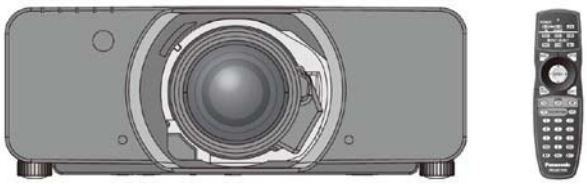
ORDER NO. VED1304464CE
D10

Service Manual

3-chip DLP Based Projector

Model No. **PT-DZ13KU**
PT-DZ13KE
PT-DS12KU
PT-DS12KE
PT-DW11KU
PT-DW11KE
PT-DZ10KU
PT-DZ10KE



The projection lens is sold separately.

- Replacement lamp unit
  ET-LAD310A (1 pc)
  ET-LAD310AW (2 pcs)
- Replacement filter unit
  ET-EMF320
- Replacement lamp unit
  (for portrait mode)
  ET-LAD320P (1 pc)
  ET-LAD320PW (2 pcs)

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Rev._2 2013-05

The service technician is required to read and follow the “Safety Precautions” and “Important Safety Notice” in this service manual.

⚠ WARNING

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

WARNING : Use UV Radiation eye and skin protection during servicing

CAUTION

Lithium Battery

Risk of explosion if battery is replaced by an incorrect type,
Replace only with the same of equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer’s instructions.

Precaution

If using of this projector at high altitudes (above 1,400m), set HIGHT ALTITUDE MODE to “ON”.
(Refer to “PROJECTOR SETUP menu” in Operating Instructions.)
Failure to observe this may cause malfunctions. Never use this projector at an altitude of 2,700m or higher.
Using this projector at high altitude, consult your dealer or Authorized Service Center about preparations.

About lead free solder (PbF)

This projector is using the P.C.Board which applies lead free solder.
Use lead free solder in servicing from the standpoint of antipollution for the global environment.
Notes:

- Lead free solder: Sn-Ag-Cu (tin, silver and copper) has a higher melting point (approx. 217°C) than standard solder. Typically the melting point
- is 30~40 °C higher. When servicing, use a high temperature soldering iron with temperature limitation function and set it to 370 ± 10 °C.
- Be precautious about lead free solder. Sn-Ag-Cu (tin, silver and copper) will tend to splash when heated too high (approx. 600°C or higher).
- Use lead free solder for the P.C.Board (specified on it as “PbF”) which uses lead free solder. (When you unavoidably use lead solder, use lead
- solder after removing lead free solder. Or be sure to heat the lead free solder until it melts completely, before applying lead solder.)
- After soldering to double layered P.C.Boards, check the component side for excess solder which may flow onto the opposite side.

About the identification of the lead free solder P.C.Board.
For the P.C.Board which applies lead free solder, the symbol as shown in the figure below is printed or stamped on the surface or the back of P.C.Board.

or PbF

For US

IMPORTANT SAFETY NOTICE

There are special parts used in Panasonic LCD Projectors which are important for safety. These parts are shaded on the schematic diagram. It is essential that these critical parts should be replaced with manufacturer’s specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of PANASONIC SOLUTIONS COMPANY.

WARNING:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial
environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with
the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely
to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION : Any unauthorized changes or modifications to this equipment will void the users authority to operate.

■ Cautions when transporting

・The projection lens (optional) is susceptible to effects due to vibration or impact.
Make sure to remove the lens when transporting.

・When transporting the projector, hold it securely by its bottom and avoid excessive vibration and impacts.
They may damage the internal components and result in malfunctions.

・Do not transport the projector with the adjustable feet extended.
Doing so may damage the adjustable feet.

■ Do not set up the projector in the following locations.

・Places where vibration and impacts occur such as in a car or vehicle: Doing so may cause damage to internal components or malfunction.

・Near the exhaust of an air conditioner: Depending on the conditions of use, the screen may fluctuate in rare cases due to the heated air from the air exhaust port or the hot or cooled air. Make sure that the exhaust from the projector or other equipment, or the air from the air conditioner does not blow toward the front of the projector.

・Places with sharp temperature fluctuations such as near lights (studio lamps): Doing so may shorten the life of the lamp, or result in deformation of the outer case due to heat, which may cause malfunctions.
The operating environment temperature of the projector should be between 0 °C (32 °F) and 45 °C (113 °F) when using it at elevations lower than 1 400 m (4 593') above sea level, and between 0 °C (32 °F) and 40 °C (104 °F) when using it at high altitudes (1 400 m (4 593') or higher – lower than 2 700 m (8 858') above sea level).
If you use the Smoke cut filter, the operating environment temperature should be between 0 °C (32 °F) and 35 °C (95 °F). However, it cannot be used at high altitudes.
If you use the Replacement lamp unit (for portrait mode), the operating environment temperature should be between 0 °C (32 °F) and 40 °C (104 °F) when using the projector at elevations lower than 1 400 m (4 593') above sea level, and between 0 °C (32 °F) and 35 °C (95 °F) when using the projector at high altitudes. If you use the Smoke cut filter together, the operating environment temperature should be between 0 °C (32 °F) and 30 °C (86 °F).

・Near high-voltage power lines or near motors: Doing so may interfere with the operation of the projector.

・Places where there is high-power laser equipment: Directing a laser beam onto the lens surface causes damage to the DLP chips.

■ Note at the time of installation

・The high clarity projection lens is thermally affected by the light from the light source, making the focus unstable in the period just after switching on the power. Wait at least 30 minutes with the image projected before adjusting the lens focus.

・Make sure to set [HIGH ALTITUDE MODE] to [ON] when using the projector at elevations between 1 400 m (4 593') or higher and lower than 2 700 m (8 858') above sea level.
Do not install the projector at elevations of 2 700 m (8 858') or higher above sea level.

・Do not use the projector tilted to the right or left.

・When installing and using the projector at an angle that exceeds 30° vertically, set [COOLING CONDITION].

・When using the portrait mode only lamp unit, install the projector with the terminals surface facing down.

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1. Exploded Views
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1. Safety Precautions

1.1. General Guidelines

- For continued safety, no modification of any circuit must be attempted.
- Unplug the power cord from the power outlet before disassembling this projector.
- Use correctly the supplied power cord and must ground it.
- It is advisable to use an isolation transformer in the AC power line before the service.
- Be careful not to touch the rotation part (cooling fan, etc.) of this projector when you service with the upper case removed and the power supply turned ON.
- Observe the original lead dress during the service. If a short circuit is found, replace all the parts overheated or damaged by the short circuit.
- After the service, all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations must be properly installed.
- After the service, check the leakage current to prevent the customer from getting an electric shock.

1.2. Leakage Current Check

1. Prepare the measuring circuit as shown in Fig.1.
   Be sure to use a voltmeter having the performance described in Table 1.
2. Assemble the circuit as shown in Fig. 2. Plug the power cord in a power outlet.
3. Connect M1 to T1 according to Fig. 2 and measure the voltage.
4. Change the connection of M1 from T1 to T2 and measure the voltage again.
5. The voltmeter must read 0.375 V or lower in both of steps 3 and 4. This means that the current must be 0.75mA or less.
6. If the reading is out of the above standard, the projector must be repaired and rechecked before returning to the customer because of a possibility of an electric shock.

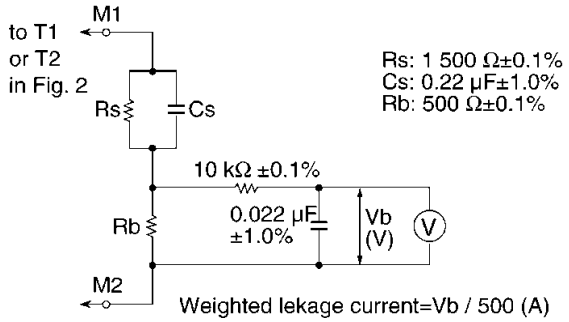

Fig. 1

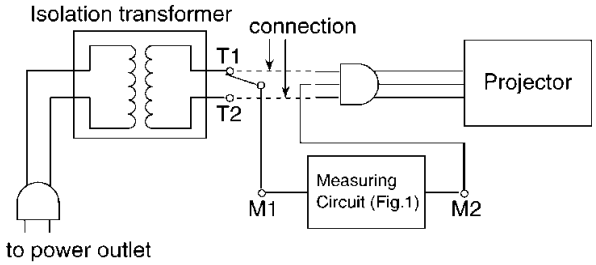

Fig. 2

	Performance
Voltmeter (rms reading)	Accuracy: ≤ 2% Input resistance: ≥ 1 MΩ Input capacitance: ≤ 200 pF Frequency range: 15 Hz to 1 MHz

Table. 1

1.3. UV Precaution and UHM Lamp Precautions

- Be sure to unplug the power cord from the power outlet when replacing the lamp.
- Because the lamp reaches a very high temperature during its operation, wait until it cools completely when replacing the Lamp Unit.
- The lamp emits small amounts of UV-radiation, avoid direct-eye contact with the light.
- The lamp unit has high internal pressure. If improperly handled, explosion might result.
- Because the high pressure lamp involves a risk of failure, never touch the lamp wire lead during the service.

2. Specifications

2. 1. Specifications

・The specifications of the projector are as follows.

Power supply		AC 120 V, 50 Hz/60 Hz	
Power consumption		**PT-DZ13K***	1 000 W (9.3 A)
		PT-DS12K*, PT-DW11K*	980 W (9.1 A)
		PT-DZ10K*	925 W (9 A)
		0.2 W when [STANDBY MODE] is set to [ECO]	
		6 W when [STANDBY MODE] is set to [NORMAL]	
DLP chip	**Size**	**PT-DZ13K*, PT-DZ10K***	24.4 mm (0.96") (aspect ratio 16:10)
		PT-DS12K*	24.1 mm (0.95") (aspect ratio 4:3)
		PT-DW11K*	21.6 mm (0.85") (aspect ratio 16:9)
	Display system	3-unit DLP chips, DLP type	
	Number of pixels	**PT-DZ13K*, PT-DZ10K***	2 304 000 pixels (1 920 x 1 200 dots)
		PT-DS12K*	1 470 000 pixels (1 400 x 1 050 dots)
		PT-DW11K*	1 049 088 pixels (1 366 x 768 dots)
Lens		Optional	
Luminous lamp		**PT-DZ13K*, PT-DS12K*, PT-DW11K***	380 W UHM lamp x 2
		PT-DZ10K*	355 W UHM lamp x 2
Light output[*1]		**PT-DZ13K*, PT-DS12K***	12 000 lm (ANSI)
		PT-DW11K*	11 000 lm (ANSI)
		PT-DZ10K*	10 600 lm (ANSI)
Contrast ratio[*1]		10 000:1 (when [DYNAMIC IRIS] is set to [3])	
Color system		7 standards (NTSC/NTSC4.43/PAL/PAL-N/PAL-M/SECAM/PAL60)	
Projection screen size		1.78 m (70") to 25.40 m (1 000")	
Screen aspect ratio		**PT-DZ13K*, PT-DZ10K***	16:10
		PT-DS12K*	4:3
		PT-DW11K*	16:9
Projection method		[FRONT/CEILING], [FRONT/FLOOR], [REAR/CEILING], [REAR/FLOOR]	
Power cable length		3.0 m (118-1/8")	
Outer case		Molded plastic	
Dimensions	**Width**	530 mm (20-7/8")	
	Height	200 mm (7-7/8") (with legs at shortest position)	
	Depth	548.5 mm (21-19/32") (excluding the lens)	
Weight		Approx. 24.0 k] (52.9 lbs.)[*2]	
Noise level[*1]		**PT-DZ13K*, PT-DS12K*, PT-DW11K***	45 dB
		PT-DZ10K*	43 dB
Operating environment	**Operating environment temperature**[*3]	0 °C (32 °F) to 45 °C (113 °F)	
	Operating environment humidity	10 % to 80 % (no condensation)	
Remote control	**Power supply**	DC 3 V (AA/R6 battery x 2)	
	Operating range	Within approx. 30 m (98'5") (when operated directly in front of signal receiver)	
	Weight	134] (4.7 ozs.) (including batteries)	
	Dimensions	Width: 51 mm (2"), Height: 176 mm (6-15/16"), Depth: 28 mm (1-3/32")	

*1 Measurement, measuring conditions and method of notation all comply with ISO21118 international standards.

*2 Average value. Weight varies for each product.

*3 When using the projector at high altitudes (1 400 m (4 593') or higher – lower than 2 700 m (8 858') above sea level), the operating environment temperature should be between 0 °C (32 °F) and 40 °C (104 °F).
If you use the Smoke cut filter, the operating environment temperature should be between 0 °C (32 °F) and 35 °C (95 °F). However, it cannot be used at high altitudes.
If you use the Replacement lamp unit (for portrait mode), the operating environment temperature should be between 0 °C (32 °F) and 40 °C (104 °F) when using the projector at elevations lower than 1 400 m (4 593') above sea level, and between 0 °C (32 °F) and 35 °C (95 °F) when using the projector at high altitudes. If you use the Smoke cut filter together, the operating environment temperature should be between 0 °C (32 °F) and 30 °C (86 °F).
If the [LAMP SELECT] menu is set to [DUAL], and [LAMP POWER] is set to [HIGH], [MIDDLE], or [NORMAL], and an ambient temperature reaches 40 °C (104 °F) or higher (35 °C (95 °F) or higher when [HIGH ALTITUDE MODE] is set to [ON] or the Smoke cut filter is used), the light output may decrease by approx. 20 % to protect the projector.

2. 2. Applicable scanning frequency

・Refer to operating instructions “List of compatible signals” for the types of video signals that can be used with the projector.

For video signal (including Y/C signal)	Horizontal: 15.75 kHz/15.63 kHz, Vertical: 50 Hz/60 Hz
For RGB signal	Horizontal: 15 kHz to 100 kHz, Vertical: 24 Hz to 120 Hz PIAS (Panasonic Intelligent Auto Scanning) system
	• Dot clock frequency: 162 MHz or less
For YC_BC_R/YP_BP_R signal	• 525i (480i) Horizontal: 15.75 kHz, Vertical: 60 Hz • 525p (480p) Horizontal: 31.5 kHz, Vertical: 60 Hz • 750 (720)/60p Horizontal: 45 kHz, Vertical: 60 Hz • 1125 (1035)/60i Horizontal: 33.75 kHz, Vertical: 60 Hz • 1125 (1080)/50i Horizontal: 28.13 kHz, Vertical: 50 Hz • 1125 (1080)/24sF Horizontal: 27 kHz, Vertical: 48 Hz • 1125 (1080)/30p Horizontal: 33.75 kHz, Vertical: 30 Hz • 1125 (1080)/50p Horizontal: 56.25 kHz, Vertical: 50 Hz • 625i (576i) Horizontal: 15.63 kHz, Vertical: 50 Hz • 625p (576p) Horizontal: 31.25 kHz, Vertical: 50 Hz • 750 (720)/50p Horizontal: 37.5 kHz, Vertical: 50 Hz • 1125 (1080)/60i Horizontal: 33.75 kHz, Vertical: 60 Hz • 1125 (1080)/24p Horizontal: 27 kHz, Vertical: 24 Hz • 1125 (1080)/25p Horizontal: 28.13 kHz, Vertical: 25 Hz • 1125 (1080)/60p Horizontal: 67.5 kHz, Vertical: 60 Hz • The SYNC/HD and VD terminals do not support 3 value SYNC.
For DVI-D signal	525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/24sF, 1125 (1080)/25p, 1125 (1080)/30p, 1125 (1080)/60p, 1125 (1080)/50p
	• Displayable resolution: VGA to WUXGA (non-interlaced) • Dot clock frequency: 25 MHz to 162 MHz
For HDMI signal	525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/24sF, 1125 (1080)/25p, 1125 (1080)/30p, 1125 (1080)/60p, 1125 (1080)/50p
	• Displayable resolution: VGA to WUXGA (non-interlaced) • Dot clock frequency: 25 MHz to 162 MHz
For SDI signal (Only for PT-DZ13KU, PT-DS12KU, PT-DZ10KU)	**SD-SDI signal** SMPTE ST 259 compliant YC_BC_R 4:2:2 10-bit 480i, 576i **Single link HD-SDI signal** SMPTE ST 292 compliant YP_BP_R 4:2:2 10-bit 720/50p, 720/60p, 1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p **Dual link HD-SDI signal*1** SMPTE ST 372 compliant RGB 4:4:4 12-bit/10-bit 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p X'Y'Z' 4:4:4 12-bit 2048 x 1080/24p, 2048 x 1080/24sF **3G-SDI signal** SMPTE ST 424 compliant YP_BP_R 4:2:2 10-bit 1080/50p, 1080/60p RGB 4:4:4 12-bit/10-bit 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p • The 3G-SDI signal is only compatible with SDI1.

1 Only for PT-DZ13K, PT-DS12K*

2. 3. Terminal

<RGB 1 IN> terminal	1 set (BNC x 5 (RGB/YP_BP_R/YC_BC_R/YC x 1))		
	RGB signal	0.7 V [p-p] 75 Ω (SYNC ON GREEN: 1.0 V [p-p] 75 Ω)	
		SYNC/HD	TTL high impedance, automatic positive/negative polarity compatible
		VD	TTL high impedance, automatic positive/negative polarity compatible
	YP_BP_R signal	Y: 1.0 V [p-p] including synchronization signal, P_BP_R: 0.7 V [p-p] 75 Ω	
	Y/C signal	Y: 1.0 V [p-p], C: 0.286 V [p-p] 75 Ω	
<RGB 2 IN> terminal	1 set, high-density D-Sub 15 p (female)		
	RGB signal	0.7 V [p-p] 75 Ω (SYNC ON GREEN: 1.0 V [p-p] 75 Ω)	
		SYNC/HD	TTL high impedance, automatic positive/negative polarity compatible
		VD	TTL high impedance, automatic positive/negative polarity compatible
	YP_BP_R signal	Y: 1.0 V [p-p] including synchronization signal, P_BP_R: 0.7 V [p-p] 75 Ω	
<DVI-D IN> terminal	1 set, DVI-D 24 p, single link, DVI 1.0 compliant, HDCP compatible		
<HDMI IN> terminal	1 set, HDMI 19 pin, HDCP compatible, Deep Color compatible		
<VIDEO IN> terminal	1 set, BNC 1.0 V [p-p] 75 Ω		
<SDI IN 1> terminal (Only for PT-DZ13K*, PT-DS12K*) <SDI IN> terminal (Only for PT-DZ10K*)	1 set (BNC)		
	SD-SDI signal	SMPTE ST 259 compliant	
	HD-SDI signal	SMPTE ST 292 compliant	
	3G-SDI signal	SMPTE ST 424 compliant	
	Dual link HD-SDI (LINK-A) signal*1	SMPTE ST 372 compliant	
<SDI IN 2> terminal (Only for PT-DZ13K*, PT-DS12K*)	1 set (BNC)		
	SD-SDI signal	SMPTE ST 259 compliant	
	HD-SDI signal	SMPTE ST 292 compliant	
	Dual link HD-SDI (LINK-B) signal	SMPTE ST 372 compliant	
<3D SYNC 1 IN/OUT> terminal (Only for PT-DZ13K*, PT-DS12K*, PT-DW11K*)	1 set (BNC)		
	During input setting	TTL high impedance	
	During output setting	TTL output: Maximum 10 mA	
<3D SYNC 2 OUT> terminal (Only for PT-DZ13K*, PT-DS12K*, PT-DW11K*)	1 set (BNC) TTL output: Maximum 10 mA		
<SERIAL IN>/ <SERIAL OUT> terminal	D-Sub 9 p, 1 set each, RS-232C compliant, for computer control		
<REMOTE 1 IN>/ <REMOTE 1 OUT> terminal	M3 stereo mini jack cable, 1 set each, for remote control (wired)/projector connection control		
<REMOTE 2 IN> terminal	1 set, D-Sub 9 p, for contact control		
<LAN> terminal	1 set, RJ-45, for network connection, PJLink compatible, 10Base-T/100Base-TX		

1 Only for PT-DZ13K, PT-DS12K*

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SECTION 1

Service Information

Model No. **PT-DZ13KU / DZ13KE**
PT-DS12KU / DS12KE
PT-DW11KU / DW11KE
PT-DZ10KU / DZ10KE

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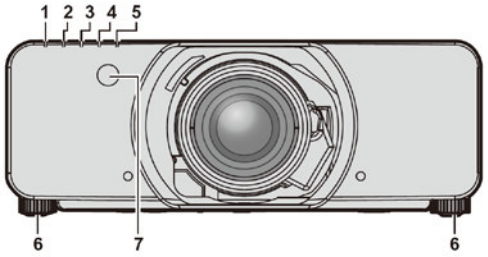
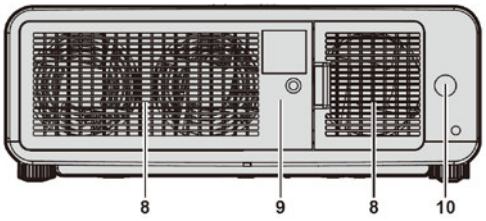
1. The name of each part

1. 1. Projector body

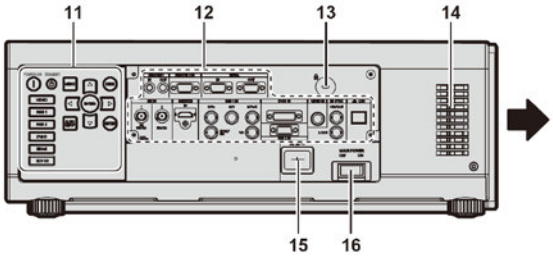
■ Front

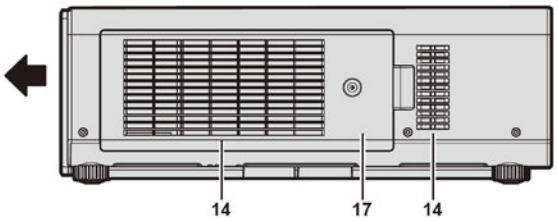


■ Rear

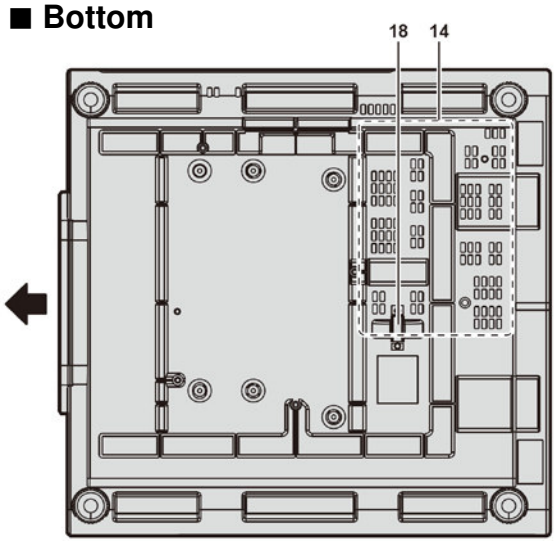


■ Side





■ Bottom



1 **Power indicator <ON (G)/STANDBY (R)>**
Displays the status of the power.

