75
H frequency (kHz)		47.712		48.363	56.476
V frequency (Hz)		60.015		60.004	70.069
H total (uS) (dots)		20.959 1792		20.677 1344	17.707 1328
H display period (uS (dots)		15.906 1360		15.754 1024	13.653 1024
H front porch (uS) (dots)		0.749 64		0.369 24	0.32 24
H sync pulse width (uS) (dots)		1.31 112		2.092 136	1.813 136
H back porch (uS) (dots)		2.994 256		2.462 160	1.92 144
V total (mS) (line)		16.662 795		16.666 806	14.272 806
V display period (mS) (line)		16.097 768		15.88 768	13.599 768
V front porch (mS) (line)		0.063 3		0.062 3	0.053 3
V sync pulse width (mS)(line)		0.126 6		0.124 6	0.106 6
V back porch (mS) (line)		0.377 18		0.6 29	0.513 29
H sync polarity V sync polarity		Pos. Pos.		Neg Neg	Neg Neg
Scan type		Non Interlaced		Non Interlaced	Non Interlaced
Remarks					

PC mode	26	27	28	29	30
Signal name	VESA 768@75Hz	VESA 768@85Hz	MAC@19"	VESA 1024@60Hz	VESA 1024@75Hz
Definition	1024*768	1024*768	1024*768	1280*1024	1280*1024
Dot clock frequency (MHz)	78.75	94.5	80	108	135
H frequency (kHz)	60.023	68.677	60.24	63.981	79.976
V frequency (Hz)	75.029	84.997	74.93	60.02	75.025
H total (uS) (dots)	16.66 1312	14.561 1376	16.600 1328	15.63 1688	12.501 1688
H display period (uS (dots)	13 1024	10.836 1024	12.8 1024	11.852 1280	9.481 1280
H front porch (uS) (dots)	0.203 16	0.508 48	0.4 32	0.444 48	0.119 2
H sync pulse width (uS) (dots)	1.219 96	1.016 96	1.2 96	1.037 112	1.067 144
H back porch (uS) (dots)	2.235 176	2.201 208	2.2 176	2.296 248	1.837 248
V total (mS) (line)	13.328 800	11.765 808	13.347 804	16.661 1066	13.329 1066
V display period (mS) (line)	12.795 768	11.183 768	12.749 768	16.005 1024	12.804 1024
V front porch (mS) (line)	0.017 1	0.015 1	0.050 3	0.016 1	0.013 1
V sync pulse width (mS)(line)	0.05 3	0.044 3	0.050 3	0.047 3	0.038 3
V back porch (mS) (line)	0.466 28	0.524 36	0.498 30	0.594 38	0.475 38
H sync polarity V sync polarity	Pos. Pos.	Pos. Pos.	— —	Pos. Pos.	Pos. Pos.
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	31	32	33	34	35
Signal name	IDC-3000G PAL 625P	IDC-3000G NTSC 525P	HDTV-JD	TV(480P)	DTV(720P)
Definition	768*576	640*480	1920*1035	644*483	1280*720
Dot clock frequency (MHz)	29.687	24.39	74.25	24.37	74.25
H frequency (kHz)	31.389	31.47	33.75	31.469	45.000
V frequency (Hz)	50	59.9	60	59.94	60
H total (uS) (dots)	31.933 948	31.775 775	29.63 2200	31.777 774	22.222 1650
H display period (uS (dots)	25.87 768	26.24 640	25.86 1920	26.427 644	17.239 1280
H front porch (uS) (dots)	0.269 8	0.41 10	0.59 44	0.75 18	0.943 70
H sync pulse width (uS) (dots)	2.526 75	2.46 60	0.59 44	2.35 57	1.077 80
H back porch (uS) (dots)	3.267 97	2.665 65	2.59 192	2.25 55	2.963 220
V total (mS) (line)	19.911 625	16.522 525	16.666 562.5	16.683 525	16.667 750
V display period (mS) (line)	18.35 576	15.106 480	15.348 517/518	15.348 483	16 720
V front porch (mS) (line)	0.223 7	0.252 8	0.163/0.148 5.5/5	0.191 6	0.111 5
V sync pulse width (mS)(line)	0.223 7	0.22 7	0.148 5	0.191 6	0.111 5
V back porch (mS) (line)	1.115 35	0.944 30	1.037/1.022 35/34.5	0.953 30	0.444 20
H sync polarity V sync polarity	Neg Neg	Neg Neg	Neg Neg	Neg Neg	Neg Neg
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	36	37	38	39	40
Signal name	HDTV-W			MAC@21"	VESA 1024@85Hz
Definition	1920*1080			1152*870	1280*1024
Dot clock frequency (MHz)	74.25			100	157.5
H frequency (kHz)	33.75			68.681	91.146
V frequency (Hz)	60			75.062	85.024
H total (uS) (dots)	29.630 2200			14.560 1456	10.971 1728
H display period (uS) (dots)	25.859 1920			11.520 1152	8.127 1280
H front porch (uS) (dots)	0.593 44			0.320 32	0.406 64
H sync pulse width (uS) (dots)	1.185 88			1.280 128	1.016 160
H back porch (uS) (dots)	1.993 148	NOT USED	NOT USED	1.440 144	1.422 224
V total (mS) (line)	16.666 562.5			13.322 915	11.761 1072
V display period (mS) (line)	16.000 540			12.667 870	11.235 1024
V front porch (mS) (line)	0.074/0.059 2.5/2			0.044 3	0.011 1
V sync pulse width (mS) (line)	0.148 5			0.044 3	0.033 3
V back porch (mS) (line)	0.444/0.459 15/15.5			0.568 39	0.483 44
H sync polarity V sync polarity	Neg Neg			Sync on G Sync on G	Pos. Pos.
Scan type	Interlaced			Non Interlaced	Non Interlaced
Remarks					

PC mode	41	42	43	44	45
Signal name	I/O data 480@100Hz	I/O data 480@120Hz	I/O data 600@100Hz	I/O data 600@120Hz	I/O data 768@100Hz
Definition	640*480	640*480	800*600	800*600	1024*768
Dot clock frequency (MHz)	42.506	51.008	66.022	79.942	111.987
H frequency (kHz)	51.089	61.307	62.998	75.703	80.451
V frequency (Hz)	100.370	120.440	99.838	119.97	100.56
H total (uS)	19.573	16.311	15.873	13.209	12.43
(dots)	832	832	1048	1056	1392
H display period (uS)	15.057	12.574	12.117	10.007	9.144
(dots)	640	640	800	800	1024
H front porch (uS)	1.506	1.255	0.606	0.300	0.214
(dots)	64	64	40	24	24
H sync pulse width (uS)	1.317	1.098	0.969	1.001	0.786
(dots)	56	56	64	80	88
H back porch (uS)	1.694	1.412	2.181	1.901	2.286
(dots)	72	72	144	152	256
V total (mS)	9.963	8.302	10.016	8.335	9.944
(line)	509	509	631	631	800
V display period (mS)	9.395	7.829	9.524	7.926	9.546
(line)	480	480	600	600	768
V front porch (mS)	0.020	0.016	0.016	0.013	0.012
(line)	1	1	1	1	1
V sync pulse width (mS)	0.059	0.049	0.048	0.04	0.037
(line)	3	3	3	3	3
V back porch (mS)	0.489	0.408	0.429	0.357	0.348
(line)	25	25	27	27	28
H sync polarity	Neg	Neg	Pos.	Pos.	Neg
V sync polarity	Neg	Neg	Pos.	Pos.	Neg
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	46	47	48	49	50
Signal name	I/O data 768@120Hz	I/O data 1024@100Hz	EWS 4800@71Hz	RCA-STB 1080A	DTV(570P)
Definition	1024*768	1280*1024	1280*1024	1920*1034	768*576
Dot clock frequency (MHz)	132.953	190.908	125	81	29.538
H frequency (kHz)	95.512	108.47	75.12	33.75	31.25
V frequency (Hz)	119.39	100.06	71.204	60	50
H total (uS)	10.47	9.219	13.312	29.630	31.993
(dots)	1392	1760	1664	2400	945
H display period (uS)	7.702	6.7	10.24	23.7	26
(dots)	1024	1280	1280	1920	768
H front porch (uS)	0.181	0.545	0.256	0.59	0.745
(dots)	24	104	32	48	22
H sync pulse width (uS)	0.662	0.75	1.024	3.56	2.35
(dots)	88	143	128	288	69
H back porch (uS)	1.925	1.22	1.792	1.78	2.9
(dots)	256	233	224	144	86
V total (mS)	8.376	9.994	14.044	16.652	20
(line)	800	1084	1055	562	625
V display period (mS)	8.041	9.44	13.631	15.319	18.432
(line)	768	1024	1024	517	576
V front porch (mS)	0.010	0.01	0.04	0.059	0.16
(line)	1	1	3	2	5
V sync pulse width (mS)	0.031	0.03	0.04	0.089	0.16
(line)	3	3	3	3	5
V back porch (mS)	0.293	0.52	0.333	1.185	1.248
(line)	28	56	25	40	39
H sync polarity	Neg	Pos.	Neg	Pos.	Neg
V sync polarity	Neg	Pos.	Neg	Pos.	Neg
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Interlaced	Non Interlaced
Remarks					

PC mode	51	52	53	54	55
Signal name	VESA 864@75Hz	I/O data W_XGA@56Hz	I/O wide XGA	VESA 1200@60Hz	VESA 1200@65Hz
Definition	1152*864	1280*768	1376*768	1600*1200	1600*1200
Dot clock frequency (MHz)	108	76.064	87.34	162	175.5
H frequency (kHz)	67.5	45.064	48.307	75	81.25
V frequency (Hz)	75	56.187	59.934	60	65
H total (uS) (dots)	14.815 1600	22.192 1688	20.701 1808	13.333 2160	12.308 2160
H display period (uS) (dots)	10.667 1152	16.828 1280	15.755 1376	9.877 1600	9.117 1600
H front porch (uS) (dots)	0.593 64	0.631 48	0.366 32	0.395 64	0.365 64
H sync pulse width (uS) (dots)	1.185 128	1.472 112	1.466 128	1.185 192	1.094 192
H back porch (uS) (dots)	2.37 256	3.26 248	3.114 272	1.877 304	1.732 304
V total (mS) (line)	13.333 900	17.78 802	16.685 806	16.667 1250	15.385 1250
V display period (mS) (line)	12.8 864	17.043 768	15.898 768	16 1200	14.769 1200
V front porch (mS) (line)	0.015 1	0.044 2	0.062 3	0.013 1	0.012 1
V sync pulse width (mS) (line)	0.044 3	0.067 3	0.124 6	0.04 3	0.037 3
V back porch (mS) (line)	0.474 32	0.644 29	0.6 29	0.613 46	0.566 46
H sync polarity V sync polarity	Pos. Pos.	Pos. Pos.	Neg Pos.	Pos. Pos.	Pos. Pos.
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	56	57	58	59	60
Signal name	VESA 1200@70Hz	VESA 1200@75Hz	VESA 1200@85Hz	HP 1024@72Hz	SUN 900@66Hz
Definition	1600*1200	1600*1200	1600*1200	1280*1024	1152*900
Dot clock frequency (MHz)	189	202.5	229.5	135	92.941
H frequency (kHz)	87.5	93.75	106.25	78.130	61.796
V frequency (Hz)	70	75	85	72.009	65.95
H total (uS)	11.429	10.667	9.412	12.8	16.182
(dots)	2160	2160	2160	1728	1504
H display period (uS)	8.466	7.901	6.972	9.481	12.395
(dots)	1600	1600	1600	1280	1152
H front porch (uS)	0.339	0.316	0.279	0.474	0.312
(dots)	64	64	64	64	29
H sync pulse width (uS)	1.016	0.948	0.837	1.442	1.377
(dots)	192	192	192	192	128
H back porch (uS)	1.608	1.501	1.325	1.442	2.098
(dots)	304	304	304	192	195
V total (mS)	14.286	13.333	11.765	13.887	15.163
(line)	1250	1250	1250	1085	937
V display period (mS)	13.714	12.8	11.294	13.107	14.564
(line)	1200	1200	1200	1024	900
V front porch (mS)	0.011	0.011	0.009	0.038	0.032
(line)	1	1	1	3	2
V sync pulse width (mS)	0.034	0.032	0.028	0.038	0.065
(line)	3	3	3	3	4
V back porch (mS)	0.526	0.491	0.433	0.704	0.502
(line)	46	46	46	55	31
H sync polarity	Pos.	Pos.	Pos.	SOG.	Csync
V sync polarity	Pos.	Pos.	Pos.	SOG.	Csync
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	61	62	63	64	65
Signal name	SUN 900@76Hz	SGI 768@60Hz	VESA 960@60Hz	VESA 960@60Hz	VESA 1050@60Hz
Definition	1152*900	1024*768	1280*960	1280*960	1400*1050
Dot clock frequency (MHz)	105.561	70	108	148.5	108
H frequency (kHz)	71.710	49.716	60	85.938	63.981
V frequency (Hz)	76.047	60.043	60	85.002	60.020
H total (uS) (dots)	13.945 1472	20.114 1408	16.667 1800	11.636 1728	15.630 1688
H display period (uS) (dots)	10.913 1152	14.629 1024	11.852 1280	8.62 1280	12.963 1400
H front porch (uS) (dots)	0.152 16	2.057 144	0.889 96	0.431 64	0.444 48
H sync pulse width (uS) (dots)	0.909 96	1.371 96	1.037 112	1.077 160	1.037 112
H back porch (uS) (dots)	1.97 208	2.507 144	2.889 312	1.508 224	1.185 128
V total (mS) (line)	13.15 943	16.655 828	16.667 1000	11.764 1011	16.661 1066
V display period (mS) (line)	12.55 900	15.448 768	16 960	11.171 960	16.411 1050
V front porch (mS) (line)	0.028 2	0.443 22	0.017 1	0.012 1	0.016 1
V sync pulse width (mS) (line)	0.112 8	0.06 3	0.05 3	0.035 3	0.047 3
V back porch (mS) (line)	0.460 33	0.704 35	0.6 36	0.547 47	0.188 12
H sync polarity V sync polarity	Csync Csync	SOG. SOG.	Pos. Pos.	Pos. Pos.	Neg Neg
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks					

PC mode	66~74
Signal name	NOT USED
Definition	
Dot clock frequency (MHz)	
H frequency (kHz)	
V frequency (Hz)	
H total (uS) (dots)	
H display period (uS) (dots)	
H front porch (uS) (dots)	
H sync pulse width (uS) (dots)	
H back porch (uS) (dots)	
V total (mS) (line)	
V display period (mS) (line)	
V front porch (mS) (line)	
V sync pulse width (mS) (line)	
V back porch (mS) (line)	
H sync polarity V sync polarity	
Scan type	
Remarks	

PC mode	75	80	81	82	83
Signal name	1080I 50Hz	W_XGA		400H	350H
Definition	1920*1080	1280*768		720*400	720*350
Dot clock frequency (MHz)	74.25	81.0		28.3	28.3
H frequency (kHz)	28.125	47.99		31.5	31.5
V frequency (Hz)	50	59.34		70.1	70.1
H total (uS) (dots)	35.556 2640	20.84 1688		31.78 900	31.78 900
H display period (uS) (dots)	25.859 1920	15.80 1280		25.42 720	25.42 720
H front porch (uS) (dots)	6.519 484	0.593 48		0.636 18	0.636 18
H sync pulse width (uS) (dots)	1.185 88	1.38 112		3.81 108	3.81 108
H back porch (uS) (dots)	1.993 148	3.06 248	NOT USED	1.91 54	1.91 54
V total (mS) (line)	10 562.5	16.713 802		14.269 449	14.269 449
V display period (mS) (line)	9.6 540	16.005 768		12.712 400	11.123 350
V front porch (mS) (line)	0.074/0.059 2.5/2	0.063 3		0.424 12	1.307 37
V sync pulse width (mS) (line)	0.148 5	0.125 6		0.064 2	0.064 2
V back porch (mS) (line)	0.444/0.459 15/15.5	0.521 25		1.112 35	1.907 60
H sync polarity V sync polarity	Neg. Neg.	Pos. Neg.		Neg. Pos.	Pos. Neg.
Scan type	Interlaced	Non Interlaced		Non Interlaced	Non Interlaced
Remarks					

PC mode	84	85	86	87	88
Signal name	720P 24Hz	1080P 24Hz	720P 50Hz	1080I 48Hz	
Definition	1280*720	1920*1080	1280*720	1920*1080	
Dot clock frequency (MHz)	74.176	74.176	74.25	74.1758	
H frequency (kHz)	17.982	26.973	37.5	26.973	
V frequency (Hz)	23.976	23.976	50	37.074	
H total (uS) (dots)	55.611 4125	37.704 2750	26.667 1980	37.074 2750	
H display period (uS) (dots)	17.256 1280	25.884 1920	17.239 1280	25.884 1920	
H front porch (uS) (dots)	34.310 2545	8.008 594	5.387 400	8.008 594	
H sync pulse width (uS) (dots)	1.078 80	1.078 88	1.078 80	1.078 88	
H back porch (uS) (dots)	2.256 220	1.995 148	2.963 220	1.995 148	NOT USED
V total (mS) (line)	41.706 750	41.708 1125	20 750	20.855 1125	
V display period (mS) (line)	40.040 720	40.040 1080	19.2 720	20.020 1080	
V front porch (mS) (line)	0.278 5	0.148 4	0.133 5	0.093 5	
V sync pulse width (mS) (line)	0.278 5	0.185 5	0.133 5	0.185 10	
V back porch (mS) (line)	1.112 20	1.335 36	0.533 20	0.556 30	
H sync polarity V sync polarity	Neg Neg	Neg Neg	Neg Neg	Neg Neg	
Scan type	Non Interlaced	Non Interlaced	Non Interlaced	Interlaced	
Remarks					

PC mode	89	90	91	92	93
Signal name	NOT USED	480i(60Hz)	DTV(480P)	DTV(480P)	DTV(720P)
Definition		720*480	640*480	720*480	1280*720
Dot clock frequency (MHz)		27.000	25.175	27.000	74.250
H frequency (kHz)		15.734	31.469	31.469	45.000
V frequency (Hz)		59.94	59.940	59.94	60.000
H total (uS) (dots)		16.555 1716	31.777 800	31.777 858	22.222 1650
H display period (uS) (dots)		53.333 1440	25.422 640	26.666 720	17.239 1280
H front porch (uS) (dots)		1.407 38	0.635 16	0.592 16	1.481 110
H sync pulse width (uS) (dots)		4.593 124	3.813 96	2.296 62	0.538 40
H back porch (uS) (dots)		4.222 114	1.906 48	2.222 60	2.963 220
V total (mS) (line)		16.635 262	16.683 525	19.444 525	10.101 750
V display period (mS) (line)		15.253 240	15.253 480	15.253 480	16.000 720
V front porch (mS) (line)		0.254 4	0.317 10	0.333 9	0.067 5
V sync pulse width (mS) (line)		0.191 3	0.064 2	0.191 6	0.111 5
V back porch (mS) (line)		0.953 15	1.049 33	0.953 30	0.444 20
H sync polarity V sync polarity		Neg Neg	Neg Neg	Neg Neg	Pos Pos
Scan type		Interlaced	Non Interlaced	Non Interlaced	Non Interlaced
Remarks		HDCP*	HDCP	HDCP	HDCP

*HDCP : High-bandwidth Digital Content Protection

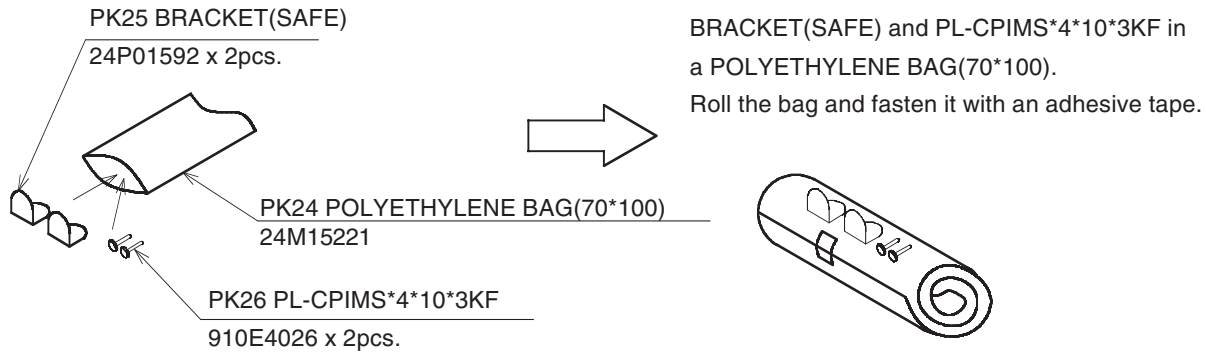
PC mode	94	95	96	97	98
Signal name	HDTV-W	NOT USED			
Definition	1920*1080				
Dot clock frequency (MHz)	74.250				
H frequency (kHz)	33.750				
V frequency (Hz)	60.000				
H total (uS) (dots)	29.629 2200				
H display period (uS) (dots)	25.859 1920				
H front porch (uS) (dots)	1.185 88				
H sync pulse width (uS) (dots)	0.592 44				
H back porch (uS) (dots)	1.993 148				
V total (mS) (line)	7.582 563				
V display period (mS) (line)	16.000 540				
V front porch (mS) (line)	0.040 3				
V sync pulse width (mS) (line)	0.148 5				
V back porch (mS) (line)	0.444 15				
H sync polarity V sync polarity	Pos Pos				
Scan type	Interlaced				
Remarks	HDCP				

*HDCP : High-bandwidth Digital Content Protection

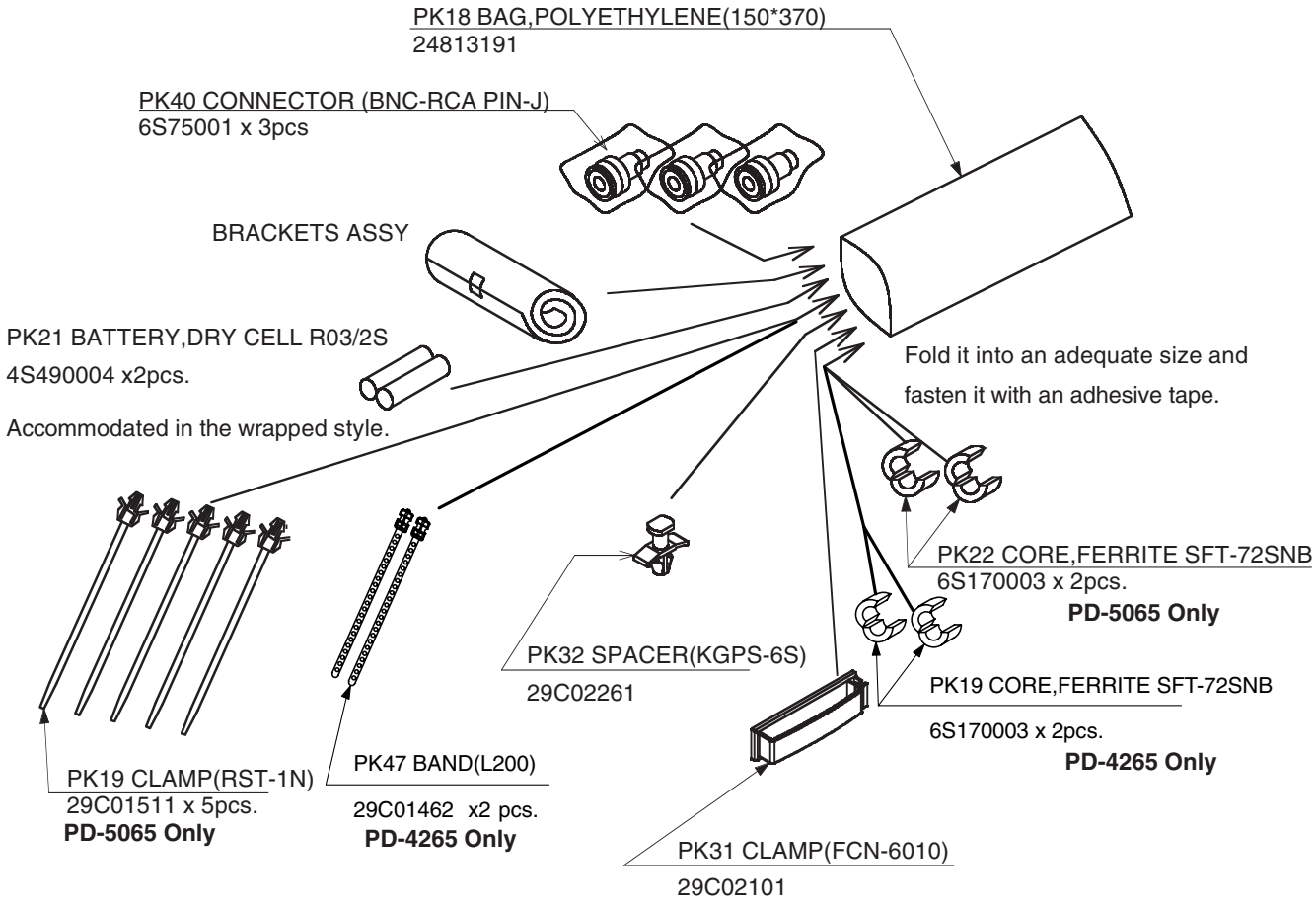
4. EXPLODED VIEWS AND PARTS LIST

4.1 PACKING

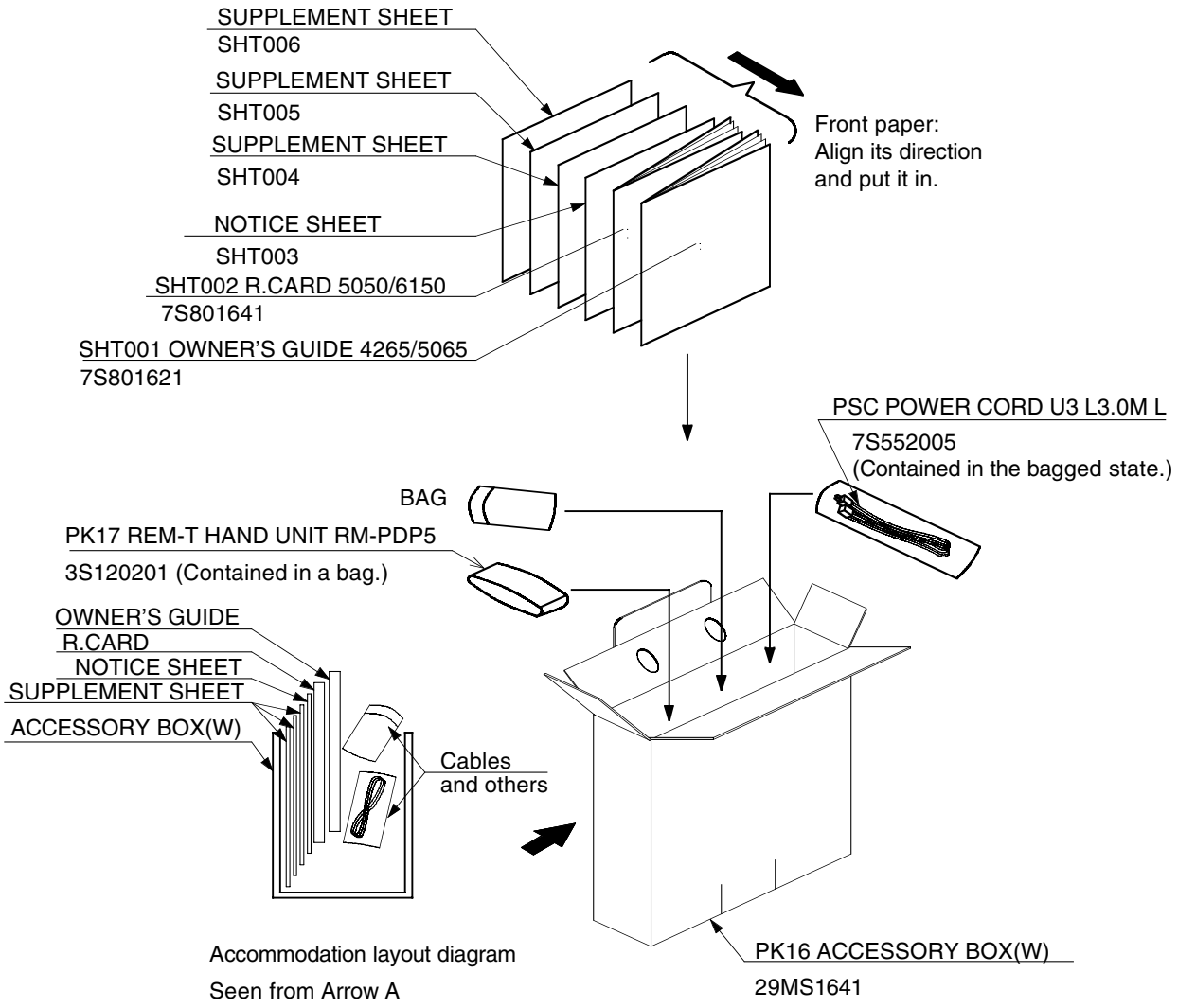
A) BRACKETS ASSY



B) ACCESSORYS ASSY

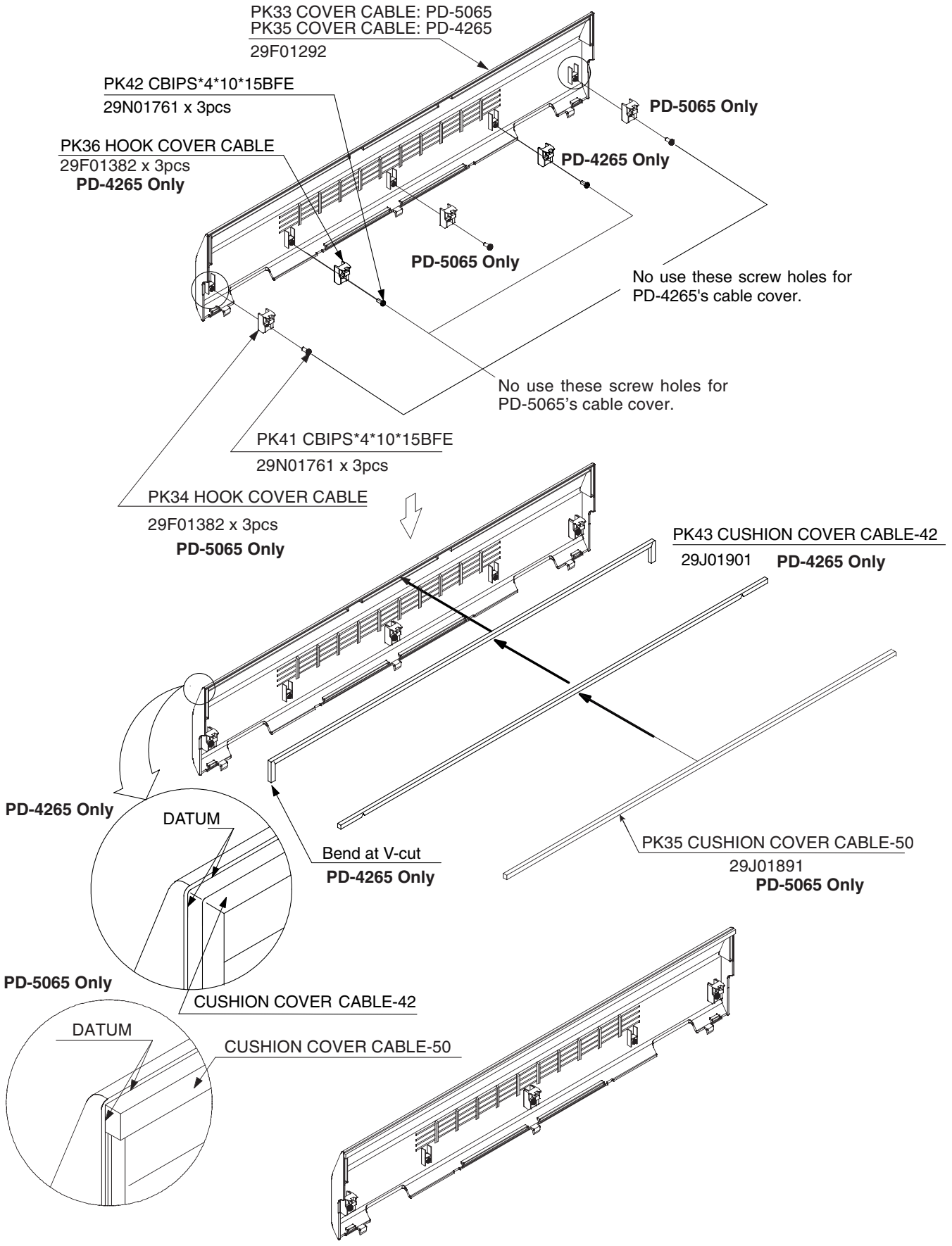


C) ACCESSORY BOX (W)

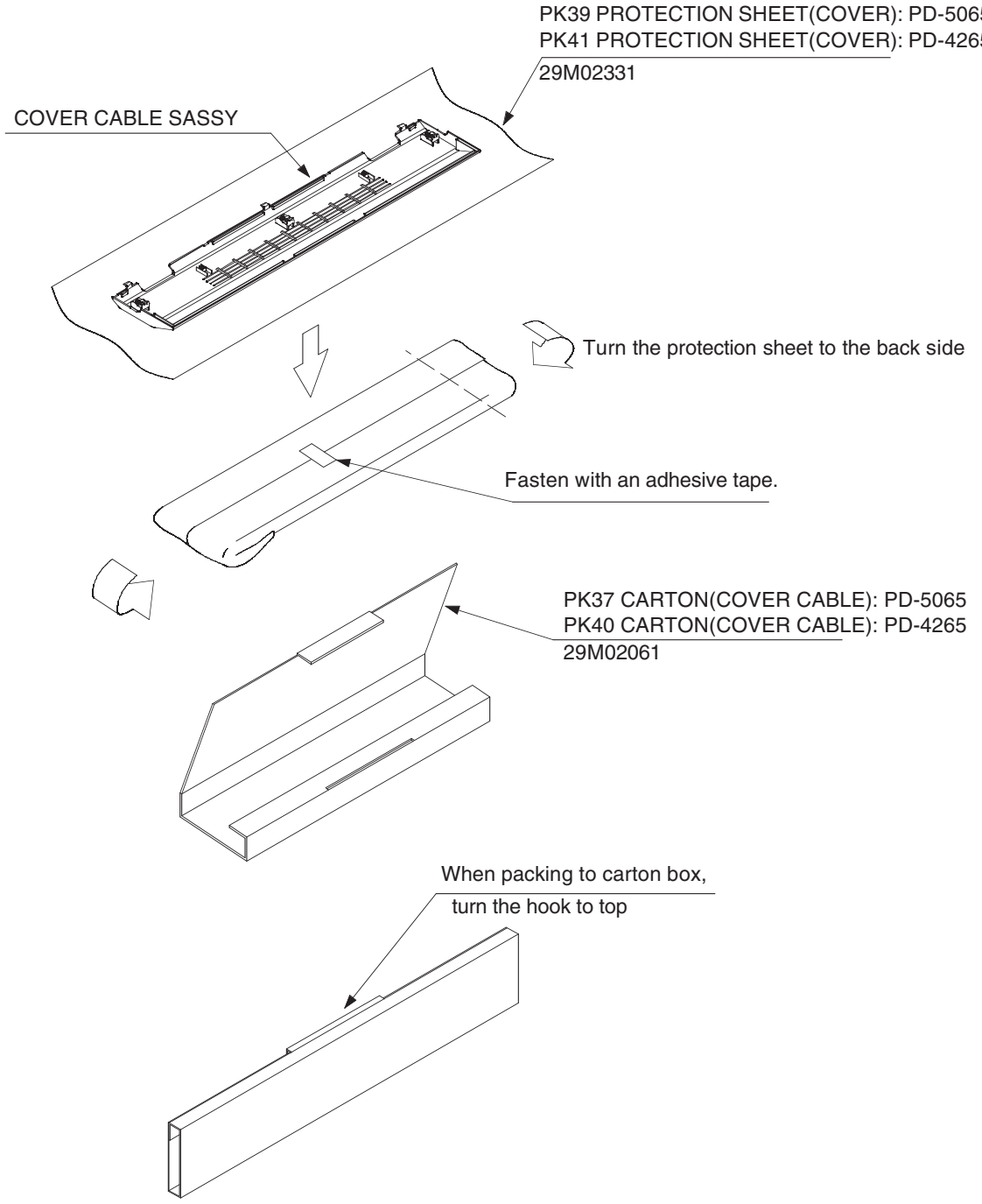


Name Titled	Circuit Symbol	Material Name	Material Code	Quantity Needed
POWER CORD	PSC	POWER CORD E3 L3.0M L		1
OWNER'S GUIDE	SHT001	OWNER'S GUIDE 4265/5065		1
RESISTORATION	SHT002	R.CARD 5050/6150		1
NOTICE SHEET	SHT003	Nil	Nil	Nil
SUPPLEMENT SHEET	SHT004	Nil	Nil	Nil
	SHT005	Nil	Nil	Nil
	SHT006	Nil	Nil	Nil

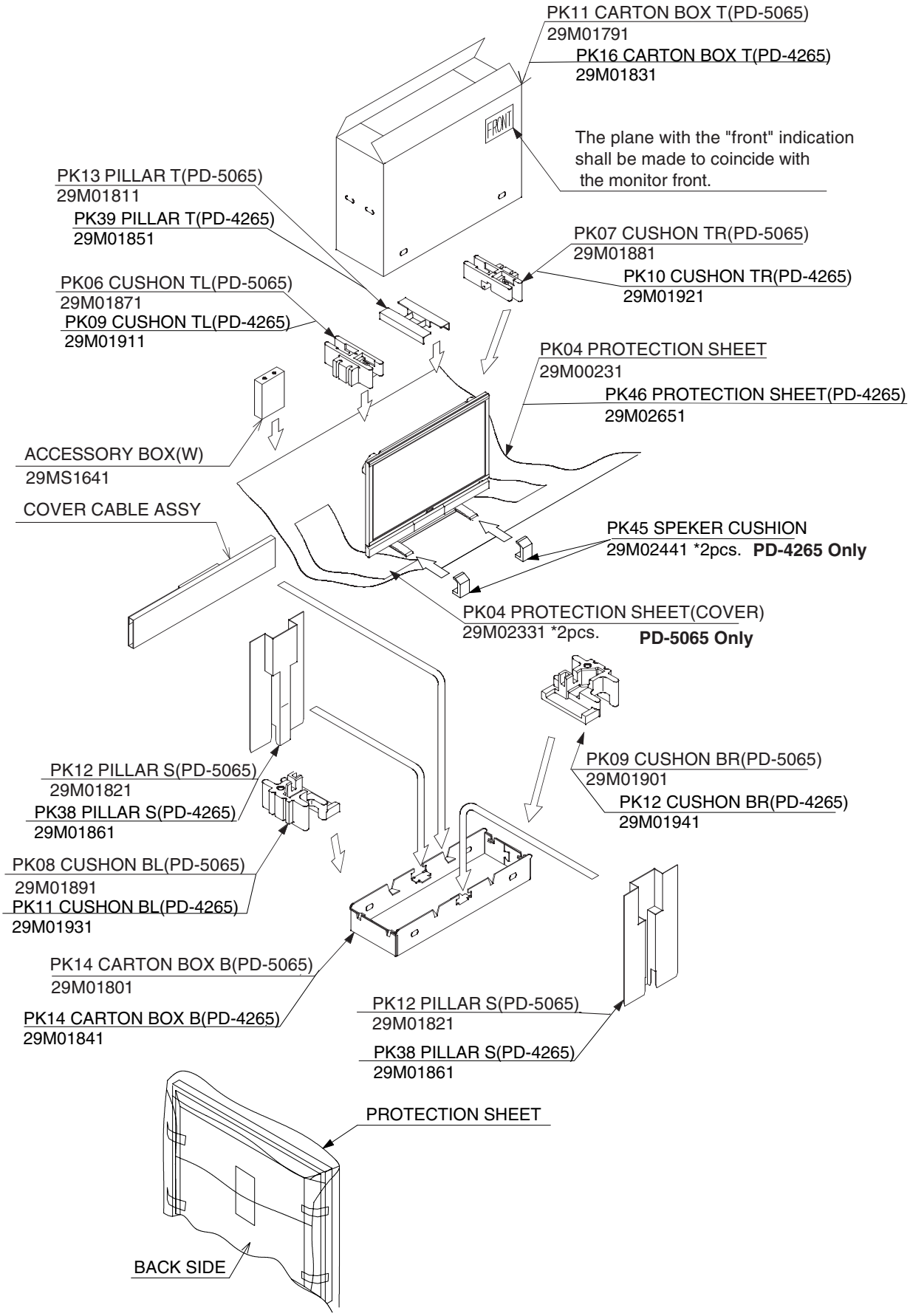
D) COVER CABLES ASSY



E) PACKING OF COVER CABLES ASSY

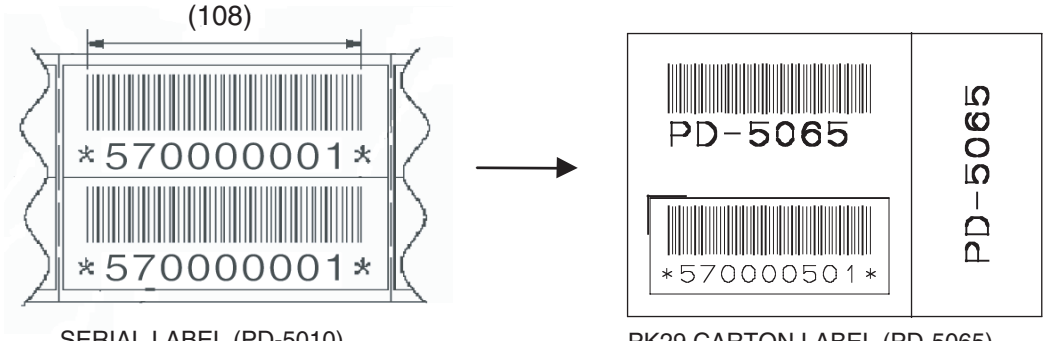


F) SPACER, PILLAR, CARTON BOX



G) BAR CODE SERIAL LABEL

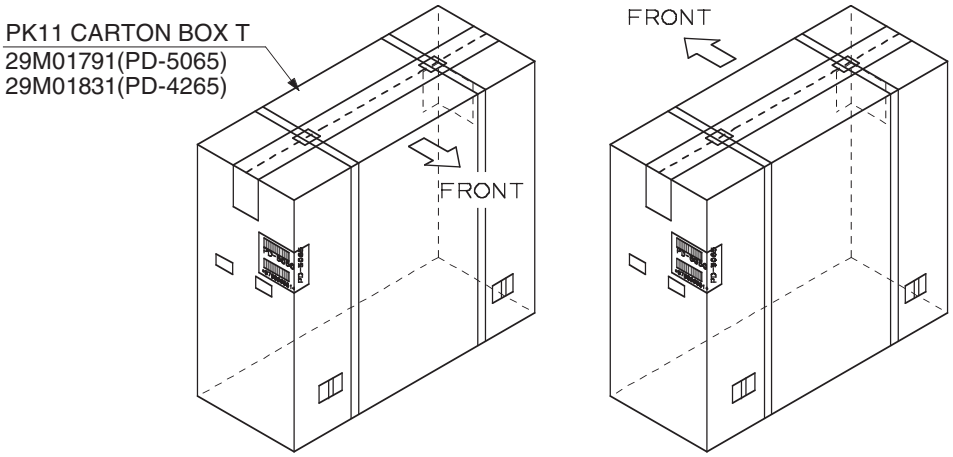
The required items shall be printed on the serial label (PD-5010) 29L02952
See **28.Contents SERIAL LABEL printout-1**



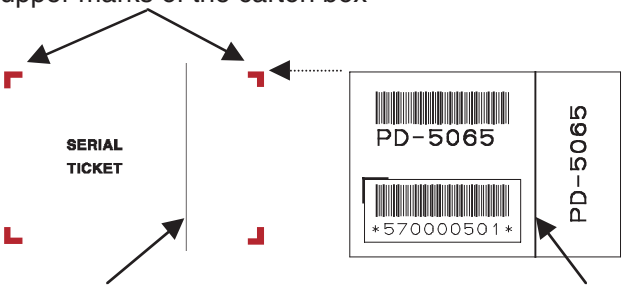
SERIAL LABEL (PD-5010)
29L02952

PK29 CARTON LABEL (PD-5065)
29L07991
PK29 CARTON LABEL (PD-4265)
29L08001

H) Adhesion of the CARTON LABEL



The upper marks of the carton box



For vertical adjustment, the upper plane of the label shall be adjusted to the upper marks of the carton box.
For horizontal adjustment, the guide line of the label shall be adjusted to the edge of the carton box.

The edge of the carton box

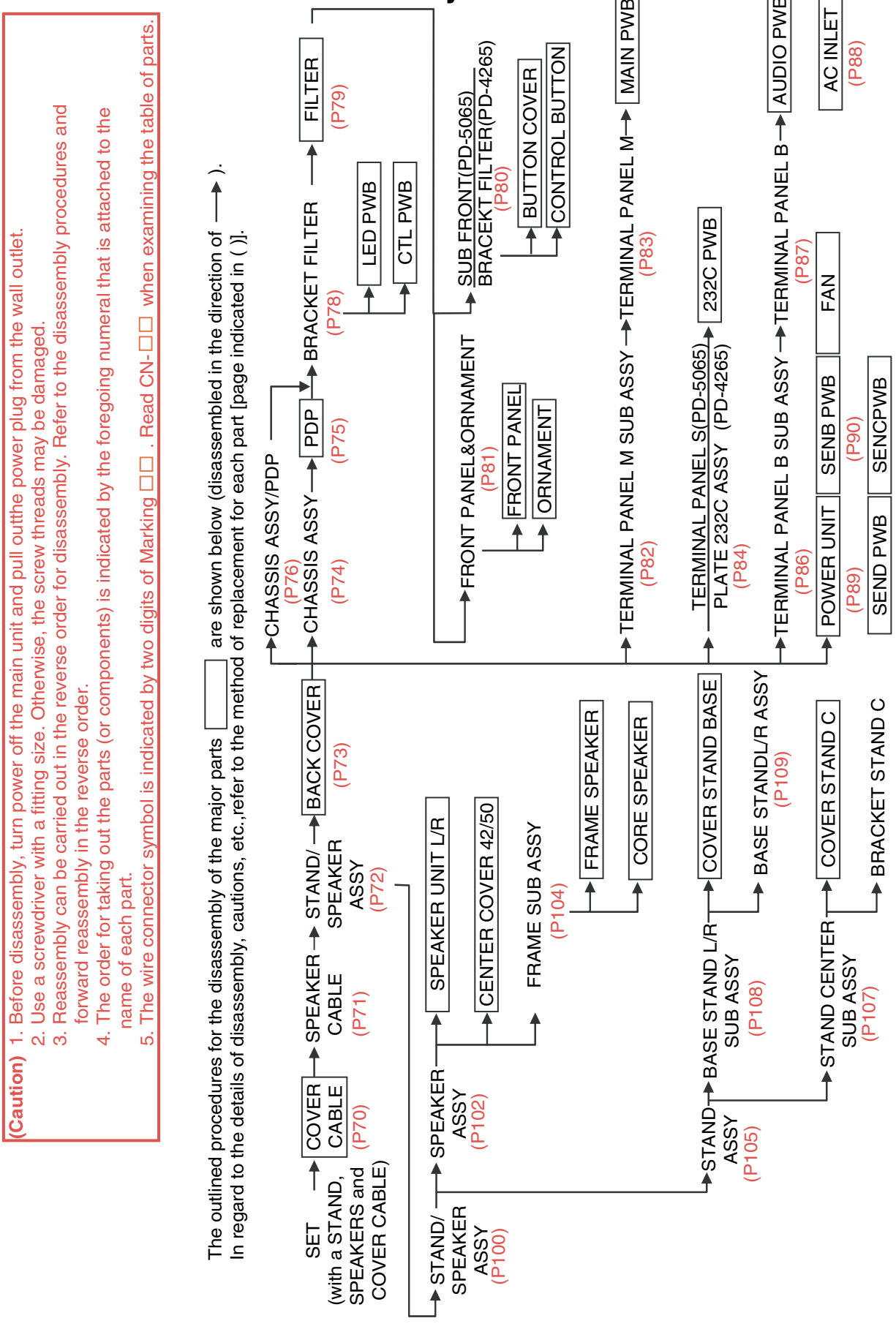
The guide line of the label

4.2 DISASSEMBLY

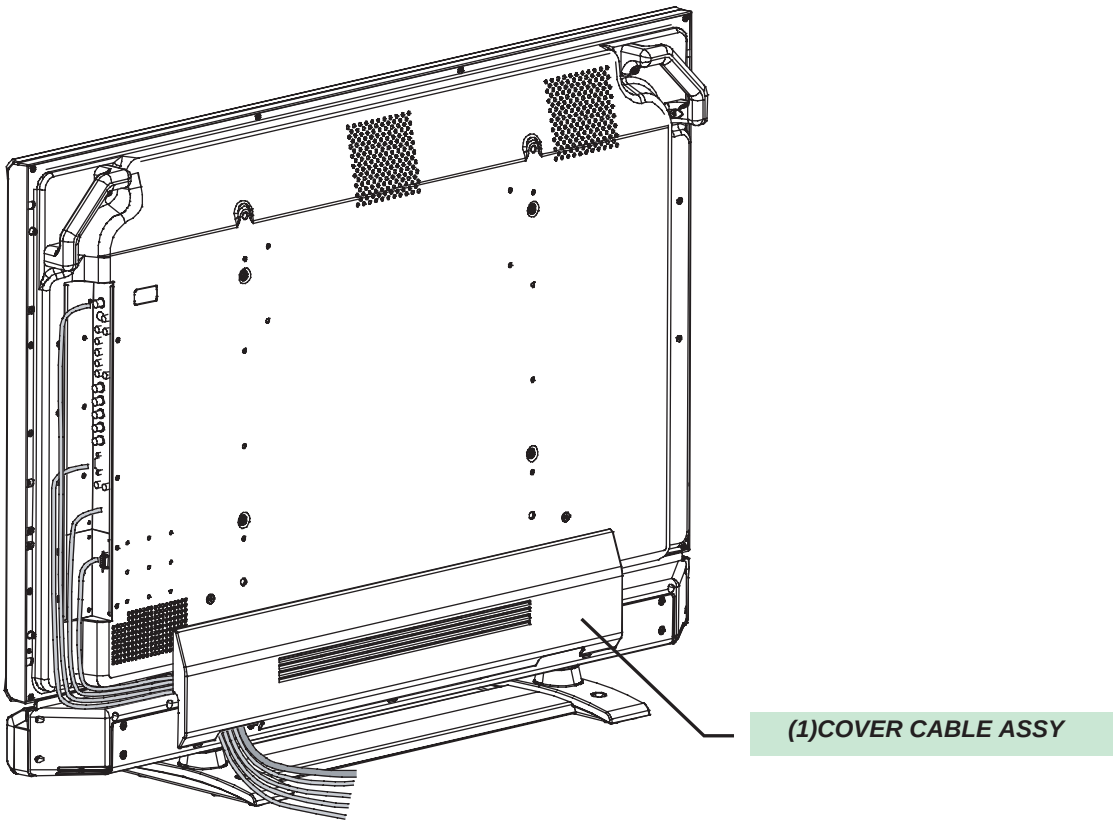
1. Outlined method of disassembly

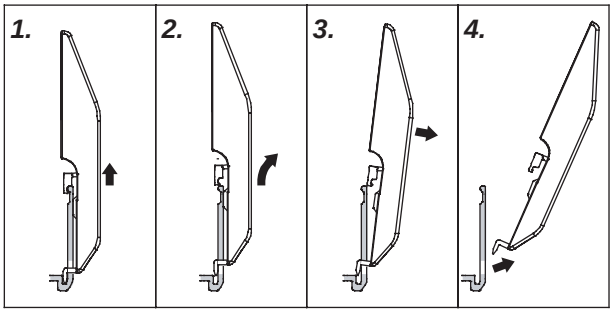
(Caution)
1. Before disassembly, turn power off the main unit and pull outthe power plug from the wall outlet.
2. Use a screwdriver with a fitting size. Otherwise, the screw threads may be damaged.
3. Reassembly can be carried out in the reverse order for disassembly. Refer to the disassembly procedures and forward reassembly in the reverse order.
4. The order for taking out the parts (or components) is indicated by the foregoing numeral that is attached to the name of each part.
5. The wire connector symbol is indicated by two digits of Marking □□ . Read CN-□□ when examining the table of parts.

The outlined procedures for the disassembly of the major parts [ ] are shown below (disassembled in the direction of ⟶).
In regard to the details of disassembly, cautions, etc.,refer to the method of replacement for each part [page indicated in ( )].



2.COVER CABLE



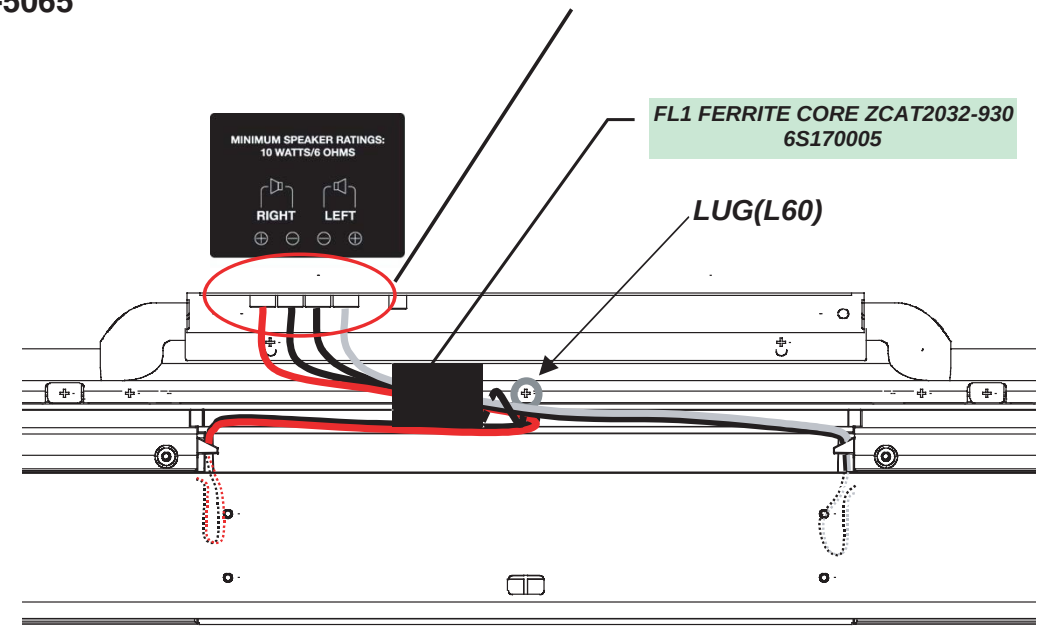


To detach the COVER CABLE ASSY

3.SPEAKER CABLE

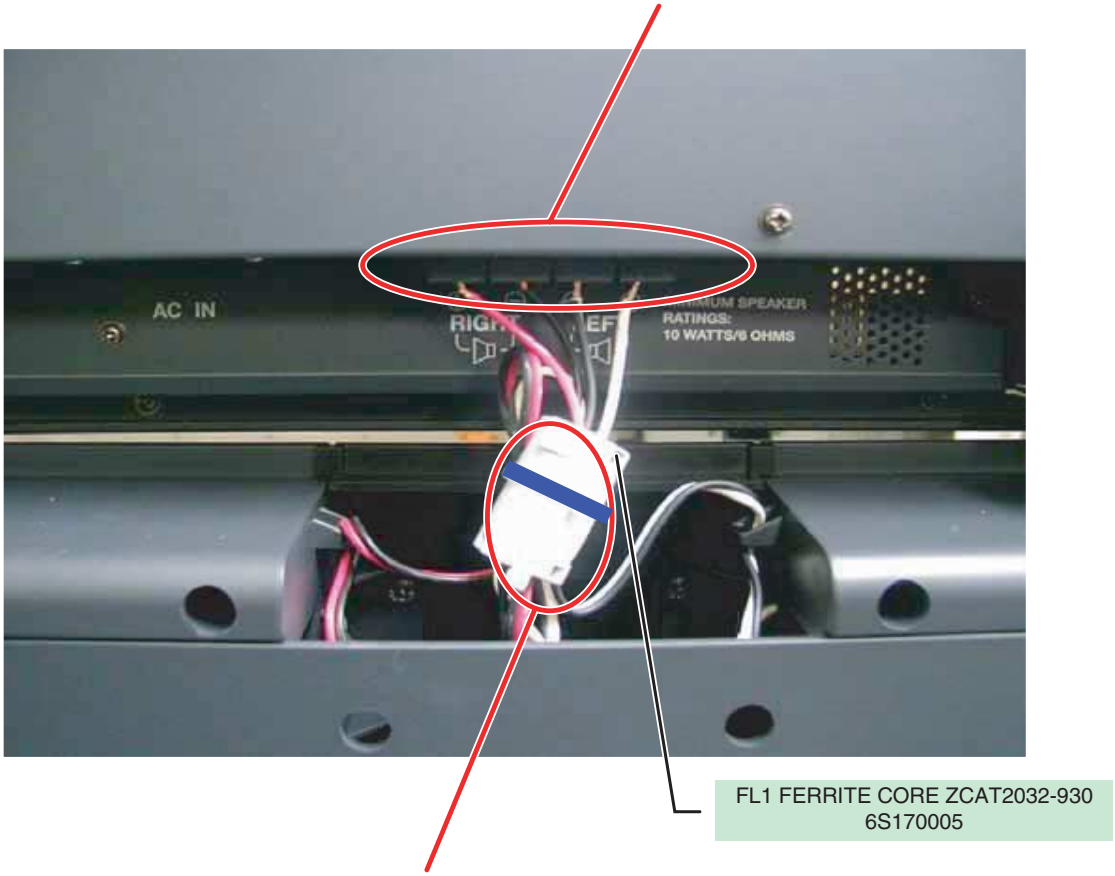
• **PD-5065**

Push the red and black button and pull out the four cables.



• **PD-4265**

Push the red and black button and pull out the four cables.

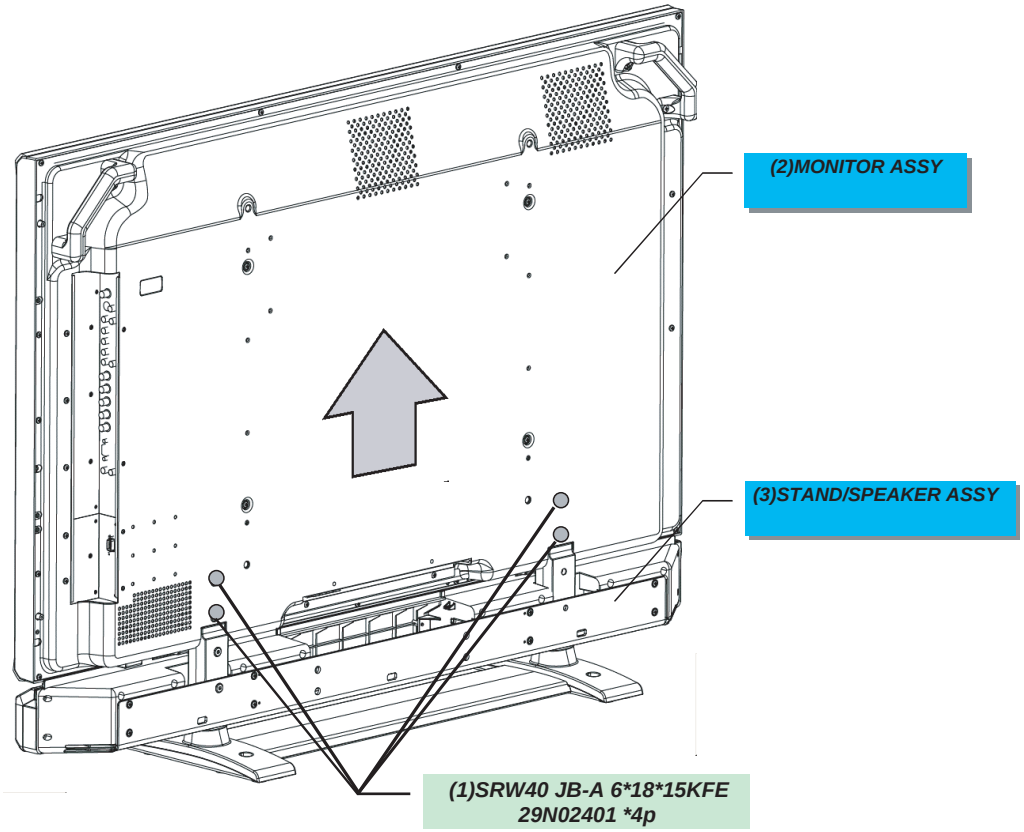


Please remove the bundle band and remove the ferrite core.

4.STAND / SPEAKER ASSY

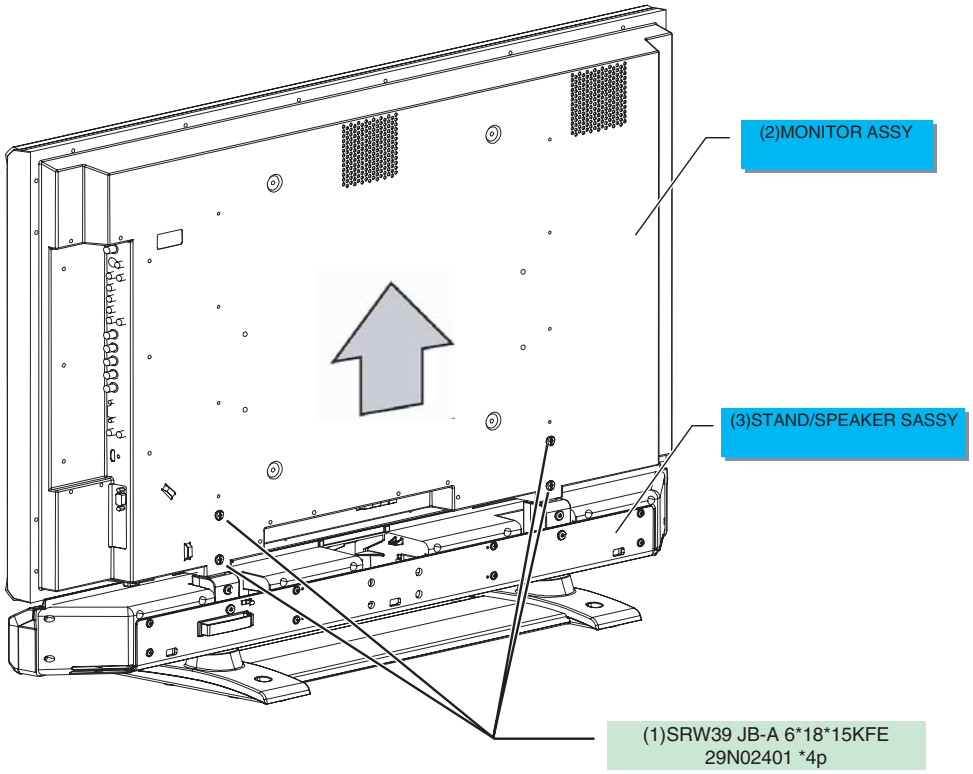
- **PD-5065**

Remove the four screws indicated and slide the monitor upper direction indicated by arrow.



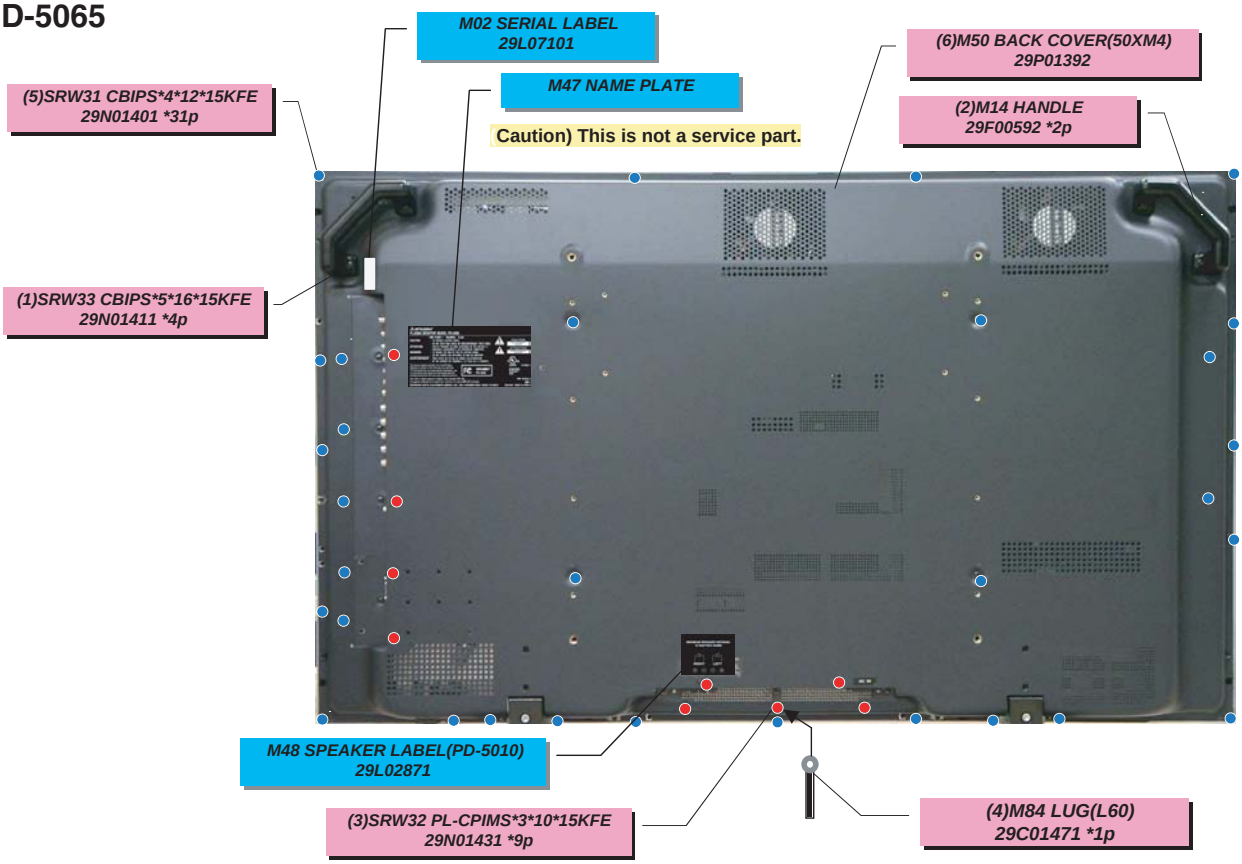
- **PD-4265**

Remove the four screws indicated and slide the monitor upper direction indicated by arrow.