2 **Lamp indicator <LAMP1>**
Displays the status of lamp 1.

3 **Lamp indicator <LAMP2>**
Displays the status of lamp 2.

4 **Temperature indicator <TEMP>**
Displays the internal temperature status.

5 **Filter indicator <FILTER>**
Displays the status of the air filter unit.

6 **Adjustable feet**
Adjusts the projection angle.

7 **Remote control signal receiver (front)**

8 **Air exhaust port**

9 **Lamp unit cover**

10 **Remote control signal receiver (rear)**

11 **Control panel**

12 **Connecting terminals**

13 **Security slot**
This security slot is compatible with the Kensington security cables.

14 **Air intake port**

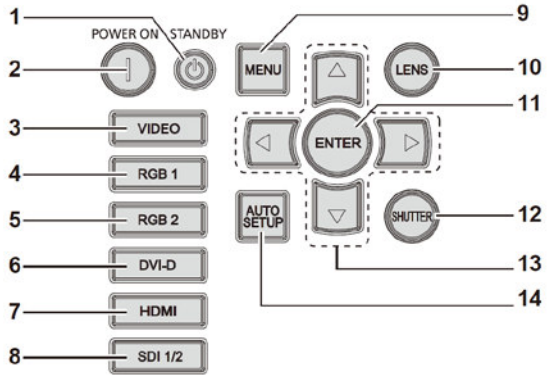
15 **<AC IN> terminal**
Connect the supplied power cord.

16 **<MAIN POWER> switch**
Turns on/off the main power.

17 **Air filter cover**
The air filter unit is inside.

18 **Burglar hook port**
Attaches a burglar prevention cable, etc.

1. 2. Control panel



1 **Power standby <⏻> button**
Sets the projector to the state where the projector is switched off (standby mode) when the <MAIN POWER> switch on the projector is set to <ON> and in projection mode.

2 **Power on <|> button**
Starts projection when the <MAIN POWER> switch on the projector is set to <ON> when the power is switched off (standby mode).

3 **<VIDEO> button**
Switches the input to VIDEO.

4 **<RGB1> button**
Switches the input to RGB1.

5 **<RGB2> button**
Switches the input to RGB2.

6 **<DVI-D> button**
Switches the input to DVI-D.

7 **<HDMI> button**
Switches the input to HDMI.

8 **<SDI 1/2> button**
Switches the input to SDI.
(Only for PT-DZ13K*, PT-DS12K*, PT-DZ10K*)

9 **<MENU> button**
Displays or hides the main menu.
Returns to the previous menu when a sub-menu is displayed.
If you press the <MENU> button on the control panel for at least three seconds while the on-screen display is off, the on-screen display is turned on.

10 **<LENS> button**
Adjusts the focus, zoom, and shift (position) of the lens.

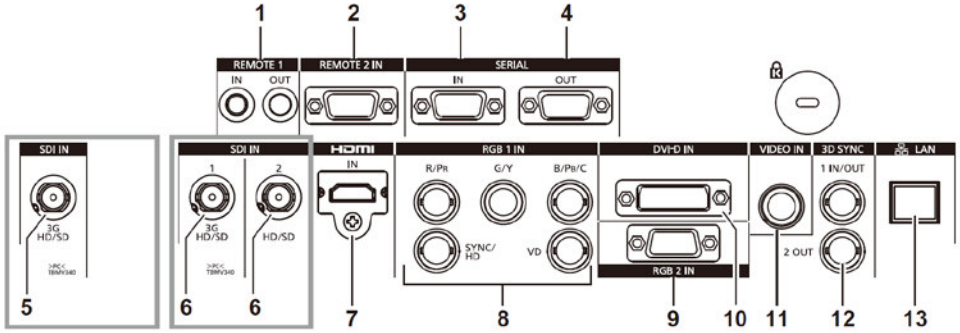
11 **<ENTER> button**
Determines and executes an item in the menu screen.

12 **<SHUTTER> button**
Used to temporarily turn off the image.

13 **▲▼◀▶ buttons**
Use to select items in the menu screen, change settings, and adjust levels.
Also used to enter a password in [SECURITY] or enter characters.

14 **<AUTO SETUP> button**
Automatically adjusts the image display position while projecting the image. [PROGRESS] is displayed on the screen while adjusting automatically.

1. 3. Connecting terminals



1 **<REMOTE 1 IN> terminal/<REMOTE 1 OUT> terminal**
These are the terminals to connect the remote control for serial control when the system uses multiple projectors.

2 **<REMOTE 2 IN> terminal**
This is a terminal to remotely control the projector using the external control circuit.

3 **<SERIAL IN> terminal**
This is the RS-232C compatible terminal to externally control the projector by connecting a computer.

4 **<SERIAL OUT> terminal**
This is a terminal to output the signal connected to the <SERIAL IN> terminal.

5 **<SDI IN> terminal**
This is the terminal to input SDI signals. (Only for PT-DZ10K*)

6 **<SDI IN 1> terminal / <SDI IN 2> terminal**
This is the terminal to input SDI signals.
(Only for PT-DZ13K*, PT-DS12K*)

7 **<HDMI IN> terminal**
This is the terminal to input HDMI signals.

8 **<RGB 1 IN> (<R/P_R>, <G/Y>, <B/P_B/C>, <SYNC/HD>, <VD>) terminal**
This is a terminal to input RGB signals or the YC_BC_R/YP_BP_R and Y/C signals.

9 **<RGB 2 IN> terminal**
This is a terminal to input RGB signals or YC_BC_R/YP_BP_R signals.

10 **<DVI-D IN> terminal**
This is the terminal to input DVI-D signals.

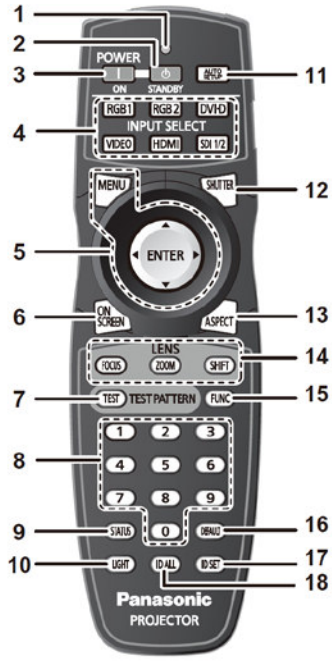
11 **<VIDEO IN> terminal**
This is the terminal to input video signals.

12 **<3D SYNC 1 IN/OUT> terminal / <3D SYNC 2 OUT> terminal**
This is a terminal to input or output control signals when using the projector in 3D systems.
(Only for PT-DZ13K*, PT-DS12K*, PT-DW11K*)

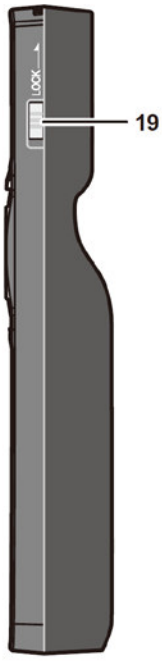
13 **<LAN> terminal**
This is a terminal to connect to the network.
Used for control and monitoring. Image input through network connections is not possible.

1. 4. Remote control

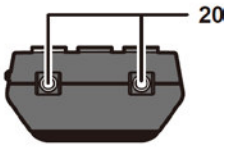
■ Front



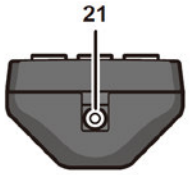
■ Side



■ Top



■ Bottom



1 **Remote control indicator**
Flashes if any button in the remote control is pressed.

2 **Power standby <⏻> button**
Sets the projector to the state where the projector is switched off (standby mode) when the <MAIN POWER> switch on the projector is set to <ON> and in projection mode.

3 **Power on <|> button**
Starts projection when the <MAIN POWER> switch on the projector is set to <ON> when the power is switched off (standby mode).

4 **Input selection (<RGB1>, <RGB2>, <DVI-D>, <VIDEO>, <HDMI>, <SDI 1/2>) buttons**
Switches the input signal to project.

5 **<MENU> button/<ENTER> button/▲▼◀▶ buttons**
Used to navigate through the menu screen.

6 **<ON SCREEN> button**
Switches on (display)/off (hide) the on-screen display function.

7 **<TEST> button**
Displays the test pattern.

8 **Number (<0> - <9>) buttons**
Used when the system uses multiple projectors.
Used to input ID numbers or passwords.

9 **<STATUS> button**
Displays the projector information.

10 **<LIGHT> button**
Pressing this button lights up the remote control buttons. The lights will go off when the remote control operation goes idle for 10 seconds.

11 **<AUTO SETUP> button**
Automatically adjusts the image display position while projecting the image.
[PROGRESS] is displayed on the screen while adjusting automatically.

12 **<SHUTTER> button**
Used to temporarily turn off the image.

13 **<ASPECT> button**
Switches the aspect ratio of the image.

14 **Lens (<FOCUS>, <ZOOM>, <SHIFT>) buttons**
Adjusts the projection lens.

15 **<FUNC> button**
Assigns a frequently used operation as a shortcut button.

16 **<DEFAULT> button**
Resets the content of the sub-menu to the factory default.

17 **<ID SET> button**
Sets the ID number of the remote control to use for a system using multiple projectors.

18 **<ID ALL> button**
Used to simultaneously control all the projectors with one remote control for a system using multiple projectors.

19 **<LOCK> button**
Used to prevent unintended operation by careless pressing of the buttons and prevent draining the remote control batteries.

20 **Remote control signal transmitter**

21 **Remote control wired terminal**
Connects to the projector with a cable.

2. Menu Navigation

Main menu

The following items are in the main menu.
When a main menu item is selected, the screen changes to a sub-menu selection screen.

Main menu item	
	[PICTURE]
	[POSITION]
	[ADVANCED MENU]
	[DISPLAY LANGUAGE]
	[3D SETTINGS]*1
	[DISPLAY OPTION]
	[PROJECTOR SETUP]
	[P IN P]
	[TEST PATTERN]
	[SIGNAL LIST]
	[SECURITY]
	[NETWORK]

1 Only for PT-DZ13K, DS12K*, DW11K*

Sub-menu

The sub-menu of the selected main menu item is displayed, and you can set and adjust items in the sub-menu.

[PICTURE]

Sub-menu item	Factory default
[PICTURE MODE]	[STANDARD]*1
[CONTRAST]	[0]
[BRIGHTNESS]	[0]
[COLOR]	[0]
[TINT]	[0]
[COLOR TEMPERATURE]	[DEFAULT]
[GAMMA]	[DEFAULT]
[SYSTEM DAYLIGHT VIEW]	[OFF]
[SHARPNESS]	[+6]
[NOISE REDUCTION]	[OFF]
[DYNAMIC IRIS]	[2]
[SYSTEM SELECTOR]	[YP_BP_R]*1

*1 Depends on the signal input.

Note

・The factory default settings may vary depending on the picture mode.

[POSITION]

Sub-menu item	Factory default
[SHIFT]	—
[ASPECT]	[DEFAULT]*1
[ZOOM]	—
[CLOCK PHASE]	[0]*1
[GEOMETRY]*2	[OFF]
[KEYSTONE]*3	—

*1 Depends on the signal input.
2 Only for PT-DZ13K, DS12K*, DZ10K*
3 Only for PT-DW11K

[ADVANCED MENU]

Sub-menu item	Factory default
[DIGITAL CINEMA REALITY]	[AUTO]*1
[BLANKING]	—
[INPUT RESOLUTION]	—
[CLAMP POSITION]	[24]*1
[EDGE BLENDING]	[OFF]
[FRAME RESPONSE]	[NORMAL]
[FRAME LOCK]*2	[OFF]
[RASTER POSITION]	—

*1 Depends on the signal input.
2 Only for PT-DZ13K, DS12K*, DZ10K*

Note

- Sub-menu items and factory default settings differ depending on the selected input terminal.

[DISPLAY LANGUAGE]

The language can be changed to English, German, French, Spanish, Italian, Portuguese, Japanese, Chinese, Russian, or Korean.

[3D SETTINGS]

(Only for PT-DZ13K*, DS12K*, DW11K*)

Sub-menu item	Factory default
[3D SYSTEM SETTING]	[SINGLE]
[3D SYNC SETTING]	—
[3D SIMUL INPUT SETTING]	—
[3D INPUT FORMAT]	[AUTO]*1
[LEFT/RIGHT SWAP]	[NORMAL]
[3D COLOR MATCHING]	[SHARED 2D/3D]
[3D PICTURE BALANCE]	—
[DARK TIME SETTING]	[1.5 ms]
[3D FRAME DELAY]	[0us]
[3D TEST MODE]	[NORMAL]
[3D TEST PATTERN]	—
[SAFETY PRECAUTIONS MESSAGE]	[ON]
[3D SAFETY PRECAUTIONS]	—

*1 Depends on the selected input terminal.

[DISPLAY OPTION]

Sub-menu item	Factory default
[COLOR MATCHING]	[OFF]
[LARGE SCREEN CORRECTION]	[OFF]
[SCREEN SETTING]*1	—
[AUTO SIGNAL]	[OFF]
[AUTO SETUP]	—
[RGB IN]	—
[DVI-D IN]	—
[HDMI IN]	—
[SDI IN]*1	—
[ON-SCREEN DISPLAY]	—
[BACK COLOR]	[BLUE]
[STARTUP LOGO]	[DEFAULT LOGO]
[UNIFORMITY]	—
[SHUTTER SETTING]	—
[FREEZE]	—
[WAVEFORM MONITOR]	[OFF]
[CUT OFF]	—

1 Only for PT-DZ13K, DS12K*, DZ10K*

[PROJECTOR SETUP]

Sub-menu item	Factory default	Page
[PROJECTOR ID]	[ALL]	108
[PROJECTION METHOD]	[FRONT/FLOOR]	108
[COOLING CONDITION]	[AUTO]	109
[HIGH ALTITUDE MODE]	[OFF]	109
[LAMP SELECT]	[DUAL]	109
[LAMP RELAY]	[OFF]	110
[LAMP POWER]	[HIGH]*1	111
[BRIGHTNESS CONTROL]	—	111
[STANDBY MODE]	[NORMAL]	115
[SCHEDULE]	[OFF]	116
[STARTUP INPUT SELECT]	[LAST USED]	117
[RS-232C]	—	118
[STATUS]	—	119
[NO SIGNAL SHUT-OFF]	[DISABLE]	120
[REMOTE2 MODE]	[DEFAULT]	120
[FUNCTION BUTTON]	—	121
[DATE AND TIME]	—	121
[LENS CALIBRATION]	—	122
[LENS MEMORY]	—	122
[SAVE ALL USER DATA]	—	124
[LOAD ALL USER DATA]	—	124
[INITIALIZE]	—	124
[SERVICE PASSWORD]	—	124

*1 In PT-DZ10KU, it is [NORMAL].

[P IN P]

- Locate a separate, small sub screen in the main screen to project two images simultaneously.

[TEST PATTERN]

- Display the test pattern built-in to the projector.
  All white, All black, Window,Window (inversion), Color bar (vertical), Color bar (horizontal), 16:9/4:3 aspect frame, Focus

[SIGNAL LIST]

- Registered signal list is displayed.
  Registering new signals, Renaming the registered signal, Deleting the registered signal, Protecting the registered signal, Expanding signal lock-in range, Registering to the sub memory, Deleting the sub memory

[SECURITY]

Sub-menu item	Factory default
[SECURITY PASSWORD]	[OFF]
[SECURITY PASSWORD CHANGE]	—
[DISPLAY SETTING]	[OFF]
[TEXT CHANGE]	—
[CONTROL DEVICE SETUP]	—
[CONTROL DEVICE PASSWORD CHANGE]	—

[NETWORK]

Sub-menu item	Factory default
[NETWORK SETUP]	—
[NETWORK CONTROL]	—
[NETWORK STATUS]	—

Note

- Some items may not be adjusted or used for certain signal formats to be input to the projector.
  The menu items that cannot be adjusted or used are shown in gray characters, and they cannot be selected.
- Sub-menu items and factory default settings differ depending on the selected input terminal.

3. Service Mode

This projector has Service Mode in addition to standard on-screen menus (User Mode).
This mode enables some menu settings for the service operation.

3. 1. Setting to Service Mode

1. Please push the main body or the menu (MENU) button of the wireless remote controller.
2. Choose a sub menu "service password" of the main menu "projector setup" and push the enter (ENTER) button.
3. Input the password "1565" by remote control and press the ENTER button.
4. Press the MENU button. "SERVICE MODE" (MAIN MENU) will be displayed.

3. 2. Resetting to User Mode

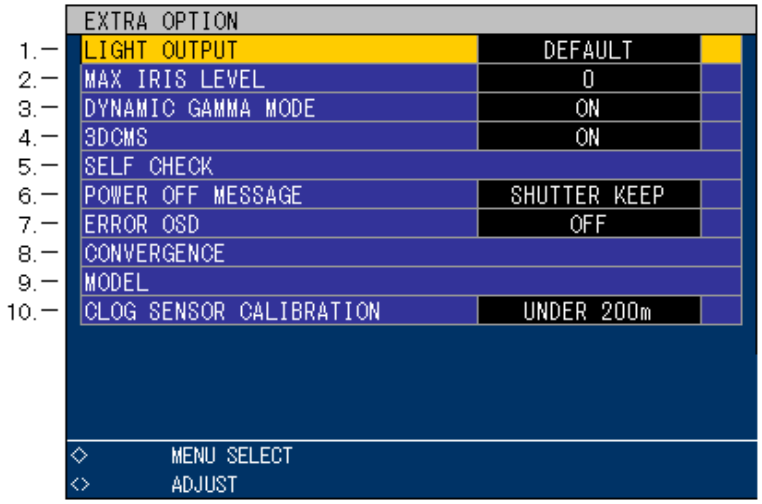
1. Please push the main body or the menu (MENU) button of the wireless remote controller.
2. Choose a sub menu "service password" of the main menu "projector setup" and push the enter (ENTER) button.
3. Input the password "0000" by remote control and press the ENTER button.
4. Press the MENU button. "USER MODE" (MAIN MENU) will be displayed.

3. 3. Functions of Service Mode

* Function varies according to a version of the main microcomputer software.

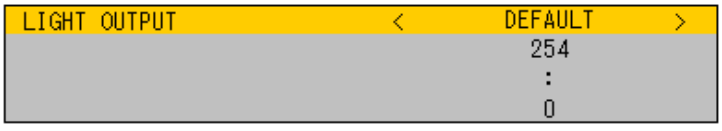
3. 3. 1. EXTRA OPTION

"EXTRA OPTION" is added to the bottom of the main menu.



1. LIGHT OUTPUT

Adjusts brightness with Dynamic Iris. It darkens as the value becomes small.



2. MAX IRIS LEVEL

Adjustment the maximum diaphragm quantity of the Dynamic iris. Please do not usually change setting.
When changed an iris unit or a DMD block, please adjust it according to Clause 1 of SECTION 3 (Adjustments).

3. DYNAMIC GAMMA MODE

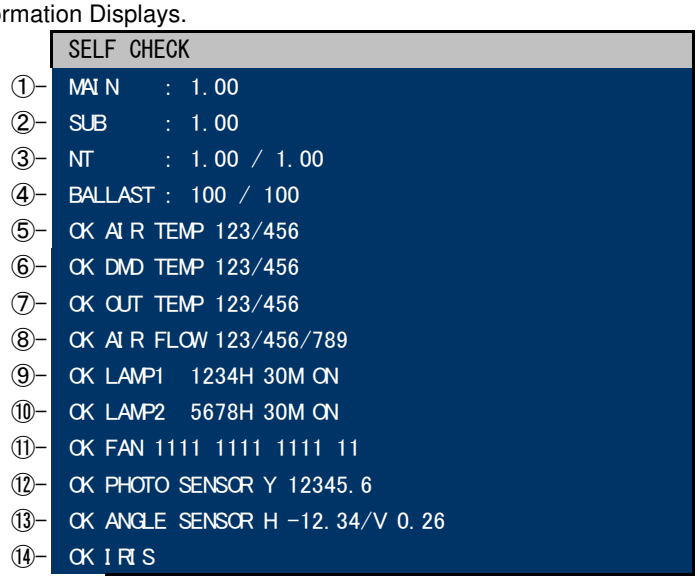
Sets ON (Valid) / OFF (Invalid) of Dynamic gamma.（Default : ON）

4. 3DCMS

Sets ON (Valid) / OFF (Invalid) of 3D Color Management system. (Default : ON)

5. SELF CHECK

Self-diagnosing information Displays.



* If any error occurs, font of "OK" becomes red.

①- Main microprocessor Software Version

②- Sub microprocessor Software Version

③- Network microprocessor Software Version（rootfs/kernel）

④- Ballast microprocessor Software Version

⑤- Intake air temperature check (Celsius/Fahrenheit)

⑥- DMD temperature check (Celsius/Fahrenheit)

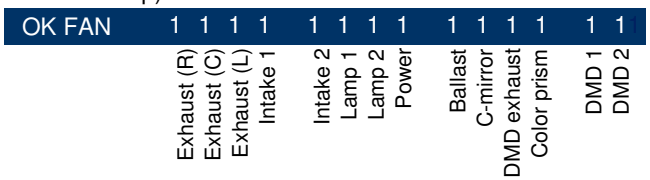
⑦- Exhaust air temperature check (Celsius/Fahrenheit)

⑧- Airflow sensor check (Sensor value/AD conversion value/Correction value)

⑨- LAMP1 check (Cumulative usage time/ON-OFF)

⑩- LAMP2 check (Cumulative usage time/ON-OFF)

⑪- Fan check (1: normal /0:stop)



⑫- Brightness sensor check

⑬- Angle sensor check

⑭- Iris check

6. POWER OFF MESSAGE

Setting of the shutter function with standby operation

- SHUTTER KEEP: When push the standby key with shutter ON, keep the shutter mode.
- SHUTTER OPEN: When push the standby key with shutter ON, open the shutter and display the "Power OFF confirmation message". (Default setting)

7. ERROR OSD

When do not watch the error instructions LED of the lamp by a back projection, the errors of the lamp can be displayed in the OSD.

- ON: "Lamp error message" is displayed on OSD.
- OFF: Does not display the "Lamp error message" in OSD.

8. CONVERGENCE

When the ingredient of each R/G/B color deviation, revise it electrically.

Specifically, please refer to Clause 1 of SECTION 3 (adjustments).

9. MODEL

Set this when the A-P.C.Board is replaced.

* If you can copy EEPROM data from the old A-P.C.Board, this setting is unnecessary.

* This model setting is changed after power restart.

10. CLOG SENSOR CALIBRATION

Calibrate the clogging sensor circuit.

* Execute this after EEPROM（IC3509/IC3518）/A-P.C.Board or clogging sensor (M2-P.C.Board) is replaced.
* Please refer to Clause 1 of SECTION 3 (Adjustments) for the procedure.

3. 3. 2. Additional function of each menu

1. [PICTURE] menu

「AI WINDOW」is added to the setting of the sub menu "dynamic iris".

- Sets the APL detection area.

2. [POSITION] menu

「DVI EQUALIZER」is added to a sub menu.

- When noise contamination to DVI input caused by long cable or external device, set this item so that the noise decreases.

3. [DISPLAY OPTION] menu

The following items are added to setting of sub menu "SDI IN".

「XYZ TO RGB SETTING」

- FACTORY SETTING: Uses the value of FACTORY Yxy conversion factor to the original data of XYZ → RGB.
- MEASURED: Uses the value of MEASURED Yxy conversion factor to the original data of XYZ → RGB.
- REC709: Uses the value of REC709 Yxy conversion factor to the original data of XYZ → RGB.
- DCI P3: Uses the value of DCI P3 Yxy conversion factor to the original data of XYZ → RGB.

「XYZ TEST PATTERN」

- WHITE：10%～100%
- DARK GRAY：1～10
- COLOR：Red/Green/Blue/Cyan/Magenta/Yellow　1～2

4. [PROJECTOR SETUP] menu

The following items are added to an indication screen of the sub menu "STATUS ".

1) Page 2

- FPGA VERSION	FPGA version (FOGA1/FPGA2/FPGA3)
- BALLAST VERSION	Ballast software version

2) Page 4

- VERTICAL TILT	Vertical angle
- HORIZONTAL TILT	Horizontal angle

3) Page 6

- MAIN VERSION	Main Microcomputer Software Version
- FPGA VERSION	FPGA version (FOGA1/FPGA2/FPGA3)
- BMP VER.	Version of Bitmap data
- ENG VER. ～ JPN VER.	Version of the each font data (English/Russian/Korean/Chinese/Japanese)

4) Page 7

- FM R/FM G/FM B VERSION	Version of the each Formatter Software Version (Configuration/Main Application/Sequence/De-Gamma)

5) Page 8

- TEMP（℃）	Intake air temperature / Exhaust air temperature / Optical module temperature
- P.SENSOR	Brightness Sensor value
- VOLT	Voltage of LAMP1/LAMP2
- AIR FLOW	Sensor value / AD conversion value, Sensor Correction value/ AD conversion value
- FAN MODE	FAN control mode (LOW/MID/HIGH)
- CLOG	Fan rev up state due to clogging of air filter (+0:NONE, +1:LEVEL1, +2:LEVEL2, +3:LEVEL3, Life extension:LIFE)
- R-EXST	Exhaust (R) fan status [Rotational speed]
- C-EXST	Exhaust (C) fan status [Rotational speed]
- L-EXST	Exhaust (L) fan status [Rotational speed]
- INTAKE1	Intake1 fan status [Rotational speed]
- INTAKE2	Intake2 fan status [Rotational speed]

- LAMP1 Lamp1 fan status [Rotational speed]
- LAMP2 Lamp2 fan status [Rotational speed]
- P-UNIT Power fan status [Rotational speed]
- BALLAST Ballast fan status [Rotational speed]
- C-MIRROR Composition mirror fan status [Rotational speed]
- DMD-EXST DMD exhaust fan status [Rotational speed]
- C-PRISM Color prism fan status [Rotational speed]
- DMD1 DMD1 fan status [Rotational speed]
- DMD2 DMD2 fan status [Rotational speed]

6) Page 9

Information of SDI signal. (when information cannot show, "---" is displayed)

- MODE Mode (「NO SIGNAL」,「SD-SDI」,「HD-SDI」,「3G-SDI」)
- TRANSPORT Conversion method (「PROGRESSIVE」,「INTERLACED」)
- PICTURE Picture information (「PROGRESSIVE」,「INTERLACED」)
- RATE Rate information (「23.98」,「24」,「25」,「29.97」,「30」,「50」,「59.94」,「60」)
- SAMPLING Sampling information (「4:2:2 (YPBPR)」,「4:2:2 (YCBCR)」,「4:4:4 (YPBPR)」,「4:4:4 (YCBCR)」, 「4:4:4 (RGB)」,「4:4:4:4 (YPBPR+A)」,「4:4:4:4 (RGB+A)」,「4:4:4 (XYZ)」)
- BIT DEPTH Bit depth (「8bit」,「10bit」,「12bit」)

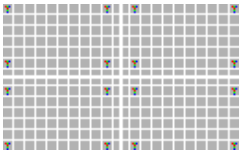
7) Page 10～11

ON-OFF log of lamp 1 and lamp 2

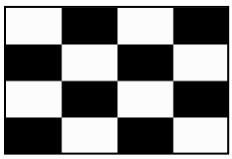
5. [TEST PATTERN] menu

The following test patterns are added.

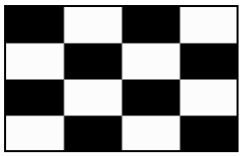
- Focus (background 70% Gray) pattern



- Checker pattern



- Inverted checker pattern



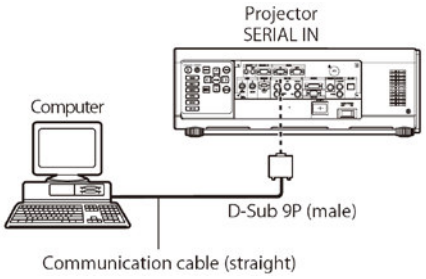
4. External Controls

4. 1. Control through Serial terminal

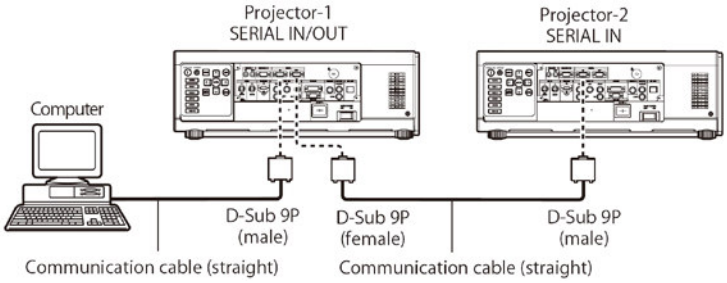
SERIAL terminals which are on the side of the projector conform to RS-232C standard. This projector can be controlled by a PC which is connected as shown below. Also SERIAL OUT terminal is provided to enable plural projector control.

4. 1. 1. Connection

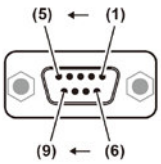
● Single projector

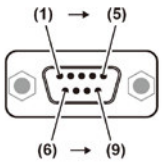


● Multiple projectors



4. 1. 2. Pin assignments and signal names

D-Sub 9-pin (female) Outside view	Pin No.	Signal name	Details
	(1)	—	NC
	(2)	TXD	Transmitted data
	(3)	RXD	Received data
	(4)	—	NC
	(5)	GND	Earth
	(6)	—	NC
	(7)	CTS	Connected internally
	(8)	RTS	
	(9)	—	NC

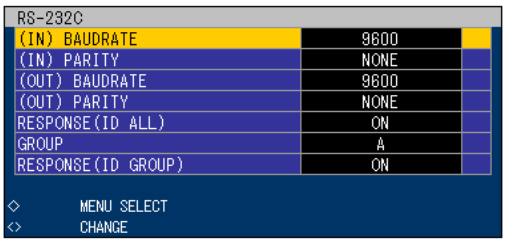
D-Sub 9-pin (male) Outside view	Pin No.	Signal name	Details
	(1)	—	NC
	(2)	RXD	Received data
	(3)	TXD	Transmitted data
	(4)	—	NC
	(5)	GND	Earth
	(6)	—	NC
	(7)	RTS	Connected internally
	(8)	CTS	
	(9)	—	NC

4. 1. 3. Communication conditions

Signal level	RS-232C-compliant
Sync. method	Asynchronous
Baud rate	9 600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

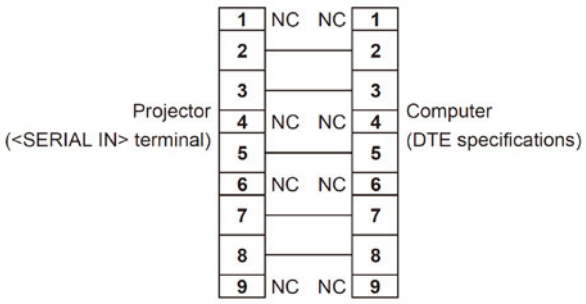
4. 1. 4. Communication condition setting

1. Press MENU button of main body or remote controller.
   Go to Main menu --> Projector setup. In sub menu,
   select "RS-232C" and press ENTER.
2. Select communication condition by pressing ▲ ▼ button.
   Set it with pressing ◄ ► button.
3. Press MENU button 3 times and return to regular display.

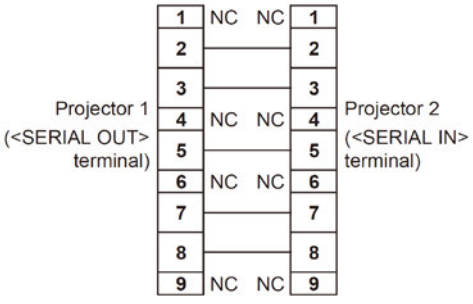


4. 1. 5. Cable specification

・When connected to a computer



・When multiple projectors are connected



4. 1. 6. Basic format

Transmission from the computer starts with STX, then the ID, command, parameter, and ETX are sent in this order.
Add parameters according to the details of control.

1. Basic control command (without parameter)

Start (STX)	ID	Separator (semicolon)	Command	End (ETX)
1 byte	4 byte	1 byte	3 byte	1 byte

2. Basic control command (with parameters)

Start (STX)	ID	Separator (semicolon)	Command	Separator (colon)	Parameter	End (ETX)
1 byte	4 byte	1 byte	3 byte	1 byte	Undefined length	1 byte

3. Basic control command (with sub command)

Start (STX)	ID	Separator (semicolon)	Command	Separator (colon)	Parameter	Operation
1 byte	4 byte	1 byte	3 byte	1 byte	5 byte	1 byte

Sign	Parameter	End (ETX)
1 byte	5 byte	1 byte

4. Operation

Specifies the method of processing the value specified by parameters.

Code	Description
=	Sets the value specified by the parameter.
_(underbar)	Adds the value specified by the parameter to the current value.

5. Sign

Specifies positive or negative of the value specified by parameters.

Code	Description
+	The value specified by the parameter is a positive value or 0 (zero).
−	The value specified by the parameter is a negative value.

6. Parameters

Specify the setting or adjustment value by right justification (0 is not suppressed).
For example, when the setting value is "1", set it as "00001".

7. ID of the basic control command

This projector will respond to the computer only in the following cases.

- If the sent ID coincides with the projector ID.
- RESPONSE(ID ALL) in RS232C settings of this projector is ON and the sent ID is ALL.
- Or If Group (A-Z) of the sent ID coincides with GROUP in RS232C settings of this projector and RESPONSE(ID GROUP) in RS232C settings of this projector is ON.

Specifically, please refer to a separate volume "Control Commands".

8. Response (Callback) of the basic control command

In the period when the command can be accepted.

Differs according to each command.

In the period when commands cannot be accepted.

Hexadecimal	02h	45h	52h	34h	30h	31h	03h
Character		E	R	4	0	1	

In case of the parameter error or REMOTE2 effective.

Hexadecimal	02h	45h	52h	34h	30h	32h	03h
Character		E	R	4	0	2	

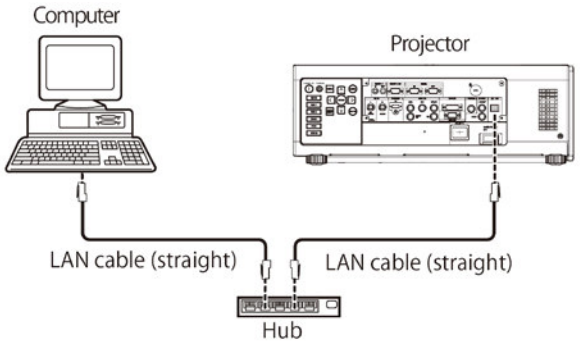
9. Attention
   - If a command is transmitted after the lamp starts illuminating, there may be a delay in response or the command may not be executed. Try sending or receiving any command after 60 seconds.
   - When transmitting multiple commands, be sure to wait until 0.5 seconds has elapsed after receiving the response from the projector before sending the next command.
   - It might take time by the time the response returns because the command is processed in the projector. Set the time-out to 10 seconds or longer.
   - When multiple projectors are all controlled
     1) Set a different ID for each projector
     2) Set [RESPONSE(ID ALL)] to [ON] in only one projector
     3) Set [RESPONSE(ID ALL)] to [OFF] for all other projectors set in Step 2)
   - When multiple projectors are all controlled by group unit
     1) Set a different ID for each projector
     2) Set [RESPONSE(ID GROUP)] to [ON] in only one projector
     3) Set [RESPONSE(ID GROUP)] to [OFF] for all other projectors set in Step 2)

4. 2. Control through LAN terminal

Possible to control this projector by connecting PC to the LAN terminal on the side of this projector.

Connection and command transmission changes depending on mode (admin password is set or not with web control). Control according to the procedure in "4.2.2" on the protection mode (the password is set), and according to the procedure in "4.2.3" on the unprotected mode (the password is not set).

4. 2. 1. Connection example



Note: Lan cable and Hub are not standard accessories. When connected directly, cross type cable is recommended.

4. 2. 2. When Web control administrator rights password is set (Protect mode)

4. 2. 2. 1. Connecting

1. Obtain the IP address and port number (Initial setting value = 1024) of the projector and request for a connection to the projector.
   You can obtain both the IP address and the port number from the menu screen of the projector.
   - IP address : Obtain from the main menu → [NETWORK] → [NETWORK STATUS]
   - Port number : Obtain from the main menu → [NETWORK] → [NETWORK CONTROL] → [COMMAND PORT]
2. Check the response from the projector
   - Response data

Data section	Blank	Mode	Blank	Random number section	Termination symbol
"NTCONTROL"	' '	'1'	' '	"zzzzzzzz"	(CR)
(ASCII string)	0x20	0x31	0x20	(ASCII code hexadecimal number)	0x0d
9 bytes	1 byte	1 byte	1 byte	8 bytes	1 byte

   Mode: 1 = Protect mode
3. Generate a 32-byte hash value from the following data using MD5 algorithm.
   "xxxxxx:yyyyy:zzzzzzzz"

xxxxxx	Administrator rights user name for Web control (default user name is "admin1")
yyyyy	Password of above administrator rights user (default password is "panasonic")
zzzzzzzz	8-byte random number obtained in Step 2)

   : colon : Separator

4. 2. 2. 2. Command transmission method

Transmit using the following command formats.

Transmitted data

Header			Data section	Termination symbol
Hash value (4. 2. 2. 1. -3)	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
32 bytes	1 byte	1 byte	Undefined length	1 byte

Received data

Header		Data section	Termination symbol
'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
1 byte	1 byte	Undefined length	1 byte

Error response

Error message		Termination symbol
"ERR1"	Undefined control command	(CR) 0x0d
"ERR2"	Out of parameter range	
"ERR3"	Busy state or no-acceptable period	
"ERR4"	Timeout or no-acceptable period	
"ERR5"	Wrong data length	
"ERRA"	Password mismatch	
4 bytes		1 byte

Example: Query Power "QPW"

1. Connects to the projector
   IP = 192.168.0.8 port = 1024
2. Receives a response
   Response = "NTCONTROL 1 1aa6c14e" + (CR)
   "1aa6c14e" = 8 bytes random characters
3. Generates a hash value (message digest) from "admin1:panasonic:1aa6c14e" by using the MD5 algorism.
   "admin1" = Administrator authority user-name
   "panasonic" = Password corresponding to "admin1"
   Hash value = "01466bc27ed8c0b7e607471580c55953"
4. Transmits the command
   Transmission data = "01466bc27ed8c0b7e607471580c5595300QPW" + (CR)
5. Receives a response.
   Reception data = "00000" + (CR)
6. Disconnects the connection with the projector.

4. 2. 3. When Web control administrator rights password is not set (Non-protect mode)

4. 2. 3. 1. Connecting

1. Obtain the IP address and port number (Initial setting value = 1024) of the projector and request for a connection to the projector.
   You can obtain both the IP address and the port number from the menu screen of the projector.
   - IP address : Obtain from the main menu → [NETWORK] → [NETWORK STATUS]
   - Port number : Obtain from the main menu → [NETWORK] → [NETWORK CONTROL] → [COMMAND PORT]
2. Check the response from the projector
   - Response data

Data section	Blank	Mode	Termination symbol
"NTCONTROL"	' '	'0'	(CR)
(ASCII string)	0x20	0x30	0x0d
9 bytes	1 byte	1 byte	1 byte

Mode: 0 = Non-protect mode

4. 2. 3. 2. Command transmission method

Transmit using the following command formats.

Transmitted data

Header		Data section	Termination symbol
'0'	'0'	Control command	(CR)
0x30	0x30	(ASCII string)	0x0d
1 byte	1 byte	Undefined length	1 byte

Received data

Header		Data section	Termination symbol
'0'	'0'	Control command	(CR)
0x30	0x30	(ASCII string)	0x0d
1 byte	1 byte	Undefined length	1 byte

Error response

Error message		Termination symbol
"ERR1"	Undefined control command	(CR) 0x0d
"ERR2"	Out of parameter range	
"ERR3"	Busy state or no-acceptable period	
"ERR4"	Timeout or no-acceptable period	
"ERR5"	Wrong data length	
"ERRA"	Password mismatch	
4 bytes		1 byte

Example: Query Power "QPW"

1. Connects to the projector
   IP = 192.168.0.8 port = 1024
2. Receives a response
   Response = "NTCONTROL 0" + (CR)
3. Transmits the command
   Transmission data = "00QPW" + (CR)
4. Receives a response.
   Reception data = "00000" + (CR)
5. Disconnects the connection with the projector.

4. 3. Control commands List

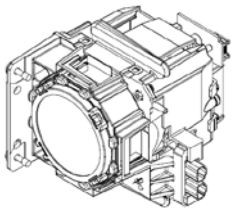
* Please refer to a separate volume "control commands". (Posted to the projector home page)

5. Notes on service

5. 1. Before service operation

5. 1. 1. Lamp

1. The light source of the projector is a high-pressure mercury lamp.
2. The luminance of the lamp will decrease by duration of usage.
3. The lamp may burst with a loud sound or have its service life shortened because of shock, chipping, or degradation due to cumulative runtime.
4. The lamp life varies greatly depending on individual differences and usage conditions.
   In particular, frequent on/off switching of the power greatly deteriorate the lamp and affects the lamp life.
5. Continuous use for over one week will deteriorate the lamp. The degradation of the lamp due to continuous use can be reduced by using the [PROJECTOR SETUP] menu → [LAMP RELAY].
6. In rare cases, the lamps burst shortly after projection starts.
7. If the lamp bursts, gas contained inside of the lamp is released in the form of smoke.
8. The risk of bursting increases when the lamp is used beyond its replacement cycle. Make sure to replace the lamp unit reg
   Make sure to replace the lamp unit regularly.
   It is recommended that you store the Replacement lamp unit as a contingency.



Replacement lamp unit : ET-LAD310A (1 pc) / ET-LAD310AW (2 pcs)

Notes ・Panasonic takes no responsibility for any damage or malfunction of the product resulting from use of lamp units which are not manufactured by Panasonic. Use only specified lamp units.
・For the portrait setting, be sure to use the optional Replacement lamp unit (for portrait mode).
・Do not use the Replacement lamp unit (for portrait mode) and normal lamp unit together.

Attention ・Please be sure to read the warnings and notices on the lamp that is described in the Operating Instructions. "Read this first!", "Precautions for use", "Maintenance/replacement"

5. 1. 2. Air filter unit

1. Make sure that the air filter unit is properly attached before using the projector. If it is not properly attached, the projector will suck in dirt and dust causing a malfunction.
2. If the filter is clogged, only one lamp may light even when [LAMP SELECT] is set to [DUAL].
3. The cleaning and replacement cycle of the air filter unit varies depending on the usage environment.
4. Air filter replacement is recommended after cleaning the unit two times.
5. The dust-proof properties may be reduced after each cleaning.
6. The Replacement Filter Unit is an optional accessory.

Air filter unit : ET-EMF320

5. 1. 3. Smoke Cut Filter (Optional accessory : ET-SFD320/SFR320)

1. Do not reuse it. The smoke cut filter to be replaced should be an unused product.
2. Do not use smoke cut filter at high altitudes (1 400 m (4 593') above sea level) or in places where the ambient temperature is 35°C or higher (30°C when used in portrait mode).
3. When this smoke cut filter is installed, the width of the projector increases by approximately 10 mm (13/32").
4. When using the smoke cut filter, be sure to switch the [FILTER TYPE] setting of the projector from [NORMAL] to [SPECIAL]. When replacing the smoke cut filter with an air filter unit, be sure to switch the [FILTER TYPE] setting of the projector from [SPECIAL] to [NORMAL].
   1) Select [SERVICE PASSWORD] in [PROJECTOR SETUP] menu and press <ENTER> button.
   2) Enter “1111” by pressing <1> on the remote control and then press <ENTER> button.
   3) Press ◄ ► button to switch from [NORMAL] to [SPECIAL] in the [AIR FILTER] screen.

5. 1. 4. Lithium battery

1. The lithium battery is used for the internal clock in the A-P.C.Board. So when it consumed it must be replaced.

Lithium battery : CR2032

* Use only specified lithium battery.
* Used battery must be scrapped according to the instruction.