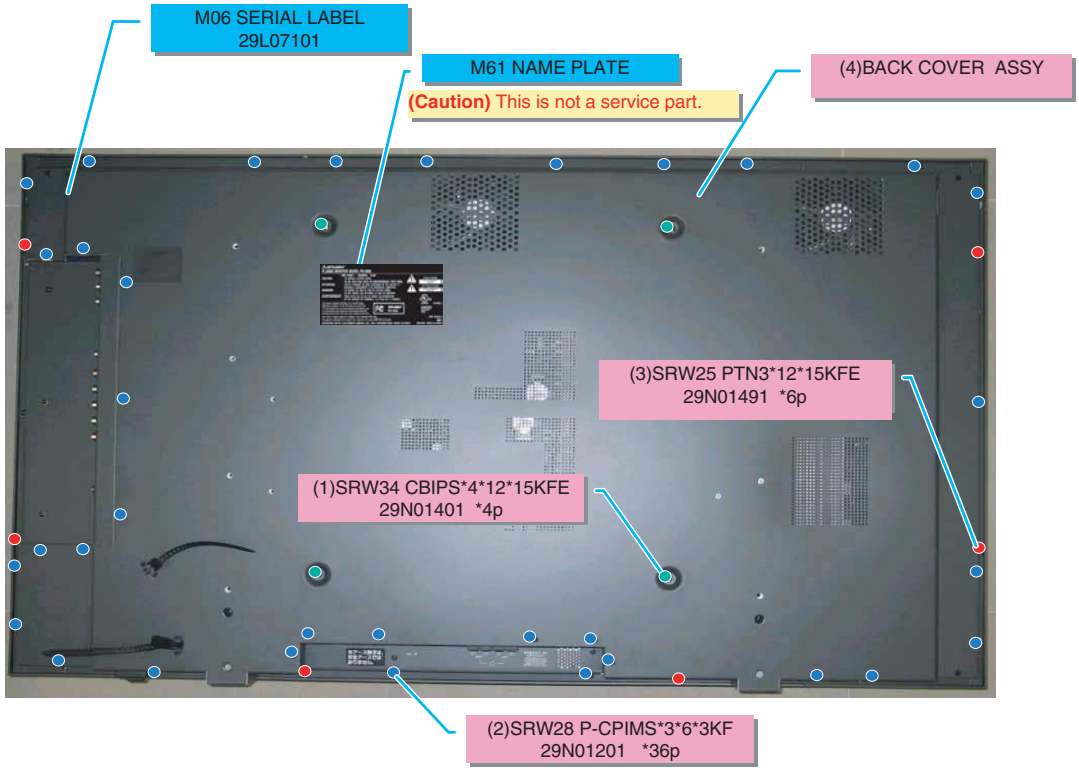


5.BACK COVER

• **PD-5065**

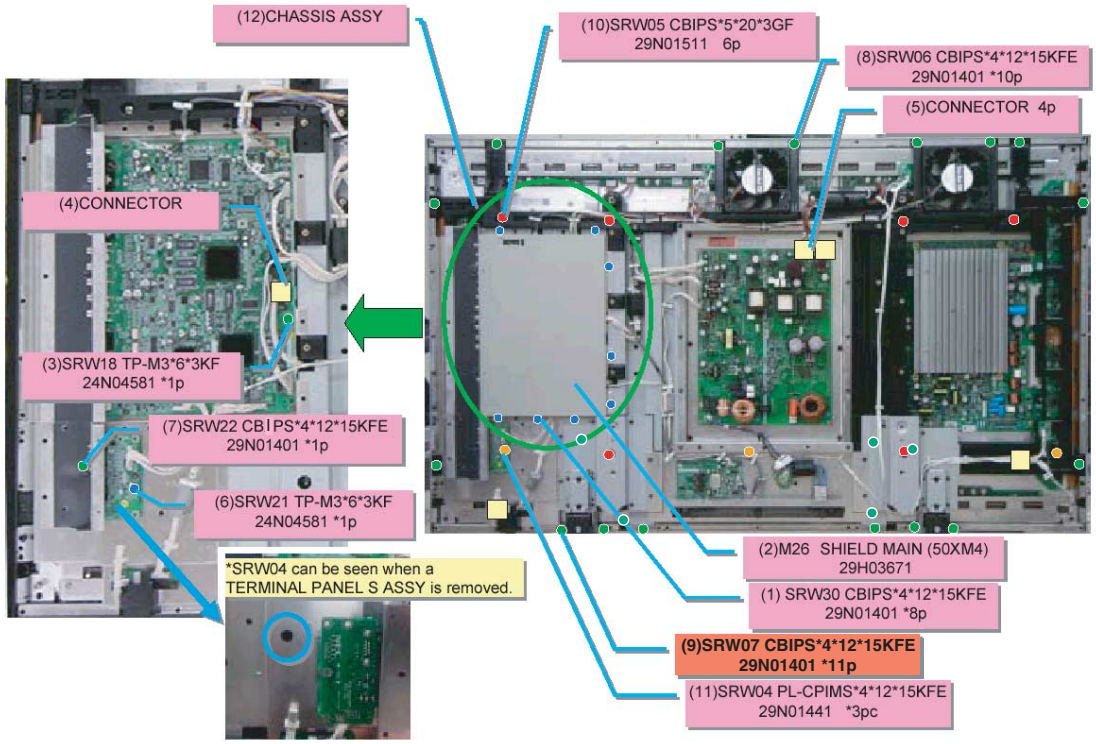


• **PD-4265**

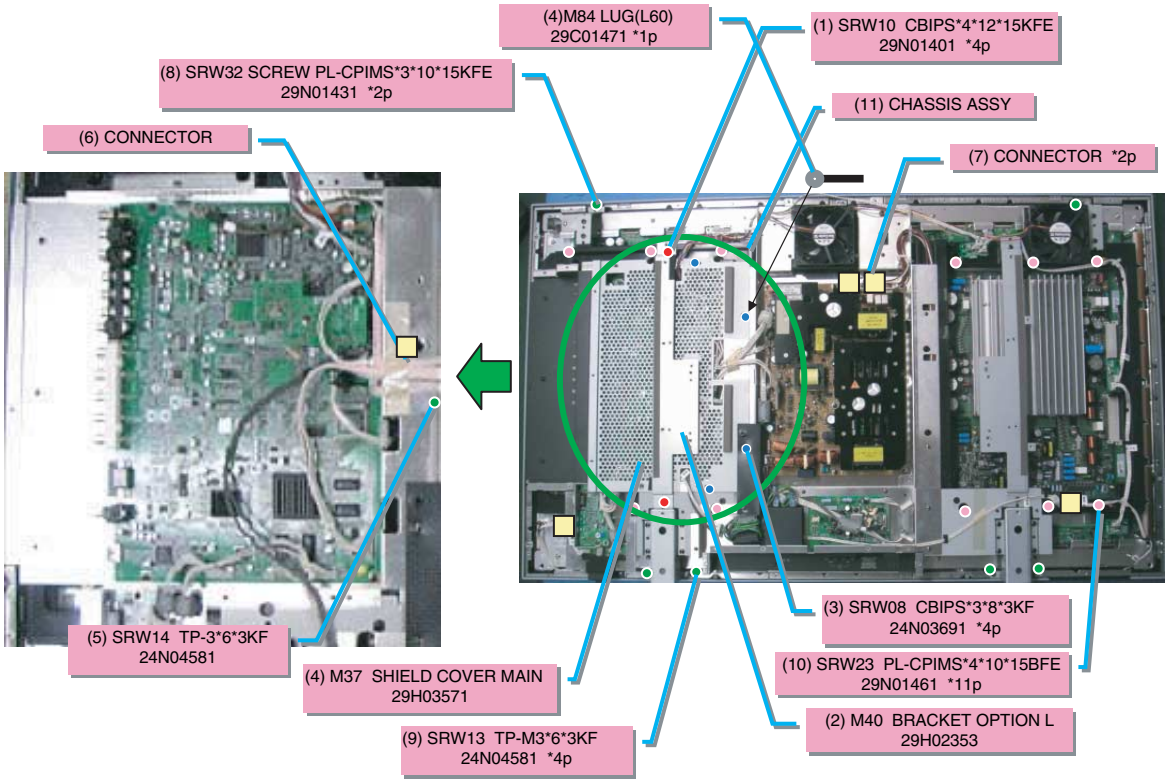


6.CHASSIS ASSY

• PD-5065

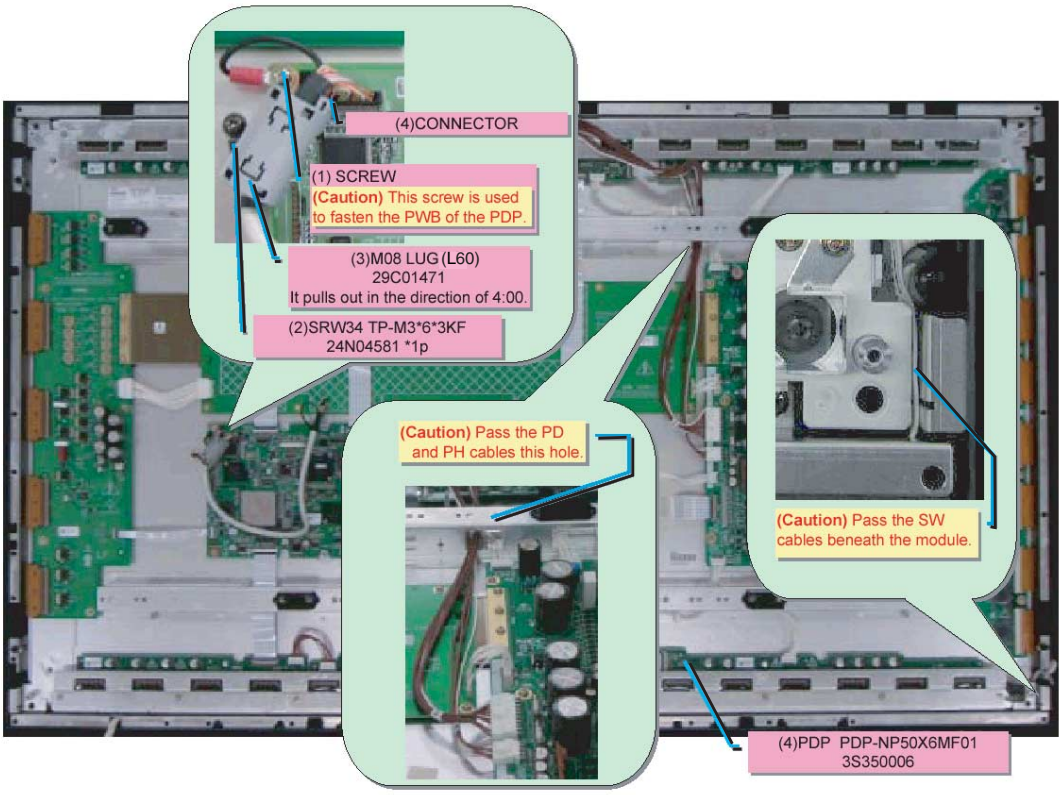


• PD-4265

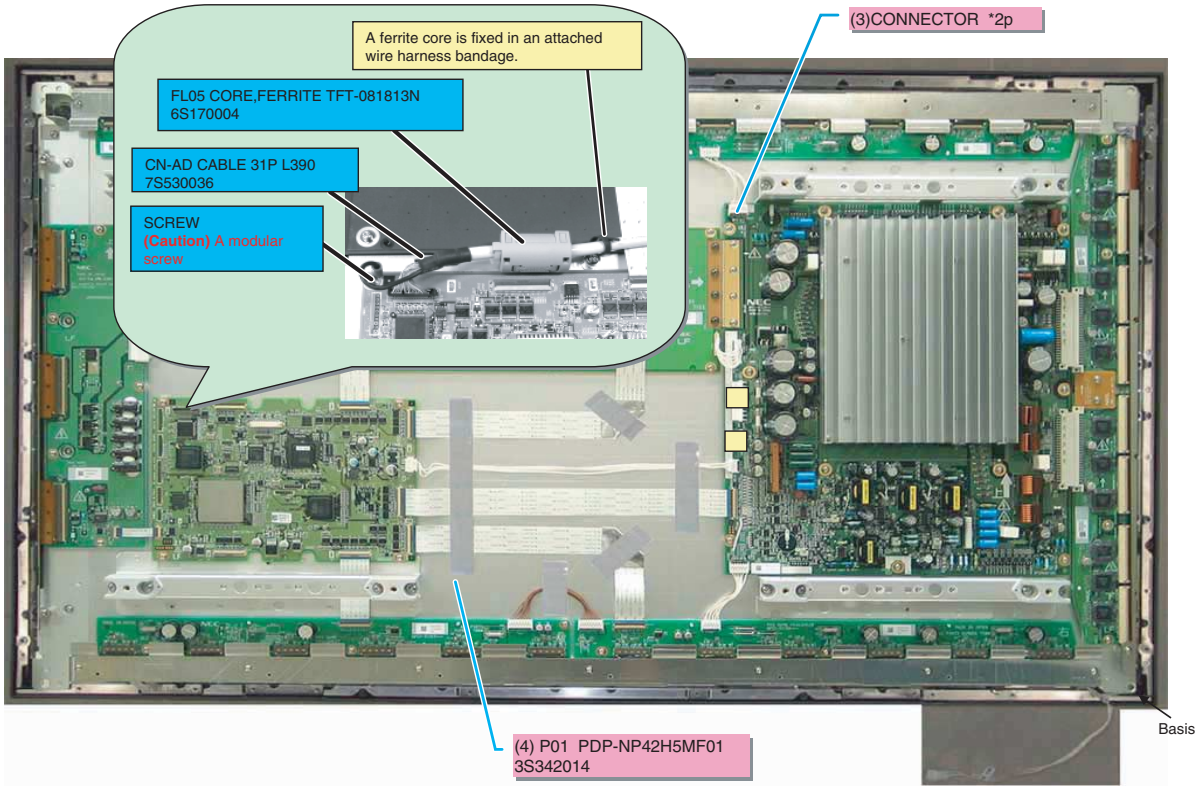


7.PDP

• PD-5065

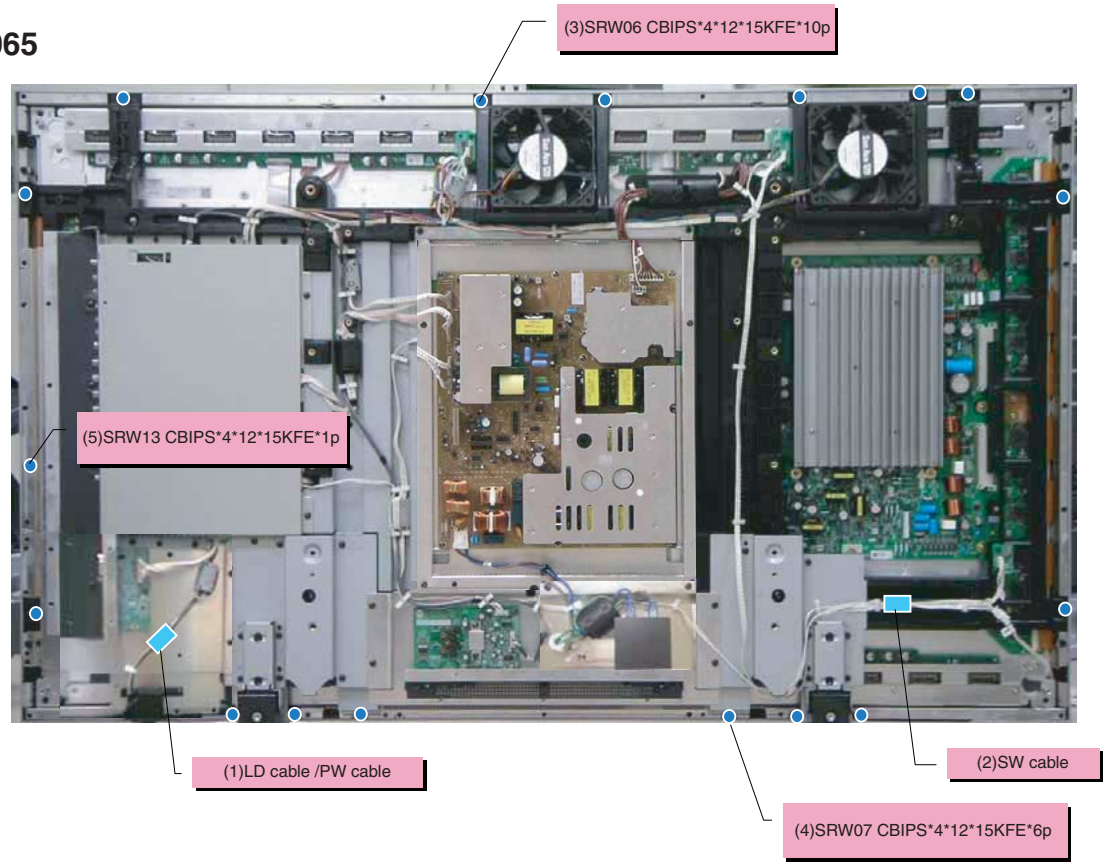


• PD-4265

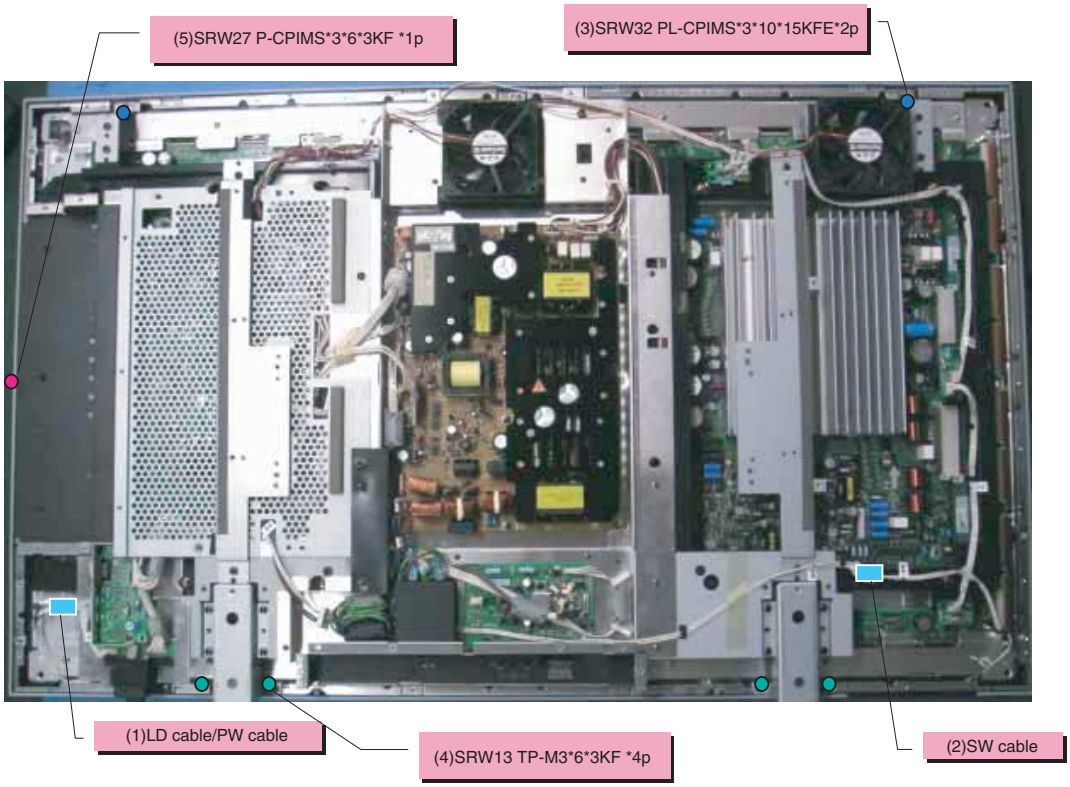


8.CHASSIS ASSY / PDP

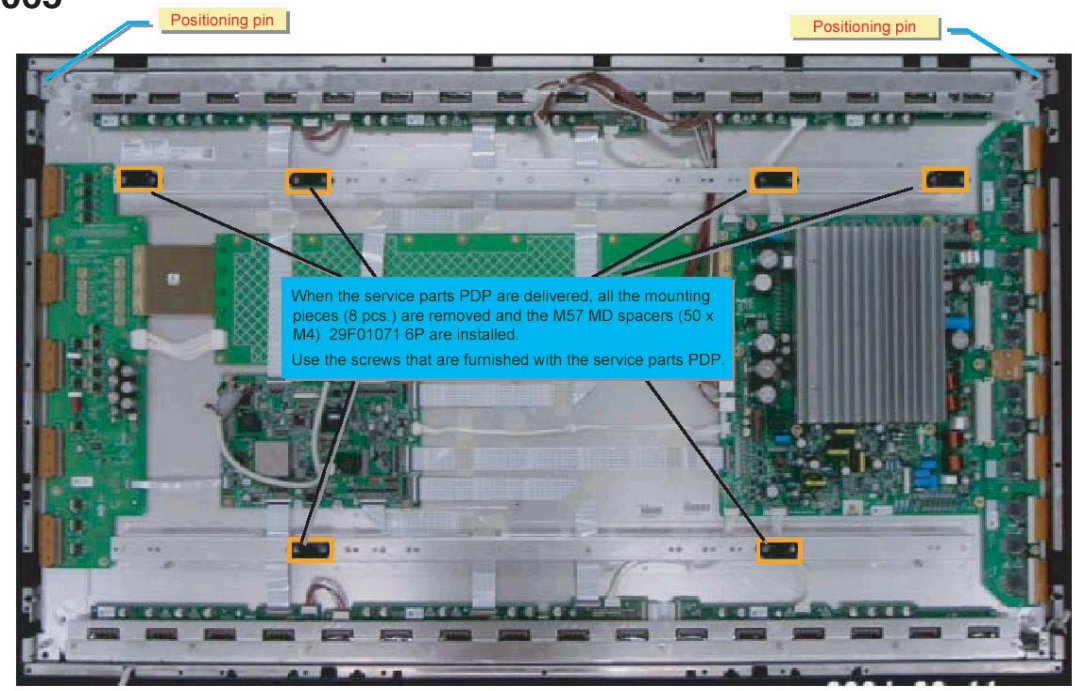
• PD-5065



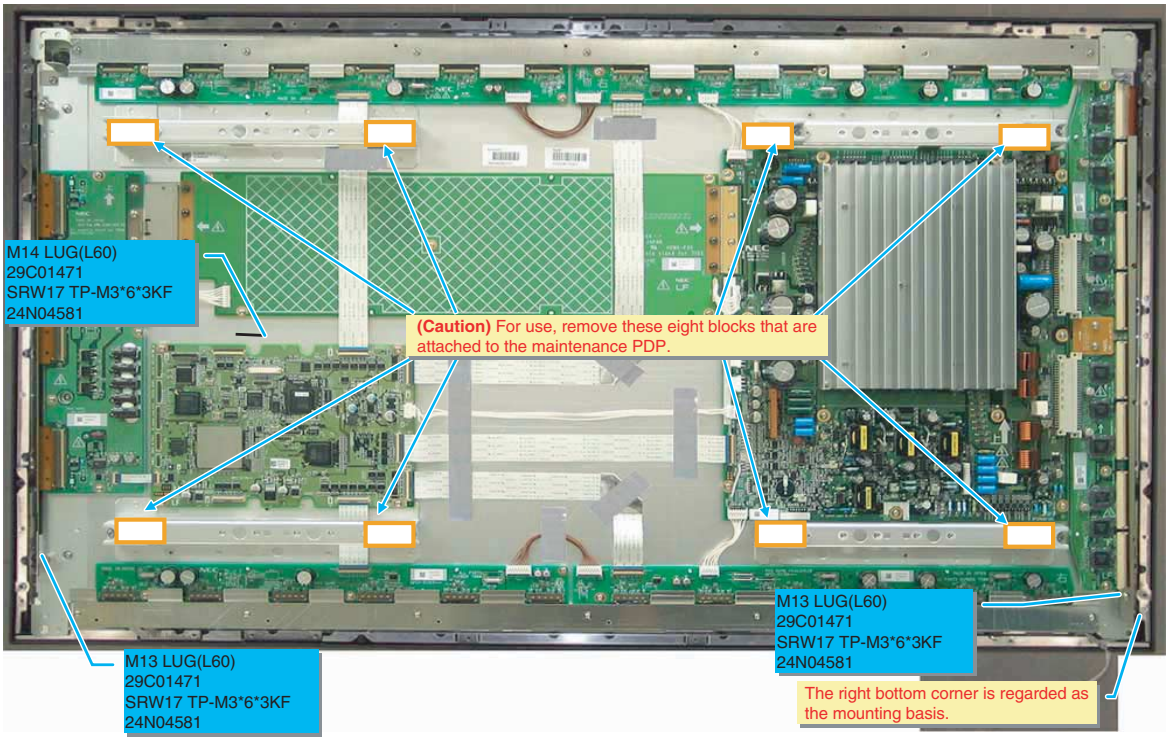
• PD-4265



• **PD-5065**

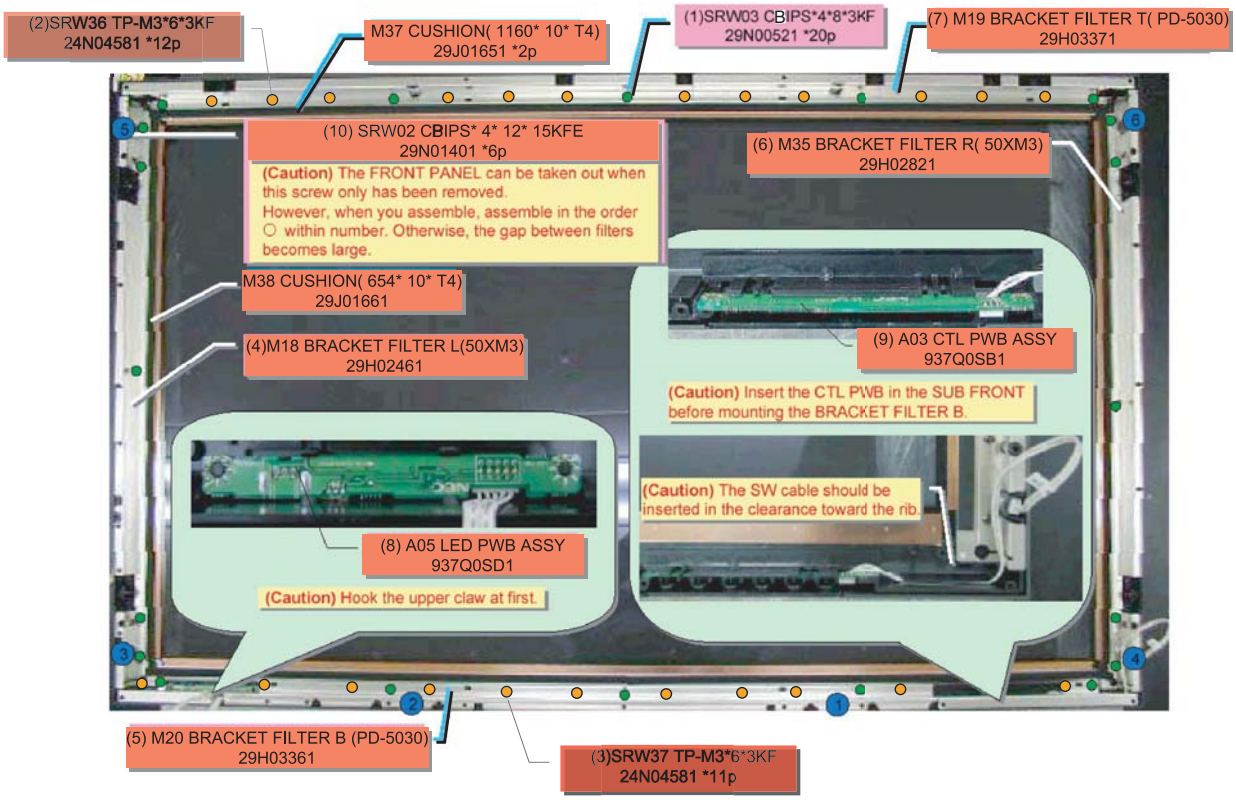


• **PD-4265**



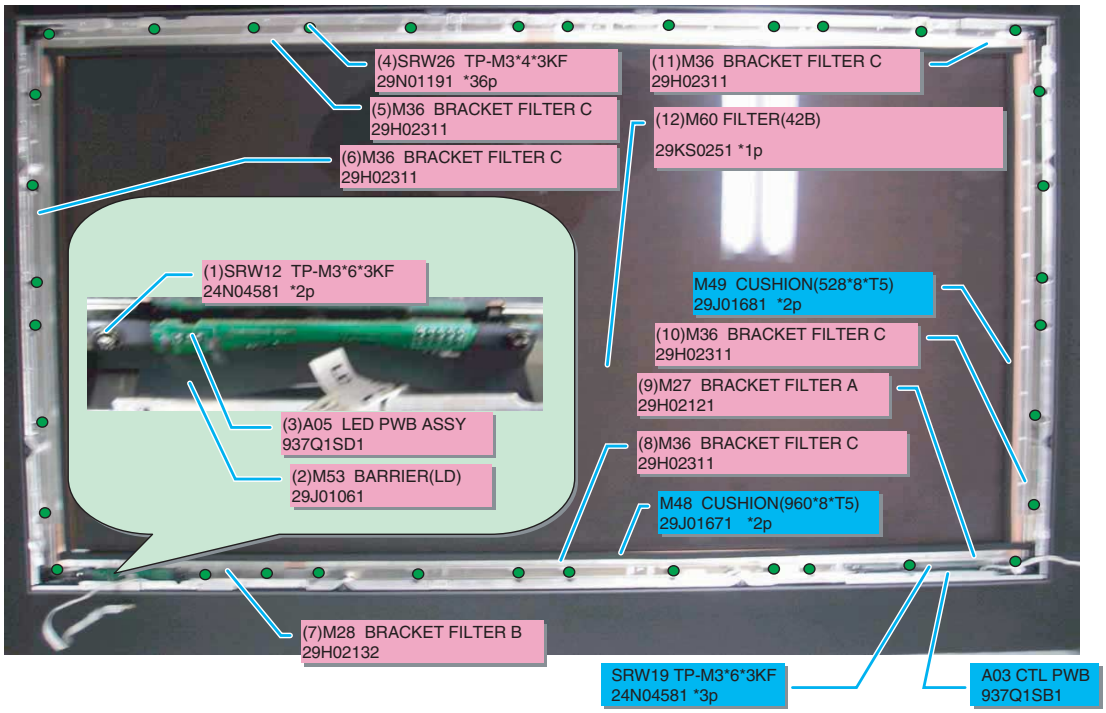
9.BRACKET FILTER

• PD-5065



BRACKET FILTER

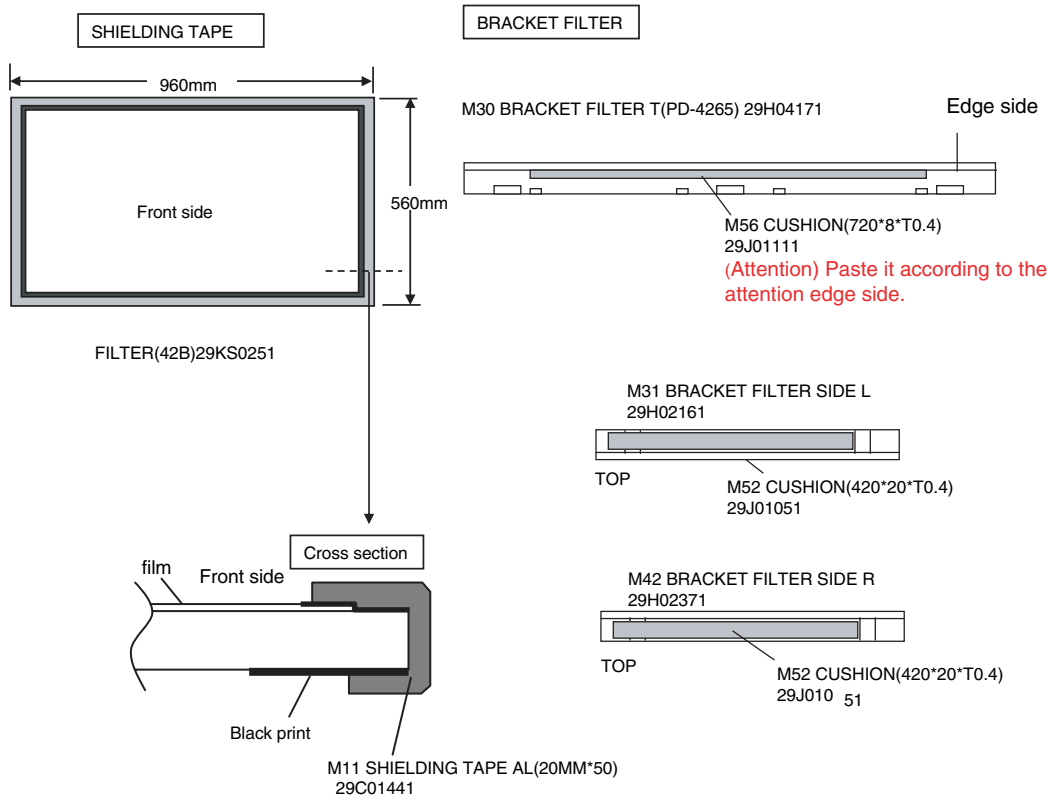
• PD-4265



10. FILTER

• PD-5065

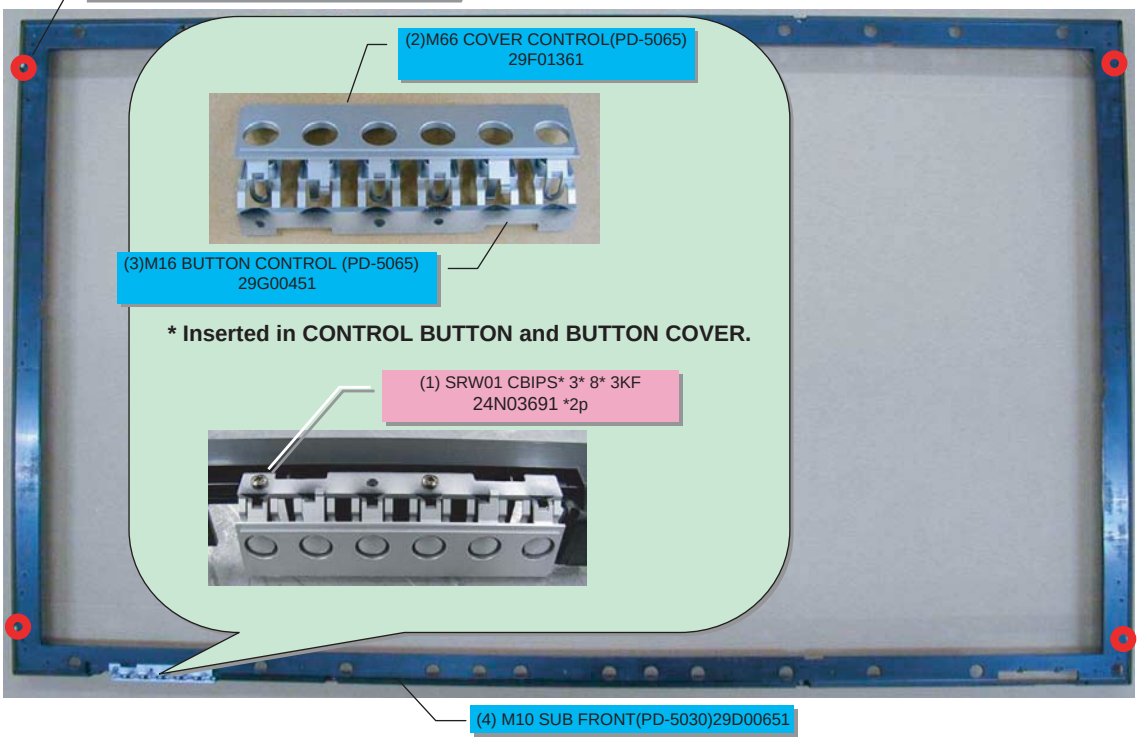
• PD-4265



11. SUB FRONT / BRACKET FILTER

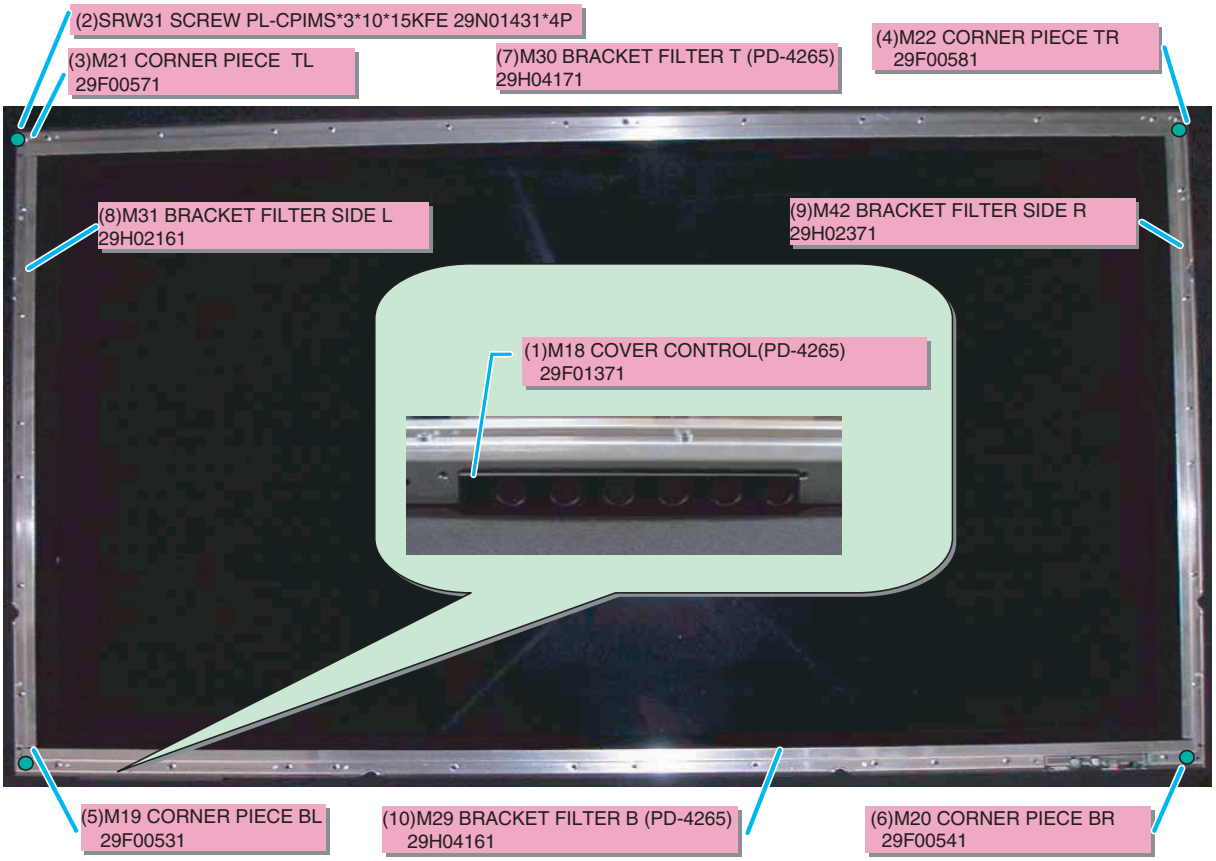