2. After replacing the lithium battery, set the "Date and Time" on the sub-menu which in main menu "projector set up".

5. 2. Service

5. 2. 1. Supporting Methods

The basic service policy is shown below.

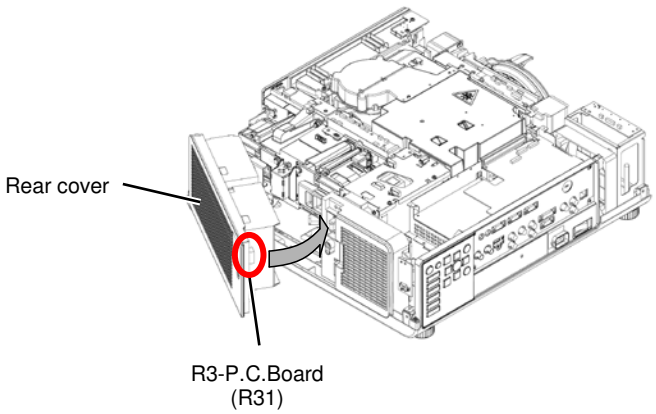
Repair contents	Applied parts
Block replacement P.C.Board replacement	・P-P.C.Board (* Specified components are replaced) ・B/Q-P.C.Board ・MR-P.C.Board ・WF-P.C.Board ・M1-P.C.Board (Intake/Exhaust) ・WL-P.C.Board ・M2-P.C.Board ・RW-P.C.Board ・M3-P.C.Board ・R3-P.C.Board ・L1-P.C.Board ・H-P.C.Board ・L2-P.C.Board ・Lens mount ・Analysis mirror ・Rod ・Iris unit
Repair at the factory	DMD Block
Replaced by discrete components	Other electrical parts and mechanism parts

5. 2. 2. Repair

1. Since this projector is very strong light output, when checking the projection screen, please UV protection glasses and select to "single" lamp mode. If the projection distance is short, please pay particular attention.
2. When removing a top cover and carrying out check or adjustment, a strong light has leaked from the optical block. Please take the use of UV protection glasses and means of the shading.
3. Before repair, make sure to turn off the main power and disconnect the power plug from the power outlet.
   * When replacing the print board, the internal electrical parts can be broken by the static electricity of clothes or human body. Please take care in static electricity, use an antistatic wrist strap or wear the anti-static electricity gloves.
4. After repair, please check the gradation (10step or the gray scale) test pattern and moving image. Also, please check that it is normal on a self check screen.

5. 2. 3. Interlock detection

Detection by the connector on the rear cover.
Power will not turn on, unless the connector R31 in a rear cover is inserted in the main body side.



5. 2. 4. Replacement of A-P.C. board

When the replacement of A-P.C.Board (assembly) is needed, back up the memory information such as adjustment data from the old board to PC with the service soft. Then transfer this data to the new A-P.C.Board.

For more information refer to the SECTION 3 "Adjustment".

* Down load the adjustment software from Projector service web site.

If you cannot transfer the data that uses the adjustment software, remove IC3508 and IC3518 from the original board and mount them on the new board.

5. 2. 5. Replacement of WL-P.C. board

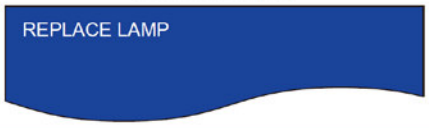
When WL-P.C.Board is replaced, the MAC address of wired LAN will be changed. Explain it to the customers in advance.

5. 3. Replacement of consumable parts

Attention ・Set the MAIN POWER switch to "OFF" and disconnect the power plug from the power outlet.
・Do not replace the lamp unit when it is high temperature. (Wait at least one hour after use.)

5. 3. 1. When to replace the lamp unit

1. The estimated duration before replacement is 2 500 hours*1, but the lamp may go off before 2 500 hours*1 has elapsed depending on individual lamp characteristics, usage conditions, and the installation environment.
   It is recommended that the Replacement lamp unit be prepared earlier.
2. When comes time to replace the lamp, will announce with an onscreen display and a lamp indicator.
   To predict when to replace the lamp, check the lamp runtime displayed in [LAMP1] and [LAMP2] in [STATUS].

	On-screen display	Lamp indicator
		
Over 2 300 hours*2	The message is displayed for 30 seconds. Pressing any button on the control panel or remote control within 30 seconds will clear the message.	The indicator lights in red even during the standby mode.
Over 2 500 hours*1	The message remains displayed until you press any button.	

3. If you continue to use the lamp unit after 2 500 hours*1 has elapsed, the lamp turns off automatically after approximately 10 minutes, as it will cause malfunction of the projector.
   If the runtime of both of two lamp unit bulbs exceeds 2 500 hours*1, the power will be switch off after approximately 10 minutes.

*1 For PT-DZ13KU, PT-DS12KU, PT-DW11KU. 3 500 hours for PT-DZ10KU.
*2 For PT-DZ13KU, PT-DS12KU, PT-DW11KU. 3 300 hours for PT-DZ10KU.

Attention ・2 500 hours and 3 500 hours are estimated duration before replacement, and is not guaranteed.
・The estimated duration before replacing the Replacement lamp unit (for portrait mode) is 500 hours.
The on-screen message for replacing the lamp appears after 300 hours.

5. 3. 2. Calculation formula of lamp runtime

The lamp runtime that is displayed in the [STATUS] is real time.
The following conversion is required to calculate the rough estimate for lamp replacement.

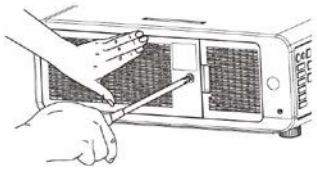
Model No.	Formula for lamp replacement time (rough estimate)
PT-DZ13KE **PT-DS12KE** **PT-DW11KE**	(**A** x 56 + **B** x 40 + **C** x 35) ÷ 56 • **A**: Runtime when [LAMP POWER] is set to [HIGH] • **B**: Runtime when [LAMP POWER] is set to [MIDDLE] • **C**: Runtime when [LAMP POWER] is set to [ECO] The formula when the optional Replacement lamp unit (for portrait mode) is used is: (**B** x 2 + **C**) ÷ 2
PT-DZ10KE	(**A** x 40 + **B** x 35) ÷ 40 • **A**: Runtime when [LAMP POWER] is set to [NORMAL] • **B**: Runtime when [LAMP POWER] is set to [ECO] The formula when the optional Replacement lamp unit (for portrait mode) is used is: (**A** x 2 + **B**) ÷ 2

5. 3. 3. Notes on the replacement of the lamp unit

Warning

Replace the lamp unit after the lamp has cooled (after waiting at least one hour).
The high temperature inside the cover will cause burns.

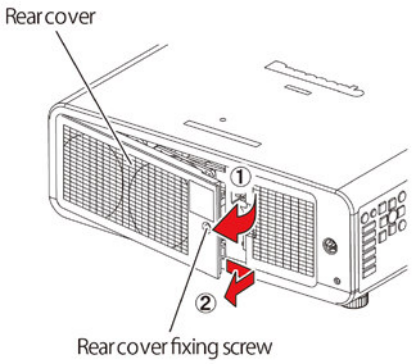
1. Since the luminous lamp is made of glass, it may burst if dropped or hit with a hard object. Handle with care.
2. When replacing the lamp unit, be sure to hold it by the handle because its surface is pointed and its shape is protruded.
3. When the projector is mounted on the ceiling, do not conduct work while your face is near the lamp unit.
4. Do not remove or loosen the screws other than specified ones when replacing the lamp unit.
5. Use same type of lamp unit for both lamps.
6. When replacing the lamp unit, loosen the rear cover fixing screw while putting your hand on.



Note ・When you replace the lamp unit with new one, the projector resets the runtime of the lamp unit automatically.

5. 3. 4. Replacement procedure for lamp unit

1. Power off the projector and disconnect the power plug from the power outlet.
   And wait at least one hour, and then check if the lamp unit has been cooled down.
2. Loosen the lamp unit cover fixing screw (one screw) until it turns freely, and then open the lamp unit cover in the direction of the arrow.

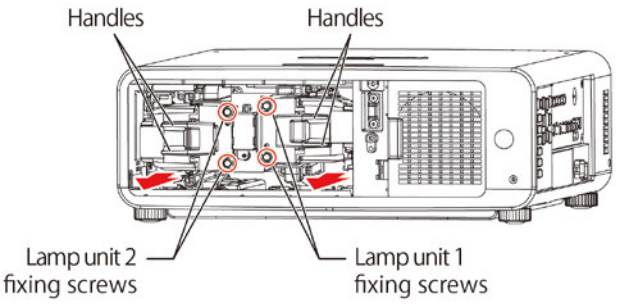


①Open a little
②Slide it in the direction of the arrow, and then pull it out backward to remove.

Caution

・If you loosen the rear cover fixing screw with the projector installed upward in the vertical direction, the rear cover may open on its weight and may be dropped off.

3. Loosen the lamp case fixing screws (two screws each) until they turns freely, and then hold the lamp case handles, pull out backward.



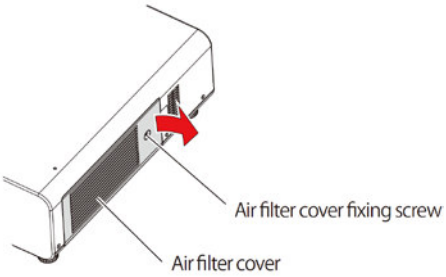
4. Install the Lamp units and reverse the disassembly procedures, install the rear cover.
   * Projector does not turn on by protection circuit, if lamp unit or rear cover are incompletely-installed.
   * If the lamp unit is not installed properly, remove it and then push it in slowly. Pushing it in quickly or forcibly may break the connector.

5. 3. 5. Air filter maintenance

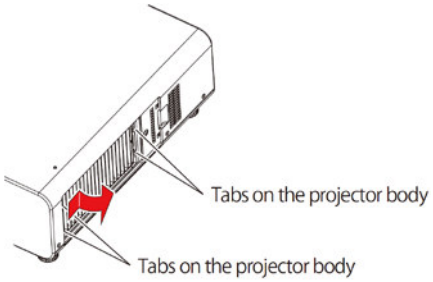
1. Air filter is clogged by dust, and if the replacement message is displayed on the screen, filter indicator <FILTER> has a red light. In this case perform the maintenance.
2. The proceeds of the air filter clogging, becomes hot of projector inside, and <TEMP>indicator is lit , power shut down. Then <FILTER>Indicator remains red , <TEMP> indicator will flash (twice) red.
3. The cleaning and replacement cycle of the air filter unit varies depending on the usage environment. If dirt does not come off even after the unit is maintained, it is time for the unit to be replaced.

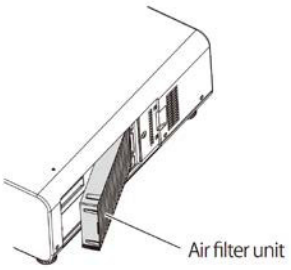
5. 3. 6. Cleaning procedure for Air filter unit

1. Make sure to turn off the power before replacing the air filter unit.
2. Loosen the lamp unit cover fixing screw (one screw) until it turns freely, then remove the Air filter cover.

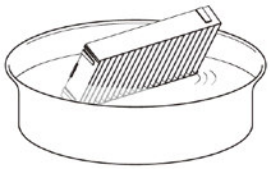


3. Pull out the air filter unit frame from the tabs of the projector body while slightly pressing around the center of the frame at the front side (with the lens) inward as described with the arrow, and pull out the frame at the opposite side from the tabs to remove the air filter unit.

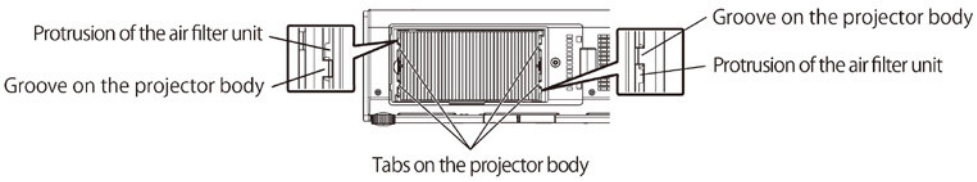




4. Wash and dry the air filter unit.
   1) Soak the air filter unit in cold or warm water and then lightly rinse it.
      * Do not use cleaning tools such as brushes.
   2) Rinse the unit two to three times using fresh water each time.
   3) Let the unit naturally dry off in a well-ventilated place where there is little dust and the unit is protected from direct sunlight.
      * Do not dry using drying devices such as dryers.
      * Dry it thoroughly before attaching it back to the projector.



   (Please read the page "Maintenance/Replacement" on the instruction book to know about details.)
5. After cleaning the air filter unit, install the filter unit and the air filter cover.
   * The air filter unit has no difference between top and bottom, but is two-sided.
   * Match the protrusion position of the air filter with the grooves on the projector body.



5. 4. Initialization for control device password

To revert to the factory default password (AAAA), perform the following operations while the screen asking for a control device password input is displayed.

1. Press the <AUTO SETUP> button on the remote control or control panel for at least two seconds.
2. Press ▼ for at least two seconds.

5. 5. Portrait Mode

When using the projector in the portrait mode (projection of vertically long images).

1. Install the optional Replacement lamp unit (for portrait mode) to the projector.

Replacement lamp unit (for portrait mode) : ET-LAD320P (1 pc)/ ET-LAD320PW (2 pcs)

2. The [MAIN VERSION] of firmware of the projector has to be [2.00] or later version.
   When the main version of firmware is lower than [2.00], please be firmware version up.
3. Install the projector with the terminals surface facing down.

Note ・When used in portrait mode, can not "High" to lamp power setting.
・The estimated duration before replacing the Replacement lamp unit (for portrait mode) is 500 hours.

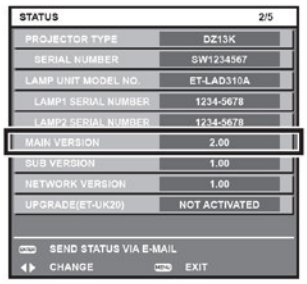
Before Using in Portrait Mode

When using the projector in the portrait mode (projection of vertically long images), the [MAIN VERSION] of firmware of the projector has to be [2.00] or later version. In addition, it is necessary to purchase and install the optional Replacement lamp unit (for portrait mode) (Model No.: ET-LAD320P (1 pc), ET-LAD320PW (2 pcs)) to the projector.

1. Checking the firmware version

1) **While the projector is switched on and theimage is projected, press the <STATUS> button on the remote control.**
2) **Press ◀▶ to switch the page to the second page.**

- [MAIN VERSION] of the firmware can be checked on the [STATUS] screen.
- Above [STATUS] screen is a sample screen. The actual screen may be different from the sample screen.



2. About firmware upgrade

1) When the main version of firmware is lower than [2.00], access the latest firmware version information page on the following Panasonic web site to download the latest upgrade tool.
2) To upgrade the firmware, connect the projector and the computer by using LAN or the serial (COM) and execute the downloaded upgrade tool.
3) For details of upgrade procedure, access the latest firmware version information page of Panasonic web site.

<Web site> http://panasonic.net/avc/projector/pass

Operating Specifications in Portrait Mode

1. [LAMP POWER] menu (Only for PT-DZ13K series, PT-DS12K series, PT-DW11K series)

1) [HIGH] cannot be selected when the optional Replacement lamp unit (for portrait mode) is used.
2) Even when [HIGH] is selected while the normal lamp unit is used, the setting is switched to [MIDDLE] automatically if the optional Replacement lamp unit (for portrait mode) is used.

2. Light output (Only for PT-DZ13K series, PT-DS12K series, PT-DW11K series)

In the portrait setting, [LAMP POWER] cannot be set to [HIGH]. Therefore the light output is be set to [HIGH]. Therefore the light output is 10 600 lm for PT-DZ13K series and PT-DS12K series, and 9 600 lm for PT-DW11K series.
The light output for PT-DZ10K series remains 10 600 lm.

3. When to replace the lamp unit

The duration (rough estimate) before replacing the Replacement lamp unit (for portrait mode) is 500 hours. The on-screen message for replacing the lamp appears after 300 hours.
Formulas for lamp replacement time (rough estimate) are as follows.

PT-DZ13K series **PT-DS12K series** **PT-DW11K series**	(**B** x 2 + **C**) ÷ 2 ・**B**: Runtime when [LAMP POWER] is set to [MIDDLE] ・**C**: Runtime when [LAMP POWER] is set to [ECO]
PT-DZ10K series	(**A** x 2 + **B**) ÷ 2 ・**A**: Runtime when [LAMP POWER] is set to [NORMAL] ・**B**: Runtime when [LAMP POWER] is set to [ECO]

6. Troubleshooting

6. 1. Shutdown system

When something wrong such as stop of fan happens, the projector has a function to be on standby immediately.

Indicator indication	Shutdown detection	Probable cause	OSD warning, etc
Not lighting or flashing	Power fuse ⇒20A (U nodel) ⇒10A (E model)	Blown out of the fuse (with some reason)	—
	Ballast block: heatsink Thermal protector (SW9601) ⇒ Over 115±5 degrees C	Intake duct clogging Ballast block error	(Returns with 80±15 degree C)
STANDBY/ON Blinks in red 1 times	Interlock SW status ⇒Open	Rear cover is not installed	—
STANDBY/ON Blinks in red 3 times	FPGA initialized or communication error	Signal processing unit PCB is faulty	—
	Main software activation error	Main microcomputer rewrite error	—
	Formatter Initialization error	FM printed circuit board failure Cable connection failure Connector contact failure	—
STANDBY/ON Red lights TEMP Red lights	Intake air temperature sensor ⇒ Below -20 ℃	Intake air temperature sensor bad connection	—
	DMD temperature sensor ⇒ Below -20 ℃	Optical module temperature sensor bad connection	—
	Exhaust air temperature sensor ⇒ Below -20 ℃	Exhaust air temperature sensor bad connection	—
TEMP Blinks in red 3 times	Each FAN sense signal ⇒no signal	Connector disconnection Fan rotation failure	—
	Each fan sense signal ⇒Slower than 70% of target for more than 5 sec.	Fan rotation failure Life time of the fan	—
TEMP Blinks in red 2 times	DMD temperature sensor ⇒After power-on, Is below 5 ℃ for more than 5 min.	Usage environment temperature is lower than the rated	
	Intake air temperature sensor ⇒ 48℃ or more High altitude:43℃(Portrait:38℃) Smoke cut:38℃(Portrait:33℃)	High temperature of environment Ventilation holes are blocked Intake air temperature sensor abnormality	46℃⇒ 「TEMPERATURE WARNING」 (Warning:TEMP Red lights)
	DMD temperature sensor ⇒ More than 65 ℃ *1	Abnormal installation of heatsink Ventilation holes are blocked At highlands, high altitude mode is not set	63℃⇒ 「TEMPERATURE WARNING」 (Warning:TEMP Red lights)
	Exhaust air temperature sensor ⇒ More than 60 ℃ *1	Exhaust fan is deterioration, abnormal Ventilation holes are blocked At highlands, high altitude mode is not set	58℃⇒ 「TEMPERATURE WARNING」 (Warning:TEMP Red lights)
LAMP Blinks in red 3 times	Lamp status (Ballast) ⇒Lamp is off during the status other than normalcy	Lighting failure of the lamp, Hot restart, Lamp abnormality (burst) Ballast block is abnormal Thermal fuse (bimetal)⇒152 ℃ or more	
LAMP Blinks in red 1 times	Lamps memory (EEPROM) communication ⇒No response ⇒Noncompliant lamp info	Lamp is not installed Lamp memory cable bad contact or disconnecting Other models lamp installed	
LAMP Red lights	Lamp rantime ⇒More than 2500 hours *2 (Shuts down after 10 min)	Lamp runtime is over the limitation.	REPLACE LAMP IN ** MINUTES,POWER WILL TURN OFF AND GO INTO STANDBY MODE AUTOMATICALLY.

*1 : Different values by "Lamp mode", or "Fan mode", "direction of installation".

*2 : DZ10K will be more than 3500 hours.

6. 2. System log data acquisition method

6. 2. 1. Equipment to be used

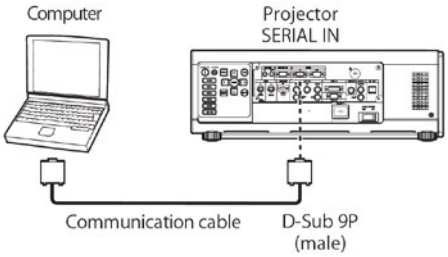
1. Computer : Use it for the collect of log data.
2. Communication cable : D-sub 9pin (male/female RS-232C straight)
3. Service Software : [DataLogBackup.exe] Service software is downloaded from the projector service homepage.

6. 2. 2. Connection Preparations

1. Confirm and make a note of "Projector ID" and "Transmission speed", "Parity setting".
2. Connect the serial terminals on the projector and the PC by using a communication cable.

Attention:

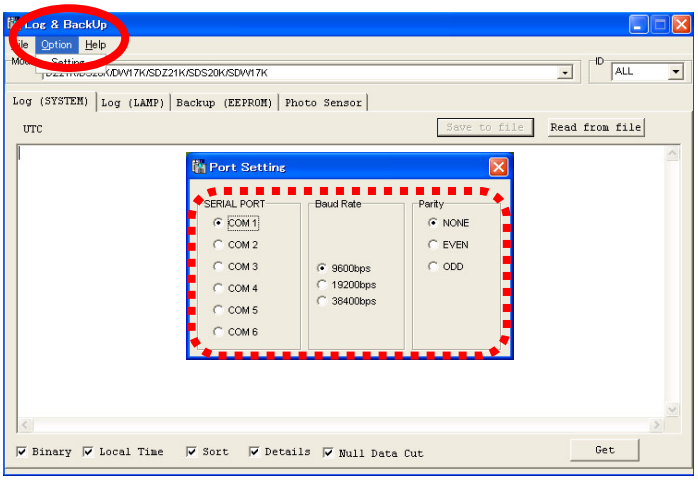
Computer, please set so as not to standby or shutdown.



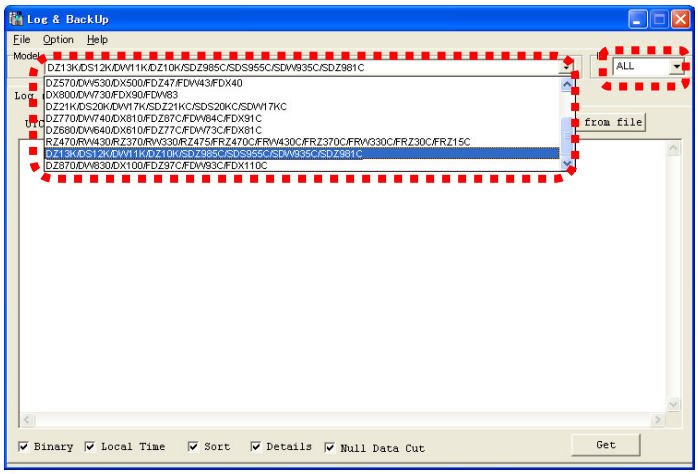
6. 2. 3. Acquisition of log data

1. Switch the projector to "Normal-Standby" mode (POWER indicator is Lighting in red).
2. Start up service software [DataLogBackup.exe] with a computer.

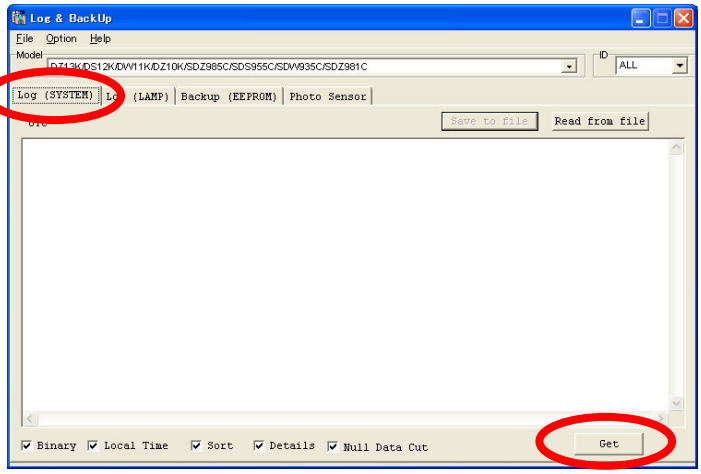
3. Select "Option " → " Setting" and set Serial Port of the computer, Baud Rate and Parity.



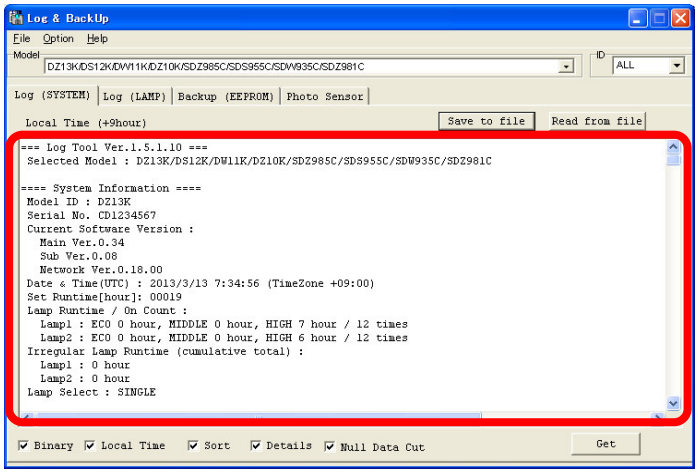
4. Select a model number and ID.



5. Select "Log (SYSTEM)" and click "Get" button



6. Log is displayed.



6. 2. 4. Error cord of system log

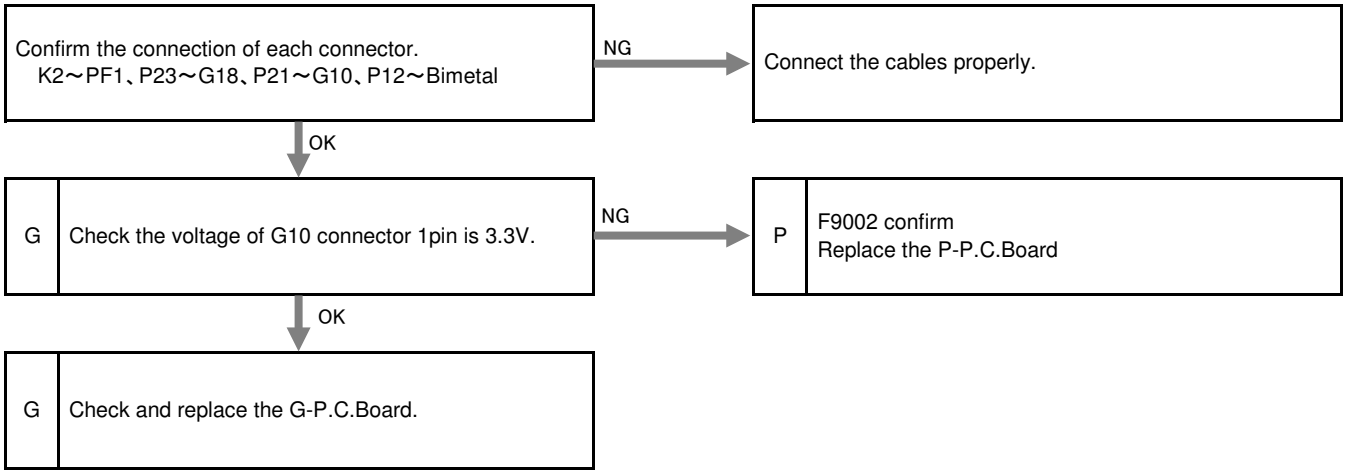
Bit		Error code (hex)	Factor	Description
0		00000000 00000001	Intake air temperature warning	The temperature inside this projector has become high or ambient temperature is too low. - The ventilation holes may be closed. - The ambient temperature in the place of use may be too high or low. - The air filter may accumulate dust.
1		00000000 00000002	Optical module high temperature warning	
2		00000000 00000004	Exhaust air high temperature warning	
3		00000000 00000008	Optical module low temperature warning	
4		00000000 00000010	Intake air temperature error	
5		00000000 00000020	Optical module high temperature error	
6		00000000 00000040	Exhaust air high temperature error	
7		00000000 00000080	Optical module low temperature error	
8		00000000 00000100	LAMP1 runtime warning	Time to replace the lamp unit. (Over 2300 hours, DZ10K is over 3300 hours)
9		00000000 00000200	LAMP2 runtime warning	
10		00000000 00000400	Unused	
11		00000000 00000800	Unused	
12		00000000 00001000	Lamp1 runtime has elapsed	The lamp unit's available time has been exceeded. (Over 2500 hours, DZ10K is over 3500 hours)
13		00000000 00002000	Lamp2 runtime has elapsed	
14		00000000 00004000	Unused	
15		00000000 00008000	Unused	
16		00000000 00010000	Unexpected Lamp1 OFF	Lamp is failure.
17		00000000 00020000	Unexpected Lamp2 OFF	
18		00000000 00040000	Unused	
19		00000000 00080000	Unused	
20		00000000 00100000	Lamp1 failed to light	Failure to Start Lamp. - There is a possibility that has restarted in hot state.
21		00000000 00200000	Lamp2 failed to light	
22		00000000 00400000	Unused	
23		00000000 00800000	Unused	
24		00000000 01000000	Lamp1 not installed	Lamp is not installed. (Lamp memory can not be read)
25		00000000 02000000	Lamp2 not installed	
26		00000000 04000000	Unused	
27		00000000 08000000	Unused	
28		00000000 10000000	Low AC voltage warning	Low AC voltage.
29		00000000 20000000	Cover open error	Rear cover is not installed.
30		00000000 40000000	Special filter setting	EXTRA OPTION→AIR FILTER "SPECIAL"
31	LOWER	00000000 80000000	Luminance sensor error	Luminance sensor proportion is abnormal. Luminance is abnormal.
32		0000000100000000	Intake air thermosensor disconnected	Intake air thermosensor has breaking of wire, or connector (M11/RL10) is disconnected.
33		00000002 00000000	Optical module thermosensor disconnected	DMD thermosensor has breaking of wire, or connector (G16) is disconnected.
34		00000004 00000000	Exhaust air thermosensor disconnected	Exhaust air thermosensor has breaking of wire, or connector (M11/R34) is disconnected.
35		00000008 00000000	Airflow sensor disconnected	Airflow sensor has breaking of wire, or connector (M21/RL9) is disconnected.
36		00000010 00000000	Filter clogged warning	Filter may accumulate dust.
37		00000020 00000000	Battery replacement for the internal clock	Remaining battery level is low.
38		00000040 00000000	Angle sensor error	Angle sensor is failure (IC3517).
39		00000080 00000000	Portrait installation warning	Installed the connecting terminals surface is not downward.
40		00000100 00000000	Air filter unit warning	Air filter unit not installed.
41		00000200 00000000	Filter clogged error	Air filter is clogged.
42		00000400 00000000	FAN1 (Exhaust-R) error/warning	Fan or fan drive circuit is failure. Fan replacement time.
43		00000800 00000000	FAN2 (Exhaust-C) error/warning	
44		00001000 00000000	FAN3 (Exhaust-L) error/warning	
45		00002000 00000000	FAN4 (Intake1) error/warning	
46		00004000 00000000	FAN5 (Intake2) error/warning	
47		00008000 00000000	FAN6 (Lamp1) error/warning	
48		00010000 00000000	FAN7 (Lamp2) error/warning	
49		00020000 00000000	FAN8 (Power) error/warning	
50		00040000 00000000	FAN9 (Ballast) error/warning	
51		00080000 00000000	FAN10 (Composition Mirror) error/warning	
52		00100000 00000000	FAN11 (DMD Exhaust) error/warning	
53		00200000 00000000	FAN12 (Color prism) error/warning	
54		00400000 00000000	FAN13 (DMD1) error/warning	
55		00800000 00000000	FAN14 (DMD2) error/warning	
56		01000000 00000000	Unused	
57		02000000 00000000	Unused	
58		04000000 00000000	Unused	
59		08000000 00000000	Unused	
60		10000000 00000000	Unused	

61	LOWER	20000000 00000000	Unused	
62		40000000 00000000	Unused	
63		80000000 00000000	Unused	
64	UPPER	00000000 00000001	Portrait lamp warning	Portrait mode only lamp is not in use.
65		00000000 00000002	Unused	
66		00000000 00000004	Unused	
67		00000000 00000008	Dynamic iris error	Iris abnormal operation.
68		00000000 00000010	Unused	
69		00000000 00000020	Unused	
70		00000000 00000040	Unused	
71		00000000 00000080	Unused	
72		00000000 00000100	Lamp 1 memory error	Lamp memory has not been initialized.
73		00000000 00000200	Lamp 2 memory error	
74		00000000 00000400	Unused	
75		00000000 00000800	Unused	
76		00000000 00001000	Unused	
77		00000000 00002000	Unused	
78		00000000 00004000	Unused	
79		00000000 00008000	Unused	
80		00000000 00010000	FPGA 1/2 configuration error	Signal unit is failure.
81		00000000 00020000	FPGA 3 configuration error	Signal unit is failure.
82		00000000 00040000	Unused	
83		00000000 00080000	Unused	
84		00000000 00100000	Unused	
85		00000000 00200000	Unused	
86		00000000 00400000	Lens mounter error	Stepping-motor is failure. Limit position detection sensor is failure.
87		00000000 00800000	Ballast1 communication error	Ballast1 communication error.
88		00000000 01000000	Ballast2 communication error	Ballast2 communication error.
89		00000000 02000000	Unused	
90		00000000 04000000	Unused	
91		00000000 08000000	Unused	
92		00000000 10000000	Unused	
93		00000000 20000000	Unused	
94		00000000 40000000	Unused	
95		00000000 80000000	Installation angle warning	Tilted at an angle that exceeds ±15° from the
96		00000001 00000000	Unused	
97		00000002 00000000	Network microcomputer communication error	Network microcomputer no response.
98		00000004 00000000	Sub microcomputer (R8) communication error	Sub microcomputer no response.
99		00000008 00000000	IIC communication error 1(RTC)	Appropriate device malfunction of signal unit.
100		00000010 00000000	IIC communication error 2(EEPROM)	
101		00000020 00000000	IIC communication error 3(LAMP1 EEPROM)	
102		00000040 00000000	IIC communication error 4(LAMP2 EEPROM)	
103		00000080 00000000	Unused	
104		00000100 00000000	Unused	
105		00000200 00000000	IIC communication error 7(EDID DIGITAL)	Appropriate device malfunction of signal unit.
106		00000400 00000000	IIC communication error 8(EDID ANALOG)	
107		00000800 00000000	IIC communication error 9(ADC1)	
108		00001000 00000000	IIC communication error 10(ADC2)	
109		00002000 00000000	IIC communication error 11(ACCELERATION	
110		00004000 00000000	IIC communication error 12(OPTICAL	Luminance sensor error, Connector disconnection(M31/RL14).
111		00008000 00000000	Unused	
112		00010000 00000000	Unused	
113		00020000 00000000	Unused	
114		00040000 00000000	Unused	
115		00080000 00000000	Unused	
116		00100000 00000000	Unused	
117		00200000 00000000	Unused	
118		00400000 00000000	Unused	
119		00800000 00000000	Unused	
120		01000000 00000000	Unused	
121		02000000 00000000	Unused	
122		04000000 00000000	FM-P.C.B communication error	Formatter communication error
123		08000000 00000000	WF-P.C.B(GEOMERTY) communication error	GEOMETORY IC abnormal
124		10000000 00000000	Unused	
125		20000000 00000000	Lamp type is mixed warning	Lamps of different types have been mounted.
126		40000000 00000000	Unused	
127		80000000 00000000	Internal error	Main microcomputer circuit is abnormal

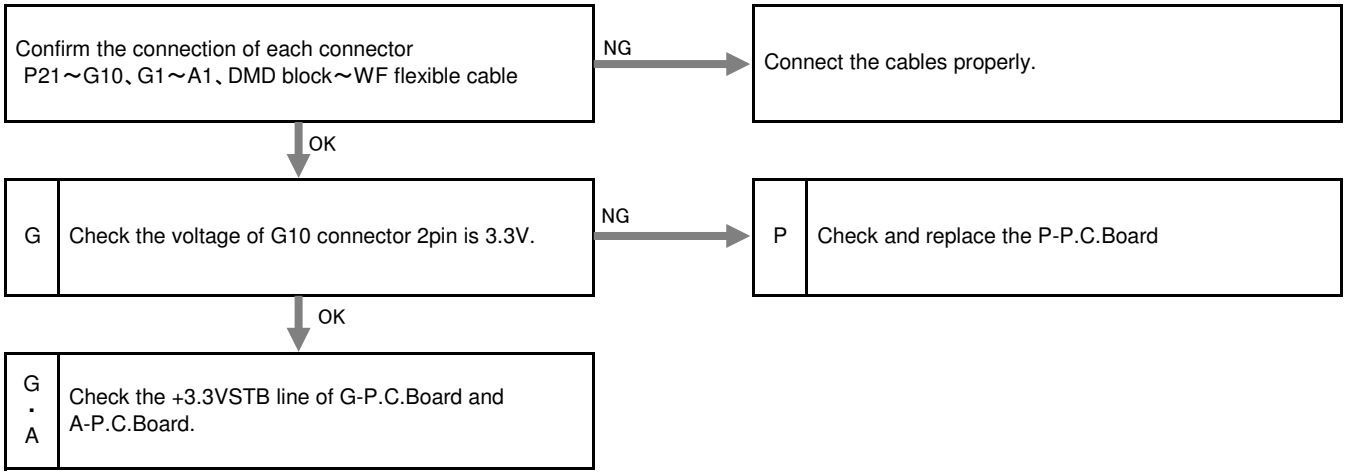
6. 3. Troubleshooting

* The letters in the left of inspection items indicate the P.C. Boards related to their respective descriptions.
* Inspection should be done with the rear cover attached. (R31 connector = inter lock detection)

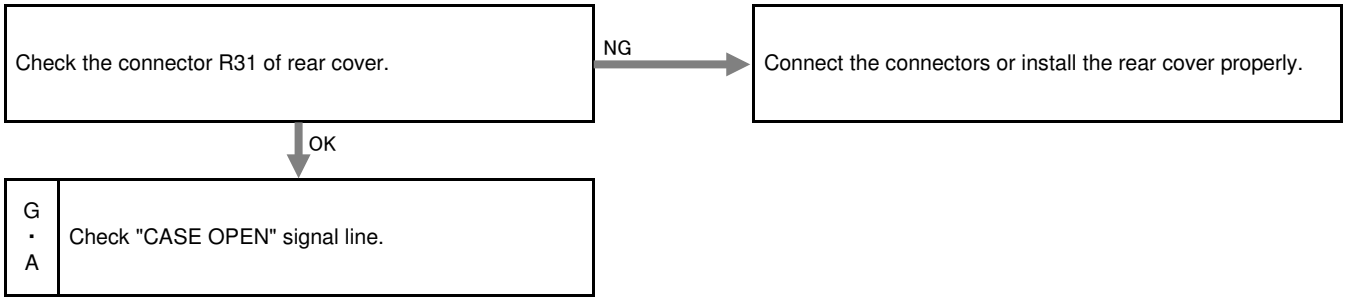
■ Power does not turn ON. (Power indicator does not light in red.)



■ Power does not turn ON. (Power indicator blink 3 times)

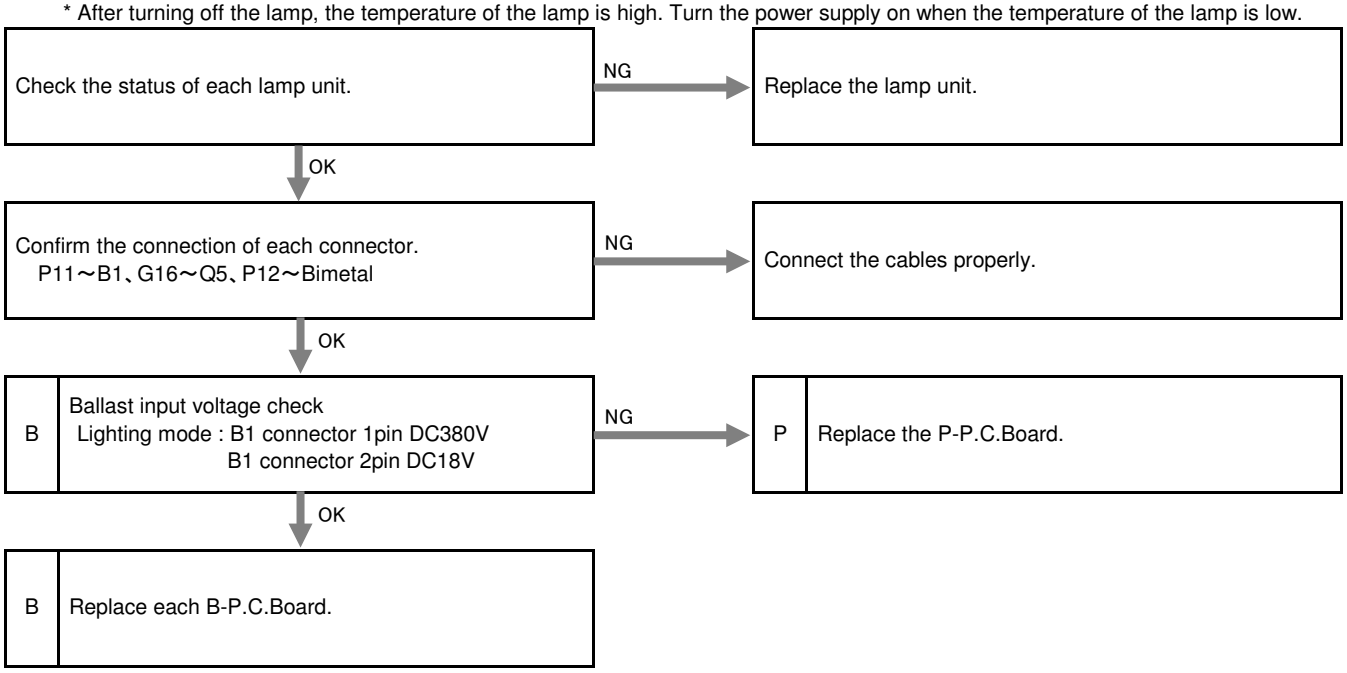


■ Power does not turn ON. (Power indicator blink 1 times)

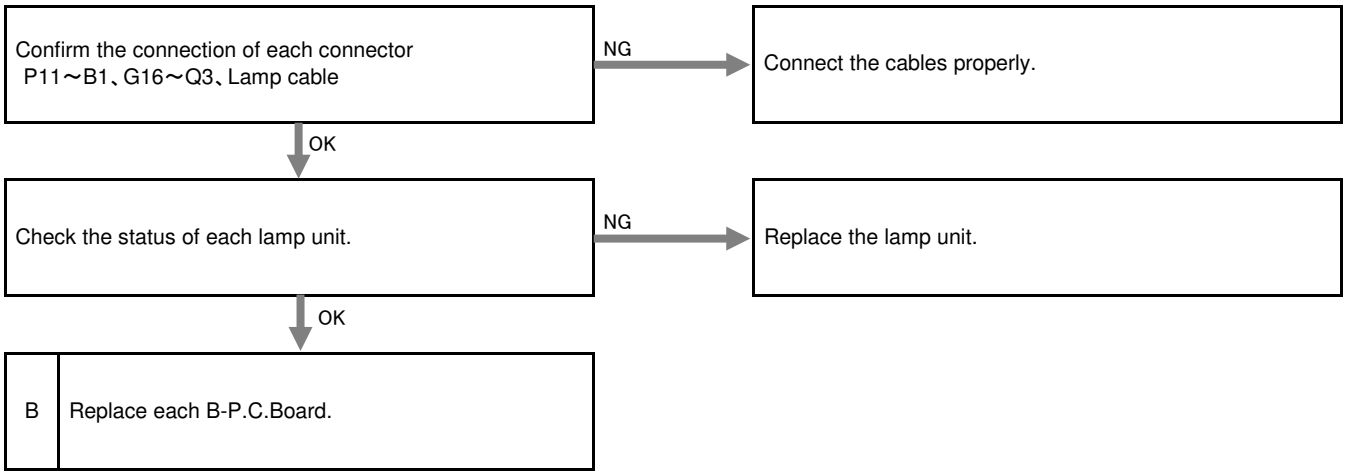


■ Lamp does not turn ON. (Lamp1 and Lamp2 indicator blink 3 times)

*The decline of AC voltage or instant blackout makes the lamp turned off. Confirm the situation of power supply.
* After turning off the lamp, the temperature of the lamp is high. Turn the power supply on when the temperature of the lamp is low.