SUB FRONT

• PD-5065



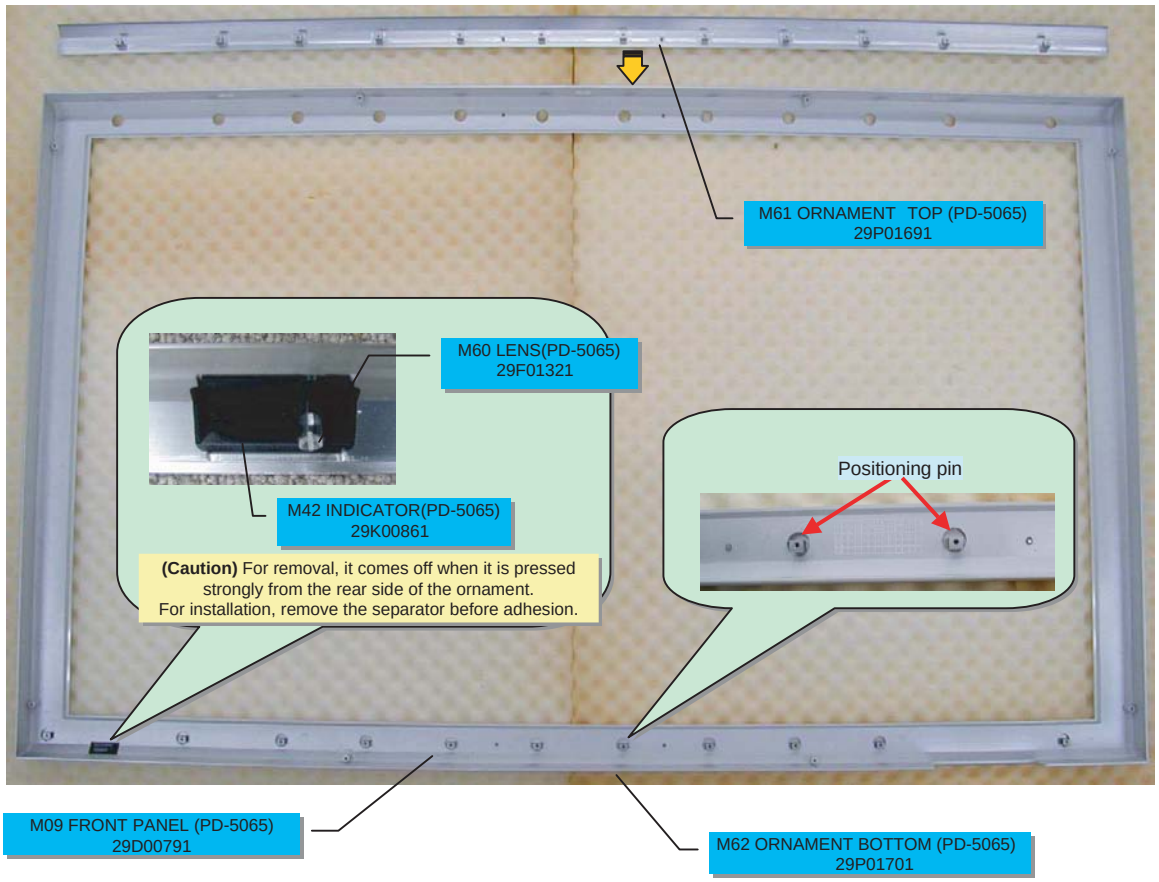
BRACKET FILTER

• PD-4265

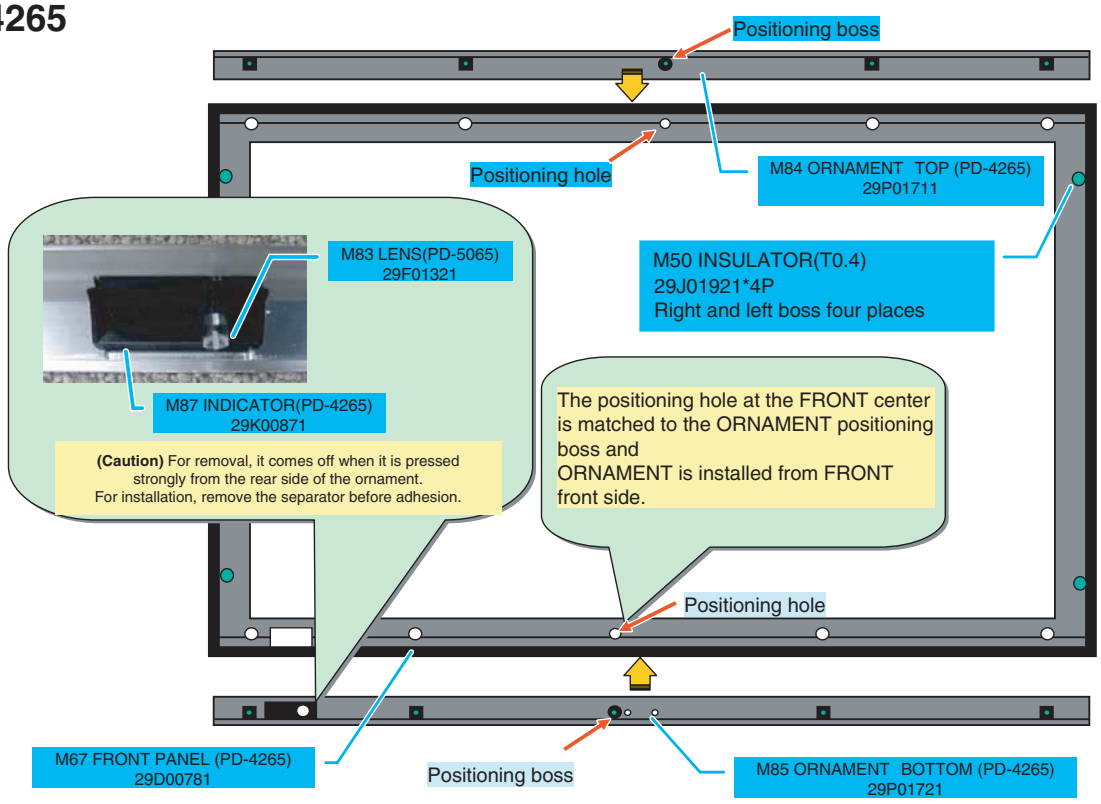


12. FRONT PANEL & ORNAMENT

• PD-5065

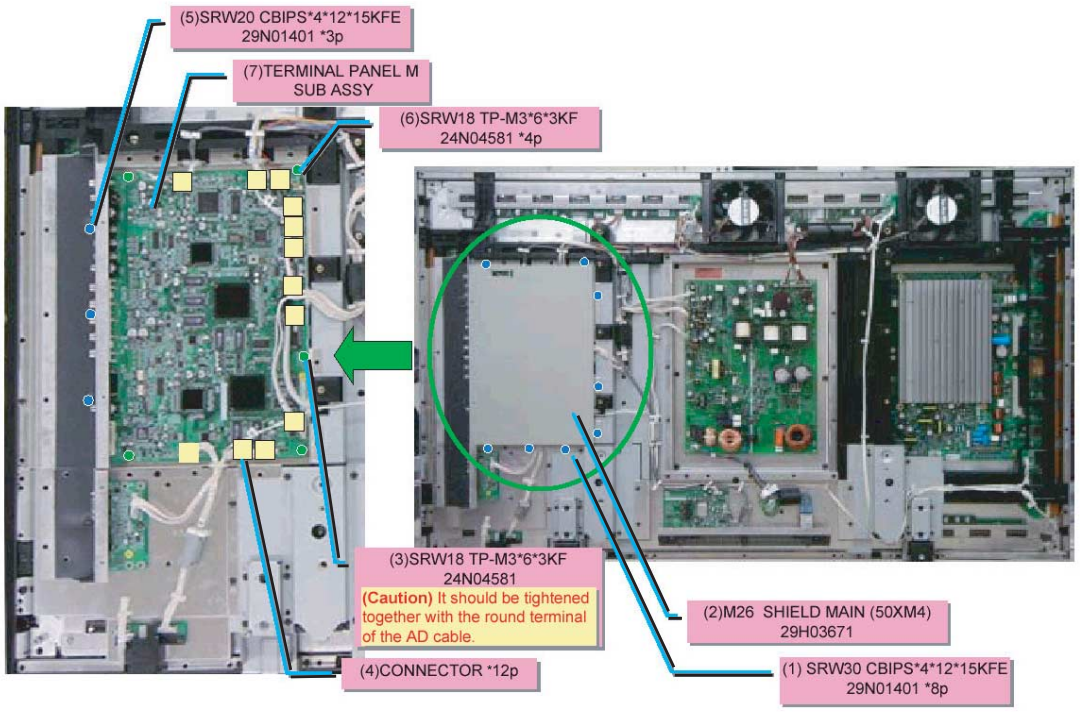


• PD-4265

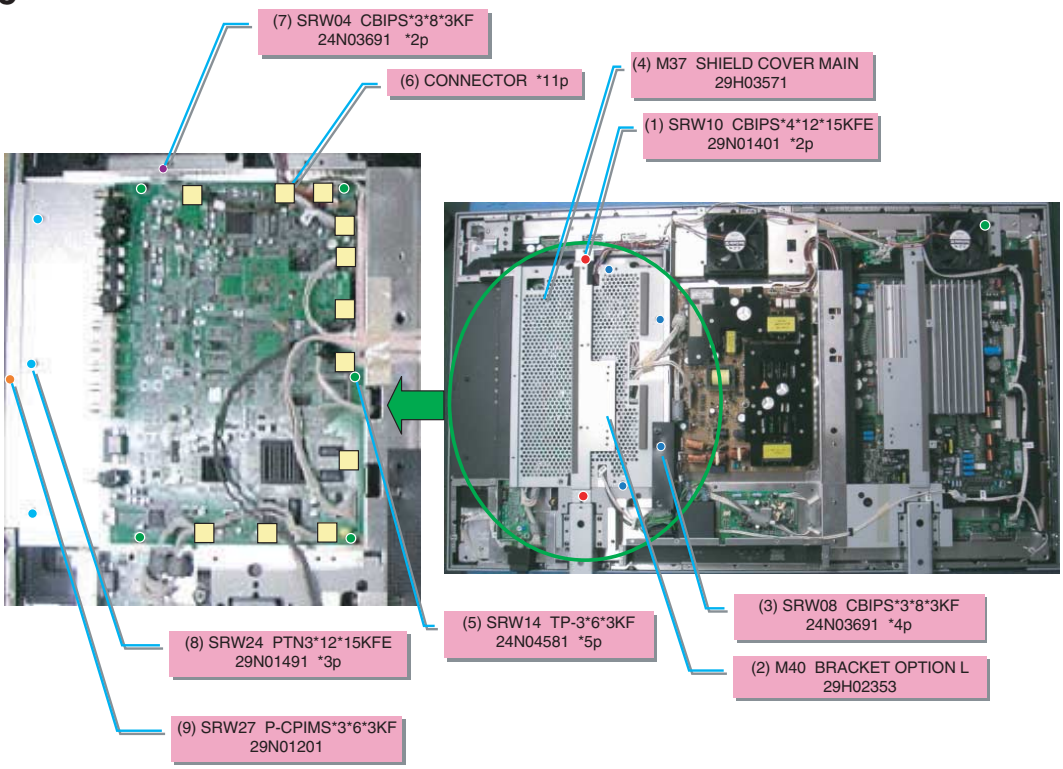


13.TERMINAL PANEL M SUB ASSY

• PD-5065

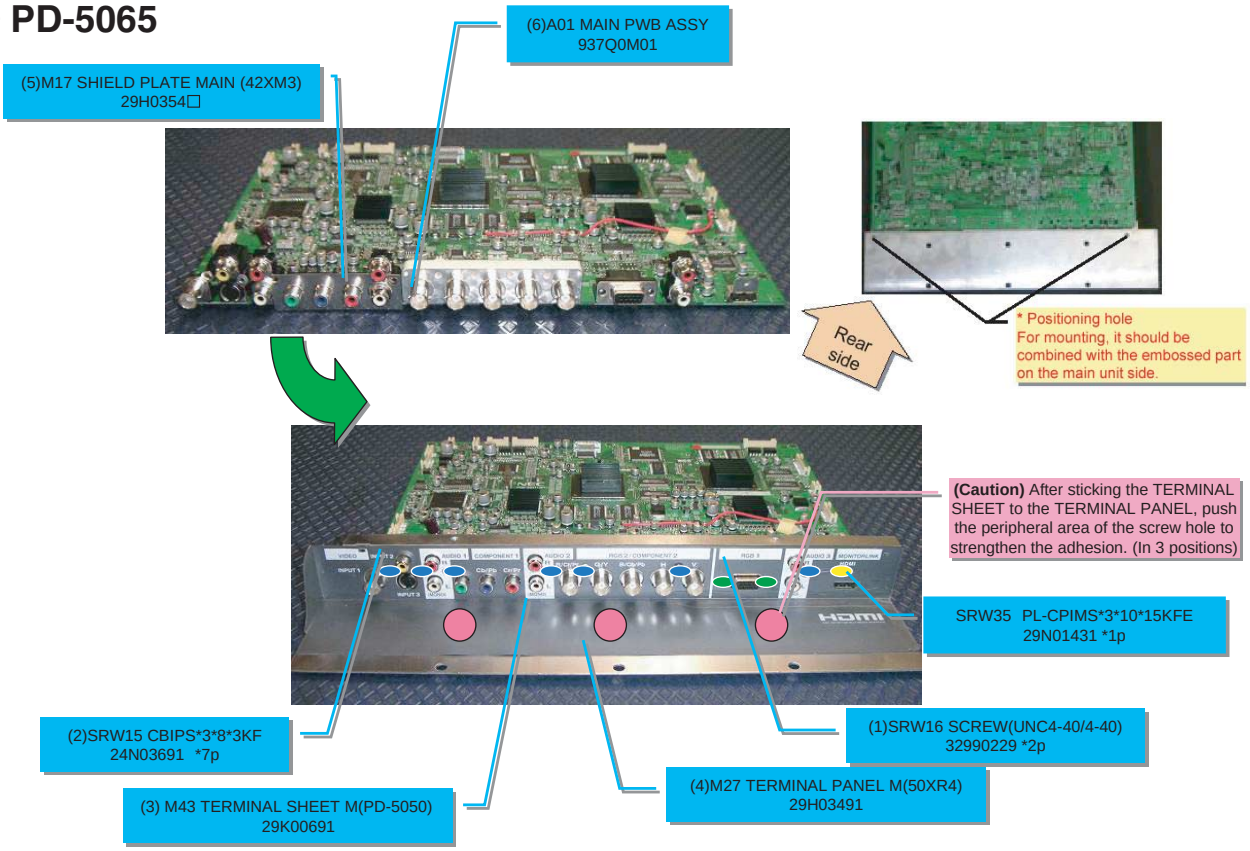


• PD-4265

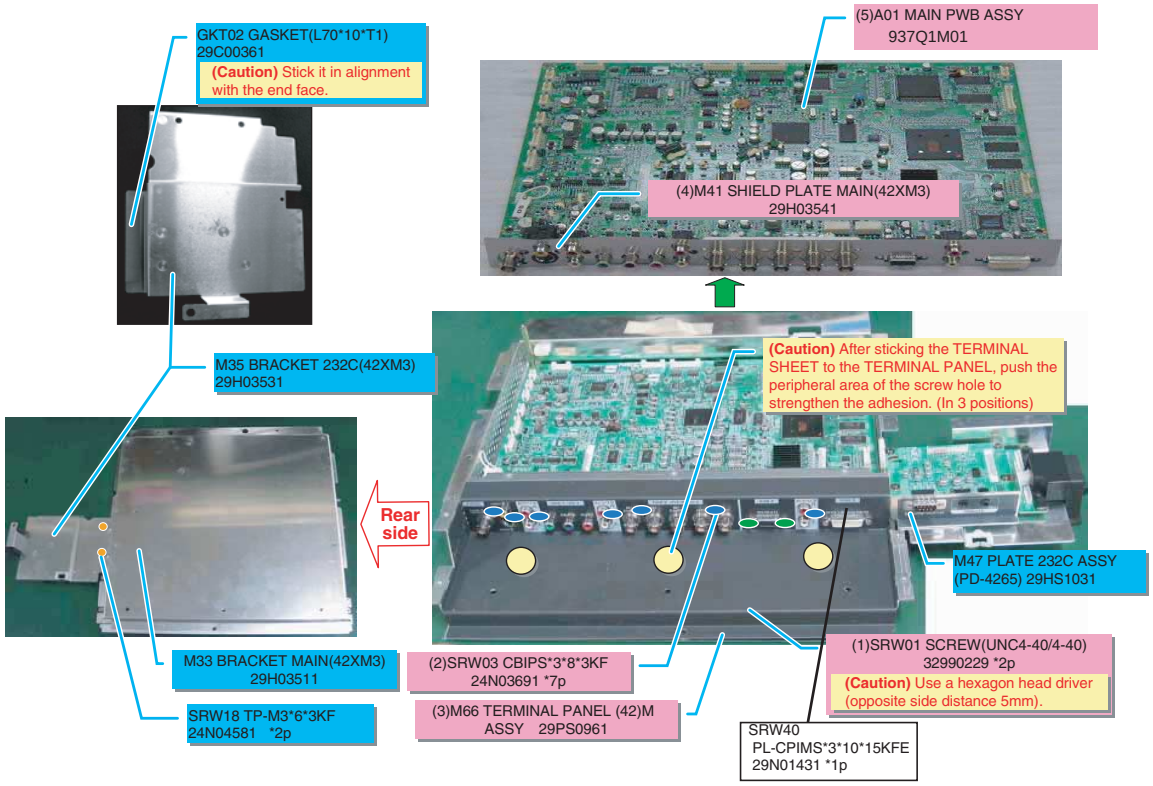


14.TERMINAL PANEL M /MAIN PWB

• PD-5065



• PD-4265



15.TERMINAL PANEL S /232C PWB

• PD-5065

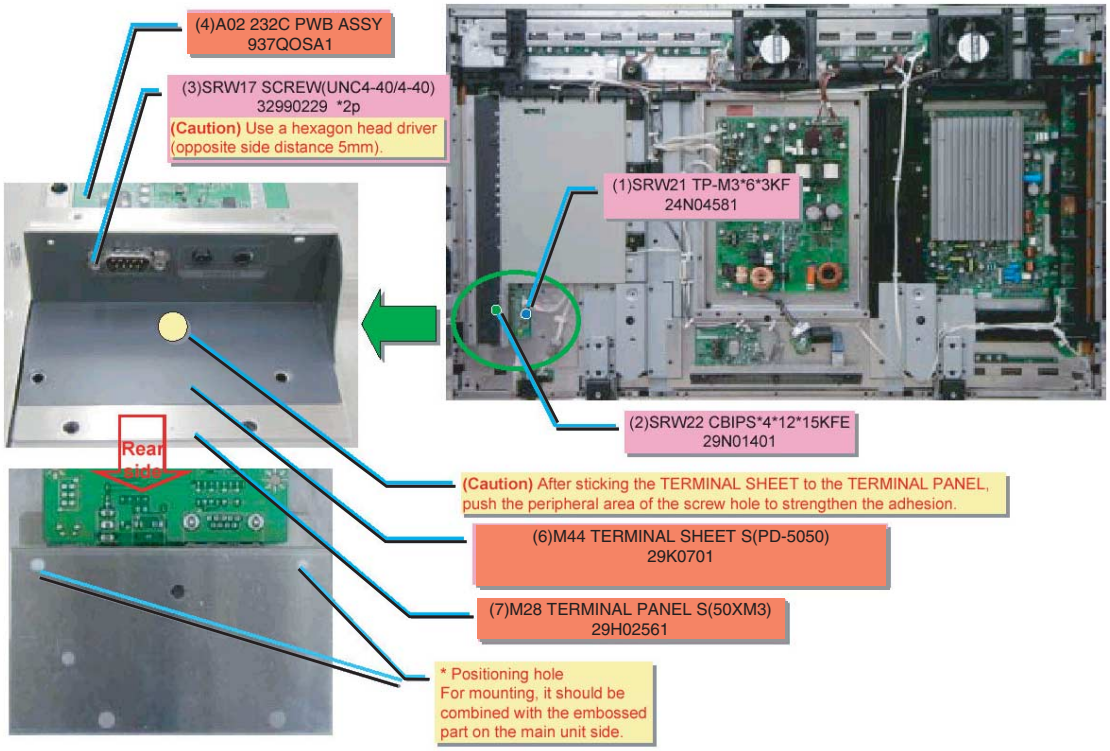
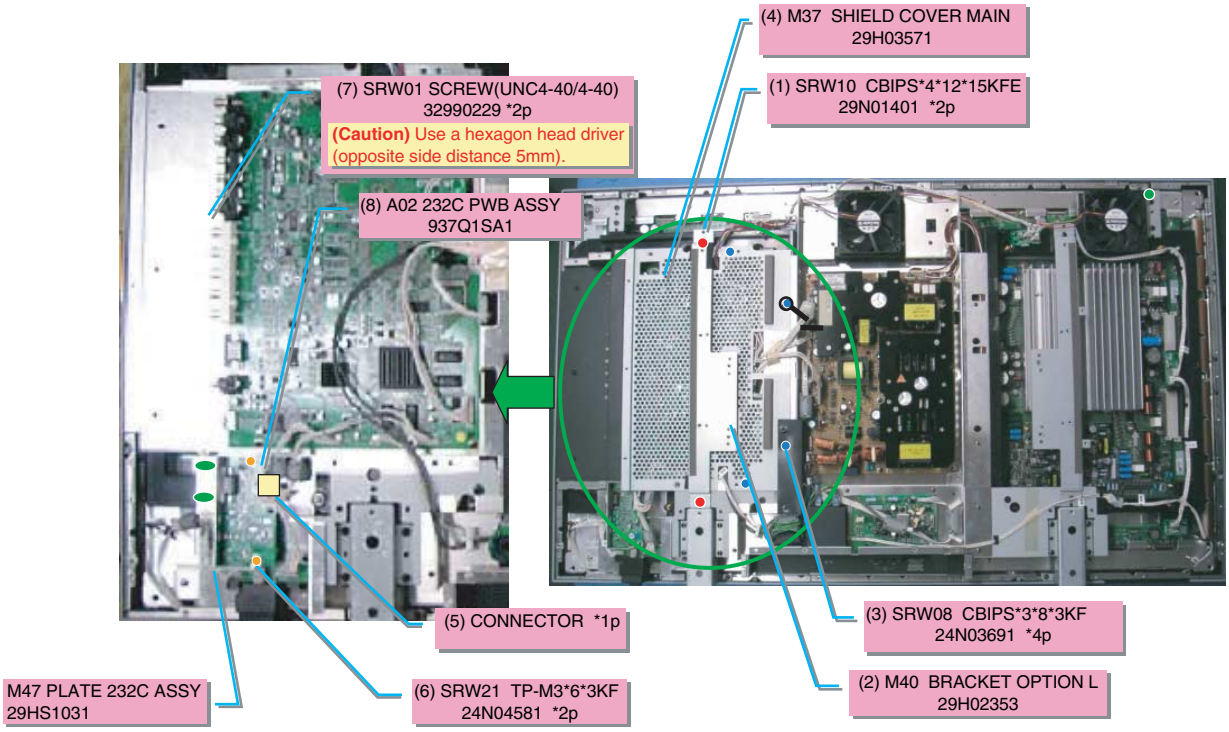


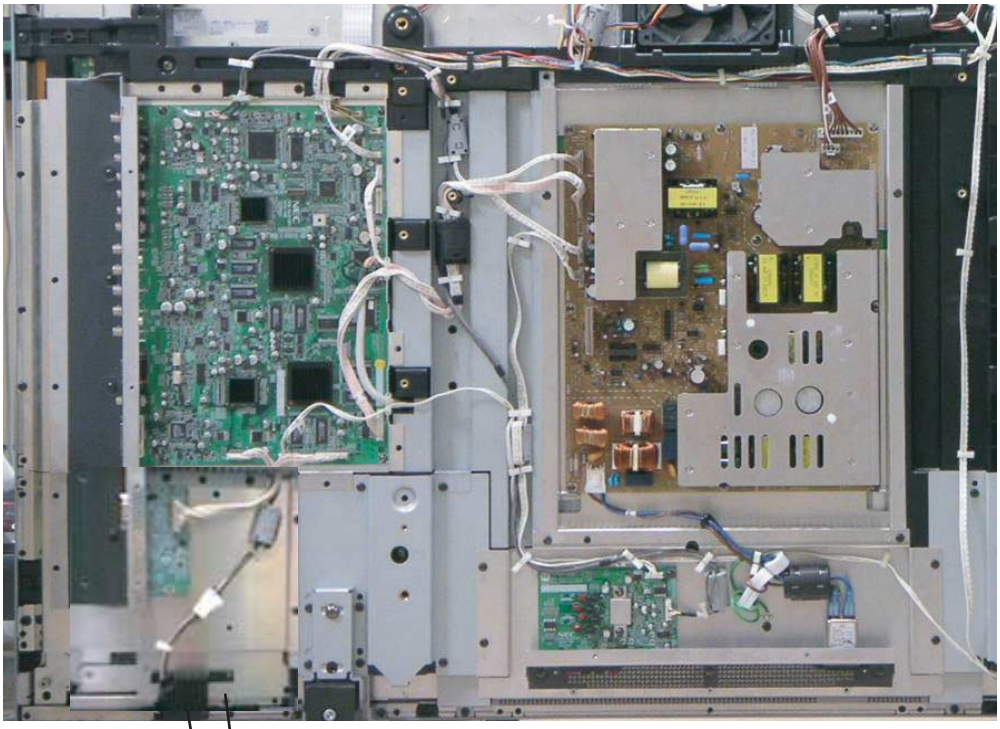
PLATE 232C ASSY / 232C PWB

• PD-4265

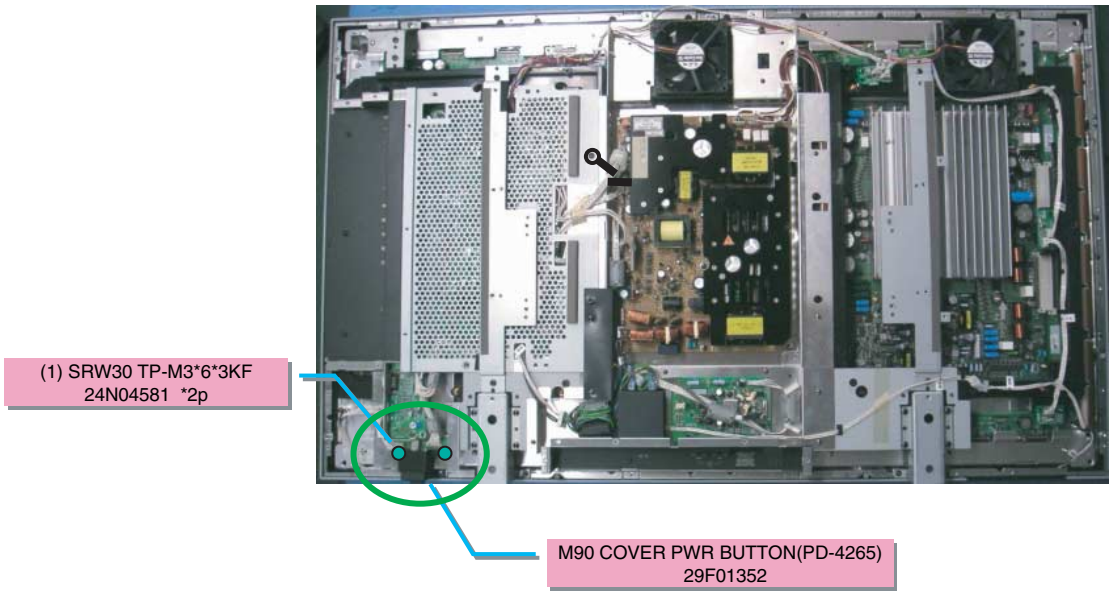


16.COVER PWR BUTTON

- **PD-5065**



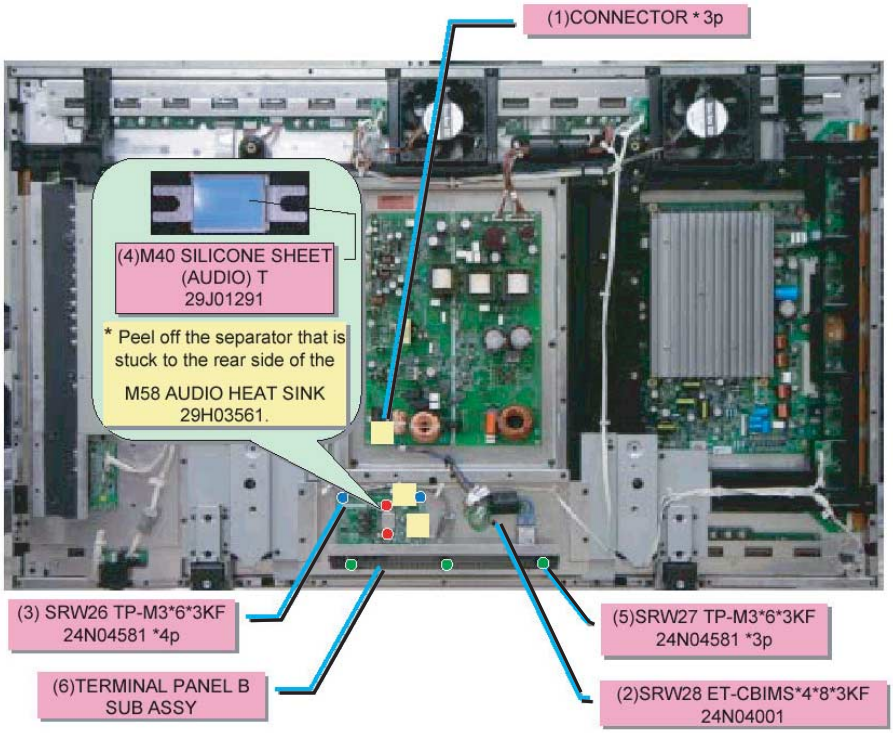
- **PD-4265**



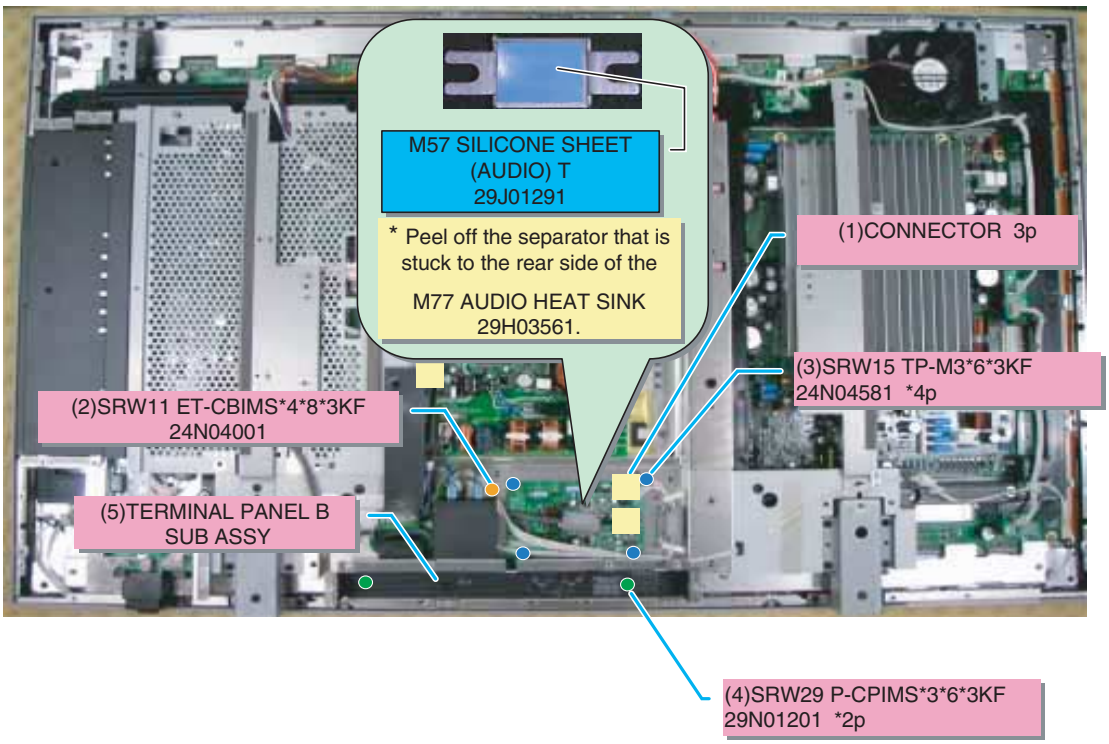
PD-5065 and PD-4265 don't have POWER PWB.