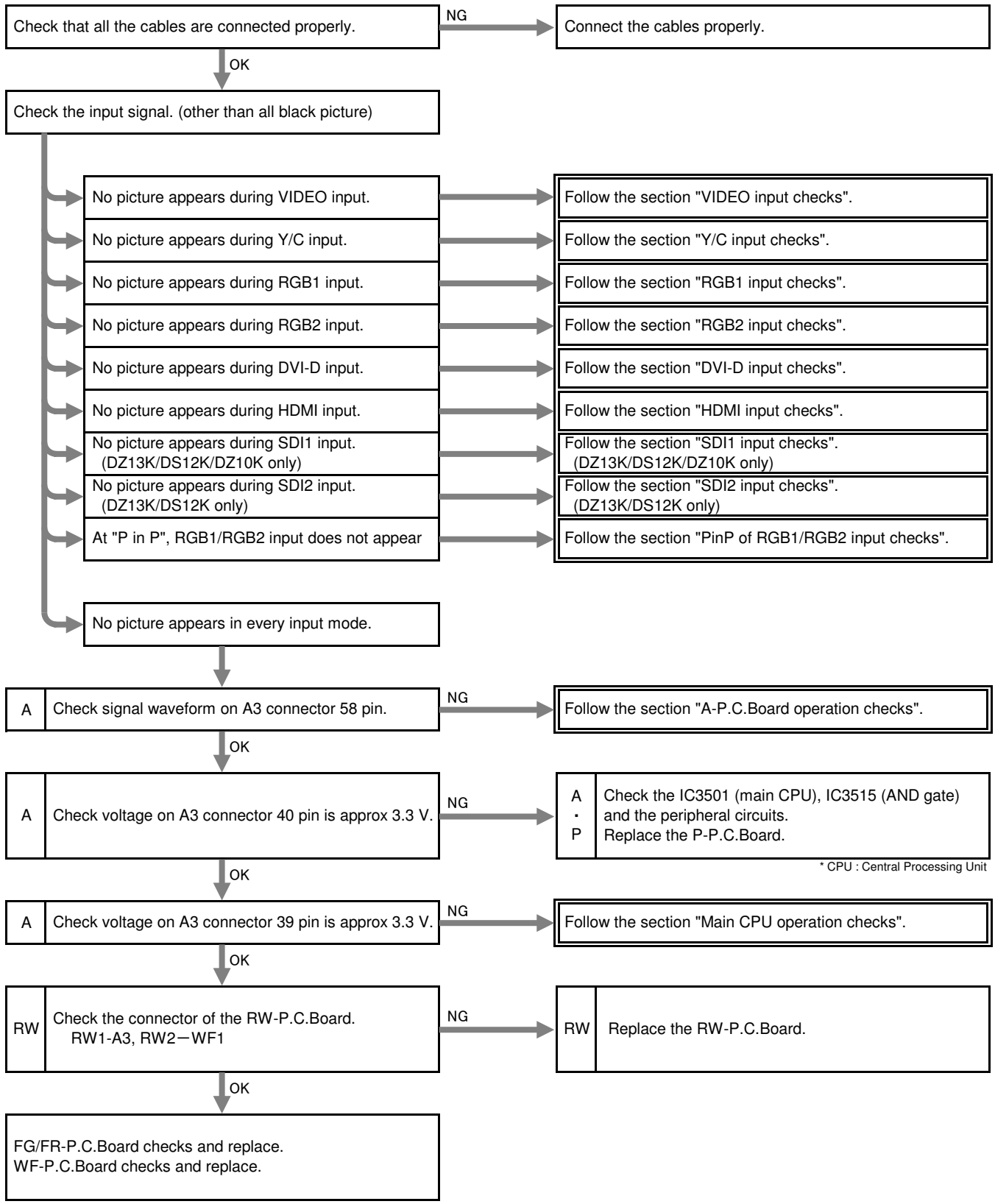


■ Lamp does not turn ON. (Lamp1 or Lamp2 either indicator blink 3 times)



<reference>
・If the Lamp of the two does not light together, please check P-P.C.Board.
・If the Lamp of only one does not light, confirm the replace the lamp2 and lamp1.
Distinction of ballast fault or lamp fault can be performed.

■ No image appears (picture is abnormal)



● VIDEO input checks

Check the picture condition Y/C, RGB1, RGB2, HDMI input.
If all four pictures are abnormal, go to NG.

NG → Follow the section "A-P.C.Board operation checks".

OK ↓

A | Check the waveform at C3013.

NG → A | Check and repair FL3001,IC3062 and peripheral circuits.

OK ↓

A | Check and repair IC3501, X3501 and the peripheral circuits.

● Y/C input checks

Check the picture condition VIDEO,RGB1,RGB2,HDMI input.
If all four pictures are abnormal, go to NG.

NG → Follow the section "A-P.C.Board operation checks".

OK ↓

A | Check the waveform at C3011(Y), C3012(C).

NG → A | Check and repair FL3003, FL3004, IC3062 and peripheral circuits.

OK ↓

A | Check and repair IC3501, X3501 and the peripheral circuits.

● RGB1 input checks

Check the picture condition VIDEO, RGB2, Y/C, HDMI input.
If all four pictures are abnormal, go to NG.

NG → A | Check and repair FL3002, FL3003, FL3004, Q3005, Q3006, and peripheral circuits.

OK ↓

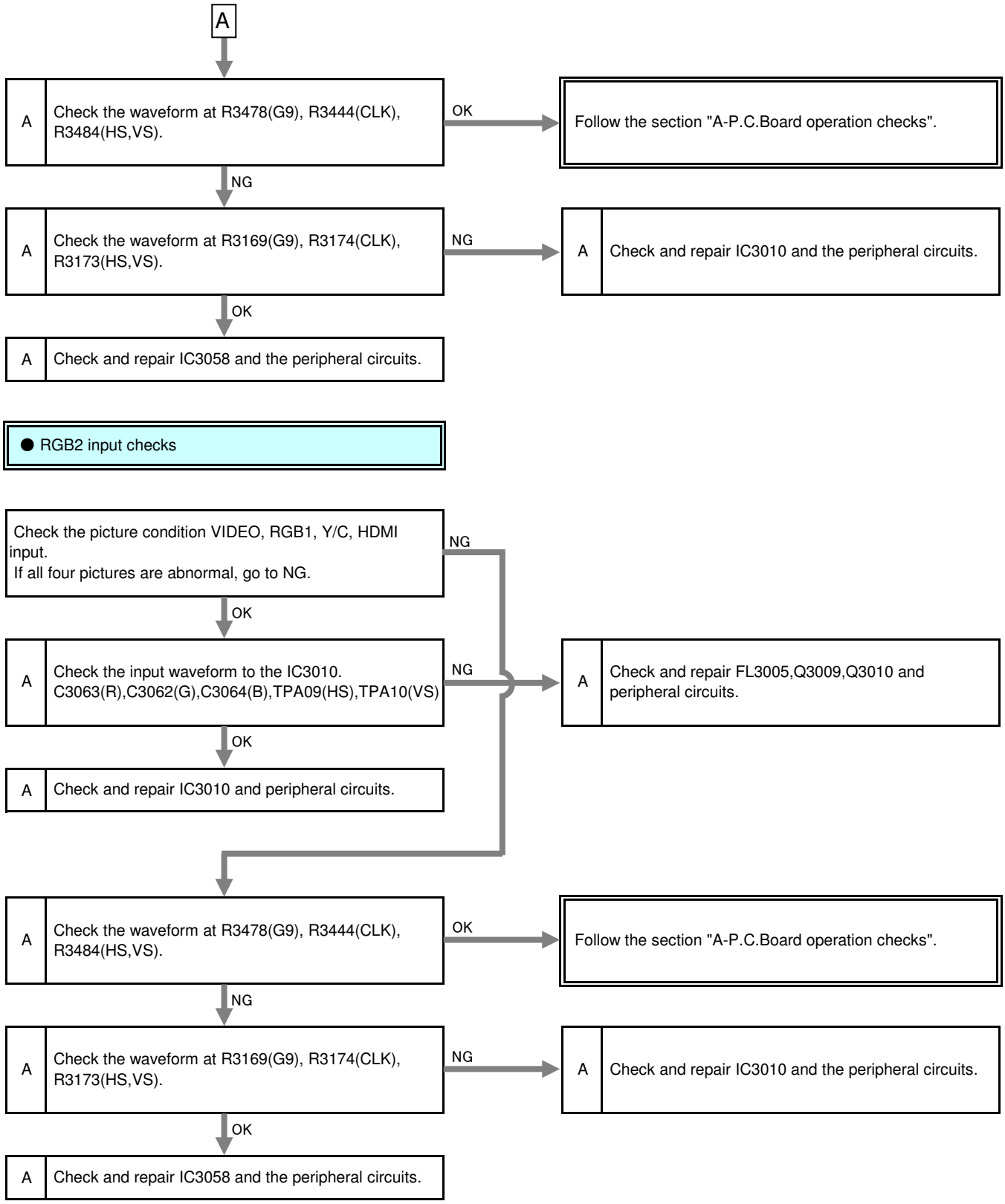
A | Check the input waveform to the IC3010.
C3059(R),C3058(G),C3060(B),TPA09(HS),TPA10(VS)

NG → A | Check and repair FL3002, FL3003, FL3004, Q3005, Q3006, and peripheral circuits.

OK ↓

A | Check and repair IC3010 and peripheral circuits.

↓ A


A
A
Check the waveform at R3478(G9), R3444(CLK), R3484(HS,VS).
OK
Follow the section "A-P.C.Board operation checks".
NG
A
Check the waveform at R3169(G9), R3174(CLK), R3173(HS,VS).
NG
A
Check and repair IC3010 and the peripheral circuits.
OK
A
Check and repair IC3058 and the peripheral circuits.
● RGB2 input checks
Check the picture condition VIDEO, RGB1, Y/C, HDMI input.
If all four pictures are abnormal, go to NG.
NG
OK
A
Check the input waveform to the IC3010.
C3063(R),C3062(G),C3064(B),TPA09(HS),TPA10(VS)
NG
A
Check and repair FL3005,Q3009,Q3010 and peripheral circuits.
OK
A
Check and repair IC3010 and peripheral circuits.
A
Check the waveform at R3478(G9), R3444(CLK), R3484(HS,VS).
OK
Follow the section "A-P.C.Board operation checks".
NG
A
Check the waveform at R3169(G9), R3174(CLK), R3173(HS,VS).
NG
A
Check and repair IC3010 and the peripheral circuits.
OK
A
Check and repair IC3058 and the peripheral circuits.

● DVI-D input checks

Check the picture of SDI2 input.
Or select the "P in P" (main RGB1 (no input) and sub RGB2),
check the picture of RGB2.

NG

OK

A | Check the waveform on R3259(AE_ACT).

NG → A | Check circuits between JK3005 and IC3020.

OK

A | Check and repair R3493(ACT), IC3058 and the peripheral circuits.

A | Check the waveform at R3487(G9),R3446(CLK),R3493(HS,VS).

OK → Follow the section "A-P.C.Board operation checks".

NG

A | Check the waveform at R3289(G9),R3260(CLK),R3259(HS,VS)

NG → A | Check and repair IC3020 and the peripheral circuits.

OK

A | Check and repair IC3058 and the peripheral circuits.

● HDMI input checks

Check the picture condition RGB1,RGB2, input.
If all pictures are abnormal, go to NG.

NG

OK

A | Check the waveform on R3173(ACT).

NG → A | Check circuits between JK3006 and IC3010.

OK

A | Check and repair R3484(ACT), IC3058 and the peripheral circuits.

A | Check the waveform at R3478(G9), R3444(CLK), R3484(HS,VS).

OK → Follow the section "A-P.C.Board operation checks".

NG

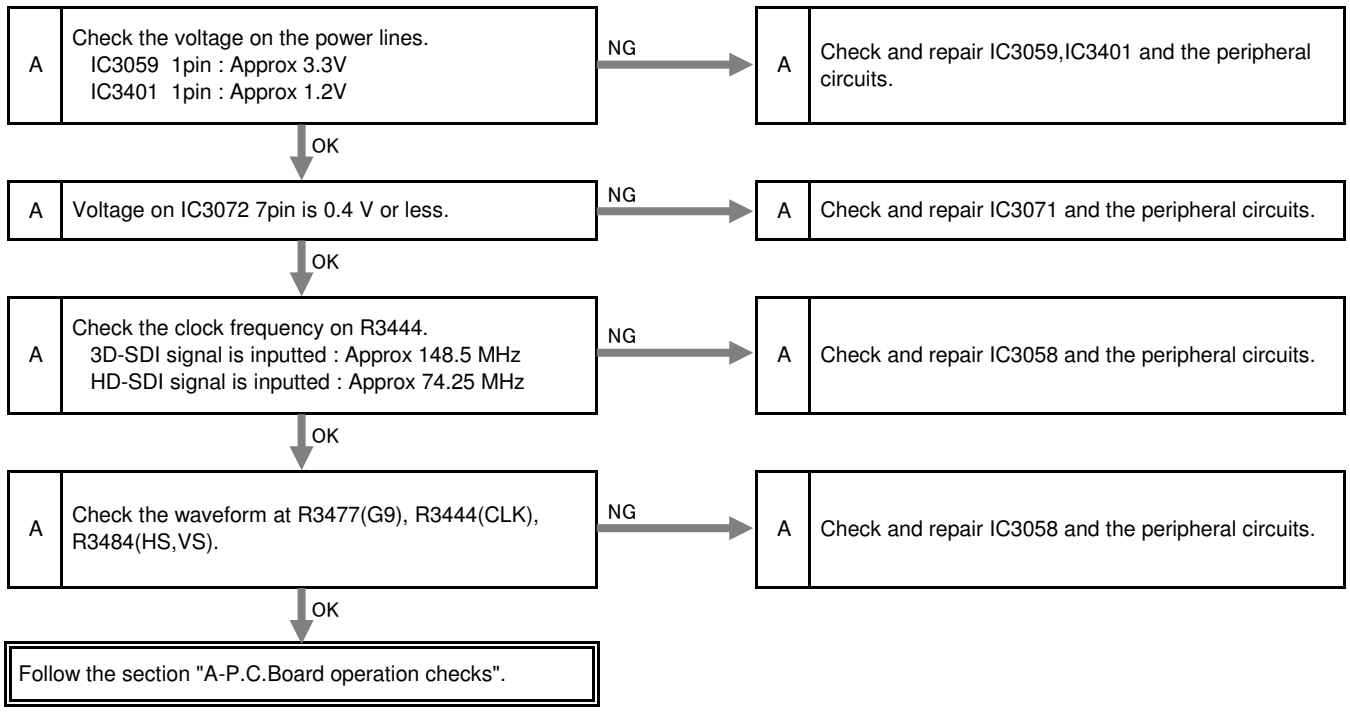
A | Check the waveform at R3169(G9), R3174(CLK), R3173(HS,VS).

NG → A | Check and repair IC3010 and the peripheral circuits.

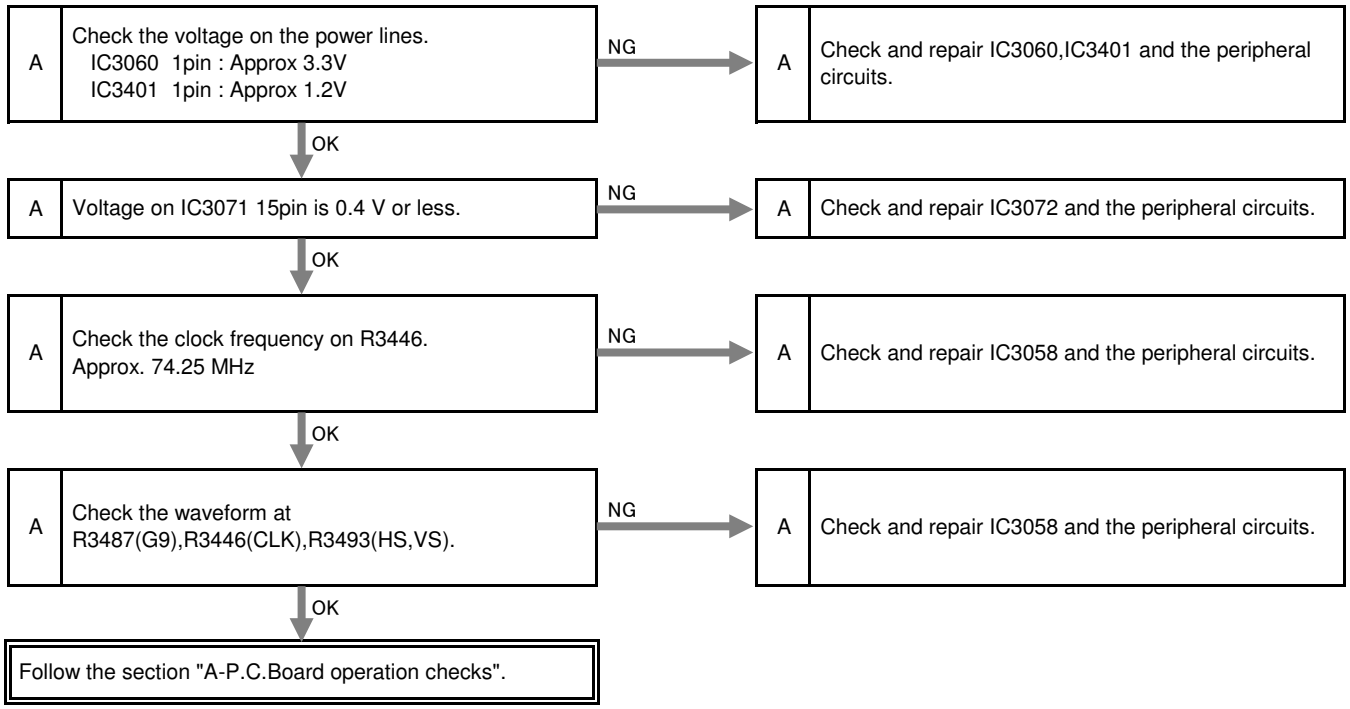
OK

A | Check and repair IC3058 and the peripheral circuits.

● SDI1 input checks (DZ13K/DS12K/DZ10K only)



● SDI2 input checks (DZ13K/DS12K only)



● PinP of RGB1/RGB2 input checks

Turn off a PinP mode.
Check the picture condition RGB1, RGB2 input.

NG → Follow the section "RGB1 input checks".
Follow the section "RGB2 input checks".

OK ↓

A | Check the waveform at R3487(G9),R3446(CLK),R3493(HS,VS).

OK → Follow the section "A-P.C.Board operation checks".

NG ↓

A | Check the waveform at R3289(G9),R3260(CLK),R3259(HS,VS).

OK → A | Check and repair IC3058 and the peripheral circuits.

NG ↓

A | Check the waveform at C3166(R),C3165(G),C3167(B),TPA07(HS),TPA08(VS)

OK → A | Check and repair IC3058 and the peripheral circuits.

NG ↓

A | Check and repair IC3064(Sync SW) and the peripheral circuits.

● A-P.C.Board operation checks

A | Check the clock waveform.
R3577 : 24.5MH
R3573 : 39.8MH

NG → A | Check and repair IC3501,X3502 and the peripheral circuits.

OK ↓

A | The voltage of R3671 is 1.2V.

NG → A | Check and repair IC3511 and the peripheral circuits.

OK ↓

A | The voltage of R3695 is 1.5V.

NG → A | Check and repair IC3510 and the peripheral circuits.

OK ↓

A | The voltage of R3759 is 0.75V.

NG → A | Check and repair IC3520 and the peripheral circuits.

OK ↓

A | Check the waveform around IC3501 (no input).
A3 connector 57pin(CLK) : (DZ21K) 159.5MHz,
(DS20K,DW17K) 103.4MHz

NG → A | Check and repair IC3501 and the peripheral circuits.

OK ↓

RW | Check the connector of the RW-P.C.Board.
RW1-A3, RW2－WF1

NG → RW | Replace the RW-P.C.Board.

OK ↓

FG/FR-P.C.Board checks and replace.
WF-P.C.Board checks and replace.

● Main CPU operation checks

* CPU : Central Processing Unit

A	Check the clock waveform. R3575 : 35.455MHz	NG →	A	Check and repair X3402 and the peripheral circuits.
↓ OK				
G	The voltage of G10 connector. 2pin : 3.3V, 6pin : 5V	NG →		Check and Replace cable between connectors P21 and G10. Replace the P-P.C.Board.
↓ OK				
A	The voltage of R3672 is 1.2V.	NG →	A	Check and repair IC3512 and the peripheral circuits.
↓ OK				
A	Check in order of the following. IC3508(FLASH ROM) and peripheral circuits. IC3513(SRAM) and peripheral circuits. IC3501(MAIN CPU)			

■ Remote control does not respond

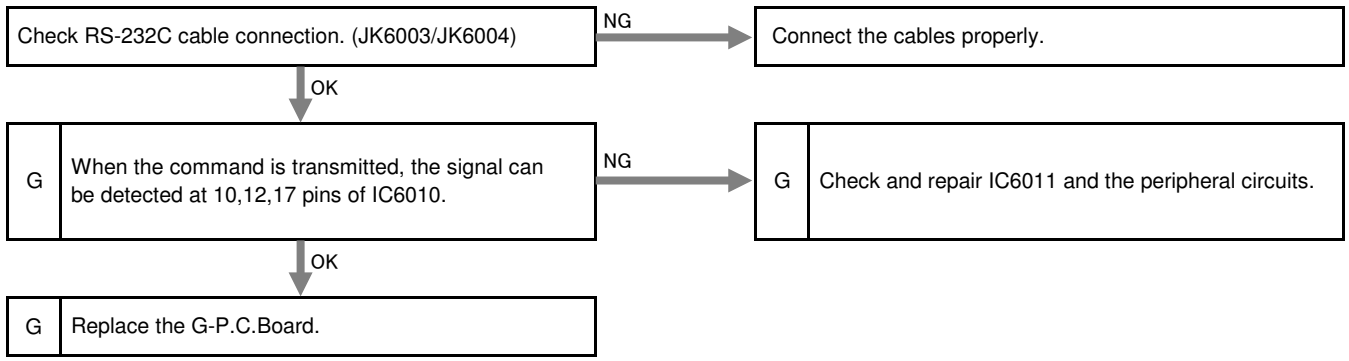
● Cannot control from the front side of the main unit.

G	When remote control is operated, the signal can be detected at G17 connector 5 pin.	NG →	G ・ R	Check the cable between connectors G17 and R1 (No breaking of wire, etc.). Replace the R-P.C.Board.
↓ OK				
G	When remote control is operated, the signal can be detected at 6 pin of IC6012.	NG →	G	Check and repair IC6012,JK6001,Q6008 and the peripheral circuits.
↓ OK				
G	Check IC6001. Replace the G-P.C.Board.			

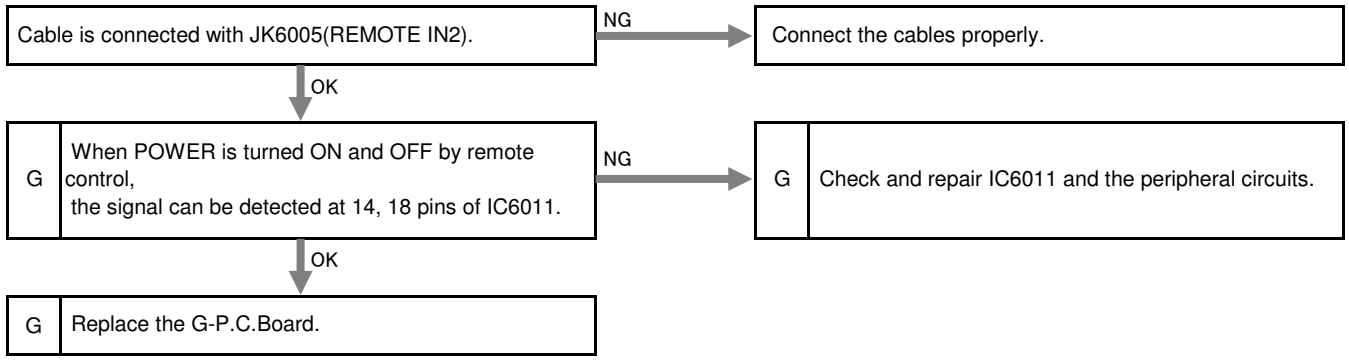
● Cannot control from the rear side of the main unit.

G	When remote control is operated, the signal can be detected at G19 connector 3 pin.	NG →	G R2	Check the cable between connectors G19 and R21. Replace the R2-P.C.Board.
↓ OK				
G	When remote control is operated, the signal can be detected at 8 pin of IC6012.	NG →	G	Check and repair IC6012 and the peripheral circuits.
↓ OK				
G	Replace the G-P.C.Board.			

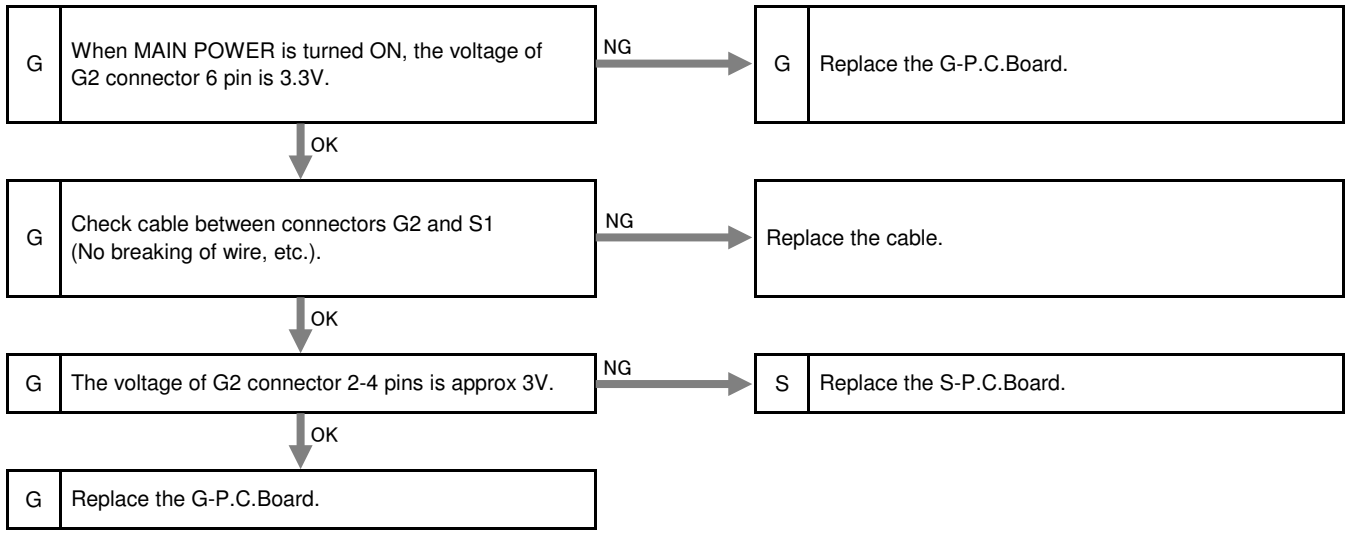
■ SERIAL IN/OUT does not respond



■ REMOTE 2 IN does not respond



■ Controls of side panel does not respond



SECTION 2

Disassembly Procedures

Model No. **PT-DZ13KU / DZ13KE**
PT-DS12KU / DS12KE
PT-DW11KU / DW11KE
PT-DZ10KU / DZ10KE

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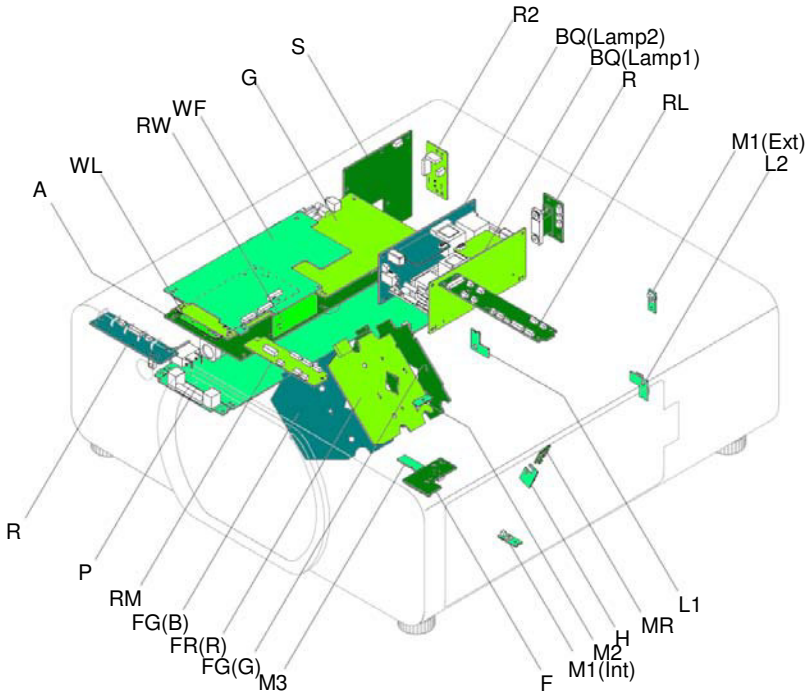
   3. 6. RL-P.C.Board
   3. 7. R-P.C.Board/RM-P.C.Board

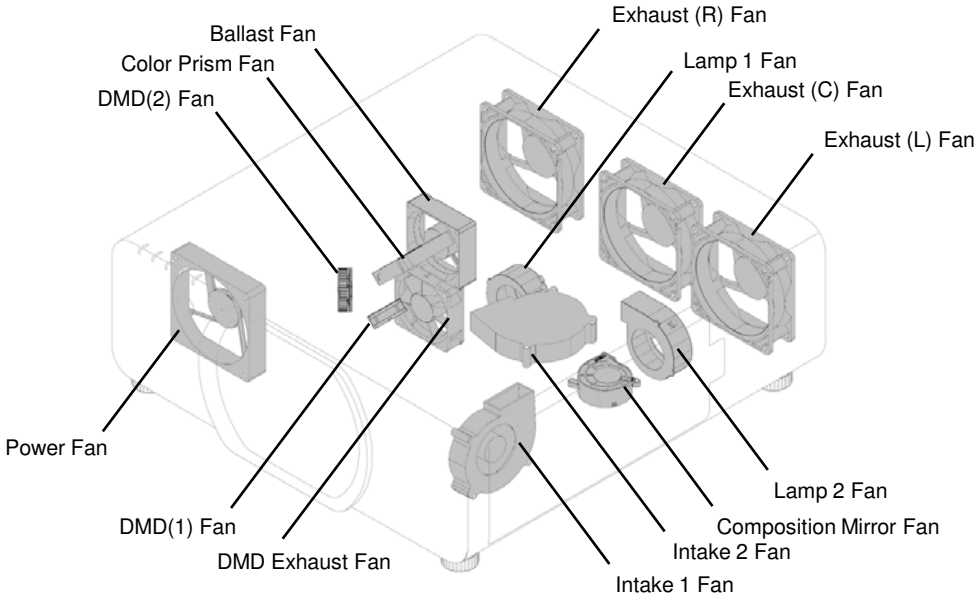
1. Parts Location

1. 1. Electrical parts location (P.C.Board)

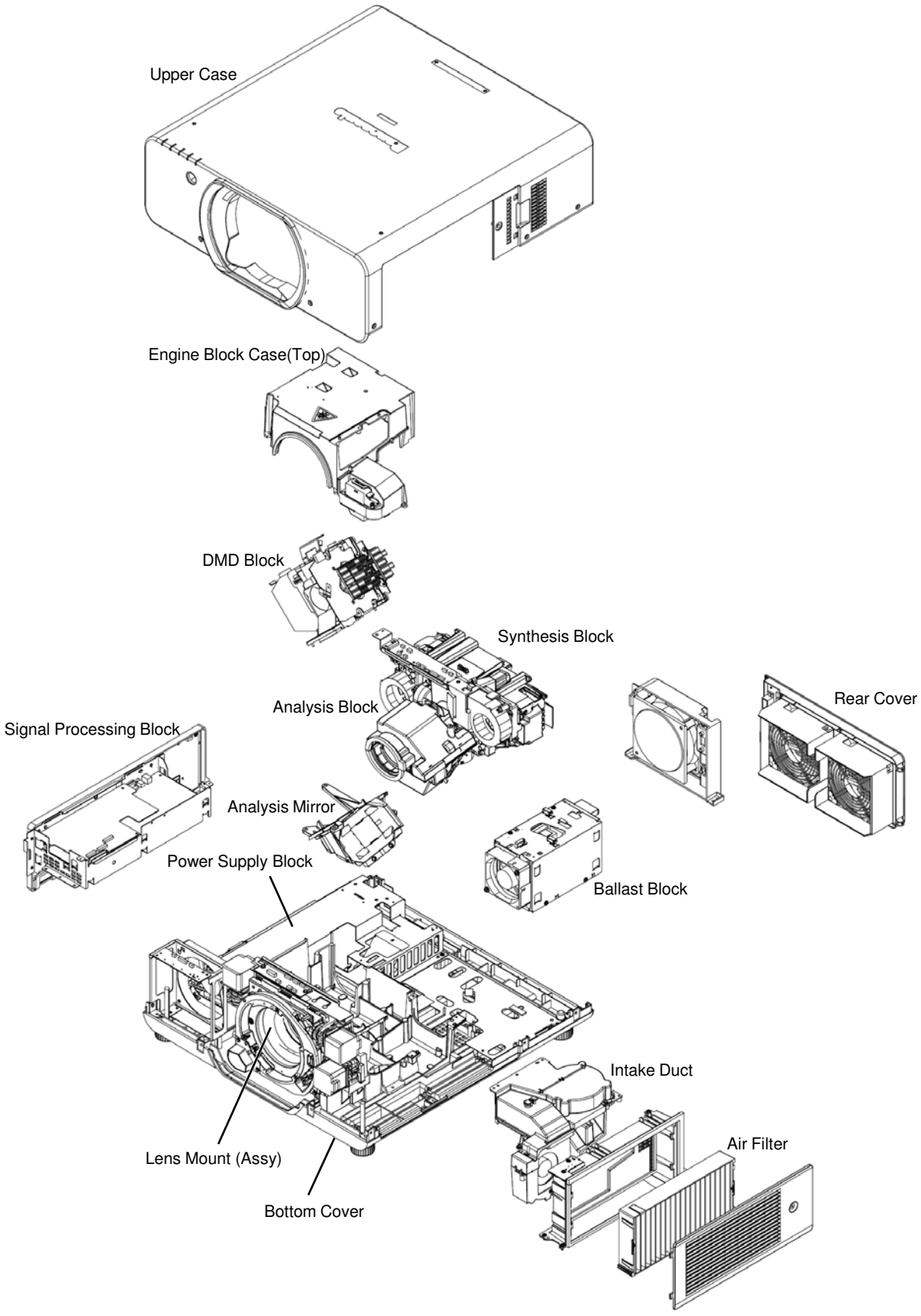


Board Name	Function summary	Board Name	Function summary
A	Image processing system / CPU	RW	Relay Board (A-WF)
G	Control terminal / Fan,Iris,Motor Drive	R	Front IR Receiver / Status LED
W F	Geometric Adjustment (*DZ/DS only)	R 2	Rear IR Receiver
W L	Network (LAN)	R 3	Rear cover connection / Interlock
S	Control Panel	R L	Relay Board (Fan)
FG/FR	DMD drive	R M	Relay Board (Lens Mounter Motor)
BQ	Ballast power / Ballast control	M 1	Temp sensor (Intake/Exhaust)
P	AC Inlet / Power supply (DC-DC)	M 2	Temp sensor (Air flow)
F	Filter sensor	M 3	Luminance Sensor
L1/L2	Lamp memory connection	H/MR	Iris posistion sensor / Iris relay board

1. 2. Electrical parts location (Fan)



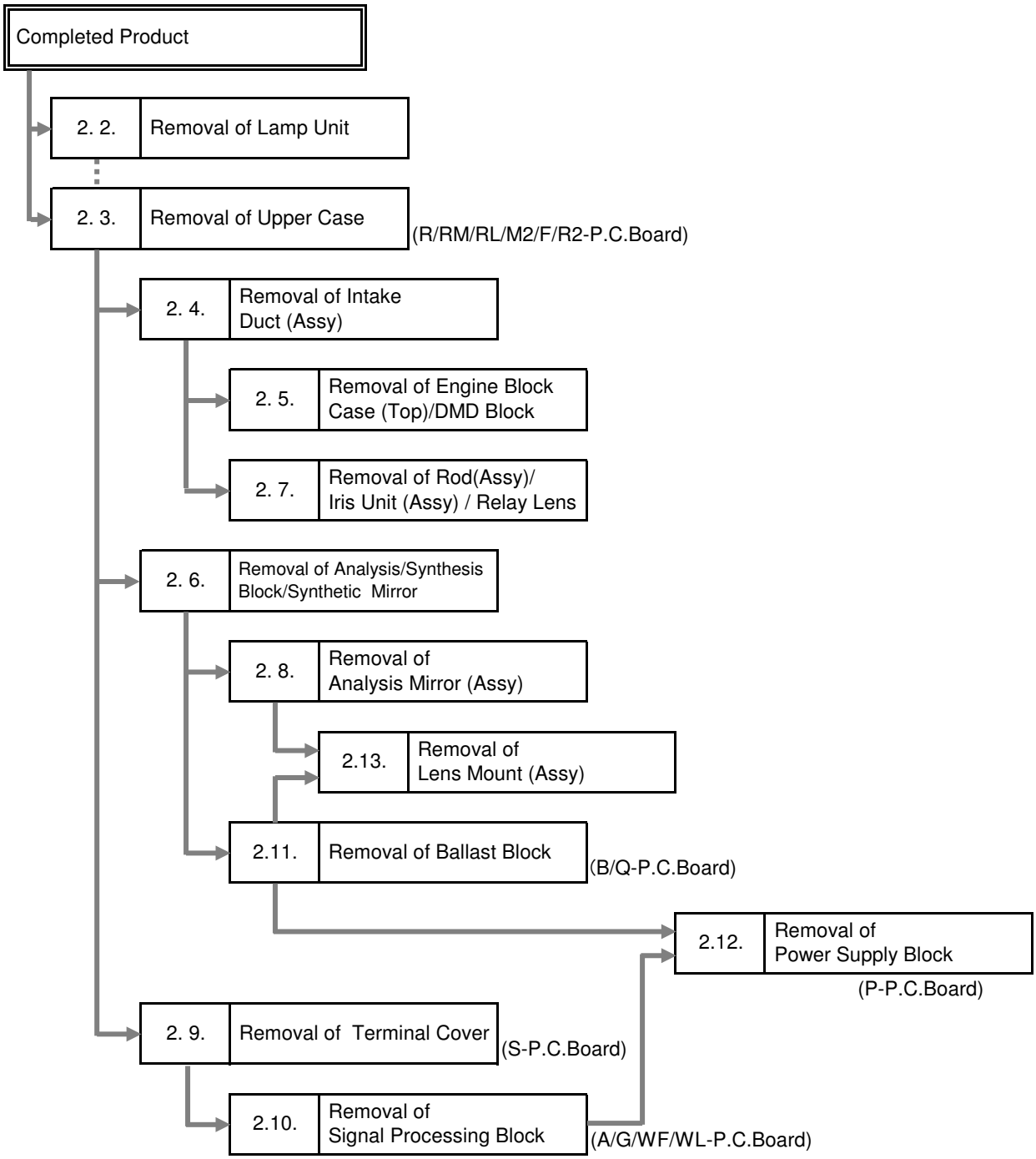
1. 3. Mechanism element parts location



2. Disassembly Instructions

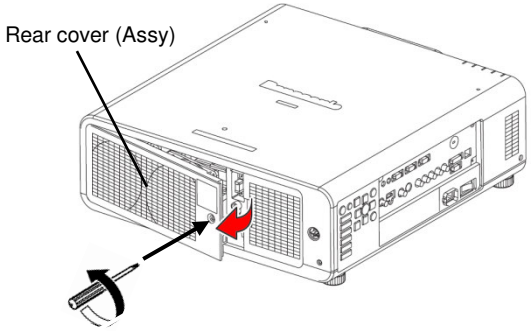
2. 1. Flowchart for Disassembly

* Before Disassembly the projector, turn off the POWER switch and disconnect the power plug from the wall outlet.
* To assemble, reverse the disassembly procedures.
* When tore off sticky tapes, please use a new thing without reusing it on the occasion of assembling.

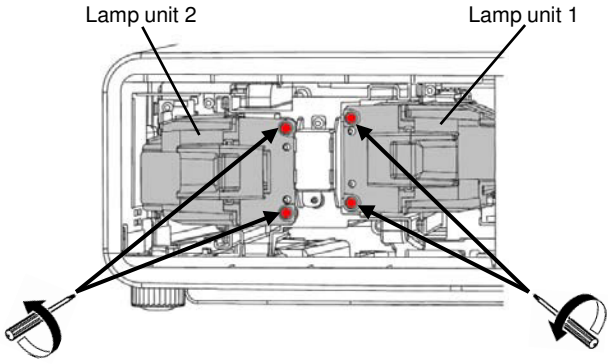


2. 2. Removal of Lamp Unit

1. Loosen the 1 screw until it idles, then remove the Rear cover (Assy).

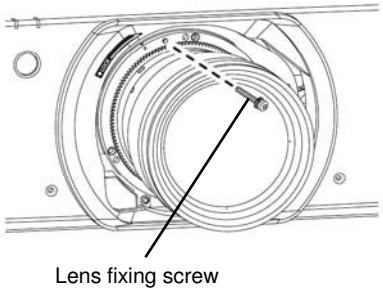


2. Loosen the 2 screws until they idle, hold the handles and pull the lamp unit out from the main unit.



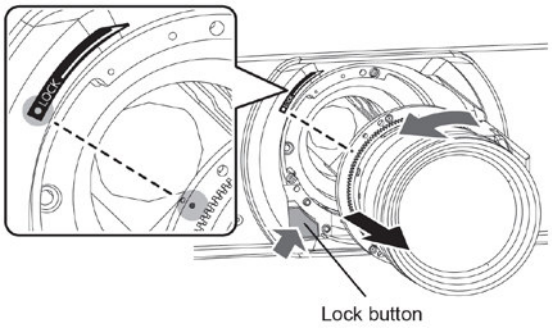
2. 3. Removal of Upper Case (R/RM/RL/M2/F/R2 -P.C.Board)

1. Remove the projection lens. (* Move the lens to the home position before removing the projection lens.)
   1) Remove the “Lens fixing screw”. (* Some types of the lens do not have the projection lens fixing screw hole.)



Remove the first screw on the right side of the mark (orange) of the projection lens with a Phillips-head screwdriver.

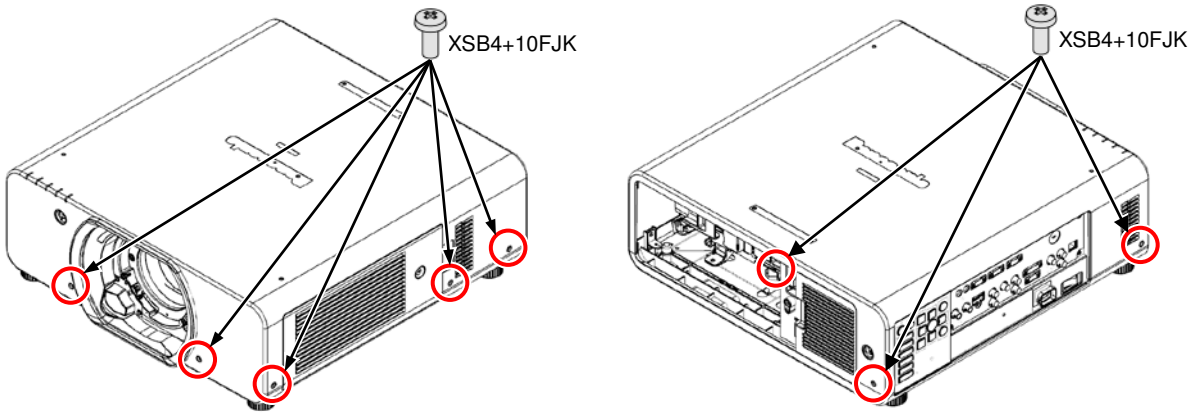
   2) While holding down the “LOCK button”, turn the projection lens counterclockwise, and then pull it off.