17.TERMINAL PANEL B SUB ASSY

- **PD-5065**

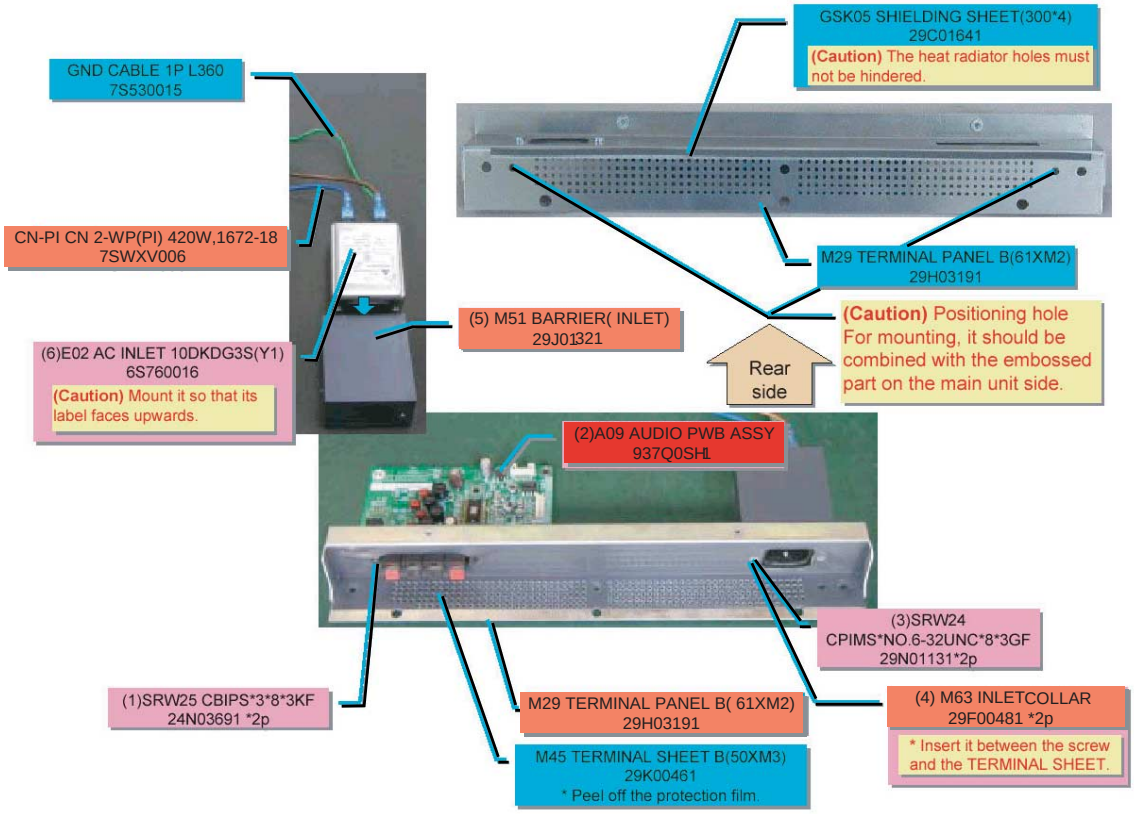


- **PD-4265**

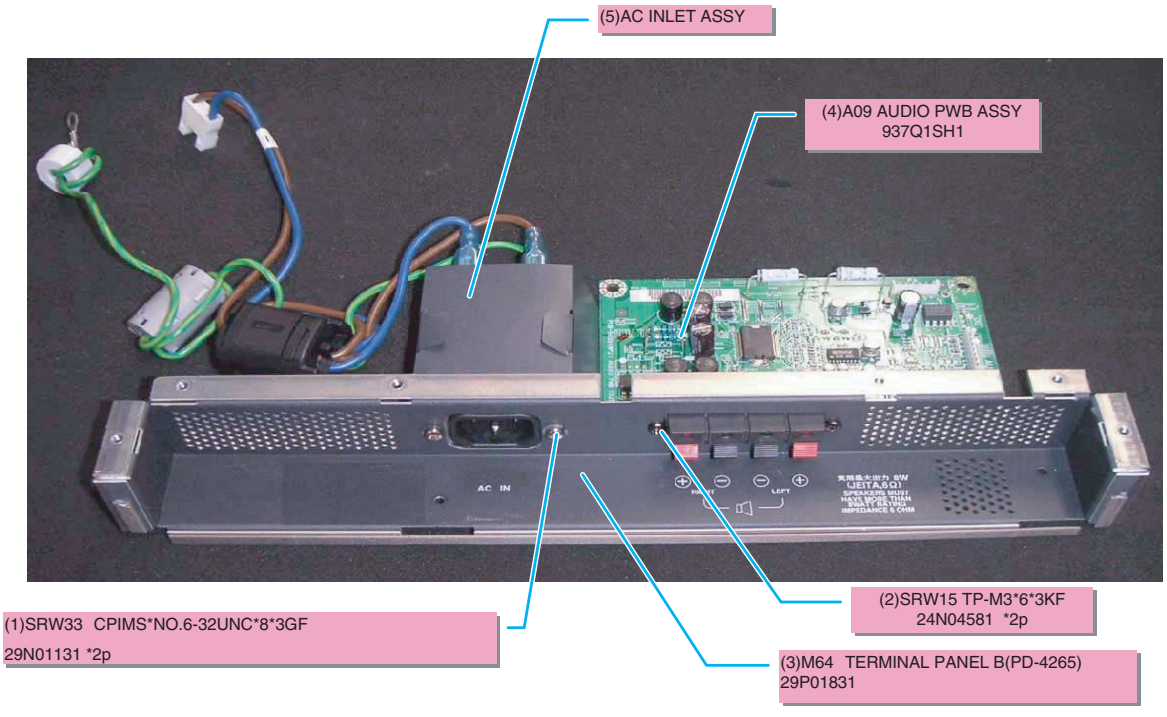


18.TERMINAL PANEL B/ AUDIO PWB/ AC INLET

• PD-5065



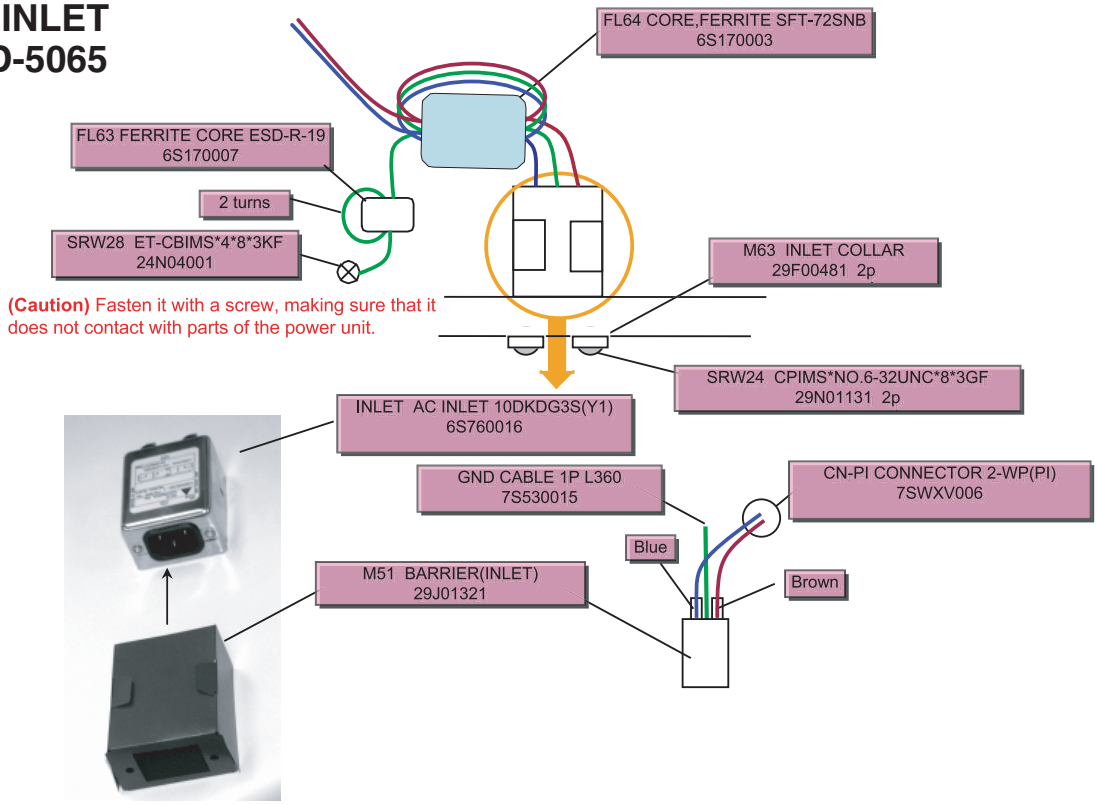
• PD-4265



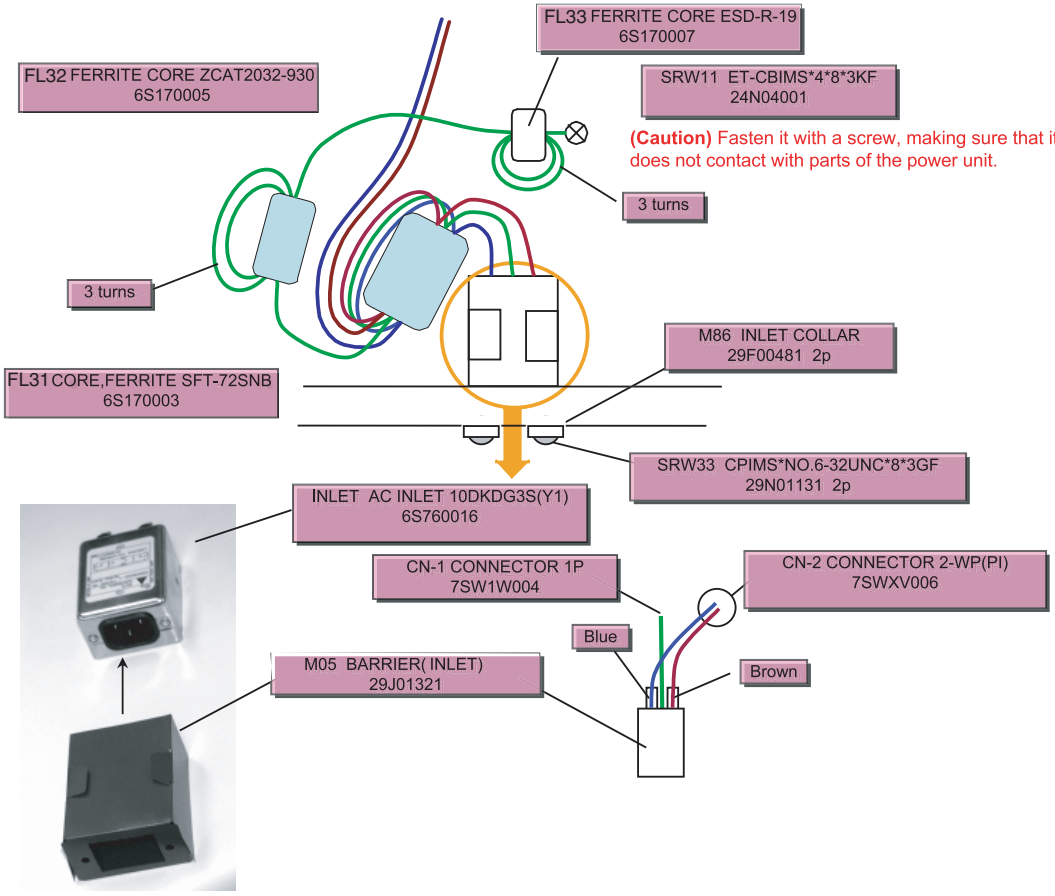
19.AC INLET

AC INLET

• PD-5065

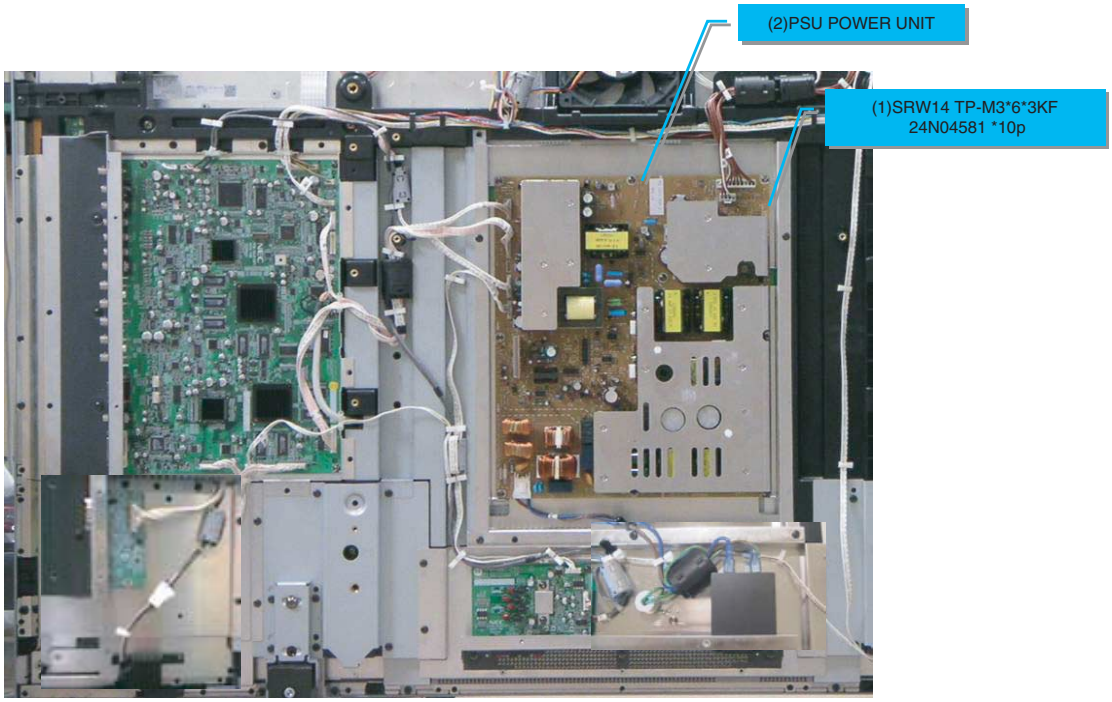


• PD-4265

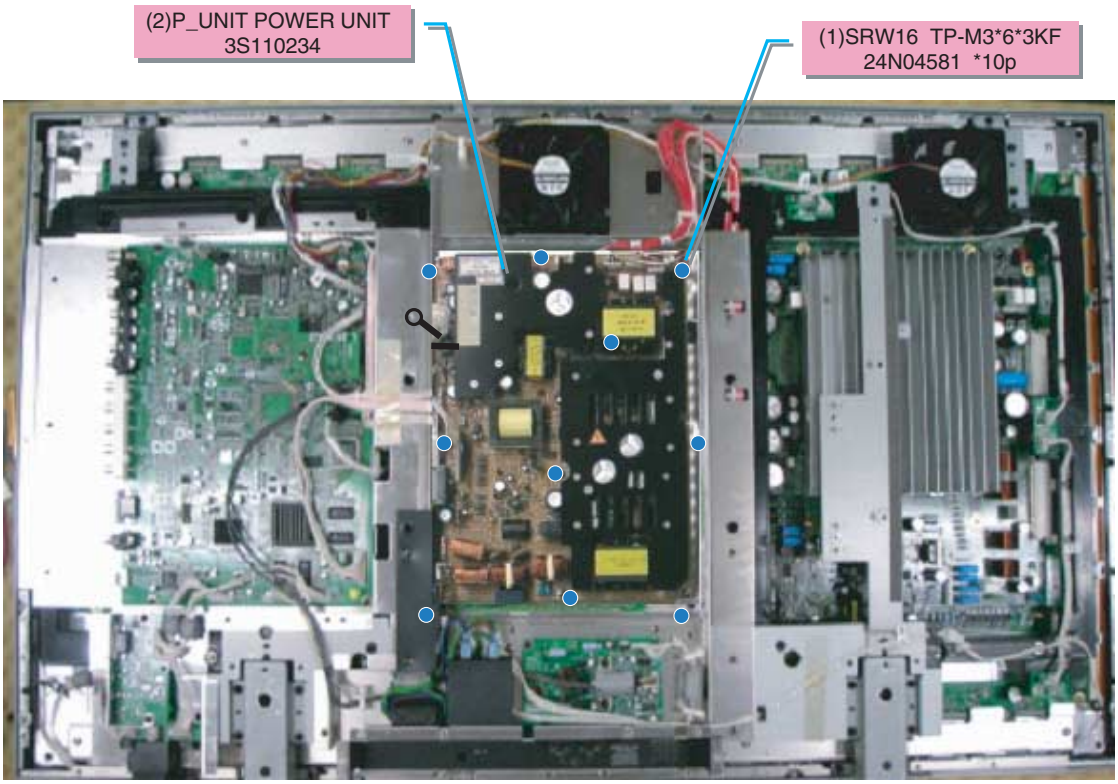


20.POWER UNIT

• PD-5065

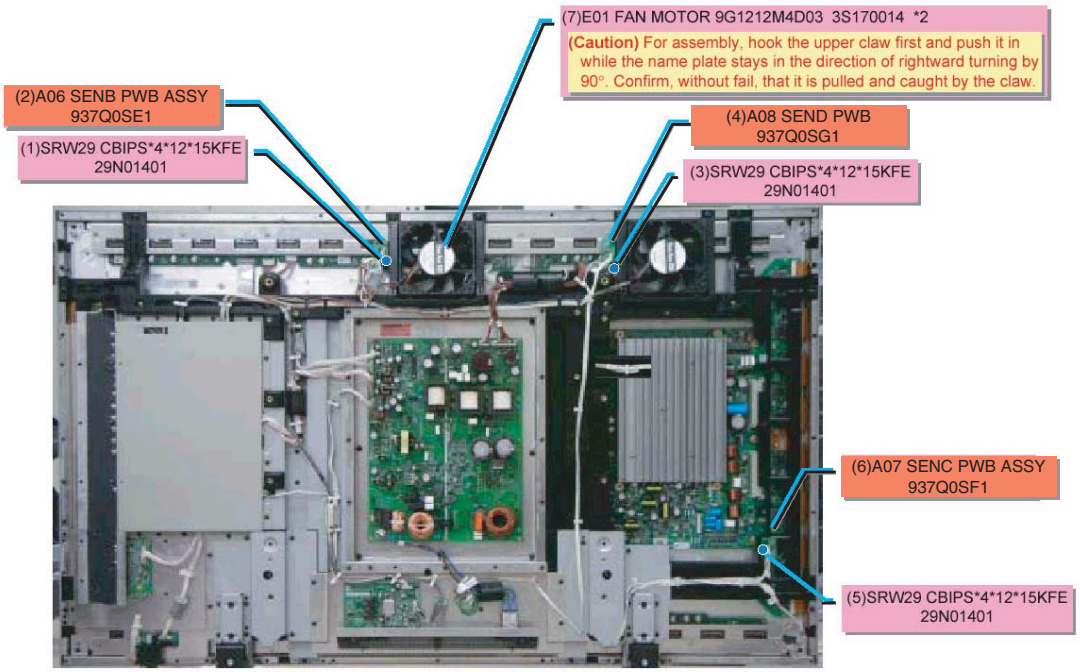


• PD-4265

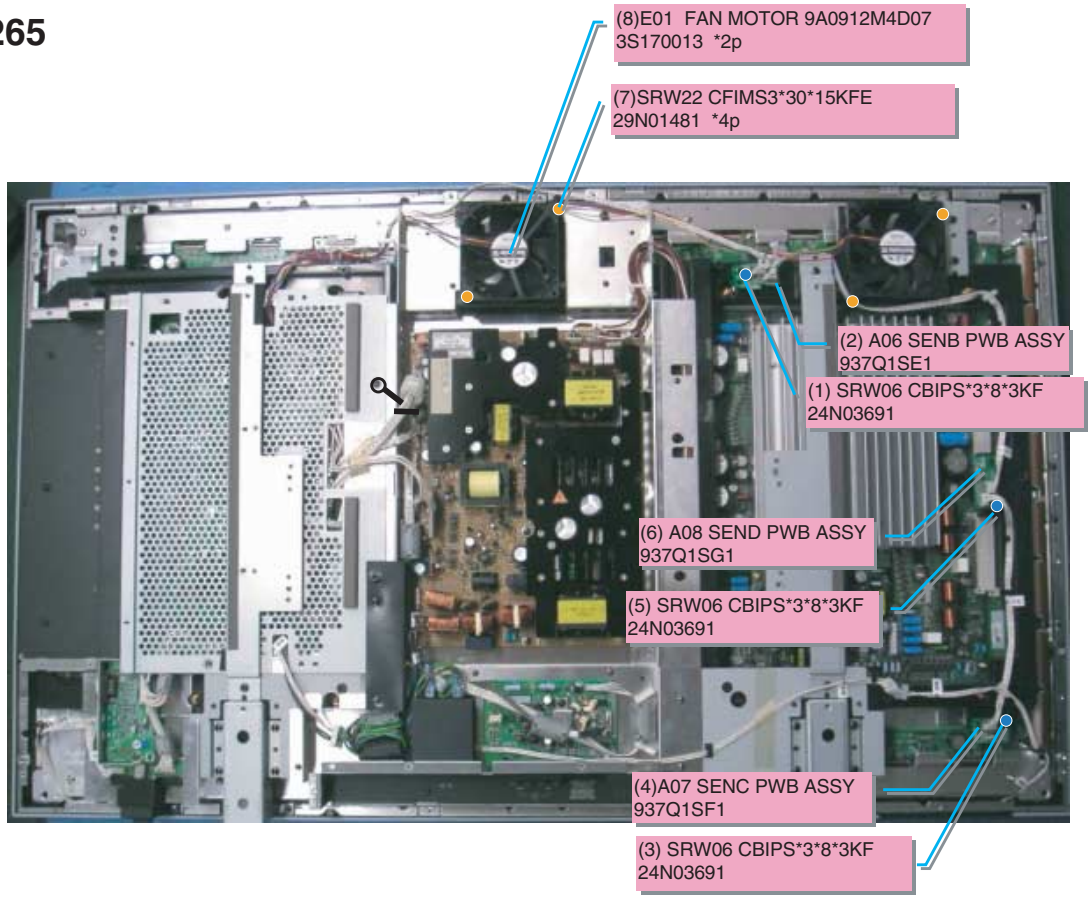


21.SENB PWB/SENC PWB/SEND PWB/FAN

• PD-5065

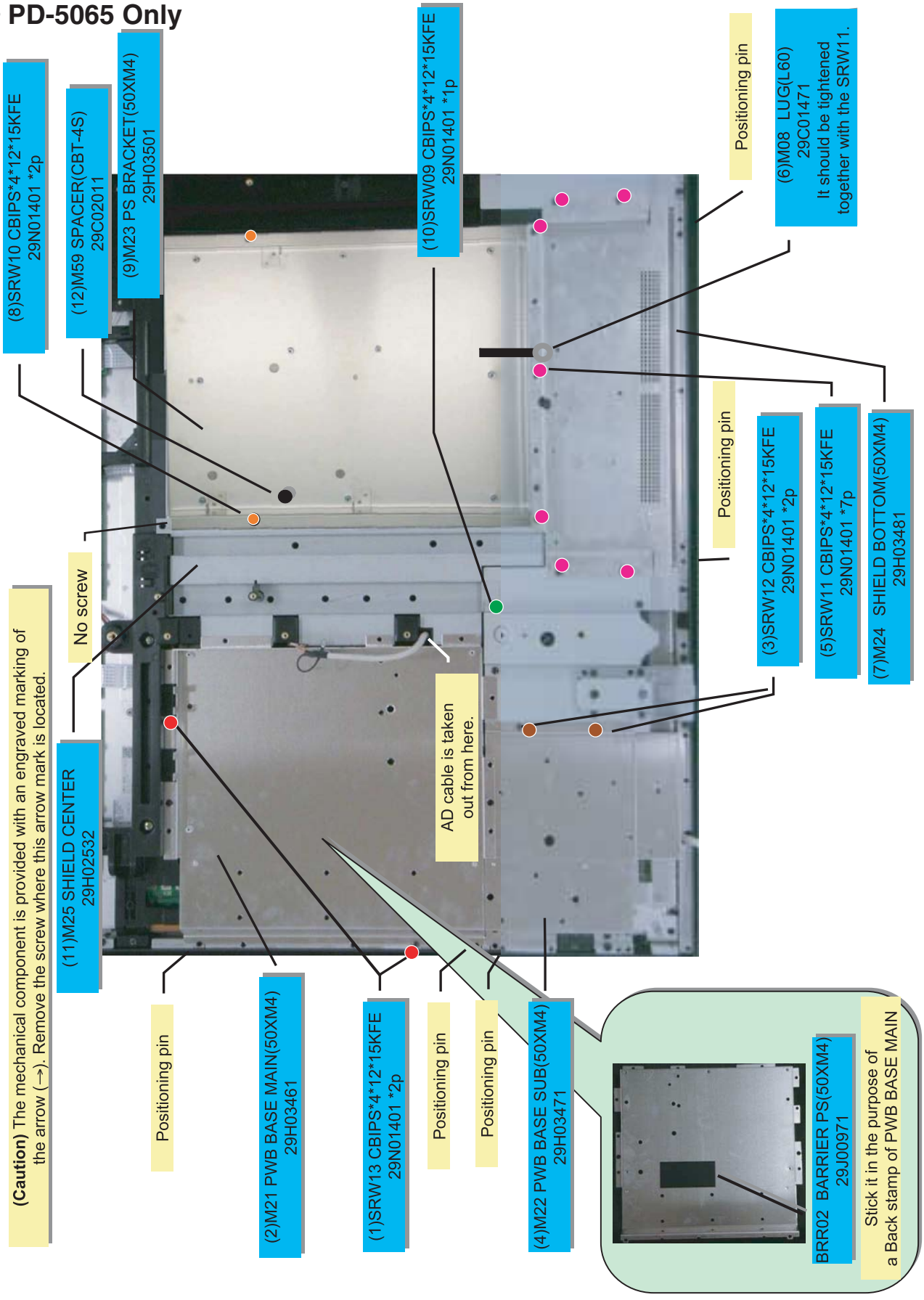


• PD-4265



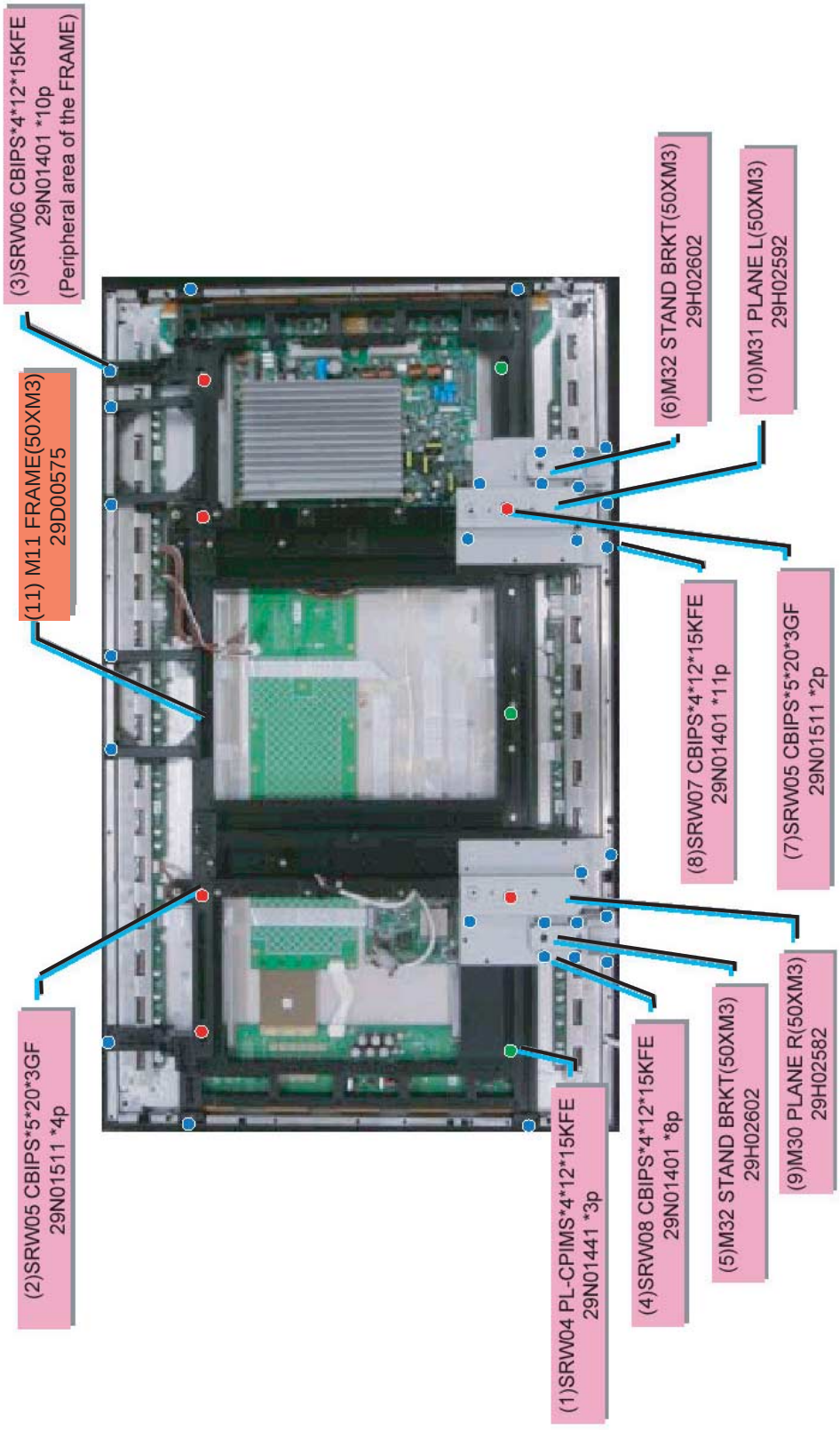
22. BRACKET & SHIELD

- **PD-5065 Only**



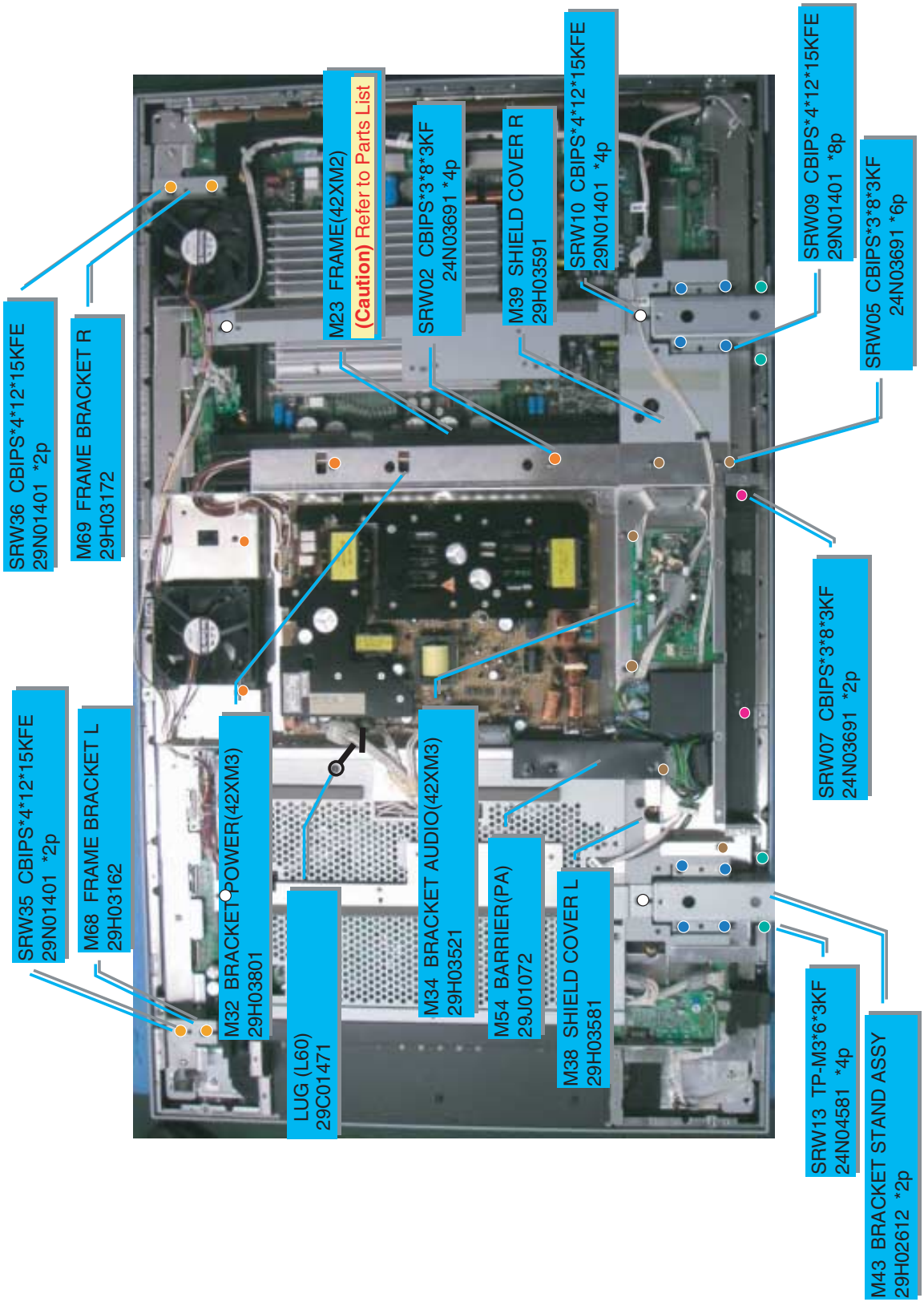
23.FRAME

- **PD-5065 Only**



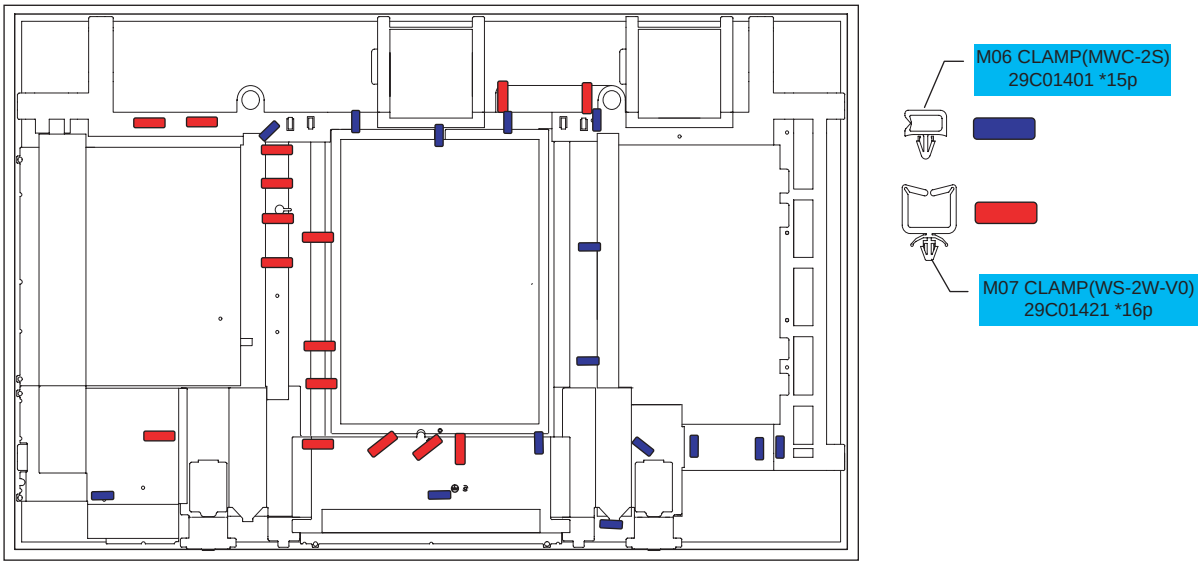
24. MISCELLANEOUS PARTS

- **PD-4265 Only**

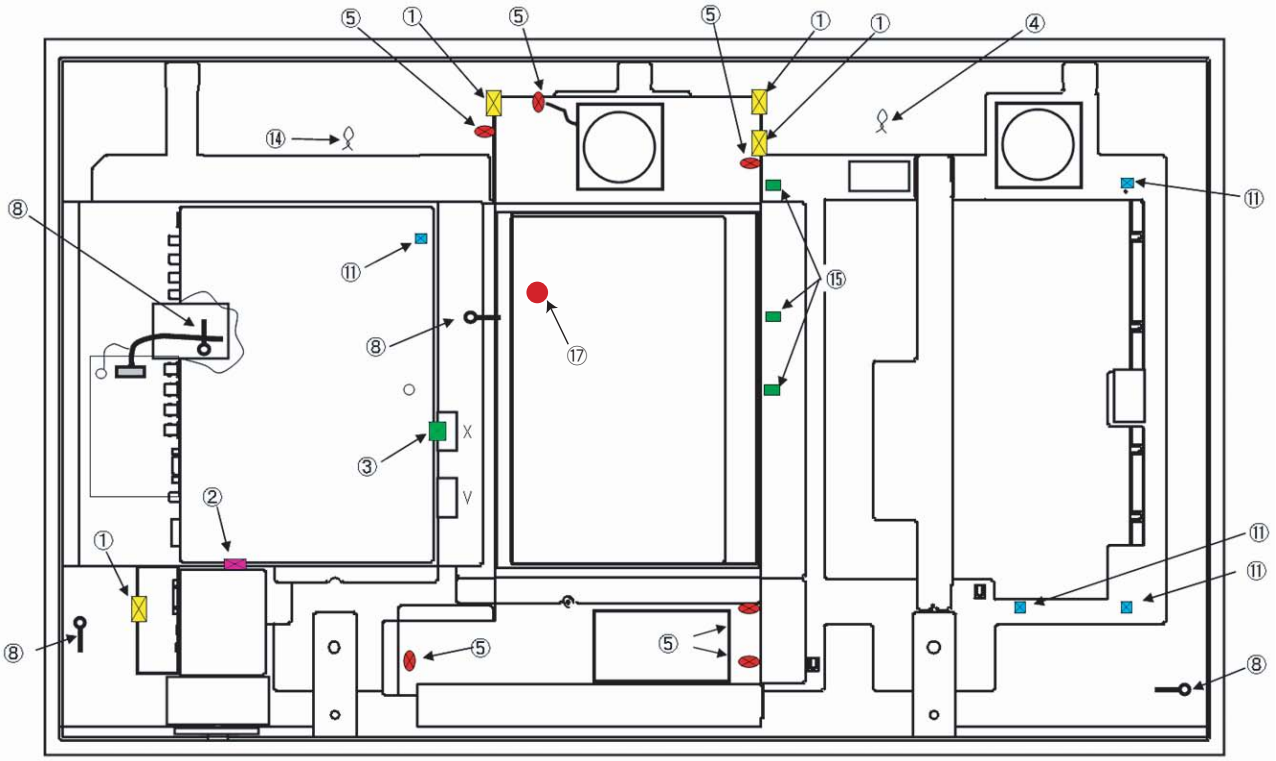


25.WIRE CLAMP

- **PD-5065**



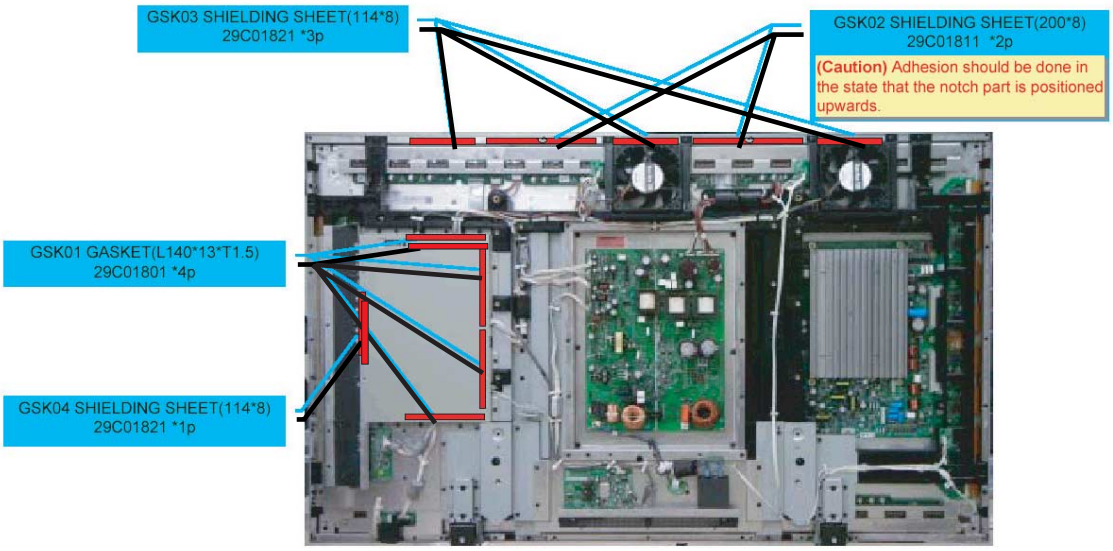
- **PD-4265**



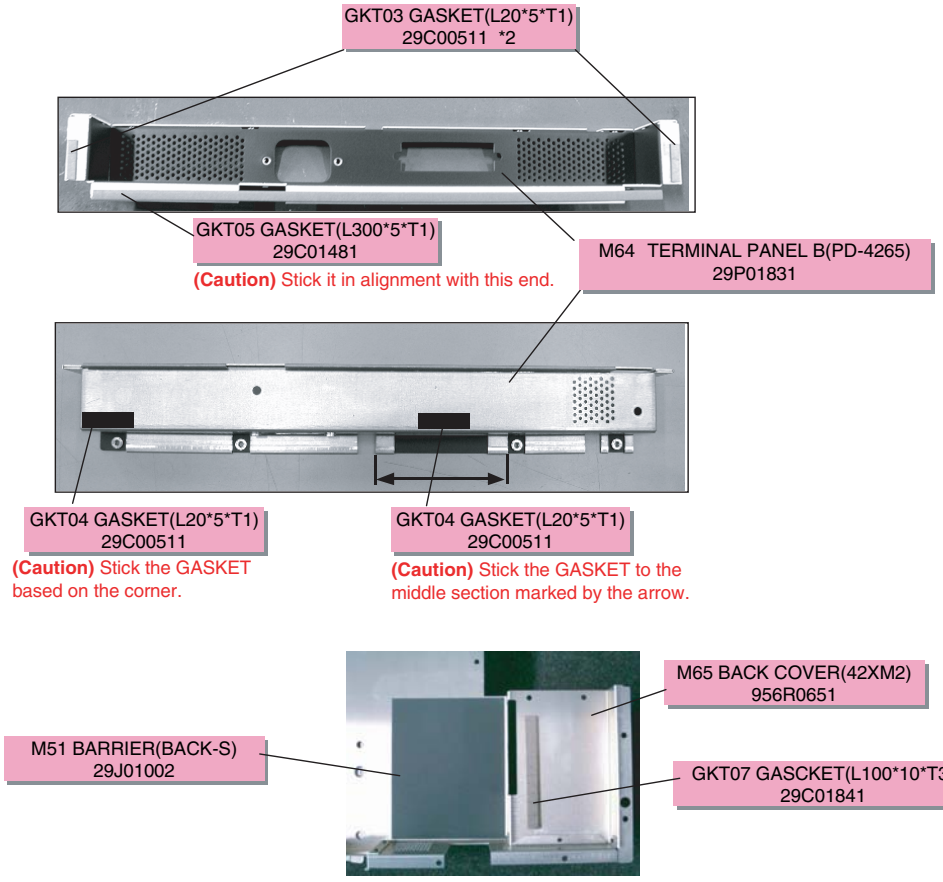
①EDGING SADDLE(EDS-1208U)	29C00461	4		⑧LUG(L60)	29C01471	4	
②EDGE SADDLE(TES-016NV)	29C01431	1		⑪CLAMP(MWC-2S)	29C01401	4	
③EDGE SADDLE(TSB-1915)	24C05151	1		⑭LEAD CLAMPER(D8.3)	24C00101	1	
④LEAD CLAMPER(D5.2)	24C00091	2		⑮CLAMP(LWS-1S V0)	29C01931	3	
⑤CLAMP(WS-2W-V0)	29C01421	6		⑰SPACER(CBT-4S)	29C02011	1	

26.GASCKET

• PD-5065



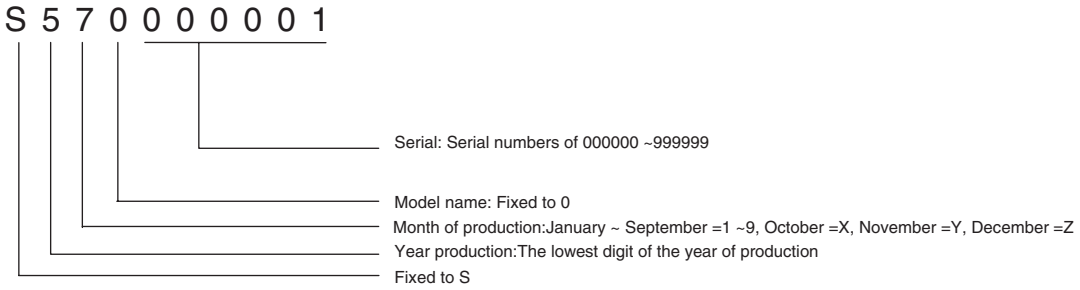
• PD-4265



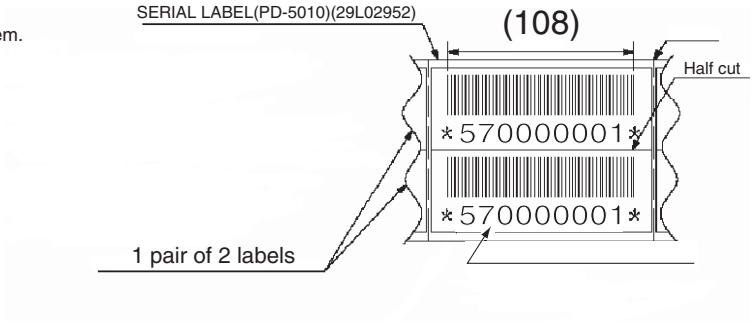
27.Contents SERIAL LABEL printout-1

• PD-5065

*The bar code shall be printed out at the upper stage.
*The serial number shall be printed out at the lower stage.
The numbering system for the serial numbershall conform to the following:

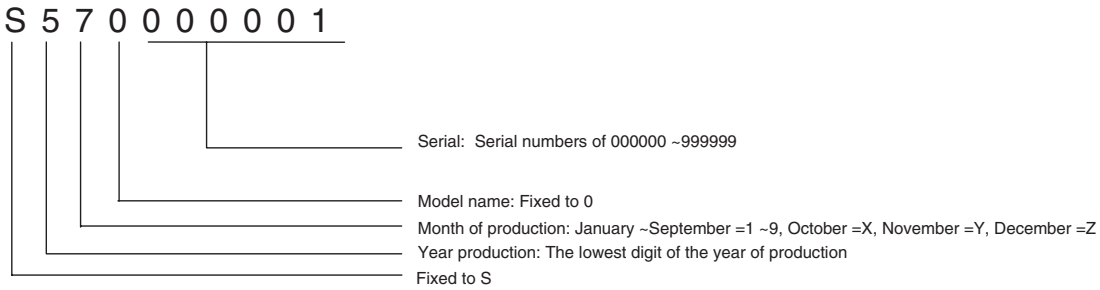


1.'S'shall be not indicate.
2.Bar code shall be encode Code'39'(3 of 9)system.
3.The height of serial number i s 20mm.
4.The printing color isblack.

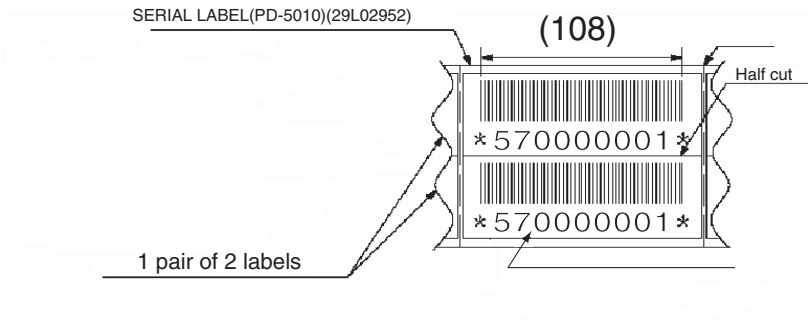


• PD-4265

*The bar code shall be printed out at the upper stage.
*The serial number shall be printed out at the lower stage.
The numbering system for the serial number shall conform to the following:



1.'S' shall be not indicate.
2. Bar code shall be encode Code'39'(3 of 9) system.
3. The height of serial number is 20mm.
4. The printing color is black.

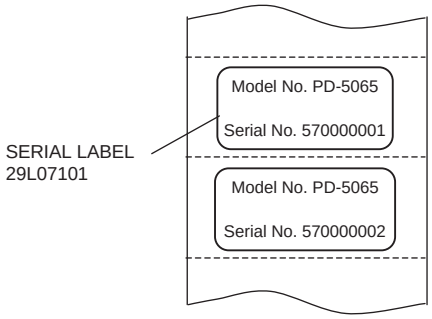


28.Contents SERIAL LABEL printout-2

• PD-5065

*The model name shall be printed out at the upper stage.
*The serial number shall be printed out at the lower stage.
The numbering system for the serial number shall conform to the following:

ex.
Model No. PD-5065
Serial No. 570000001



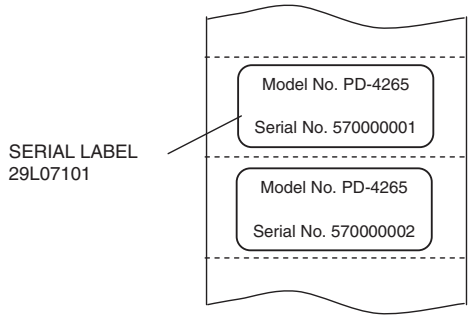
5 7 0 0 0 0 0 0 1

Serial: Serial numbers of 000000 ~999999
Model name: Fixed to 0
Month of production: January ~September =1 ~9, October =X, November =Y, December =Z
Year production: The lowest digit of the year of production

• PD-4265

*The model name shall be printed out at the upper stage.
*The serial number shall be printed out at the lower stage.
The numbering system for the serial number shall conform to the following:

ex.
Model No. PD-4265
Serial No. 570000001



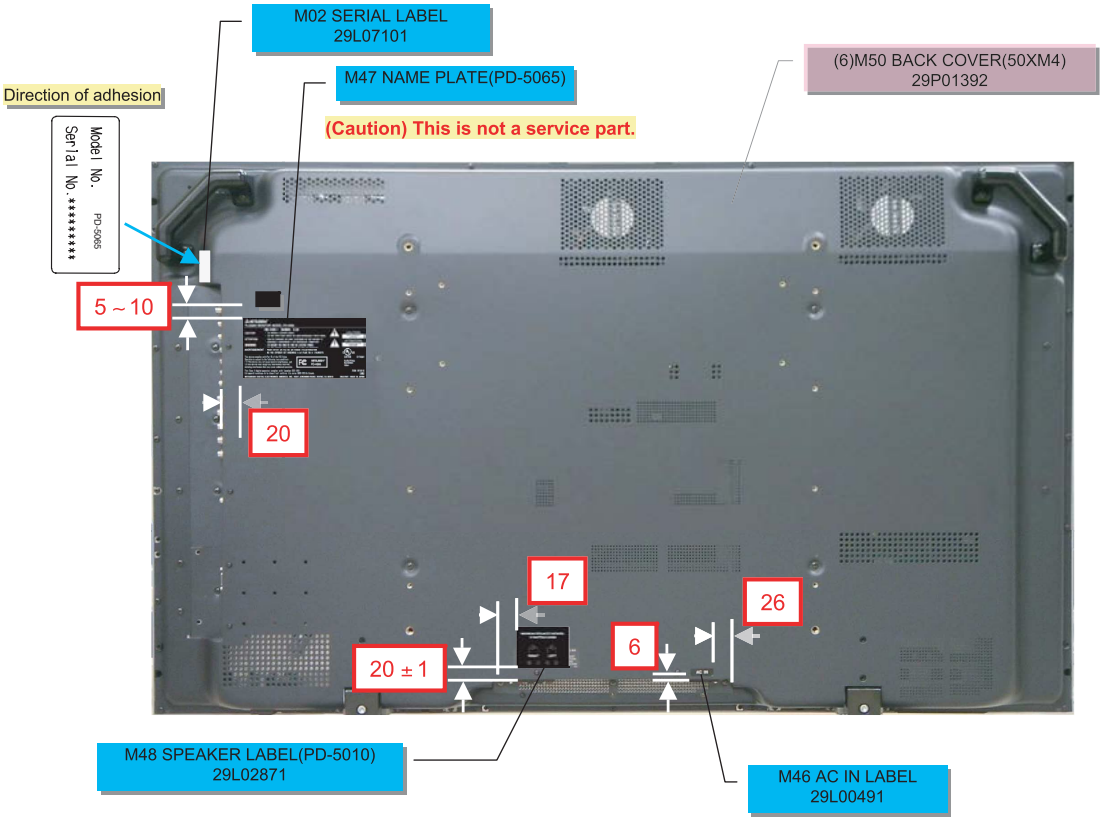
5 7 0 0 0 0 0 0 1

Serial: Serial numbers of 000000 ~999999
Model name: Fixed to 0
Month of production: January ~September =1 ~9, October =X, November =Y, December =Z
Year production: The lowest digit of the year of production

29.LABELS

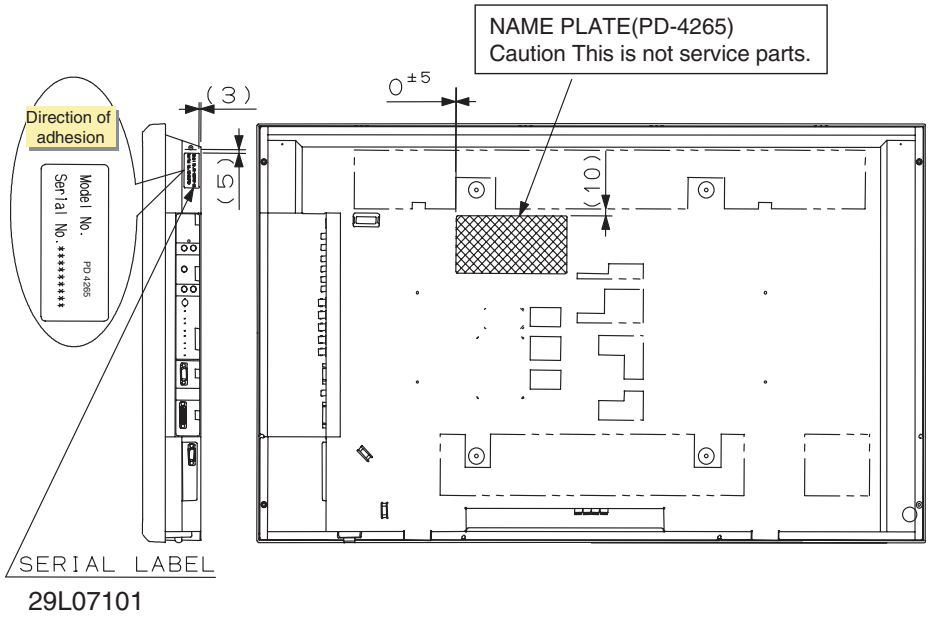
• PD-5065

Stick the labels in the positions on the back cover illustrated below.
Dimensions indicated are approximate figures.
However, the presence of bends and air bubbles shall be reduced to a minimum.



• PD-4265

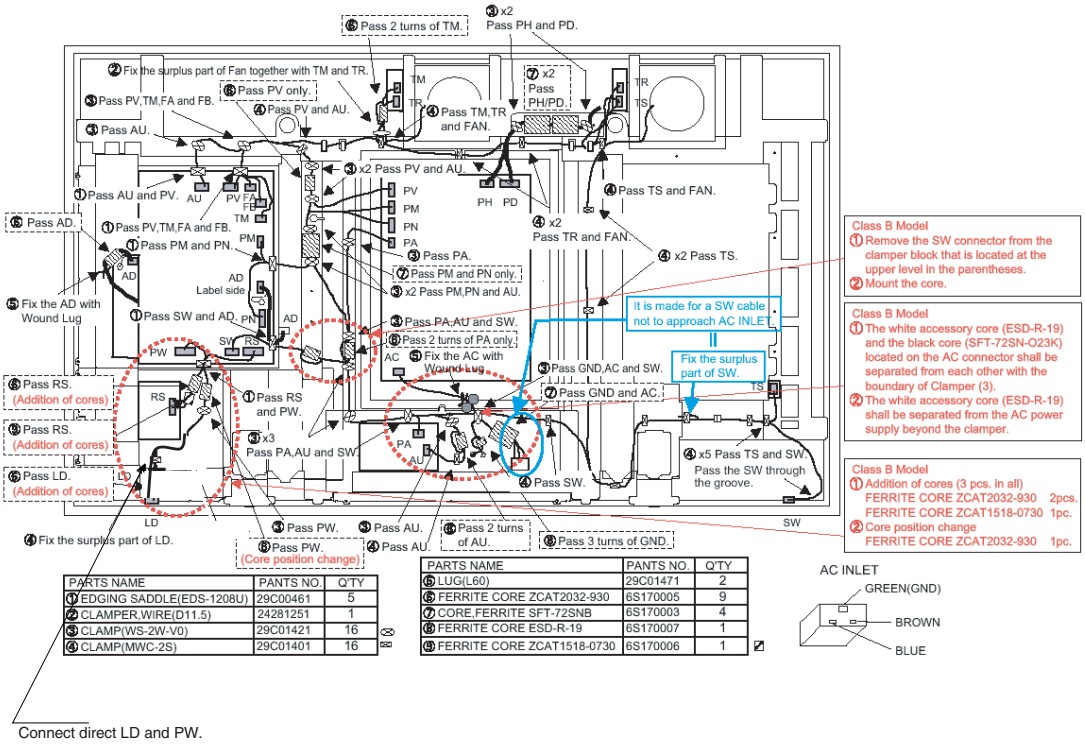
Stick the labels in the positions on the back cover illustrated below.
Dimensions indicated are approximate figures.
However, the presence of bends and air bubbles shall be reduced to a minimum.



30.cable

• PD-5065

(Caution) "Turns" in the illustration below denotes the number of cable turns to be wound around the ferrite core. **(Example)** 3 turns → 3 turns of a cable wound around.

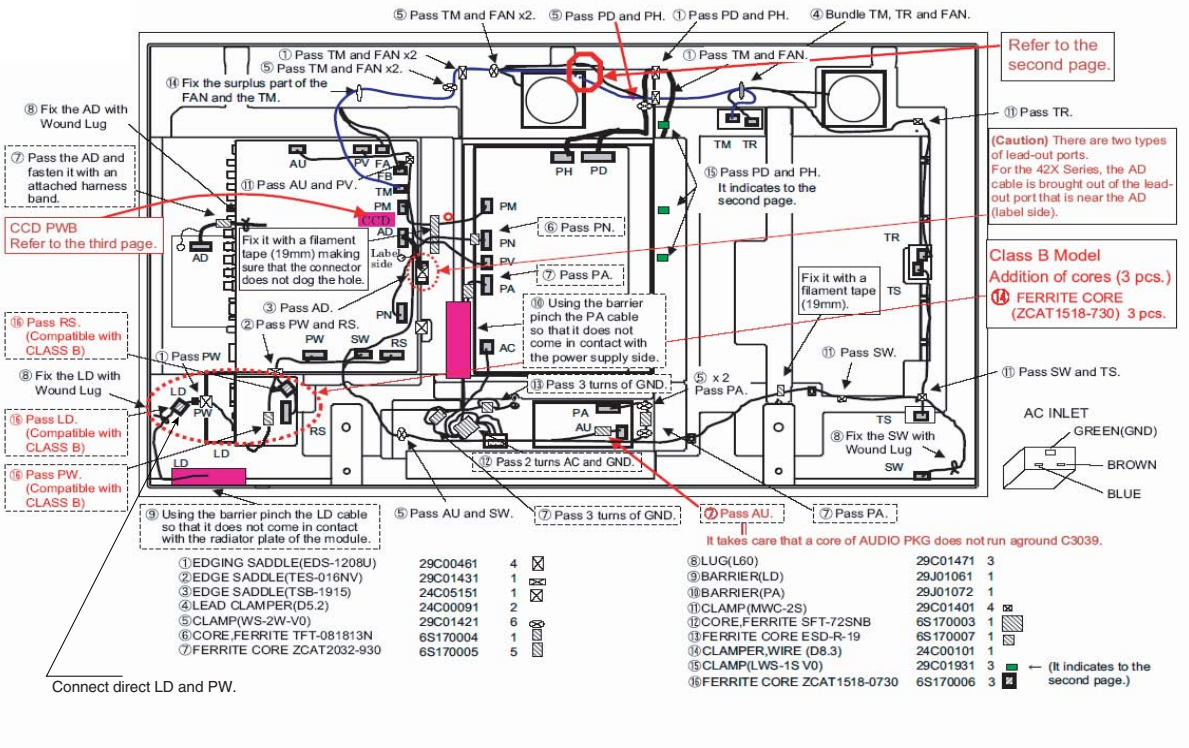


PARTS NAME	PANTS NO.	Q'TY
① EDGING SADDLE(EDS-1208U)	29C00461	5
② CLAMPER,WIRE(D11.5)	24281251	1
③ CLAMP(WS-2W-V0)	29C01421	16
④ CLAMP(MWC-2S)	29C01401	16

PARTS NAME	PANTS NO.	Q'TY
⑤ LUG(L60)	29C01471	2
⑤ FERRITE CORE ZCAT2032-930	6S170005	9
⑦ CORE,FERRITE SFT-72SNB	6S170003	4
⑱ FERRITE CORE ESD-R-19	6S170007	1
⑲ FERRITE CORE ZCAT1518-0730	6S170006	1

• PD-4265

(Caution) "Turns" in the illustration below denotes the number of cable turns to be wound around the ferrite core. **(Example)** 3 turns → 3 turns of a cable wound around.

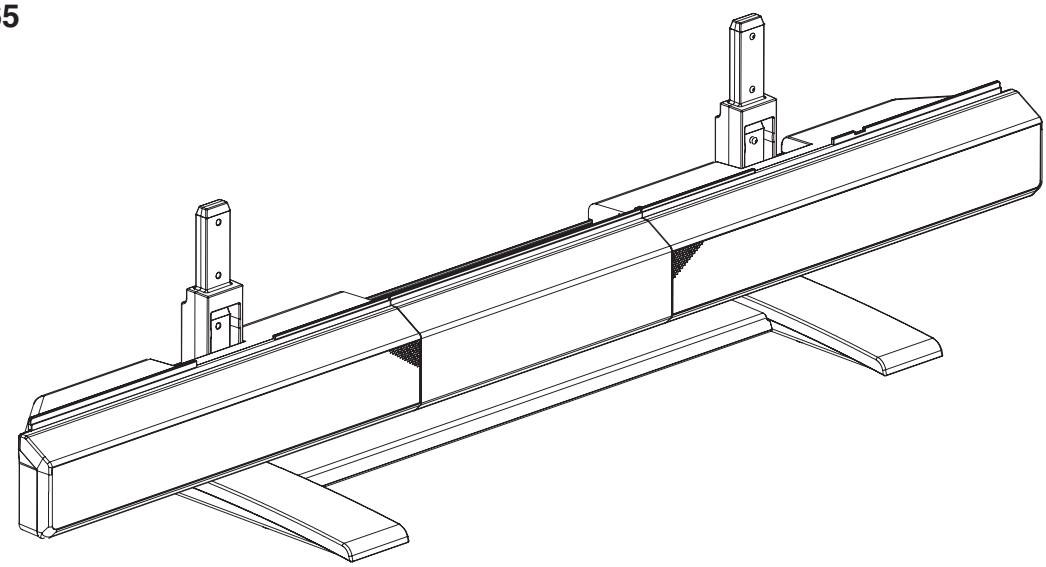


①EDGING SADDLE(EDS-1208U)	29C00461	4	
②EDGE SADDLE(TES-016NV)	29C01431	1	
③EDGE SADDLE(TSB-1915)	24C05151	1	
④LEAD CLAMPER(D5.2)	24C00091	2	
⑤CLAMP(WS-2W-V0)	29C01421	6	
⑥CORE,FERRITE TFT-081813N	6S170004	1	
⑦FERRITE CORE ZCAT2032-930	6S170005	5	

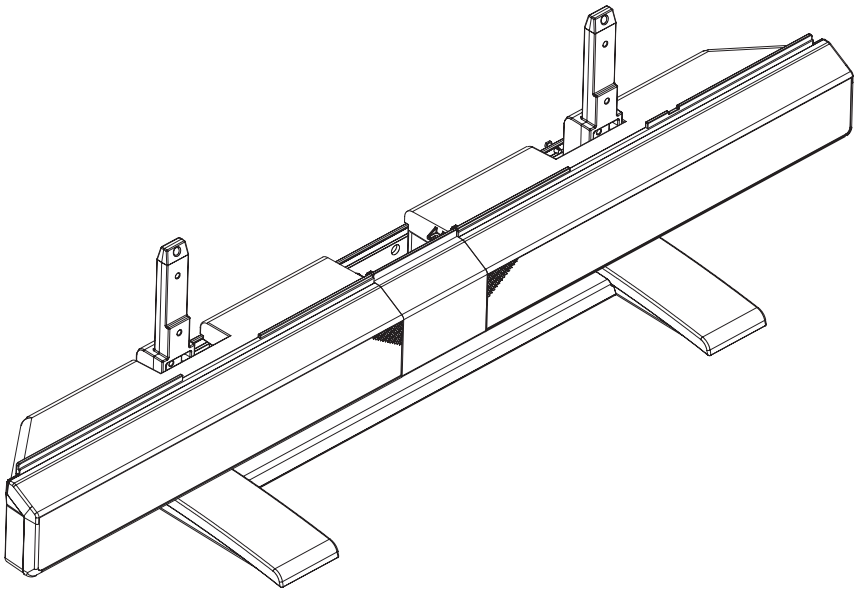
⑧LUG(L60)	29C01471	3	
⑨BARRIER(LD)	29J01061	1	
⑩BARRIER(PA)	29J01072	1	
⑪CLAMP(MWC-2S)	29C01401	4	
⑫CORE,FERRITE SFT-72SNB	6S170003	1	
⑬FERRITE CORE ESD-R-19	6S170007	1	
⑭CLAMPER,WIRE (D8.3)	24C00101	1	
⑮CLAMP(LWS-1S V0)	29C01931	3	← (It indicates to the second page.)
⑯FERRITE CORE ZCAT1518-0730	6S170006	3	

31.STAND/SPEAKER ASSY

- **PD-5065**

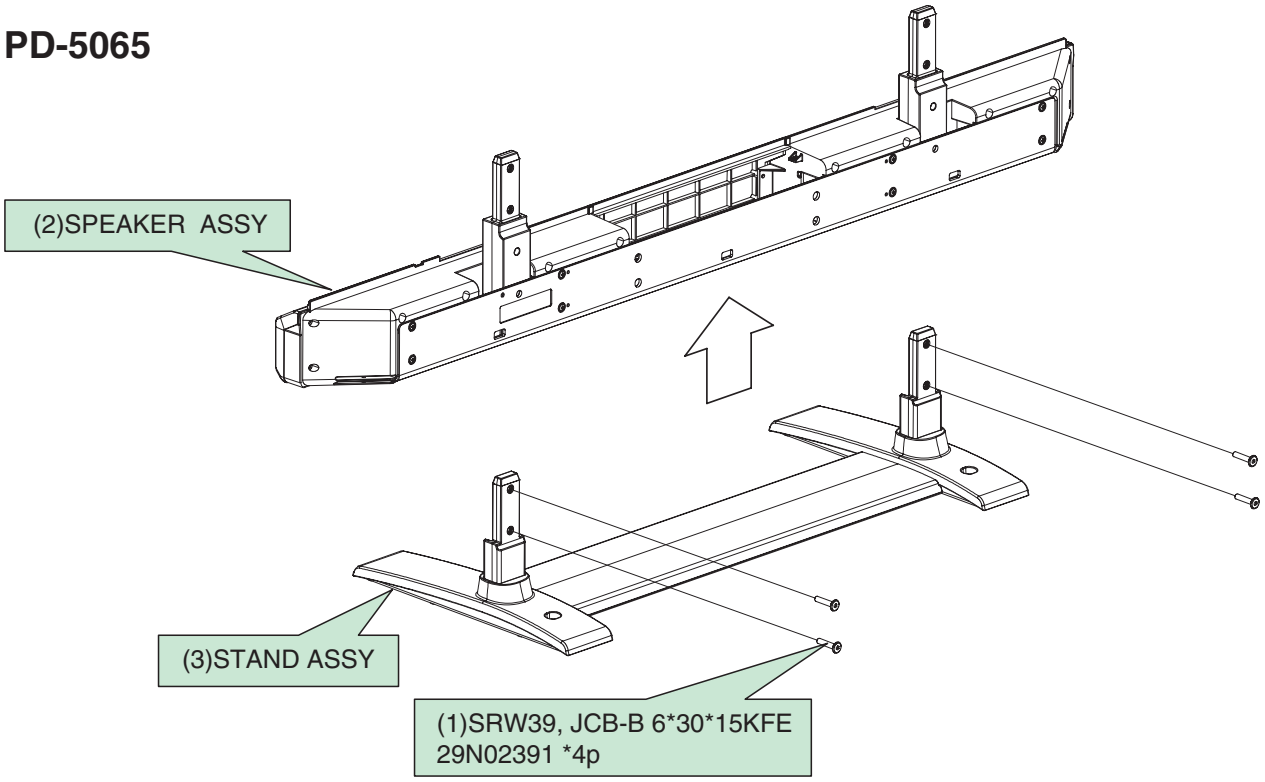


- **PD-4265**

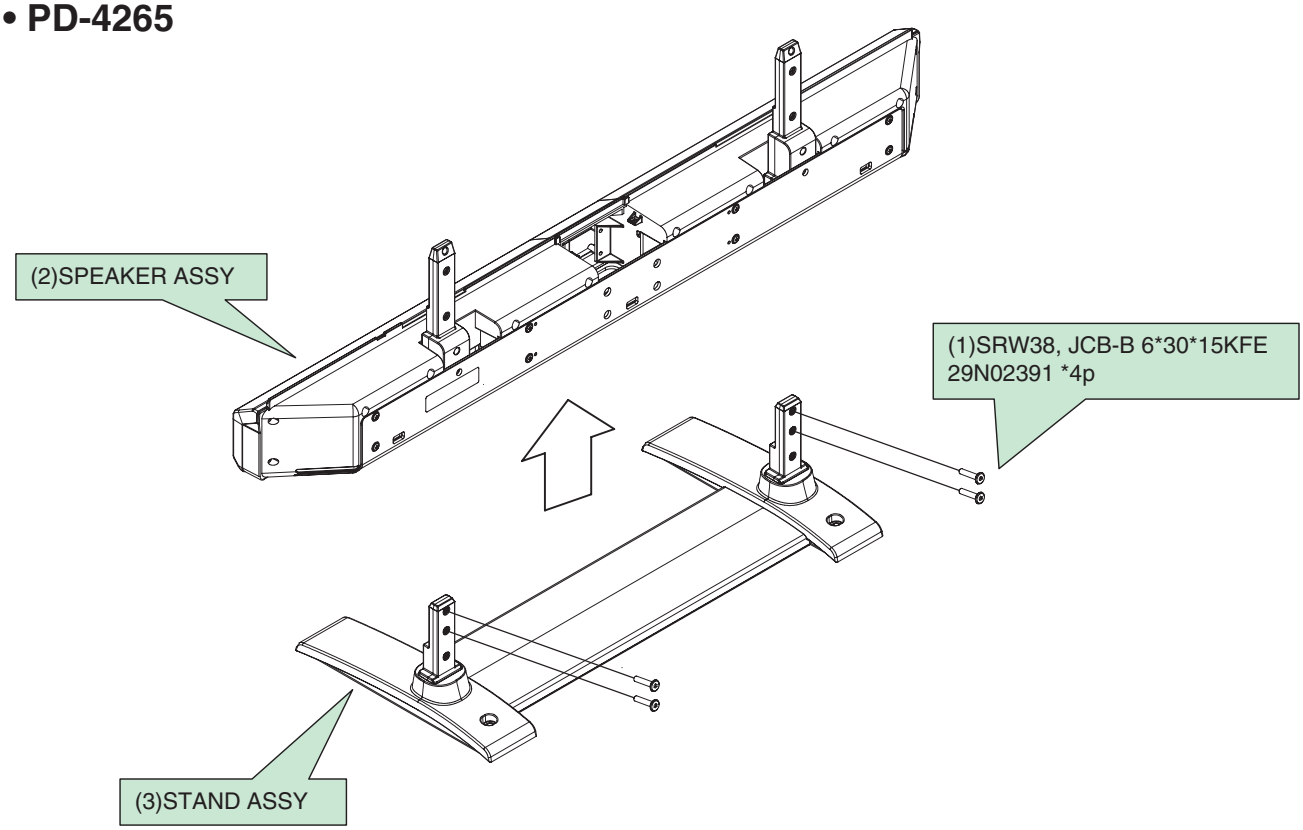


32.STAND/SPEAKER ASSY

- **PD-5065**

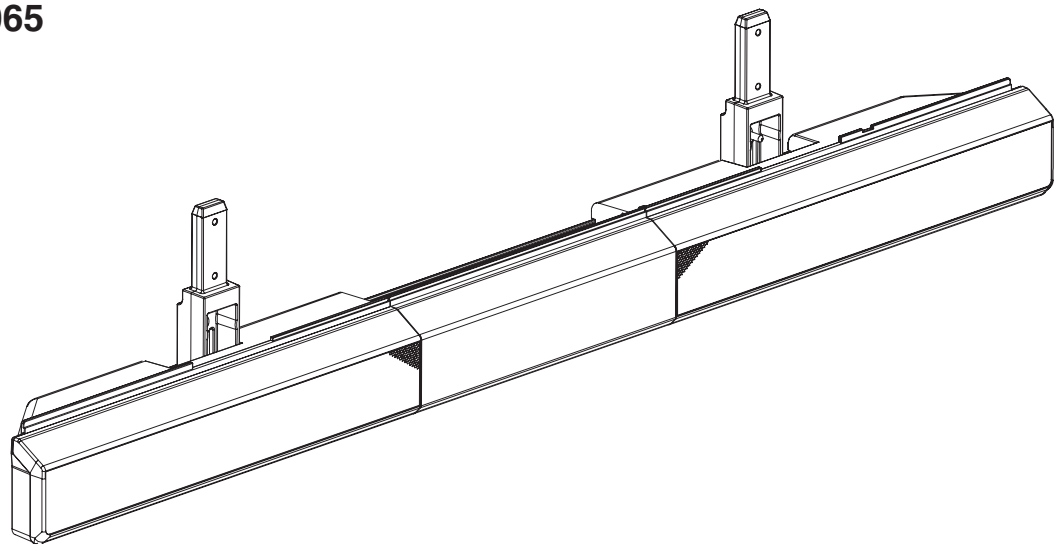


- **PD-4265**

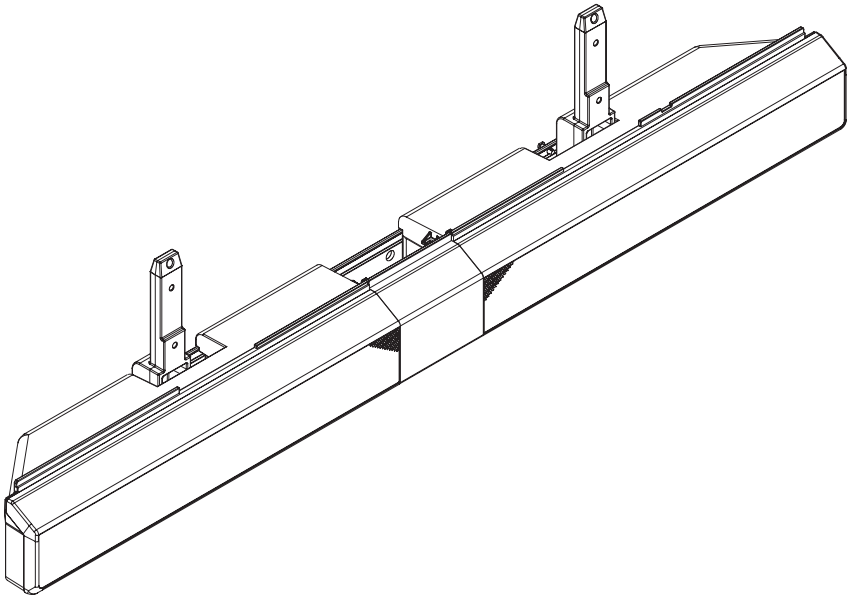


33.SPEAKER ASSY

- **PD-5065**

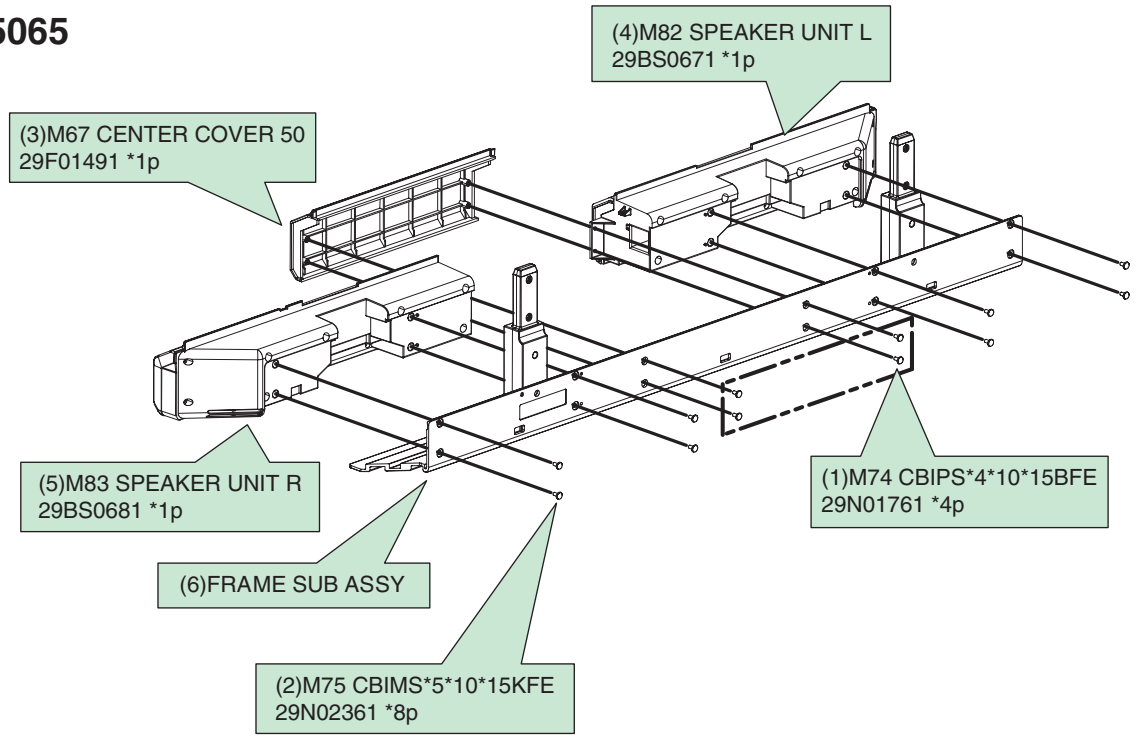


- **PD-4265**

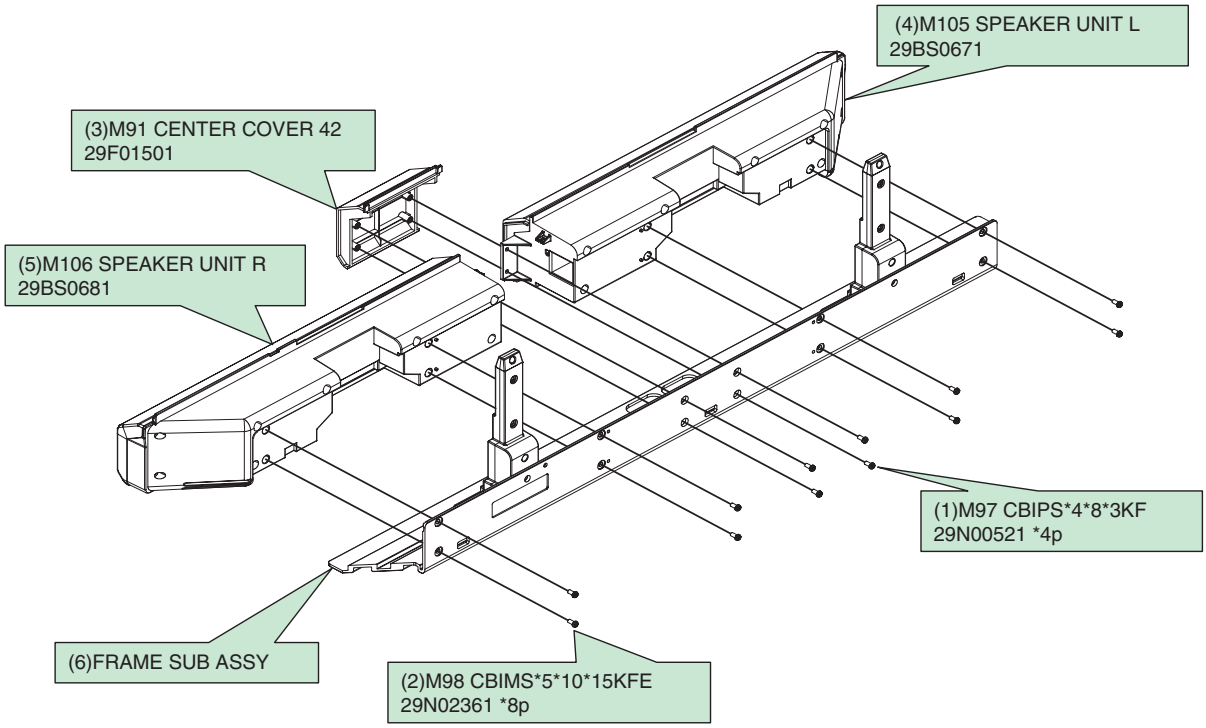


34.SPEAKER ASSY

• PD-5065

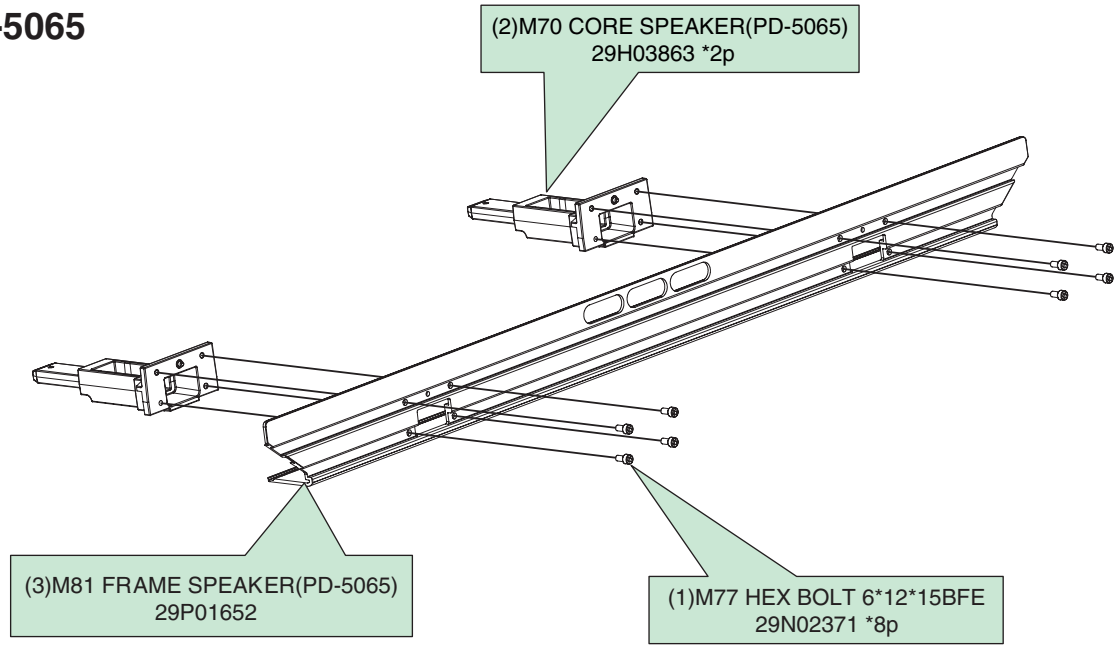


• PD-4265

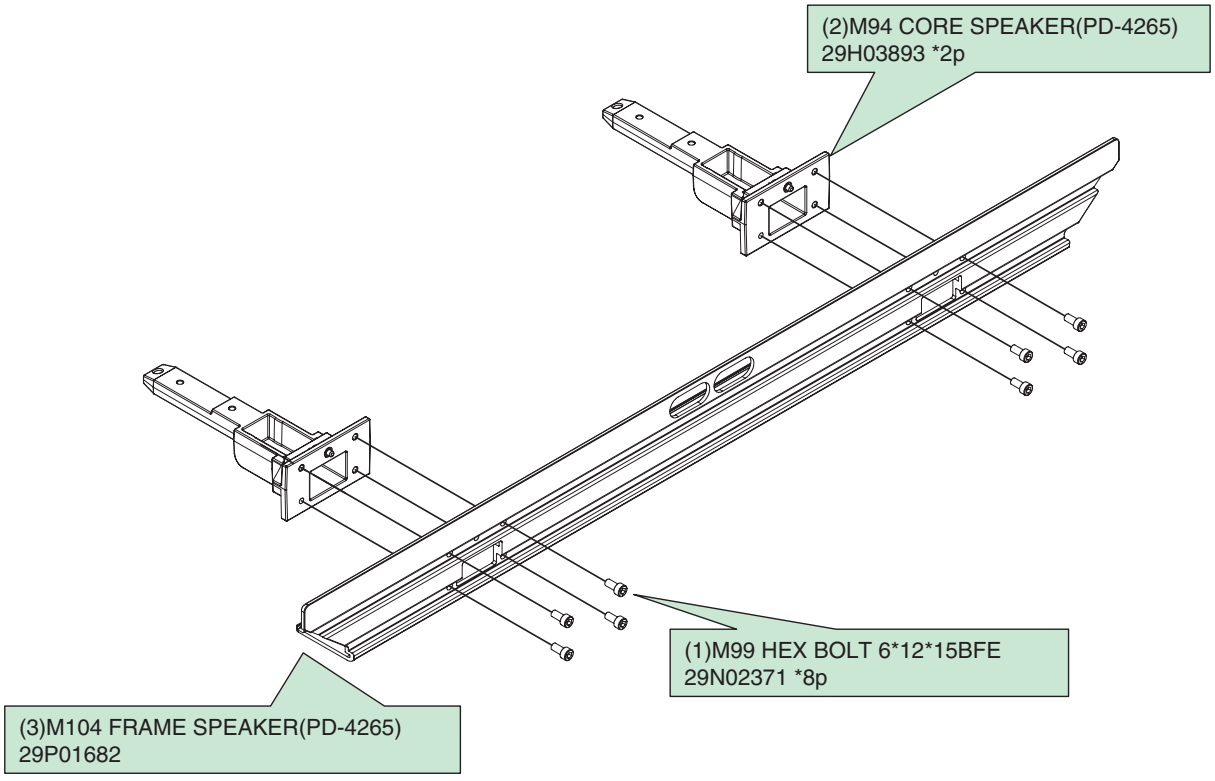


35.FRAME SUB ASSY

- **PD-5065**

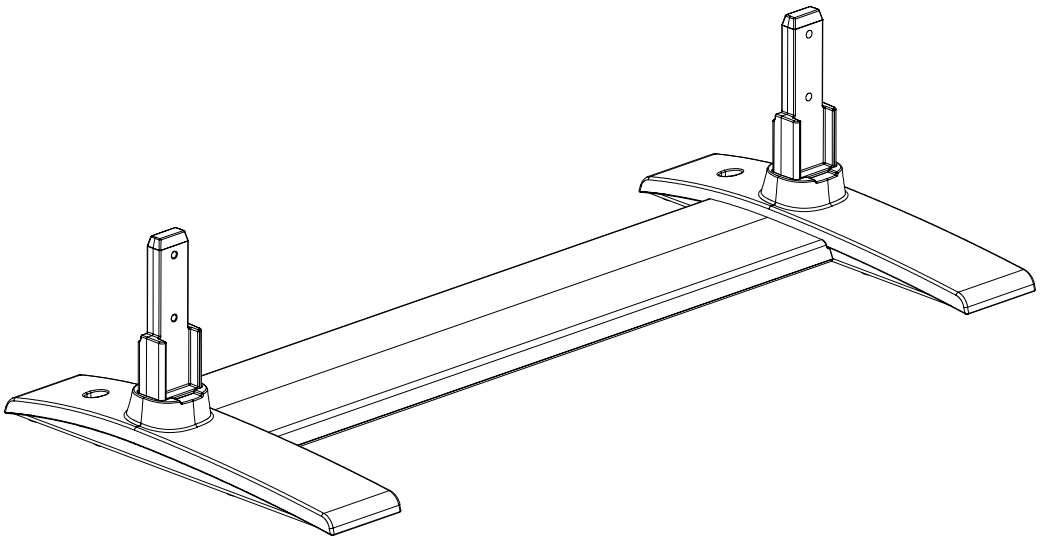


- **PD-4265**

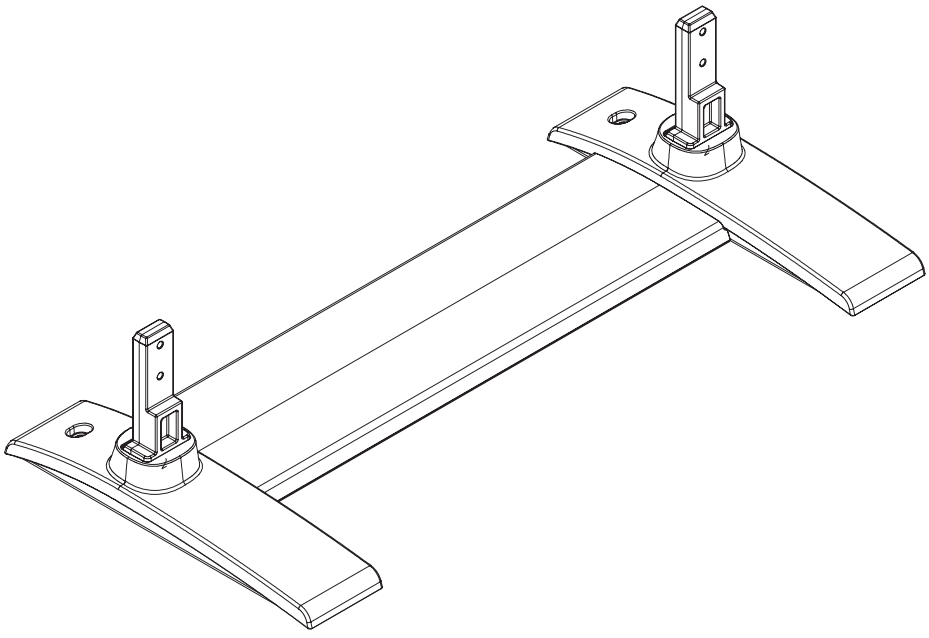


36.STAND ASSY

- **PD-5065**

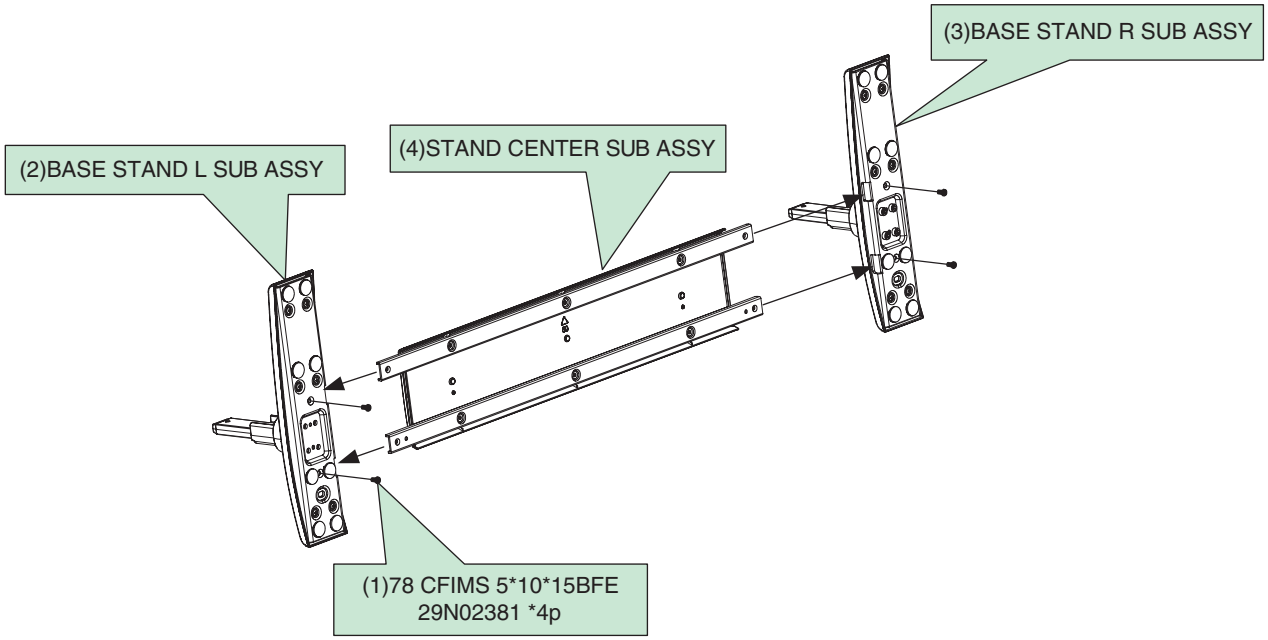


- **PD-4265**

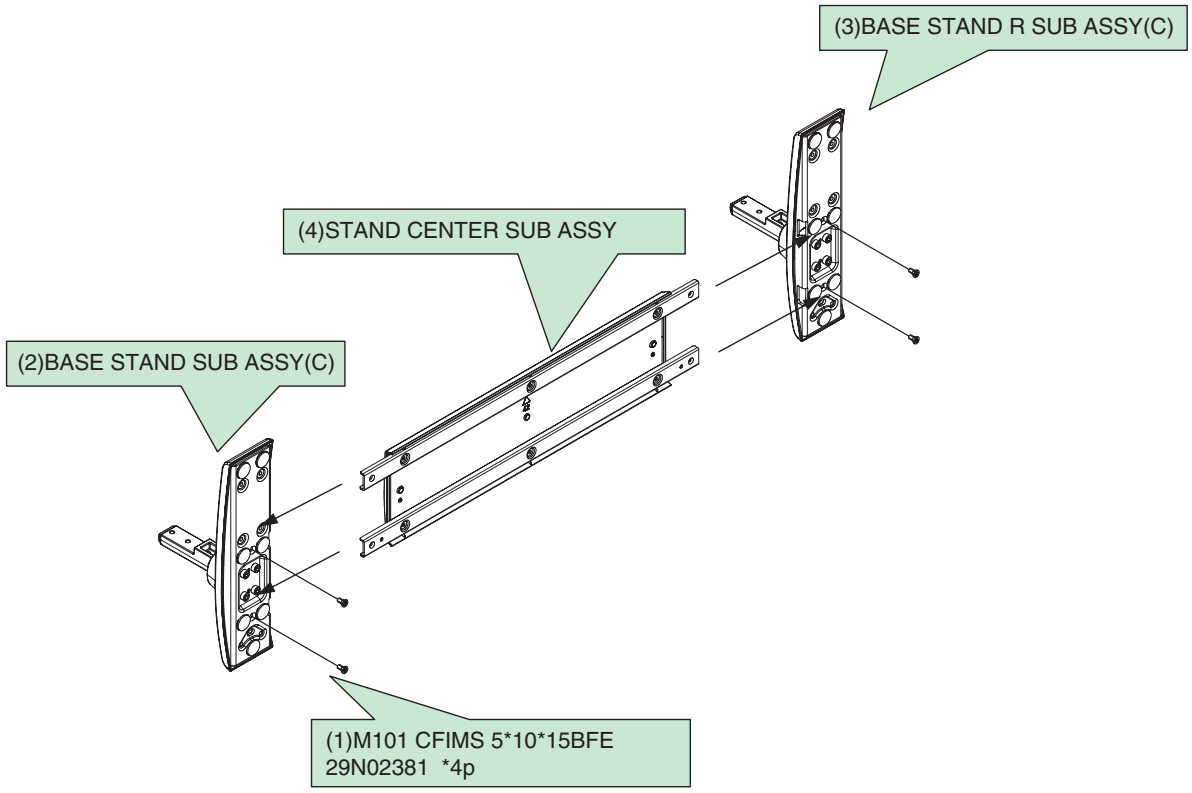


37.STAND ASSY

- **PD-5065**

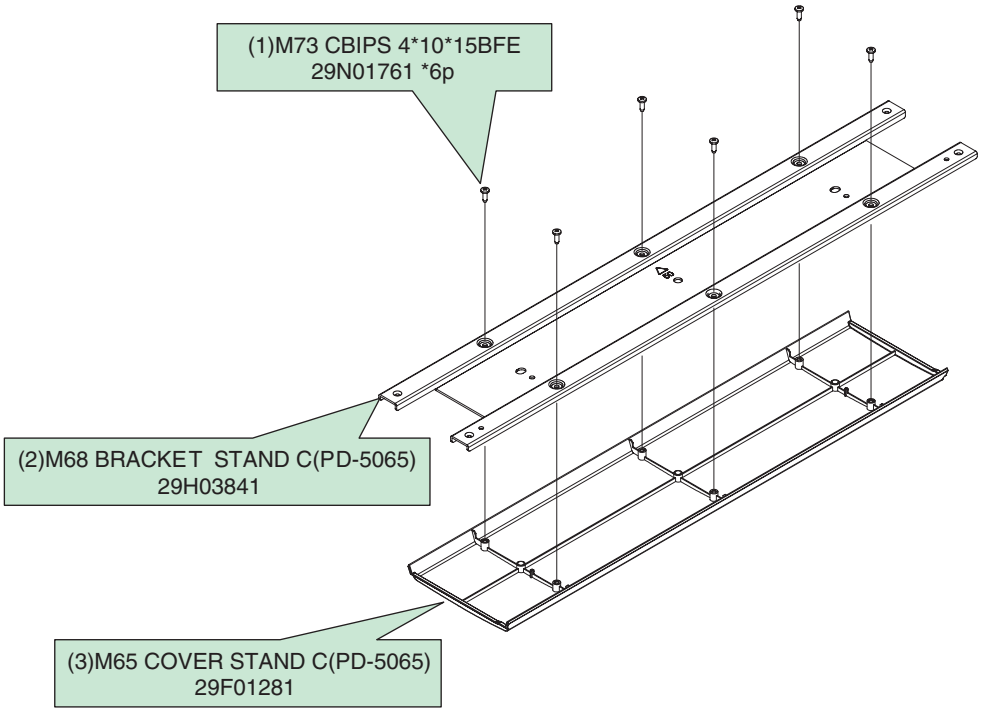


- **PD-4265**

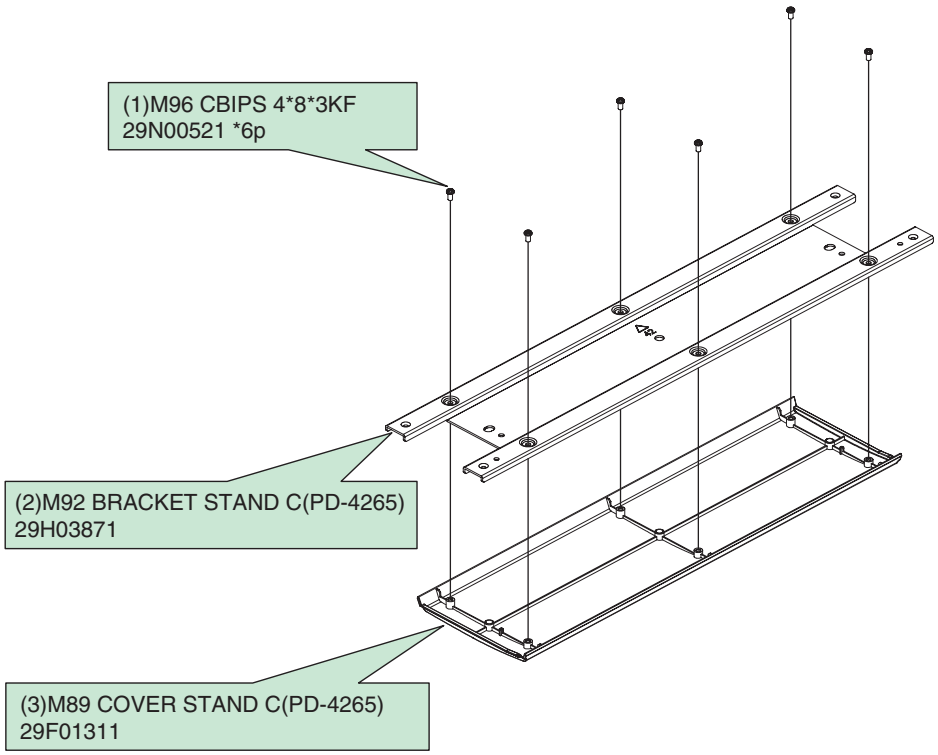


38.STAND CENTER SUB ASSY

• PD-5065

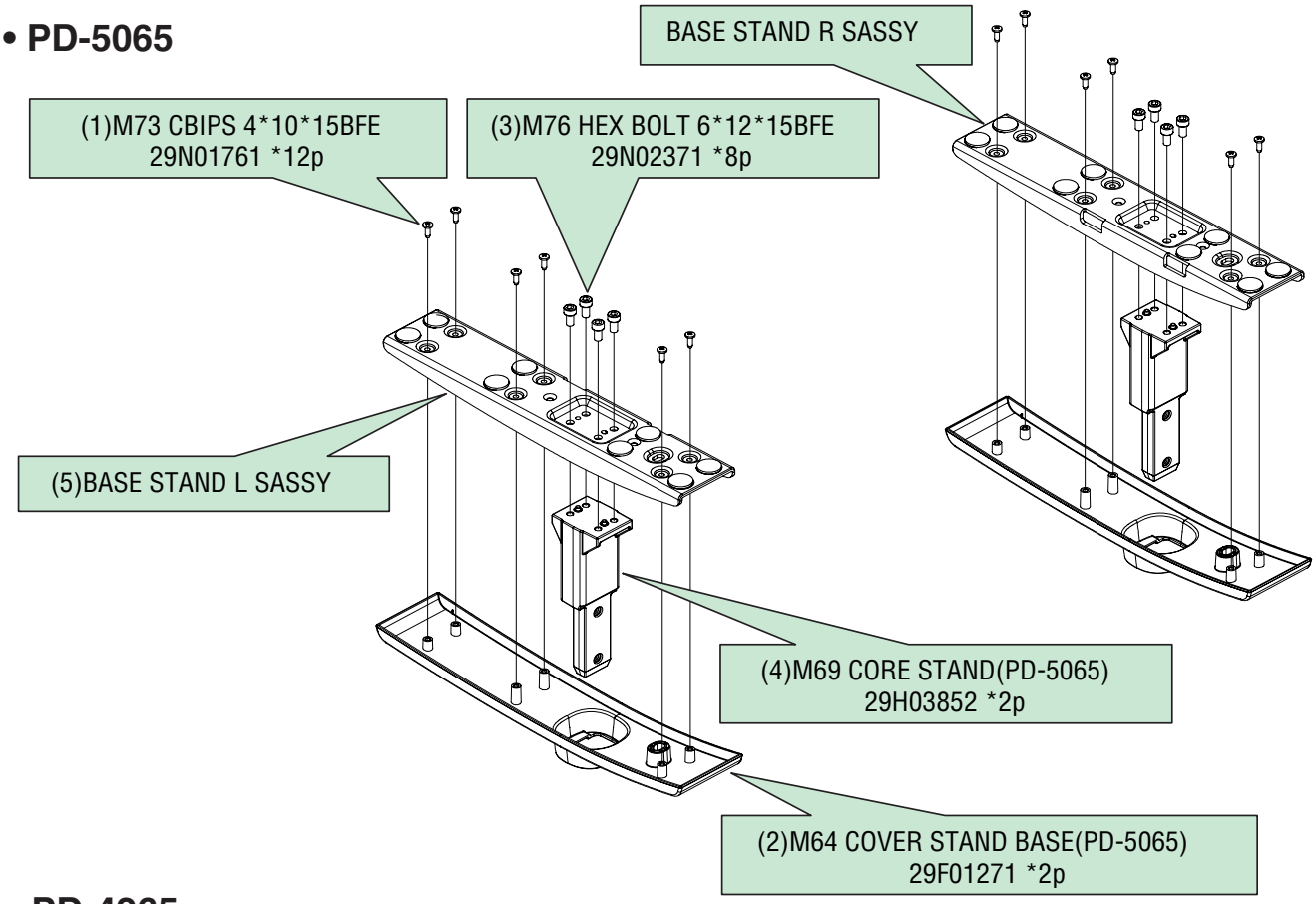


• PD-4265

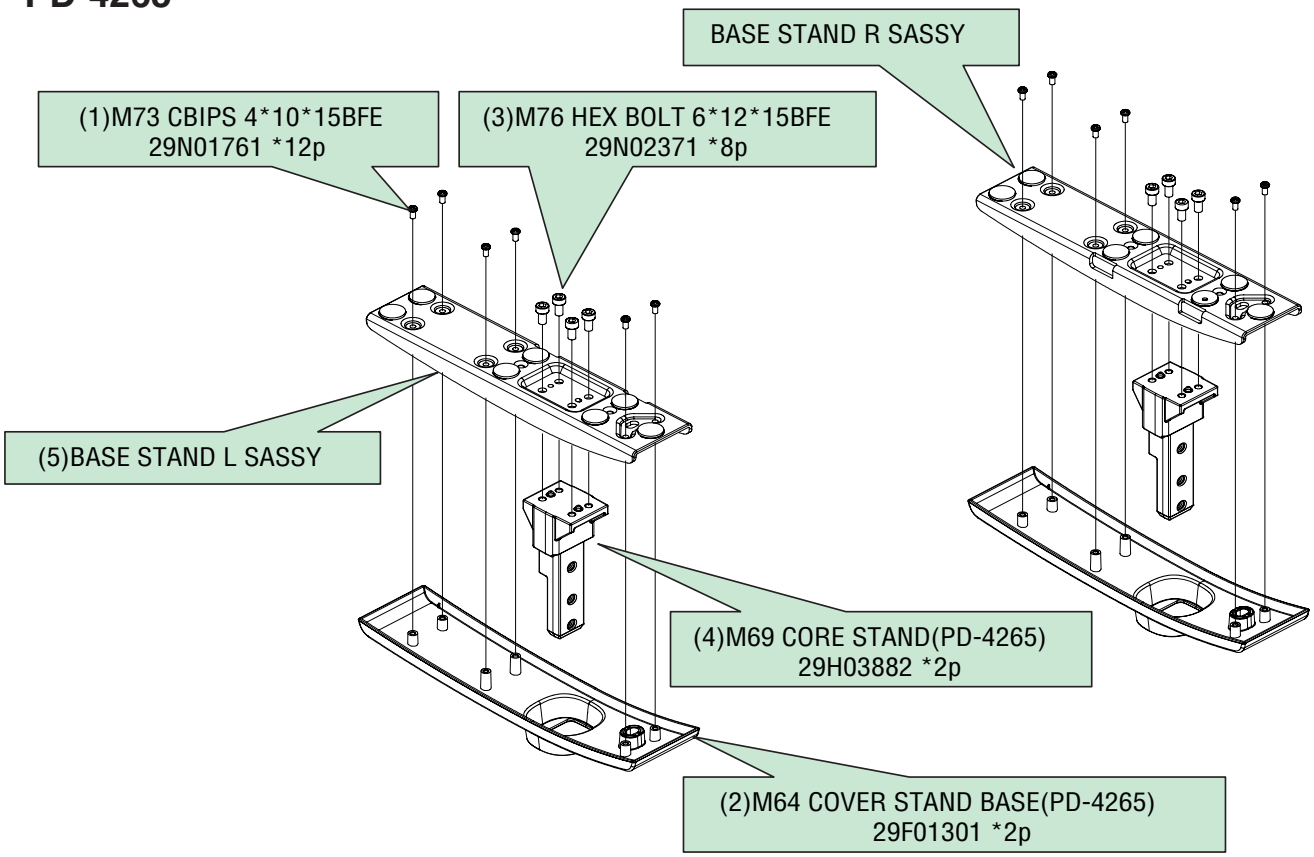


39.BASE STAND L/R SUB ASSY(B)

- **PD-5065**

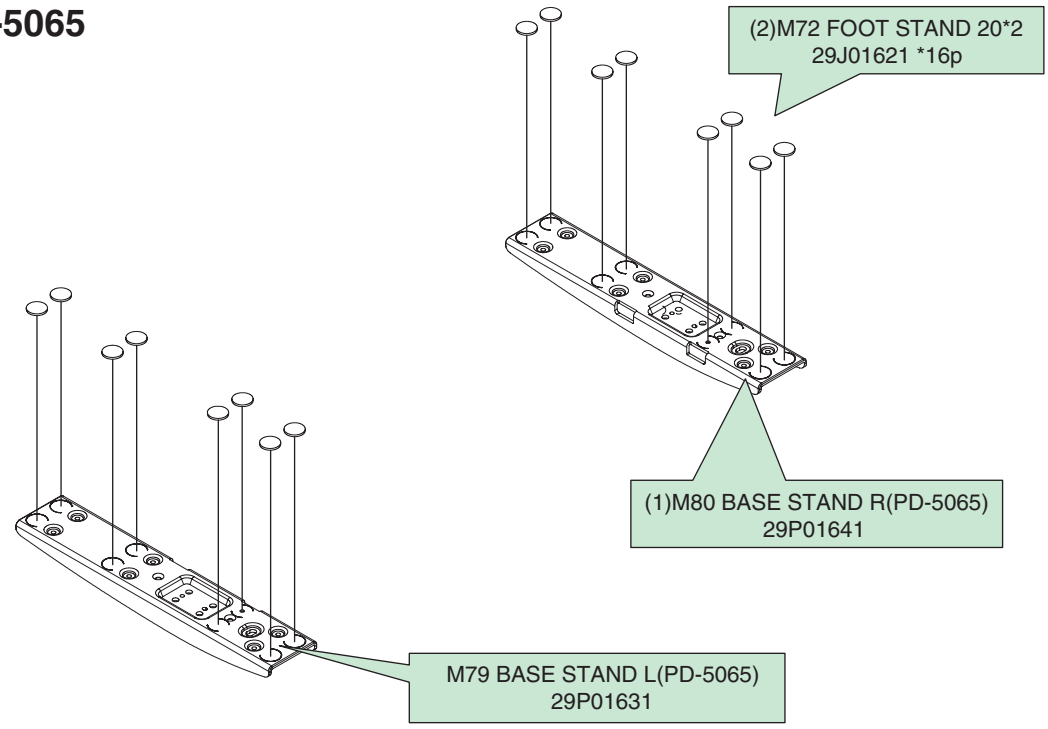


- **PD-4265**

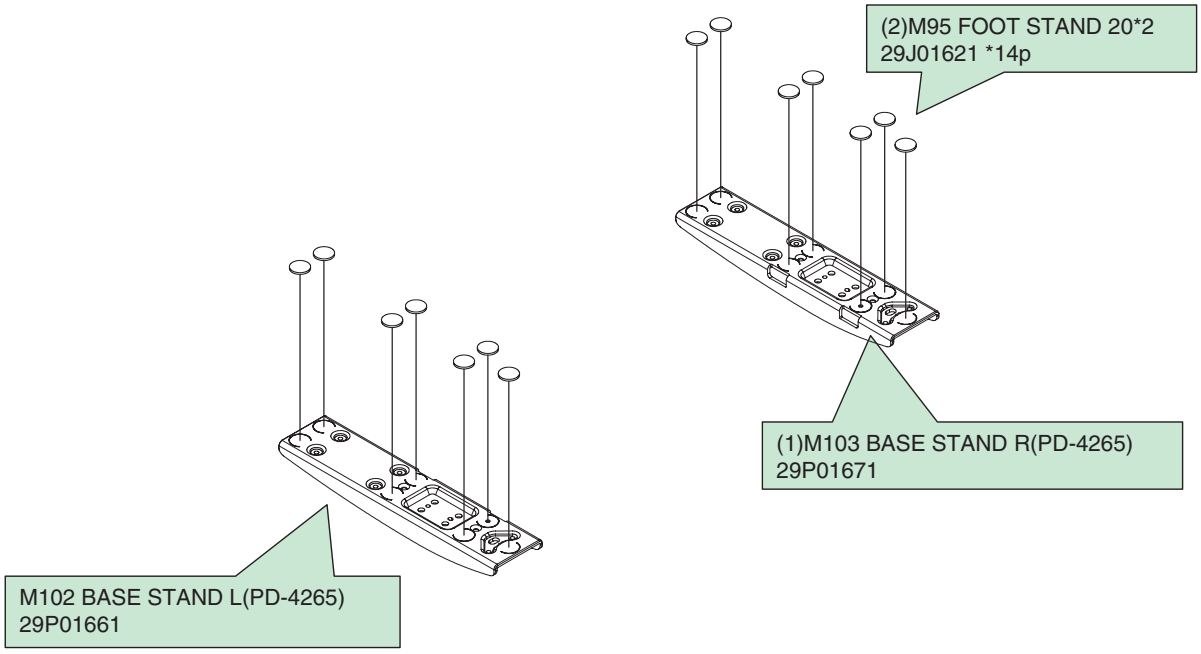


40.BASE STAND L/R ASSY

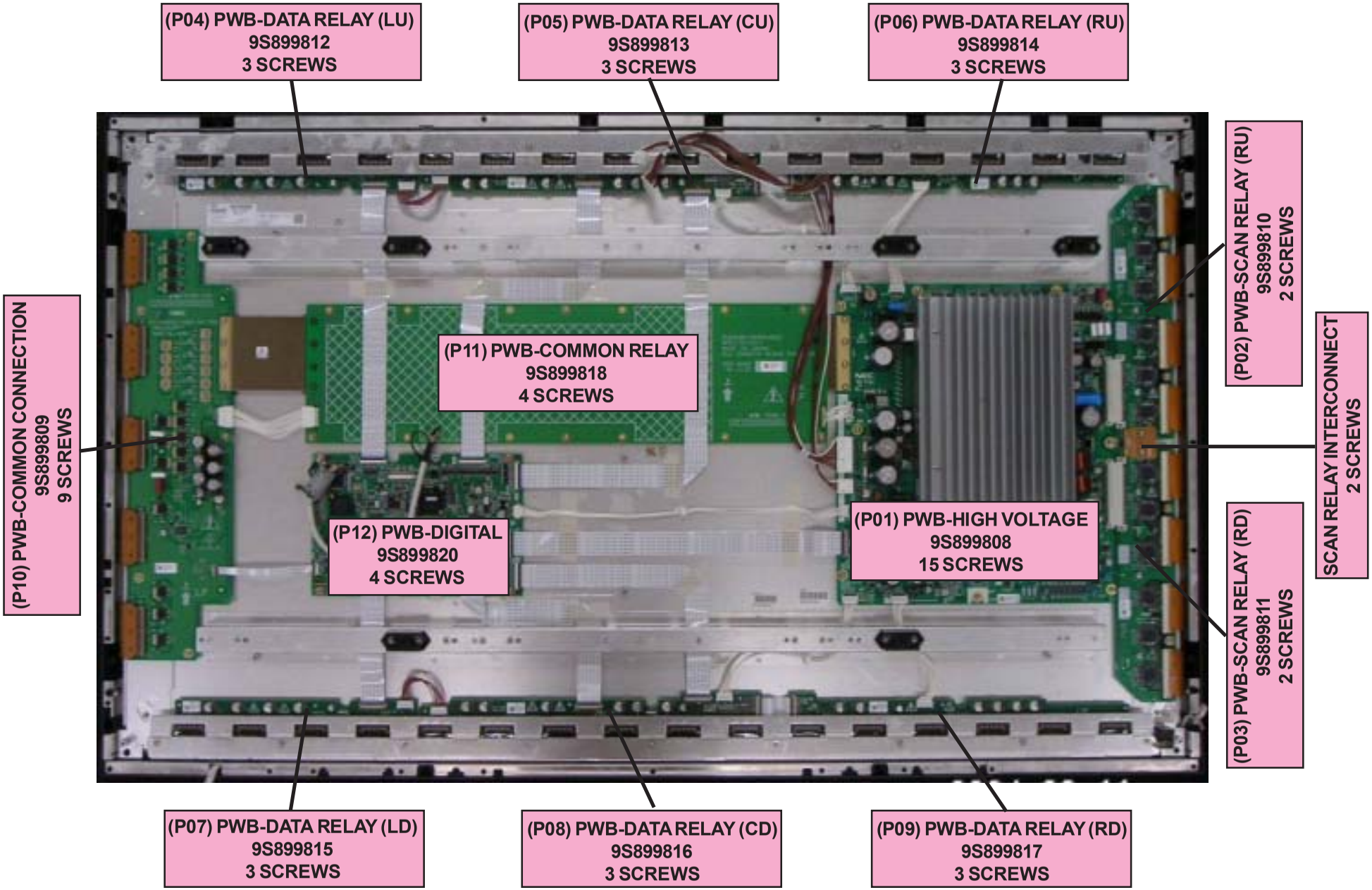
• PD-5065



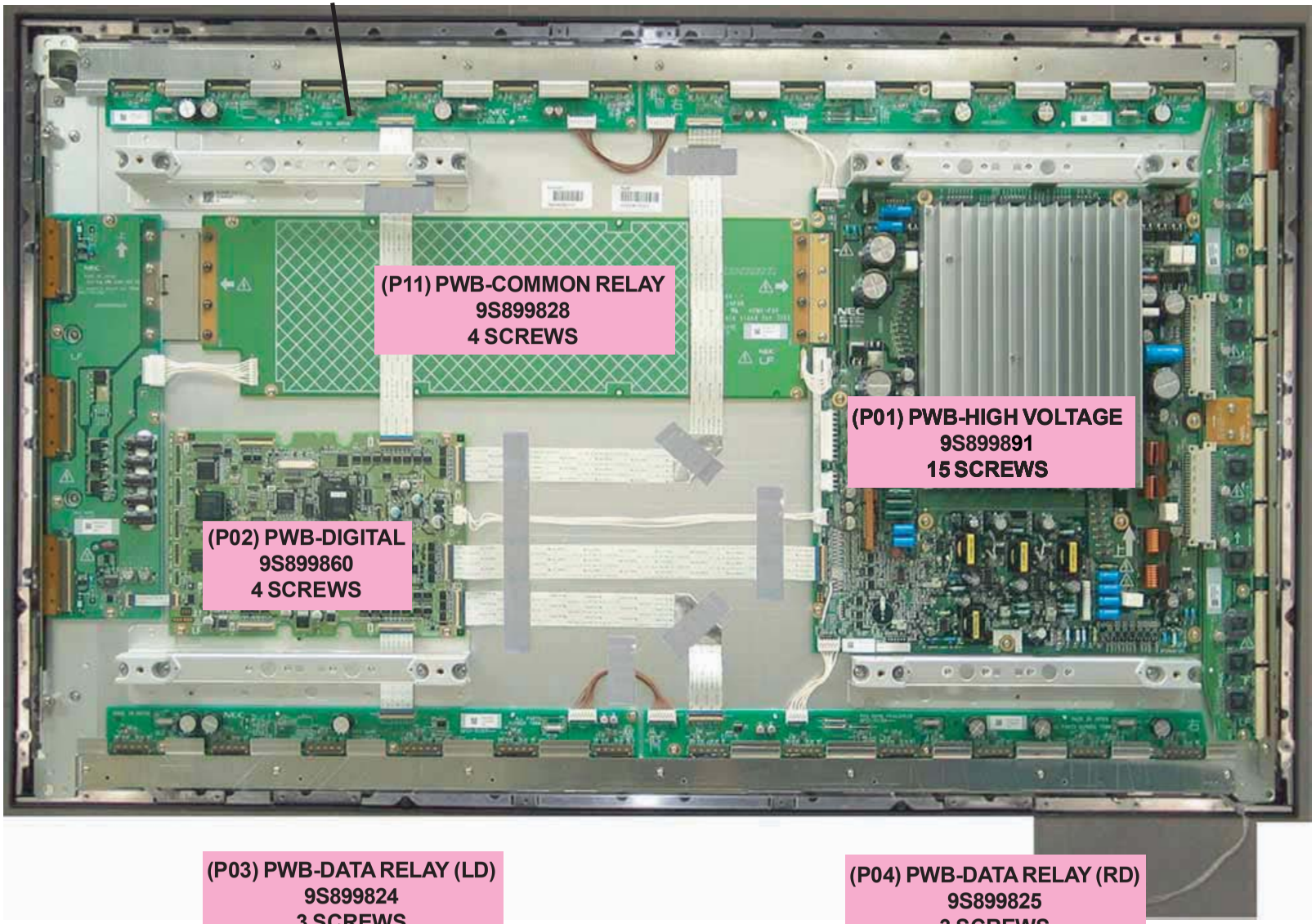
• PD-4265



4-3. PD-5065 PDP ASSEMBLY



4-3. PD-4265 PDP ASSEMBLY



4.4 PARTS LIST

PD-5065 Parts List

Ref	Part Number	Description
A01	937Q0M01	PWB-MAIN (PD5065) (T/A REQ)
A02	937Q0SA1	PWB-232C (PD5065)
A03	937Q0SB1	PWB-CTL (PD5065)
A05	937Q0SD1	PWB-LED (PD5065)
A06	937Q0SE1	PWB-SENB (PD5065)
A07	937Q0SF1	PWB-SENC (PD5065)
A08	937Q0SG1	PWB-SEND (PD5065)
A09	937Q0SH1	PWB-AUDIO (PD5065)
A10	3S110243	PWB-POWER UNIT (PD-5065) T/A REQ
E01	3S170014	FAN-MOTOR (9G1212M4D03)
M09	29D00791	PANEL-FRONT (PD-5065)
M10	29D00651	PANEL-FRONT SUB
M11	29D00575	FRAME (50XM3) (PD-5065)
M14	29F00592	HANDLE (PD-5065)
M16	29G00451	BUTTON-CONTROL (PD-5065)
M27	29H03491	PANEL-TERMINAL M(50XR4) (PD-5065)
M28	29H02561	PANEL-TERMINAL S (50XM3) (PD-5065)
M41	29KS0262	SCREEN-SHIELD (FILTER) PD-5065 (T/A REQ)
M50	29P01392	COVER-BACK (50XM4) (PD5065)
M61	29P01691	ORNAMENT-TOP(PD-5065)
M62	29P01701	ORNAMENT-BOTTOM(PD-5065)
M64	29F01271	COVER-STAND BASE (PD-5065)
M65	29F01281	COVER-STAND BASE C (PD-5065)
M66	29F01361	COVER-CONTROL(PD-5065)
M67	29F01491	COVER-CENTER (PD-5065)
M69	29H03852	STAND-CORE(PD5065)
M71	29J01521	INSULATOR (PD-5065)
M79	29P01631	STAND-BASE LEFT (PD-5065)
M80	29P01641	STAND-BASE RIGHT (PD-5065)
M105	29BS0671	SPEAKER-LEFT
M106	29BS0681	SPEAKER-RIGHT
PDP**	9S900134	PDP-NP50X6MF01EB (T/A REQ)
	7S530015	CABLE (1P L360)
	7S530036	CABLE (31P L390)
	7S552005	CORD-POWER AC (PD5065)
	I/B PD5065	I/B PD4265/5065
	3S120281	REMOTE (PD5065)

****PDP-NP50X6MF01 PARTS LIST**

Ref	Part Number	Description
P01	9S899808	PWB-HIGH VOLTAGE
P02	9S899810	PWB-SCAN RELAY (RU)
P03	9S899811	PWB-SCAN RELAY (RD)
P04	9S899812	PWB-DATA RELAY (LU)
P05	9S899813	PWB-DATA RELAY (CU)
P06	9S899814	PWB-DATA RELAY (RU)
P07	9S899815	PWB-DATA RELAY (LD)
P08	9S899816	PWB-DATA RELAY (CD)
P09	9S899817	PWB-DATA RELAY (RD)
P10	9S899809	PWB-COMMON CONNECTION
P12	9S899820	PWB-DIGITAL

PD-4265 Parts List

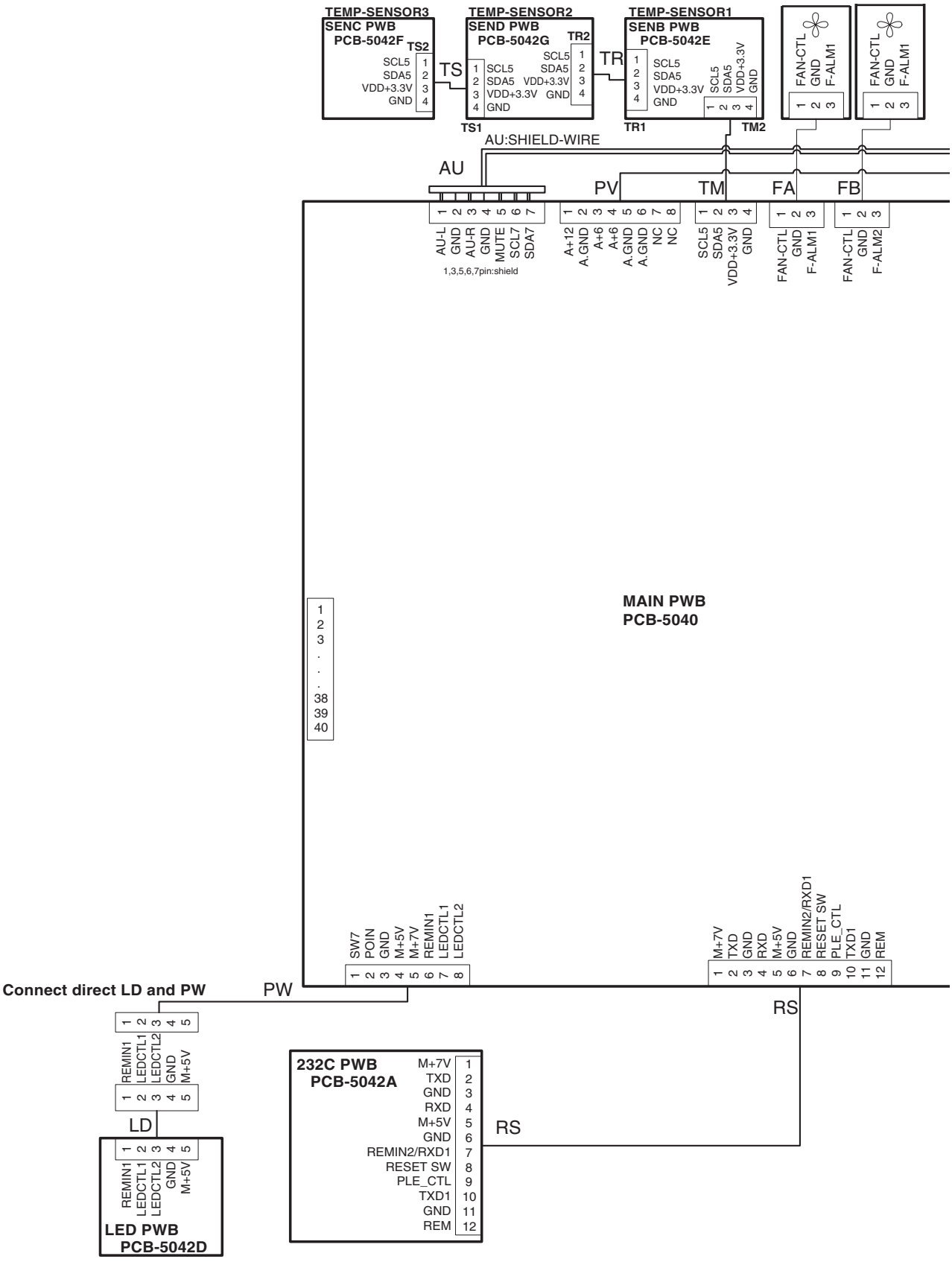
Ref	Part Number	Description
A01	937Q1M01	PWB-MAIN (PD-4265) (T/A REQ)
A02	937Q1SA1	PWB-232C (PD-4265)
A03	937Q1SB1	PWB-CTL (PD4265)
A05	937Q1SD1	PWB-LED (PD4265)
A06	937Q1SE1	PWB-SENB (PD4265)
A07	937Q1SF1	PWB-SENC (PD4265)
A08	937Q1SG1	PWB-SEND (PD4265)
A09	937Q1SH1	PWB-AUDIO (PD4265)
A10	3S110234	PWB-POWER UNIT (PD-4265) T/A REQ
E01	3S170013	FAN-MOTOR (9A0912M4D07)
M16	29G00461	BUTTON-CONTROL (PD-4265)
M41	29KS0251	SCREEN-SHIELD (FILTER) PD-4265 (T/A REQ)
M50	956R0651	COVER-BACK (PD4265)
M64	29F01301	COVER STAND BASE(PD-4265)
M66	29PS0961	PANEL-TERMINAL (PD-4265)
M67	29D00781	PANEL-FRONT
M69	29H03882	CORE STAND(PD-4265)
M84	29P01711	ORNAMENT-TOP(PD-4265)
M85	29P01721	ORNAMENT-BOTTOM(PD-4265)
M89	29F01311	COVER STAND
M91	29F01501	CENTER COVER 42
M102	29P01661	STAND-BASE LEFT
M103	29P01671	STAND-BASE RIGHT
M105	29BS0671	SPEAKER-LEFT
M106	29BS0681	SPEAKER-RIGHT
PDP	9S900100	PDP-NP42H5MF01EA (T/A REQ)
	7S530036	CABLE (31P L390)
	7S552005	CORD-POWER AC (PD5065)
	I/B PD4265	I/B PD4265/5065
	3S120281	REMOTE (PD5065)

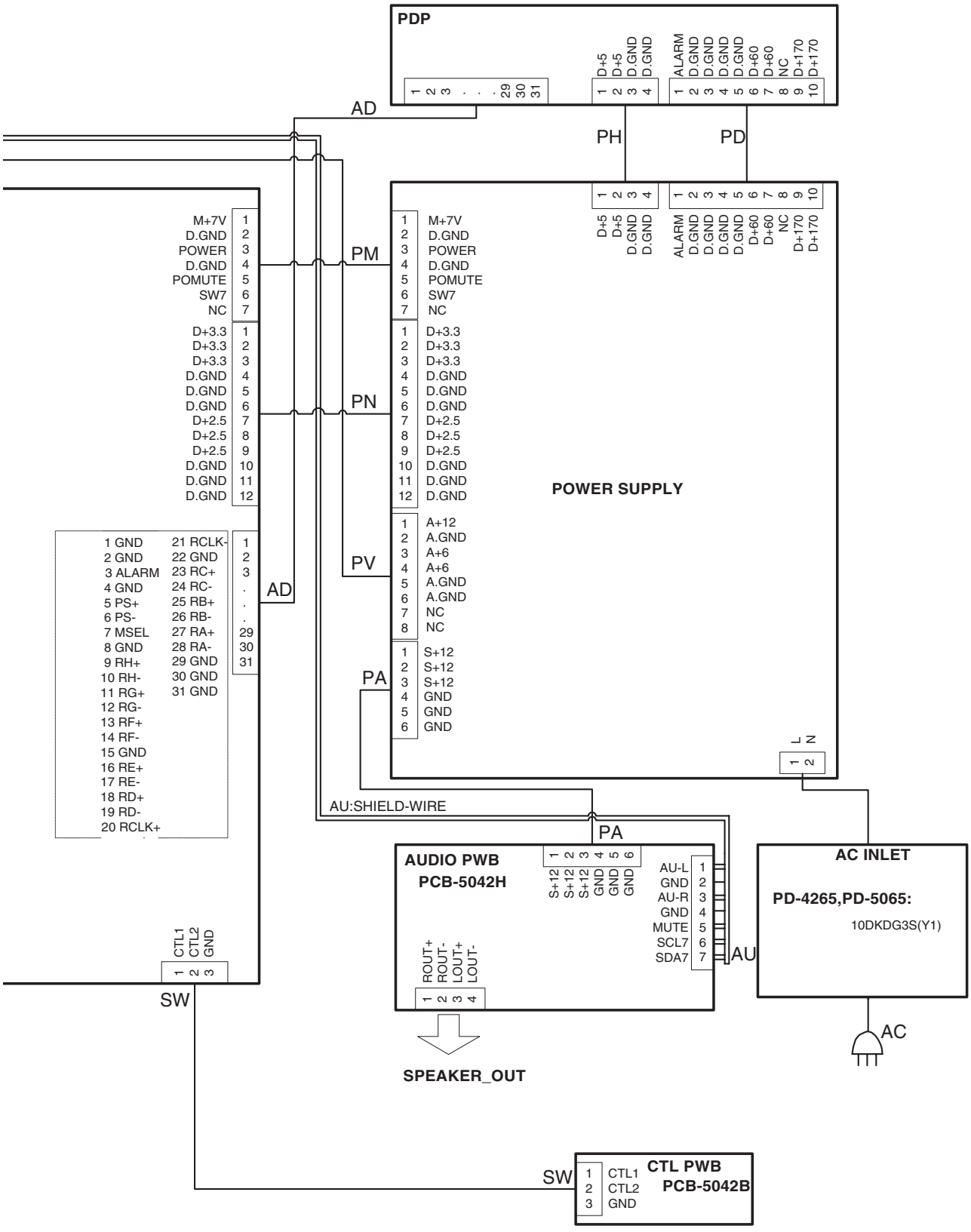
****PDP-NP42H5MF01EA PARTS LIST**

Ref	Part Number	Description
P01	9S899891	PWB-HIGH VOLTAGE (PD-4265)
P02	9S899860	PWB-DIGITAL (PD-4265)
P03	9S899824	PWB-DATA RELAY (LEFT DOWN) (PD-4265)
P04	9S899825	PWB-DATA RELAY (RIGHT DOWN) (PD-4265)
P05	9S899826	PWB-DATA RELAY (LEFT UP) (PD-4265)
P06	9S899827	PWB-DATA RELAY (RIGHT UP) (PD-4265)
P07	9S899897	PWB-SCAN RELAY BOARD (UP)
P08	9S899898	PWB-SCAN RELAY BOARD (DOWN)
P09	9S899829	PWB-SCAN RELAY INTERCONNECT
P10	9S899823	PWB-COMMON CONNECTION (PD-4265)
P11	9S899828	PWB-COMMON RELAY (PD-4265)

5. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM
5.1 CONECTION DIAGRAM
5.1.1 OVERALL CONNECTION DIAGRAM

Connection Diagram




PDP
AD
PH
PD
PM
PN
PV
PA
POWER SUPPLY
AD
SW
AU:SHIELD-WIRE
AUDIO PWB
PCB-5042H
AU
AC INLET
PD-4265,PD-5065:
10DKDG3S(Y1)
AC
SPEAKER_OUT
CTL PWB
PCB-5042B
M+7V
D.GND
POWER
POMUTE
SW7
NC
D+3.3
D+2.5
A+12
A.GND
A+6
S+12
GND
1 GND
2 GND
3 ALARM
4 GND
5 PS+
6 PS-
7 MSEL
8 GND
9 RH+
10 RH-
11 RG+
12 RG-
13 RF+
14 RF-
15 GND
16 RE+
17 RE-
18 RD+
19 RD-
20 RCLK+
21 RCLK-
22 GND
23 RC+
24 RC-
25 RB+
26 RB-
27 RA+
28 RA-
29 GND
30 GND
31 GND
CTL1
CTL2
GND
ROUT+
ROUT-
LOUT+
LOUT-
AU-L
AU-R
MUTE
SCL7
SDA7
L
N

5.1.2 CONNECTOR PIN EXPLANATION

PD-4265 / PD-5065

(Caution)The operating voltages specified below are used in common irrespective of the presence of signals.In this case,however,part of the operating voltages (red characters)may change according to the signal conditions when the main power supply is turned on (POWER button ON).

Status of LED lighting:♦ for lighting in green,,♦♦ for unlighting,,and ♦♦♦ for lighting in red..

Ver.1

name	Pin NO	Pin name	Function	Basic operation (Numerical unit: Vdc; except for the case when units are individually indicated)							Signal direction
				AC power ON (Power cord connected to the wall outlet) ♦♦	Main power ON (POWER button ON) ♦		Power management ♦♦♦	Standby ♦♦♦	Main power OFF ♦♦	AC power OFF (Power cord pulled out ofthe wall outlet) ♦♦	
					No signal	With signal					
PN	1	D+3.3	3.3V power supply for digital circuits	0	3.3	3.3	0	0	0	-	POWER → MAIN
	2	D+3.3	3.3V power supply for digital circuits	0	3.3	3.3	0	0	0	-	POWER → MAIN
	3	D+3.3	3.3V power supply for digital circuits	0	3.3	3.3	0	0	0	-	POWER → MAIN
	4	D.GND	GND	0	0	0	0	0	0	-	-
	5	D.GND	GND	0	0	0	0	0	0	-	-
	6	D.GND	GND	0	0	0	0	0	0	-	-
	7	D+2.5	2.5V power supply for digital circuits	0	2.5	2.5	0	0	0	-	POWER → MAIN
	8	D+2.5	2.5V power supply for digital circuits	0	2.5	2.5	0	0	0	-	POWER → MAIN
	9	D+2.5	2.5V power supply for digital circuits	0	2.5	2.5	0	0	0	-	POWER → MAIN
	10	D.GND	GND	0	0	0	0	0	0	-	-
	11	D.GND	GND	0	0	0	0	0	0	-	-
	12	D.GND	GND	0	0	0	0	0	0	-	-
PM	1	M+7	7V power supply for microcomputer	6.8	6.8	6.8	6.8	6.8	6.8	-	POWER → MAIN
	2	D.GND	GND	0	0	0	0	0	0	-	-
	3	POWER	Power control	0	4.9	4.9	0	0	0	-	MAIN → POWER
	4	D.GND	GND	0	0	0	0	0	0	-	-
	5	POMUTE	Mute signal for AC power OFF	4.8	4.8	4.8	4.8	4.8	4.8	-	POWER → MAIN
	6	SW7	Power start control	0	6.8	6.8	6.8	6.8	0	-	POWER → MAIN
	7	NC	Non-connection terminal	-	-	-	-	-	-	-	-
PV	1	A+12	12V power supply for analog circuits	0	12	12	0	0	0	-	POWER → MAIN
	2	A.GND	GND	0	0	0	0	0	0	-	-
	3	A+6	6V power supply for analog circuits	0	6	6	0	0	0	-	POWER → MAIN
	4	A+6	6V power supply for analog circuits	0	6	6	0	0	0	-	POWER → MAIN
	5	A.GND	GND	0	0	0	0	0	0	-	-
	6	A.GND	GND	0	0	0	0	0	0	-	-
	7	NC	Non-connection terminal	-	-	-	-	-	-	-	-
	8	NC	Non-connection terminal	-	-	-	-	-	-	-	-
AU	1	AU_L	Audio signal L CH	0	Selected input signals are output.	Selected input signals are output.	0	0	0	-	MAIN → AUDIO
	2	GND	GND	0	0	0	0	0	0	-	-
	3	AU_R	Audio signal R	0	Selected input signals are output.	Selected input signals are output.	0	0	0	-	MAIN → AUDIO
	4	GND	GND	0	0	0	0	0	0	-	-
	5	MUTE	Mute signal of audio output	3.5	0	0	0	0	3.5	-	MAIN → AUDIO
	6	SCL7	Clock line of the I2C bus	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	0	-	MAIN → AUDIO
	7	SDA7	Data line of the I2C bus	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	1	1	0	-	MAIN → AUDIO
RS	1	M+5V	5V power supply for microcomputer	0	5	5	5	5	0	-	MAIN → RS232C
	2	TXD	RS232 driver output	0	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	0	-	MAIN → RS232C
	3	GND	GND	0	0	0	0	0	0	-	-
	4	RXD	RS232 receiver input	0	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received;3.3Vdc when no data are received.	0	-	RS232C → MAIN
	5	M+3.3V	3.3V power supply for microcompute	0	3.3	3.3	3.3	3.3	0	-	MAIN → RS232C
	6	GND	GND	0	0	0	0	0	0	-	-
	7	REMIN2 / RXD1	Data signal of wired remote control	0	0	0	0	0	0	-	RS232C → MAIN
	8	RESET SW	NC	-	-	-	-	-	-	-	-
	9	PLE_CTL	PLE control	0	0	0	0	0	0	-	MAIN → RS232C
	10	TXD1	RS232 driver output	0	0	0	0	0	0	-	MAIN → RS232C
	11	232C_SHUT	TXD0 Driver ON/OFF control	0	3.3	3.3	3.3	3.3	0	-	MAIN → RS232C
	12	REM	Insertion detection for wired remotecontrol input	-	-	-	-	-	-	-	RS232C → MAIN
TM	1	SCL5	Clock line of the I2C bus	0	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	0	0	0	-	MAIN → SENB
	2	GND	GND	0	0	0	0	0	0	-	-
	3	VDD+3.3V	3.3V power supply for analog signals	0	3.3	3.3	0	0	0	-	MAIN → SENB
	4	SDA5	Data line of the I2C bus	0	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	0	0	0	-	MAIN←→SENB
TR	1	SCL5	Clock line of the I2C bus	0	Clock signal used during transmission (3.3Vac)3.3Vdc when no data are transmitted.	Clock signal used during transmission (3.3Vac)3.3Vdc when no data are transmitted.	0	0	0	-	SENB → SEND

name	Pin NO	Pin name	Function		Basic operation (Numerical unit: Vdc; except for the case when units are individually indicated)							Signal direction
					AC power ON (Power cord connected to the wall outlet)	Main power ON (POWER button ON)		Power management	Standby	Main power OFF	AC power OFF(Power cord pulled out ofthe wall outlet)	
						No signal	With signal					
TR	2	GND	GND		0	0	0	0	0	0	-	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	-	SENB→SEND
	4	SDA5	Data line of the I2C bus			During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	0	0	0	-	SENB←→SEND
TS	1	SCL5	Clock line of the I2C bus			Clock signal used during transmission (3.3Vac)3.3Vdc when no data are transmitted.	Clock signal used during transmission (3.3Vac)3.3Vdc when no data are transmitted.	0	0	0	-	SEND→SENC
	2	GND	GND			0	0	0	0	0	-	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	-	SEND→SENC
	4	SDA5	Data line of the I2C bus		0	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	During data exchange:Clock signal(3.3Vac), Data not exchanged: 3.3Vdc	0	0	0	-	SEND←→SENC
FA	1	FAN-CTL	Voltage-controllable power supply	PD-4265		11.5Vdc during high-speed revolution (Fan mode H); 8.5Vdc during medium speed revolution (Fan mode M); 6.5Vdc during low-speed revolution (Fan mode L)	11.5Vdc during high-speed revolution (Fan mode H); 8.5Vdc during medium speed revolution (Fan mode M); 6.5Vdc during low-speed revolution (Fan mode L)	0	0	0	-	MAIN→FAN
				PD-5065	0	11.6Vdc during high-speed revolution (Fan mode H); 7.8Vdc during medium speed revolution (Fan mode M); 5.3Vdc during low-speed revolution (Fan mode L)	11.6Vdc during high-speed revolution (Fan mode H); 7.8Vdc during medium speed revolution (Fan mode M); 5.3Vdc during low-speed revolution (Fan mode L)	0	0	0	-	SENB→SEND
	2	GND	GND		0	0	0	0	0	0	-	-
	3	ALARM	FAN lock detect signal output	PD-5065 PD-4265		0V during normal fan operation;3.3V dc while the fan is stopped.	0V during normal fan operation;3.3V dc while the fan is stopped.	0	0	0	-	FAN→MAIN
FB	1	FAN-CTL	Voltage-controllable power supply	PD-4265	0	11.5Vdc during high-speed revolution (Fan mode H); 8.5Vdc during medium speed revolution (Fan mode M); 6.5Vdc during low-speed revolution (Fan mode L)	11.5Vdc during high-speed revolution (Fan mode H); 8.5Vdc during medium speed revolution (Fan mode M); 6.5Vdc during low-speed revolution (Fan mode L)	0	0	0	-	MAIN→FAN
				PD-5065	0	11.5Vdc during high-speed revolution (Fan mode H); 7.6Vdc during medium speed revolution (Fan mode M); 5.3Vdc during low-speed revolution (Fan mode L)	11.5Vdc during high-speed revolution (Fan mode H); 7.6Vdc during medium speed revolution (Fan mode M); 5.3Vdc during low-speed revolution (Fan mode L)	0	0	0	-	
	2	GND	GND		0	0	0	0	0	0	-	-
	3	ALARM	FAN lock detect signal output		0	0V during normal fan operation;3.3V dc while the fan is stopped.	0V during normal fan operation;3.3V dc while the fan is stopped.	0	0	0	-	FAN→MAIN
FC	1	FAN-CTL	Voltage-controllable power supply		-	-	-	-	-	-	-	-
	2	GND	GND		0	0	0	0	0	0	-	-
	3	ALARM	FAM Lock		-	-	-	-	-	-	-	-

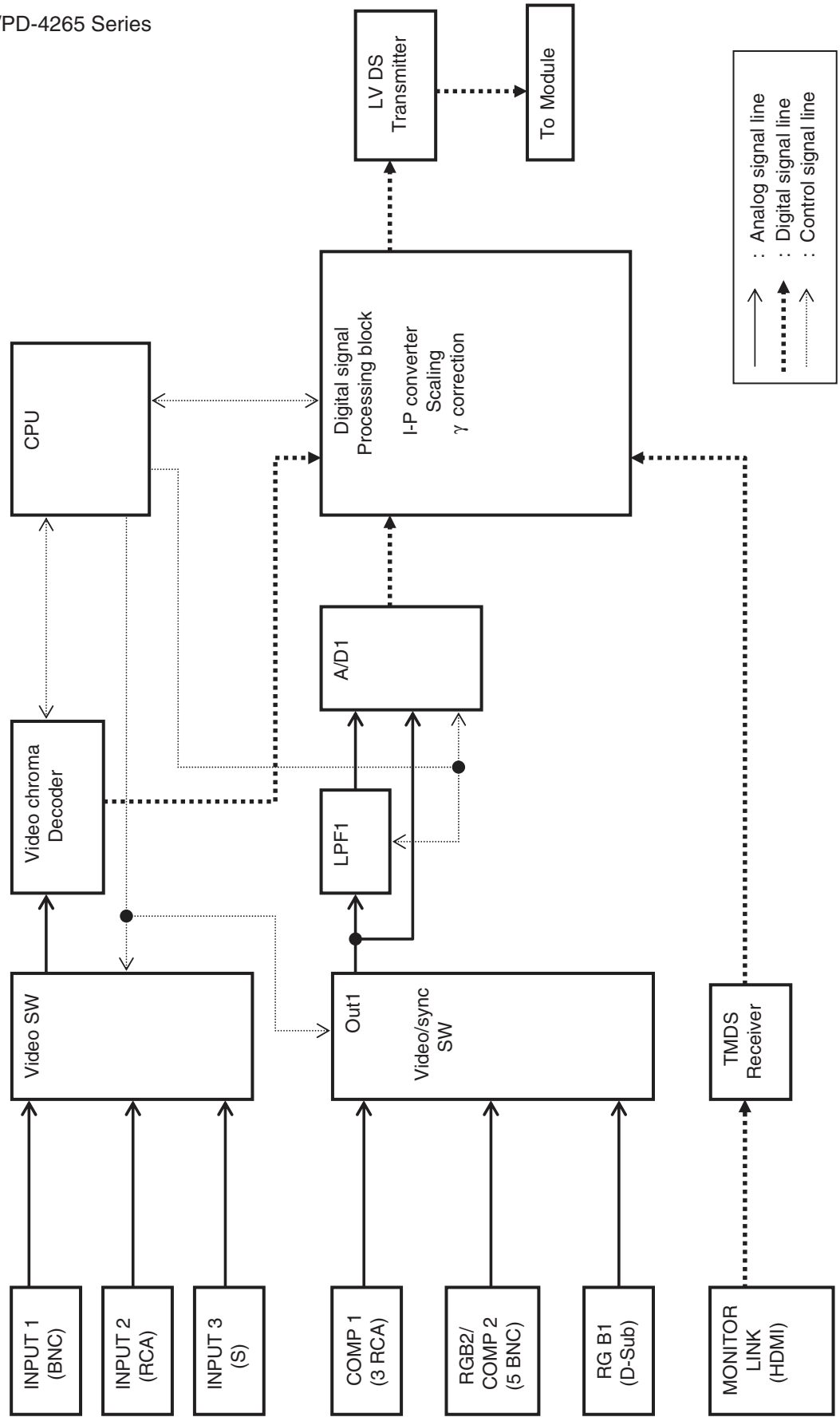
name	Pin NO	Pin name	Function	Basic operation (Numerical unit: Vdc; except for the case when units are individually indicated)							Signal direction
				AC power ON (Power cord connected to the wall outlet)	Main power ON (POWER button ON)		Power management	Standby	Main power OFF	AC power OFF(Power cord pulled out ofthe wall outlet)	
					No signal	With signal					
AD	1	GND	GND	0	0	0	0	0	0	-	-
	2	GND	G N D	0	0	0	0	0	0	-	-
	3	ALARM	Module alarm signal		5Vdc during normal PDP operation; 0V when the PDP is out of order.	5Vdc during normal PDP operation; 0V when the PDP is out of order.	0	0	0	-	PDP→MAIN MAIN→FAN
	4	GND	GND	0	0	0	0	0	0	-	-
	5	PS+	PSS input PS+		PSS LVDS serial differential PS+ input 0Vac; Bias 1.1Vdc	PSS LVDS serial differential PS+ input 0.3Vac; Bias 1.25Vdc	0	0	0	-	PDP→MAIN
	6	PS-	PSS input PS-		PSS LVDS serial differential PS+ input 0Vac; Bias 1.4Vdc	PSS LVDS serial differential PS+ input 0.3Vac; Bias 1.25Vdc	0	0	0	-	PDP→MAIN
	7	MSEL	42V5 compatible interface OFF		0	0	0	0	0	-	-
	8	GND	GND	0	0	0	0	0	0	-	-
	9	RH+	OSD system output H+		OSD LVD Sserial differential H+ output 0Vac ;Bias 1.1Vdc	OSD LVD Sserial differential H+ output 0Vac ;Bias 1.1Vdc	0	0	0	-	MAIN→PDP
	10	RH-	OSD system output H-	0	OSD LVD Sserial differential H- output 0Vac ;Bias 1.4Vdc	OSD LVD Sserial differential H- output 0Vac ;Bias 1.4Vdc	0	0	0	-	MAIN→PDP
	11	RG+	OSD system output G+	0	OSD LVDS serial differential G+ output 0.3Vac;Bias 1.25Vdc	OSD LVDS serial differential G+ output 0.3Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP

name	Pin NO	Pin name	Function	Basic operation (Numerical unit: Vdc; except for the case when units are individually indicated)							Signal direction
				AC power ON (Power cord connected to the wall outlet)	Main power ON (POWER button ON)		Power management	Standby	Main power OFF	AC power OFF(Power cord pulled out ofthe wall outlet)	
					No signal	With signal					
AD	11	RG+	OSD system output G+	0	OSD LVDS serial differential G+output 0.3Vac;Bias 1.25Vdc	OSD LVDS serial differential G+output 0.3Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	12	RG-	OSD system output G-	0	OSD LVDS serial differential G-output 0.3Vac;Bias 1.25Vdc	OSD LVDS serial differential G-output 0.3Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	13	RF+	Mode system output F+	0	Video mode LVDS serial differential F+output 0.3Vac;Bias 1.25Vdc	Video mode LVDS serial differential F+output 0.3Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	14	RF-	Mode system output F-	0	Video mode LVDS serial differential F-output 0.3Vac;Bias 1.25Vdc	Video mode LVDS serial differential F-output 0.3Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP MAIN→PDP
	15	GND	GND	0	0	0	0	0	0	-	-
	16	RE+	Video system output E+	0	Video mode LVDS serial differential E+output 0Vac;Bias 1.1Vdc	Video mode LVDS serial differential E+output 0.3Vac;Bias 1.1Vdc*	0	0	0	-	MAIN→PDP
	17	RE-	Video system output E-	0	Video mode LVDS serial differential E-output 0Vac;Bias 1.4Vdc	Video mode LVDS serial differential E-output 0.3Vac;Bias 1.25Vdc*	0	0	0	-	MAIN→PDP
	18	RD+	Video system output D+	0	Video mode LVDS serial differential D+output 0Vac;Bias 1.1Vdc	Video mode LVDS serial differential D+output 0.3Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	19	RD-	Video system output D-	0	Video mode LVDS serial differential D-output 0Vac;Bias 1.4Vdc	Video mode LVDS serial differential D-output 0Vac;Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	20	RCLK+	Video system output clock+	0	Video data clock LVDS serial differential clock+ output 0.3Vac; Bias1.25Vdc	Video data clock LVDS serial differential clock+ output 0.3Vac; Bias1.25Vdc	0	0	0	-	MAIN→PDP
	21	RCLK-	Video system output clock-	0	Video data clock LVDS seria ldifferential clock- output 0.3Vac; Bias1.25Vdc	Video data clock LVDS seria ldifferential clock- output 0.3Vac; Bias1.25Vdc	0	0	0	-	MAIN→PDP
	22	GND	GND	0	0	0	0	0	0	-	-
	23	RC+	Video system output C+	0	Video data LVDS serial differential C+ output 0.3Vac; Bias 1.25Vdc	Video data LVDS serial differential C+ output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	24	RC-	Video system output C-	0	Video data LVDS serial differential C- output 0.3Vac; Bias 1.25Vdc	Video data LVDS serial differential C- output 0.3Vac; Bias 1.25Vdc					MAIN→PDP
	25	RB+	Video system output B+	0	Video data LVDS serial differential B+ output 0Vac; Bias 1.1Vdc	Video data LVDS serial differential B+ output 0Vac; Bias 1.1Vdc	0	0	0	-	MAIN→PDP
	26	RB-	Video system output B-		Video data LVDS serial differential B-output 0Vac; Bias 1.4Vdc	Video data LVDS serial differential B-output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→PDP
	27	RA+	Video system output A+		Video data LVDS serial differential A+output 0Vac; Bias 1.4Vdc	Video data LVDS serial differential A+output 0.3Vac; Bias 1.25Vdc					MAIN→PDP
	28	RA-	Video system output A-		Video data LVDS serial differential A-output 0Vac; Bias 1.4Vdc	Video data LVDS serial differential A-output 0.3Vac; Bias 1.25Vdc					MAIN→PDP
	29	GND	GND	0	0	0	0	0	0	-	-
	30	GND	GND	0	0	0	0	0	0	-	-
	31	GND	GND	0	0	0	0	0	0	-	-

name	Pin NO	Pin name	Function	Basic operation (Numerical unit: Vdc; except for the case when units are individually indicated)							Signal direction
				AC power ON (Power cord connected to the wall outlet)	Main power ON (POWER button ON)		Power management	Standby	Main power OFF	AC power OFF(Power cord pulled out ofthe wall outlet)	
					No signal	With signal					
LD	1	REMIN1	Infrared remote control data	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	-	LED→PWR
	2	LEDCTL1	Standby red LED control		0	0					PWR→LED
	3	LEDCTL2	POWER ON green LED control		3.3	3.3					PWR→LED
	4	GND	GND		0	0					
	5	M+5V	5V power supply for microcomputer		0	0					PWR→LED
PW	1	SW7	Power start control		6.8	6.8	0	0	0	-	–
	2	POIN	Power start detection		3.3	3.3					–
	3	GND	GND		0	0					
	4	M+5V	5V power supply for microcomputer	0	5	5					MAIN→LED
	5	M+7V	7V power supply for microcomputer	0	6.8	6.8					–
	6	REMIN1	Infrared remote control data		Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.		-	LED→MAIN
	7	LEDCTL1	Standby red LED control		0	0		0	0	-	MAIN→LED
	8	LEDCTL2	POWER ON green LED control		3.3	3.3		0	0	-	MAIN→LED
SW	1	CTL1	Key input detection	0	0.7~2.8Vdc when keyinputs are entered; 3.3Vdc when no key inputs are entered.	0.7~2.8Vdc when keyinputs are entered; 3.3Vdc when no key inputs are entered.	0.7~2.8Vdc when keyinputs are entered; 3.3Vdc when no key inputs are entered.	0.7~2.8Vdc when keyinputs are entered; 3.3Vdc when no key inputs are entered.	0	-	SW→MAIN
	2	CTL2	Key input detection	0	0.7~2.8Vdc when key inputs are entered; 3.3Vdc when no key inputsare entered.	0.7~2.8Vdc when key inputs are entered; 3.3Vdc when no key inputsare entered.	0.7~2.8Vdc when key inputs are entered; 3.3Vdc when no key inputsare entered.	0.7~2.8Vdc when key inputs are entered; 3.3Vdc when no key inputsare entered.	0	-	SW→MAIN
	3	GND	GND	0	0	0	0	0	0	-	-
PA	1	S+12	+12V power supply for audio circuits	0	12	12	0	0	0	-	POWER→AUDIO
	2	S+12	+12V power supply for audio circuits	0	12	12	0	0	0	-	POWER→AUDIO
	3	S+12	+12V power supply for audio circuits	0	12	12	0	0	0	-	POWER→AUDIO
	4	GND	GND	0	0	0	0	0	0	-	-
	5	GND	GND	0	0	0	0	0	0	-	-
	6	GND	GND	0	0	0	0	0	0	-	-
PD	1	ALARM	PDP alarm signal	0	5Vdc when the PDP is normal; 0V when it is abnormal.	5Vdc when the PDP is normal; 0V when it is abnormal.	0	0	0	-	PDP→POWER
	2	D.GND	GND	0	0	0	0	0	0	-	-
	3	D.GND	GND	0	0	0	0		0	-	-
	4	D.GND	GND	0	0	0	0	0	0	-	-
	5	D.GND	GND	0	0	0	0	0	0	-	-
	6	D+60	Vd power supply for PDP	0	60Vdc(changeable according to the PDP)	60Vdc(changeable according to the PDP)	0			-	PDWER→PDP
	7	D+60		0	60Vdc(changeable according to the PDP)	60Vdc(changeable according to the PDP)	0	0		-	PDWER→PDP
	8	NC	digital circuits	-	-	-	-	-	-	-	-
	9	D+170	Vs power supply for PDP high-voltage circuits	0	170Vdc(changeable according to the PDP)	170Vdc(changeable according to the PDP)	0			-	PDWER→PDP
	10	D+170	Vs power supply for PDP high-voltage circuits	0	170Vdc(changeable according to the PDP)	170Vdc(changeable according to the PDP)	0	0		-	PDWER→PDP
PH	1	D+5	5V power supply for digital circuits	0	5.15	5.15	0	0	0	-	PDWER→PDP
	2	D+5	5V power supply for digital circuits	0	5.15	5.15	0	0	0	-	PDWER→PDP
	3	D.GND	GND	0	0	0	0	0	0	-	-
	4	D.GND	GND	0	0	0	0	0		-	-

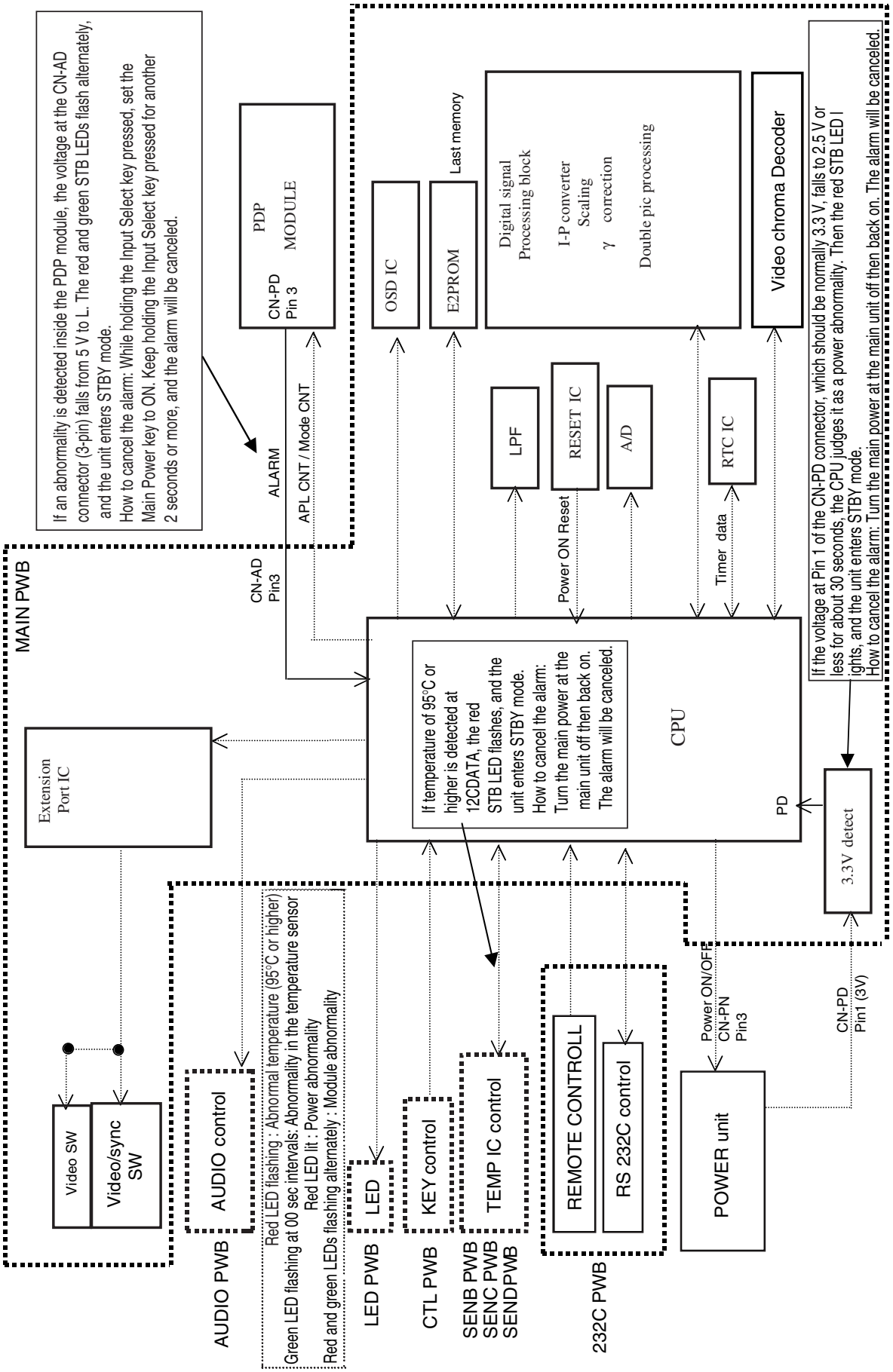
5.2 BLOCK DIAGRAM
5.2.1 OVERALL BLOCK DIAGRAM

PD-5065/PD-4265 Series



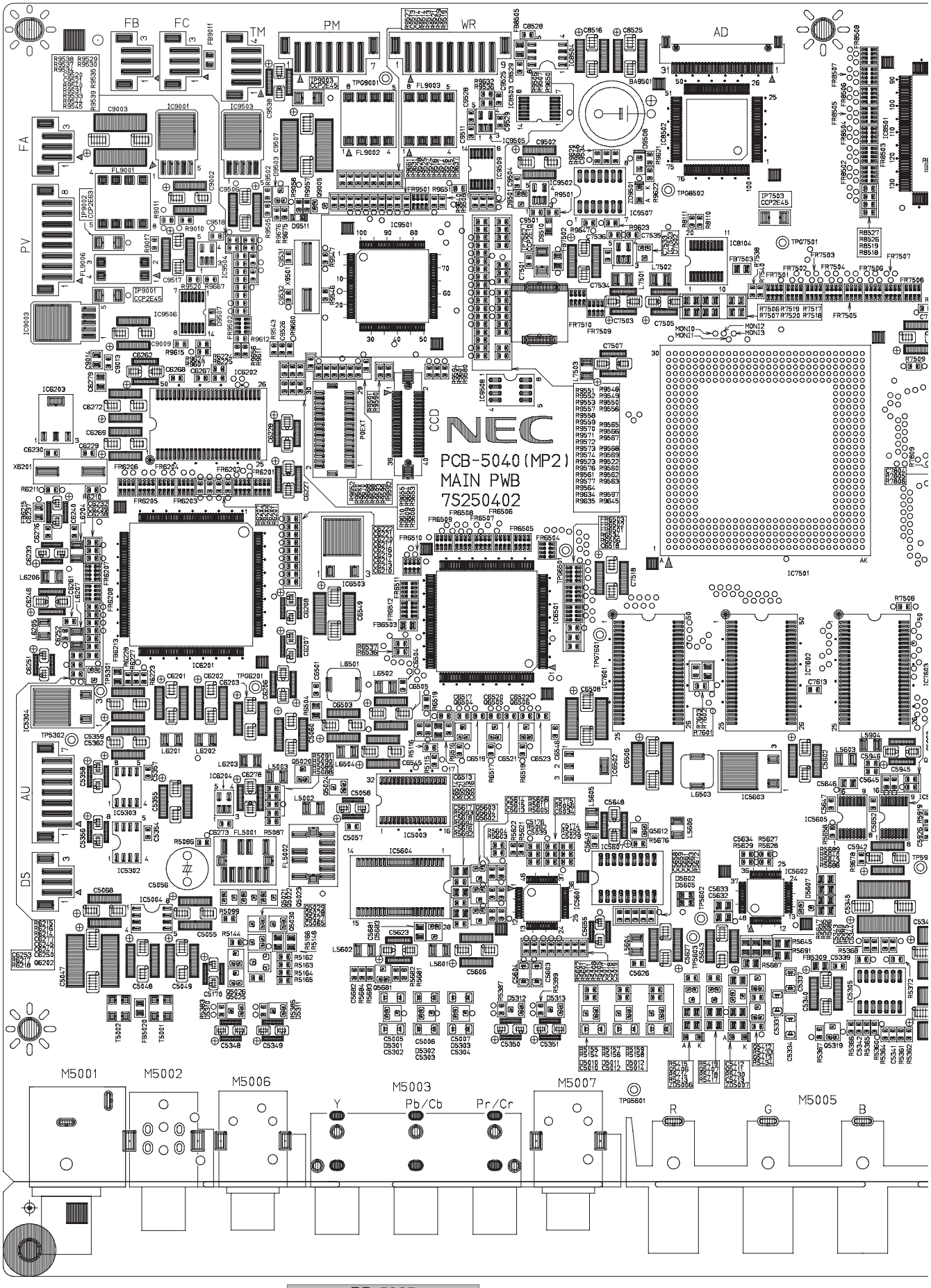
5.2.2 CPU BLOCK

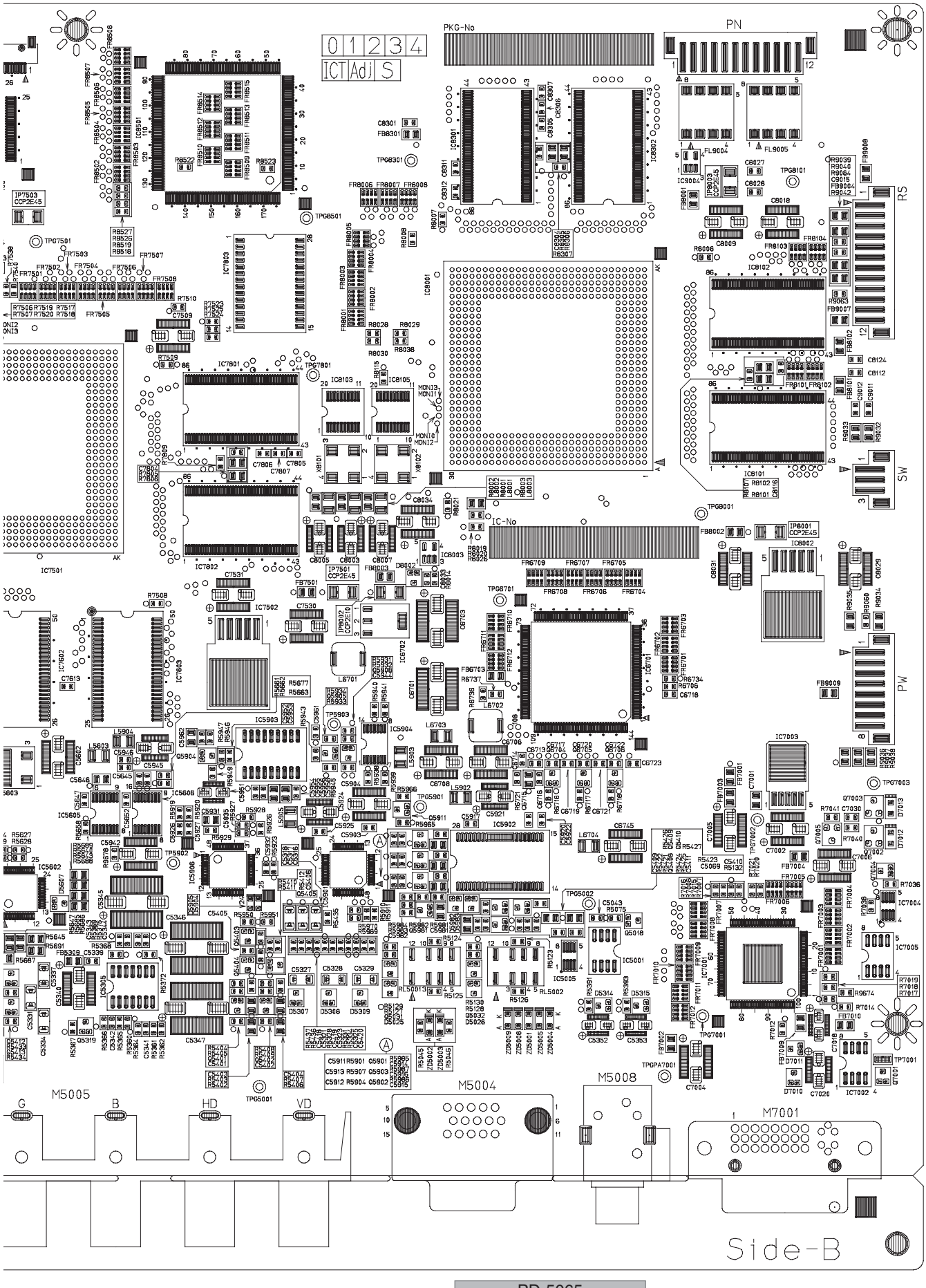
PD-5065/PD-4265 Series Blockdiagram of the control block



6. PCB DIAGAM

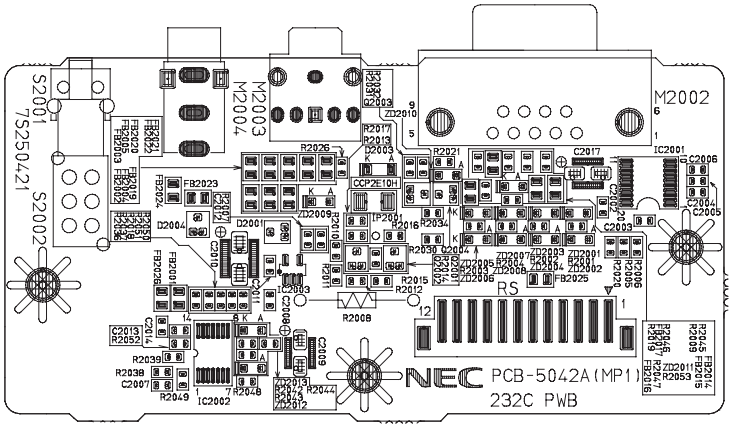
6.1 MAIN PWB



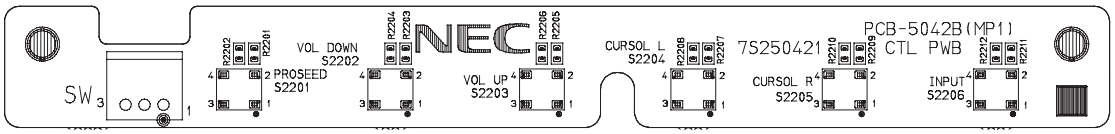

PKG-No
PN
RS
SW
PW
IC-No
ICT Adj S
M5005
M5004
M5008
M7001
G
B
HD
VD
Side-B

6.2 232C, CLT and LED PWB

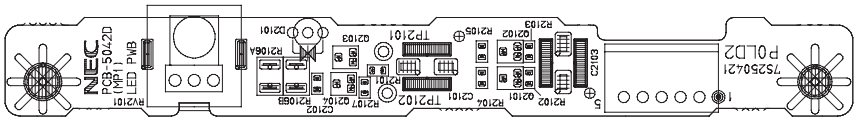
232C PWB



CLT PWB

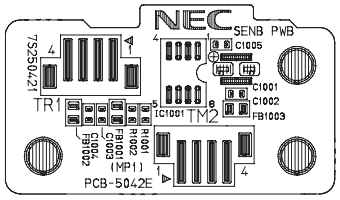


LED PWB

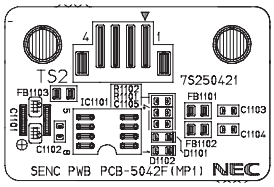


6.3 SENB, SENC, SEND and AUDIO PWB

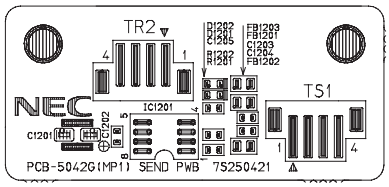
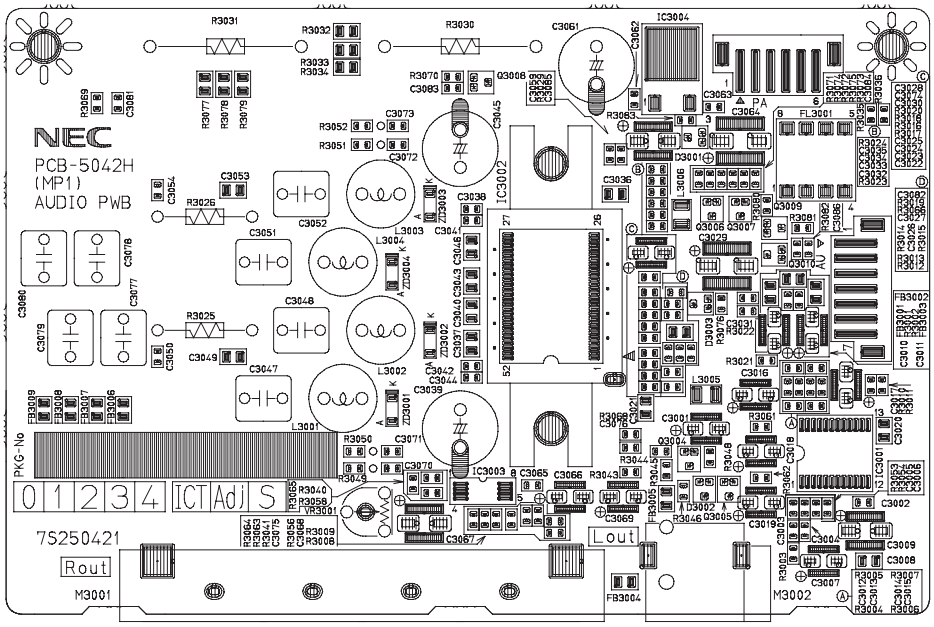
SENB PWB



SENC PWB



SEND PWB



AUDIO PWB