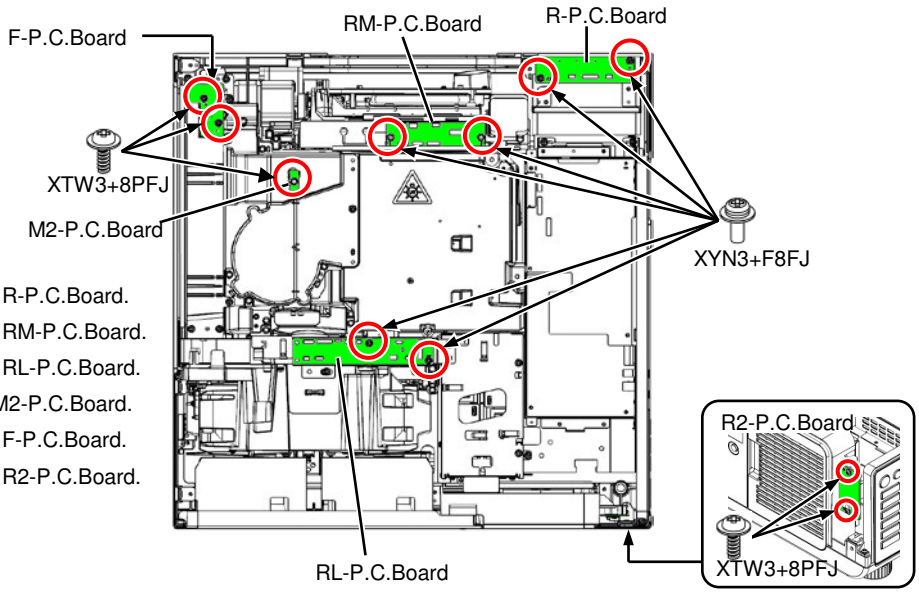


Turn the projection lens counterclockwise until its mark (orange) is aligned with the mark on the projector (on the left side of LOCK).

2. Loosen the 1 screw until it idles, then remove the Rear cover (Assy).

3. Unscrew the 8 screws and remove the upper case.

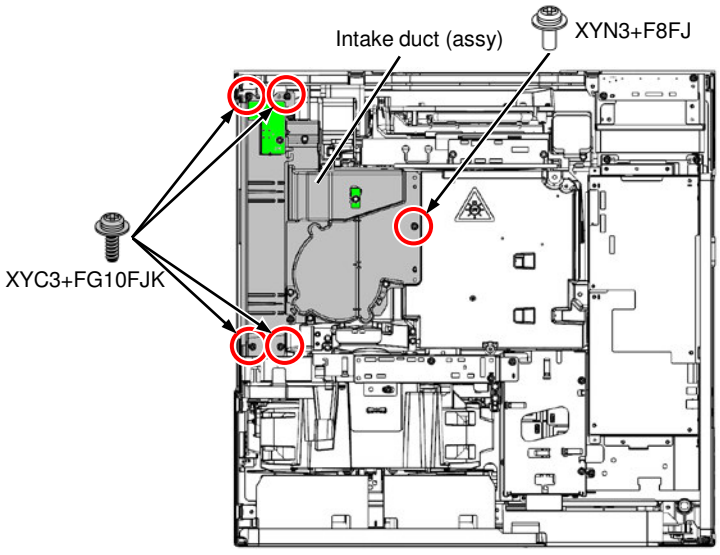




Unscrew the 2 screws and remove the R-P.C.Board.
Unscrew the 2 screws and remove the RM-P.C.Board.
Unscrew the 2 screws and remove the RL-P.C.Board.
Unscrew the 1 screw and remove the M2-P.C.Board.
Unscrew the 2 screws and remove the F-P.C.Board.
Unscrew the 2 screws and remove the R2-P.C.Board.

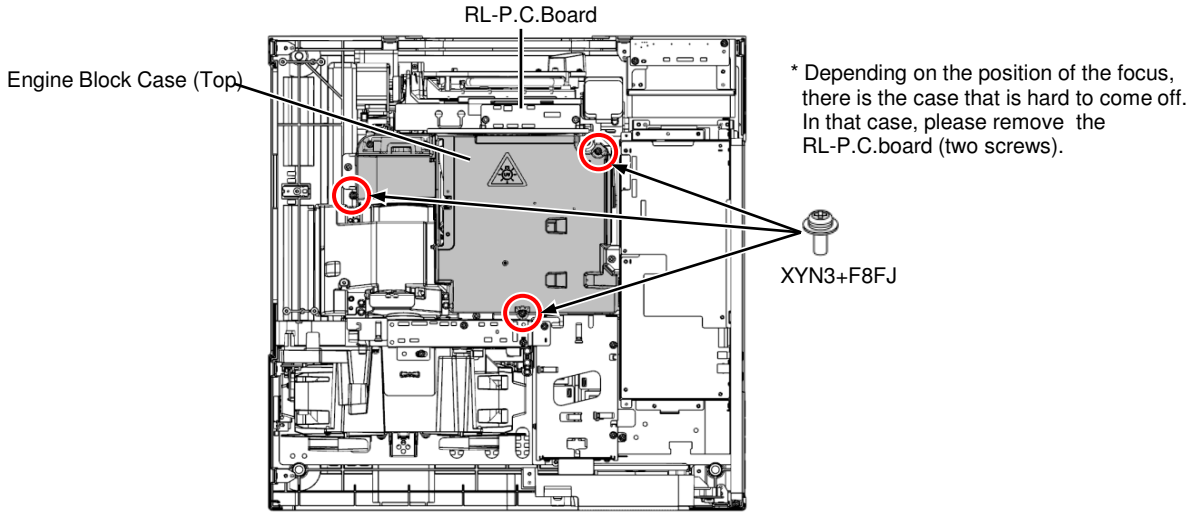
2. 4. Removal of Intake Duct (Assy)

1. Remove the upper case according to the section 2.3. "Removal of Upper Case".
2. Unscrew the 5 screws and remove the Intake Duct (Assy).

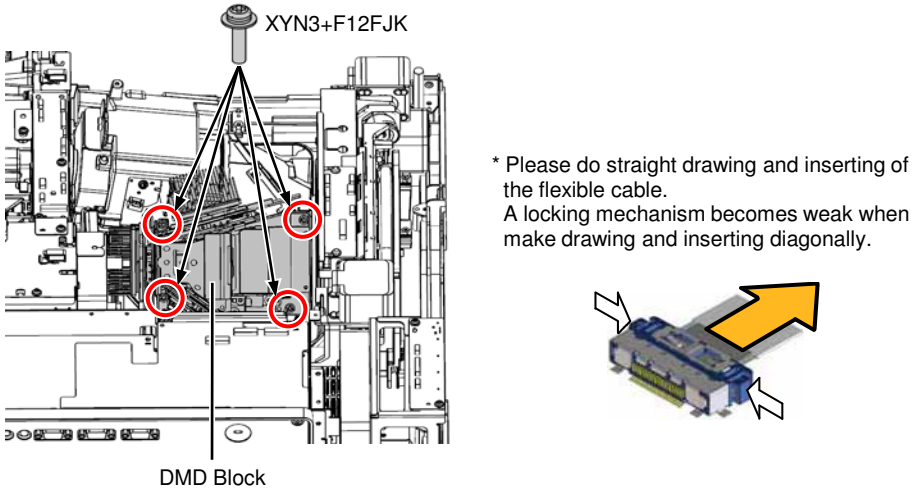


2. 5. Removal of Engine Block Case (Top)/DMD Block

1. Remove the Intake Duct (Assy) according to the section 2.4. "Removal of Intake Duct (Assy) / ACF(Assy)".
2. Unscrew the 3 screws and remove the Engine Block Case (Top).

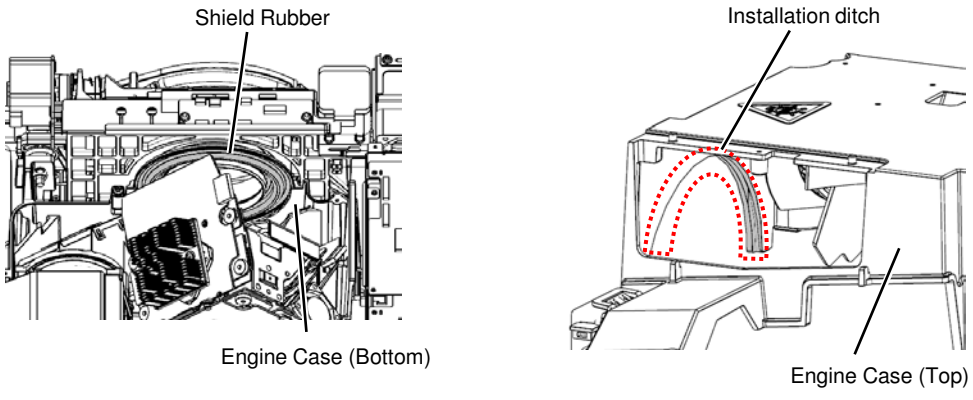


3. Unscrew the 4 screws and remove the DMD Block.



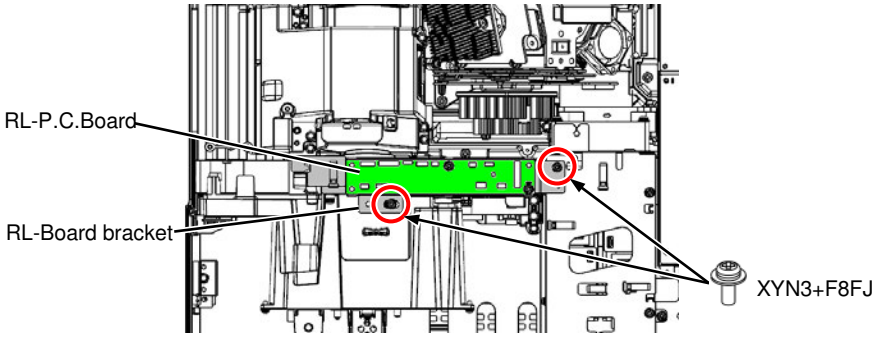
<u>* Attention when assemble the Engine Case (Top).</u>

Please be careful so that shield rubber of the lens mount department side fits into the installation ditch properly.

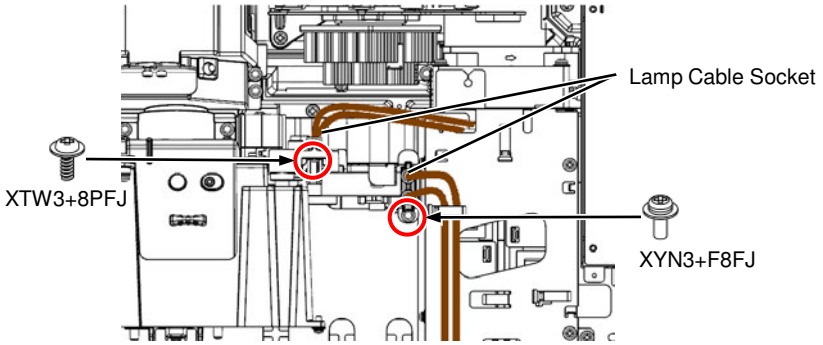


2. 6. Removal of Analysis Block/Synthesis Block/Synthetic Mirror

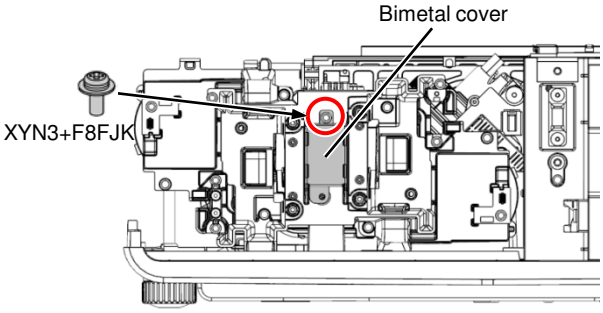
1. Remove the Lamp Unit according to the section 2.2. "Removal of Lamp Unit".
2. Remove the Engine Block Case (Top) according to the section 2.5. "Removal of Engine Block Case (Top) / DMD Block".
3. Unscrew the 2 screws and remove the RL-Board bracket.

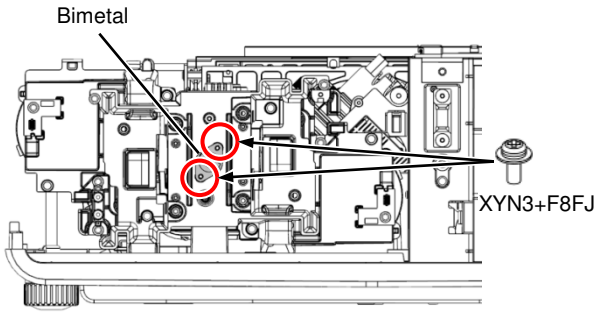


4. Unscrew the 2 screws (for each 1) and remove the Lamp Cable Socket (two places).

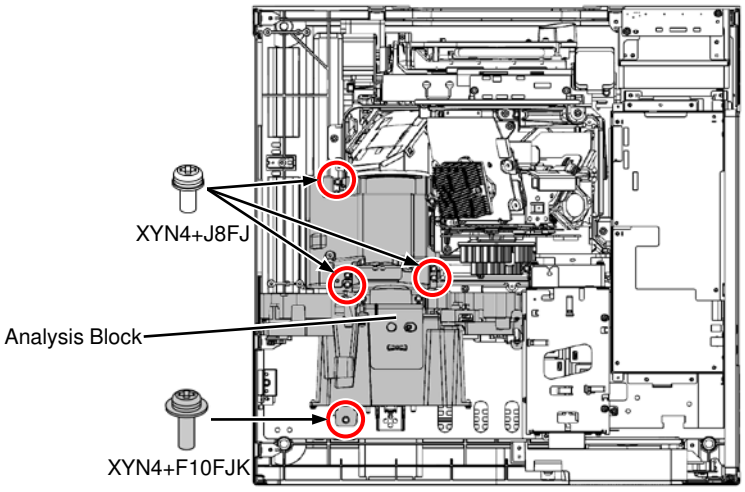


5. 1) Unscrew the 1 screws and remove the Bimetal cover.
   2) Unscrew the 2 screws and remove the Bimetal.

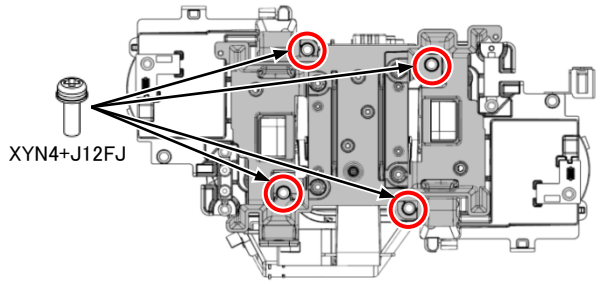




・Unscrew the 4 screws and remove the Analysis Block.

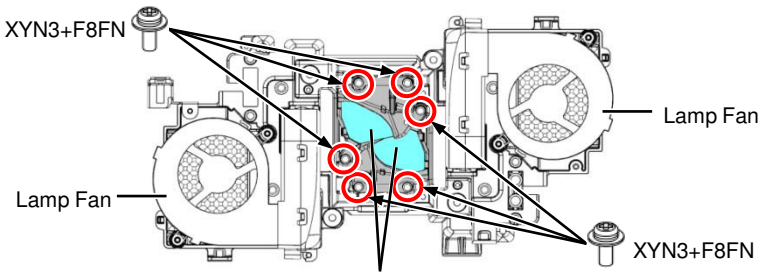


6. Unscrew the 4 screws, and divide Analysis Block and Synthetic Block.



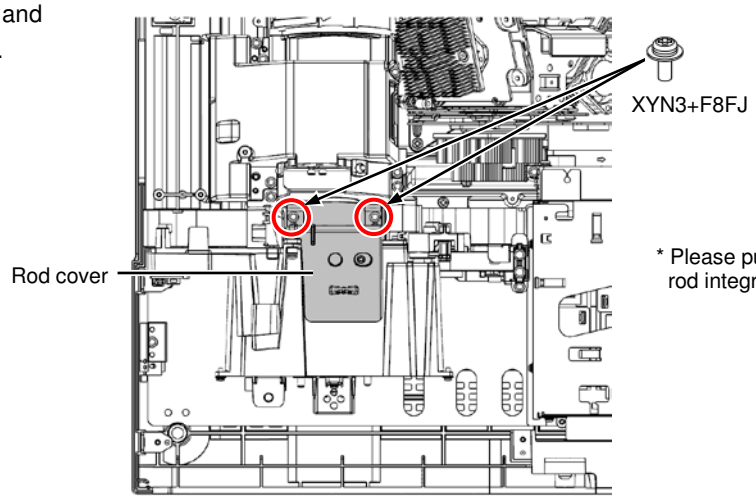
Synthetic Block (lamp case side)

・Unscrew the 3 screws and remove the each synthetic Mirror.



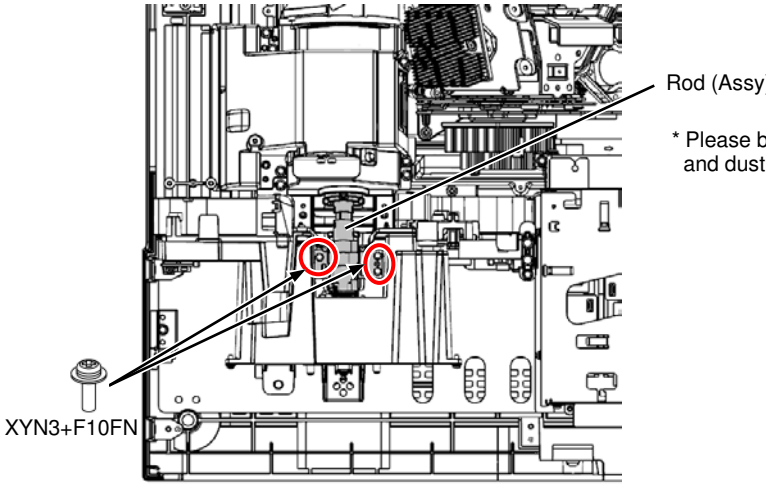
2. 7. Removal of Rod (Assy)/Iris Unit (Assy)/Relay Lens

1. Remove the Intake Duct (Assy) and ACF(Assy) according to the section 2.4. "Removal of Intake Duct (Assy) / ACF(Assy)".
2. Remove the RL-Board bracket according to the steps 1 through 3 in the section 2.6. "Removal of Analysis Block / Synthesis Block / Synthetic Mirror".
3. Unscrew the 2 screws and remove the Rod cover.



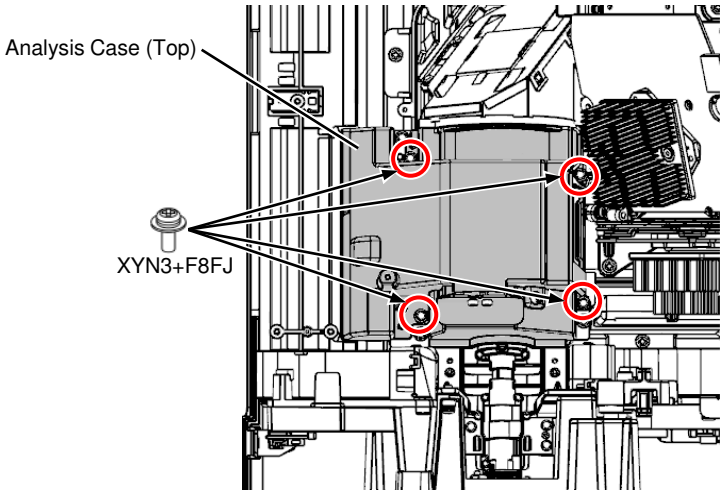
* Please pull straight it up not to injure a rod integrator.

・Unscrew the 3 screws and remove the Rod (Assy).



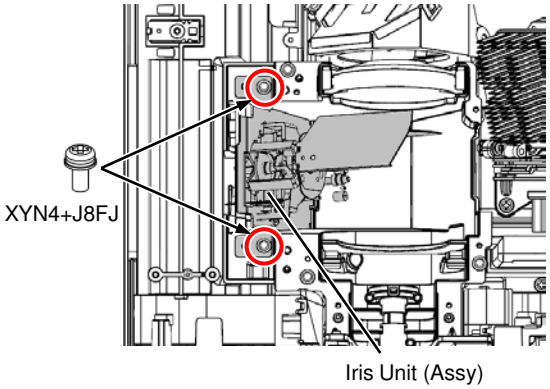
* Please be careful so that a fingerprint and dust do not stick.

4. Unscrew the 4 screws and remove the Analysis Case (Top).

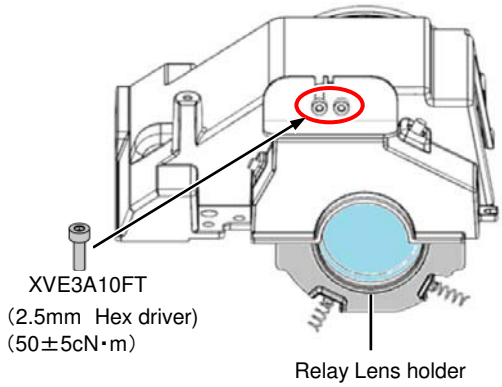


* Analysis case assembling needs the confirmation of the lighting area afterward. Please refer to the SECTION3 adjustments.

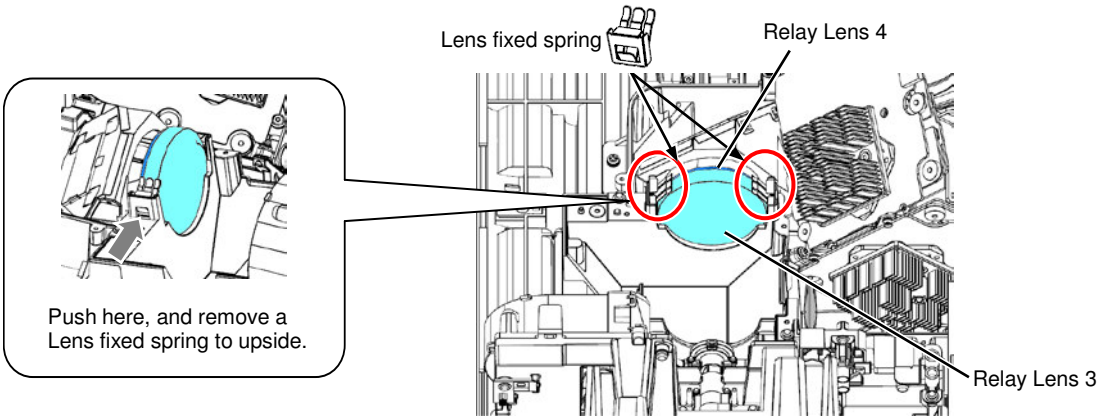
・Unscrew the 2 screws and remove the Iris Unit (Assy).



・Unscrew the 2 hexagon socket head screw and remove the Relay Lens holder.

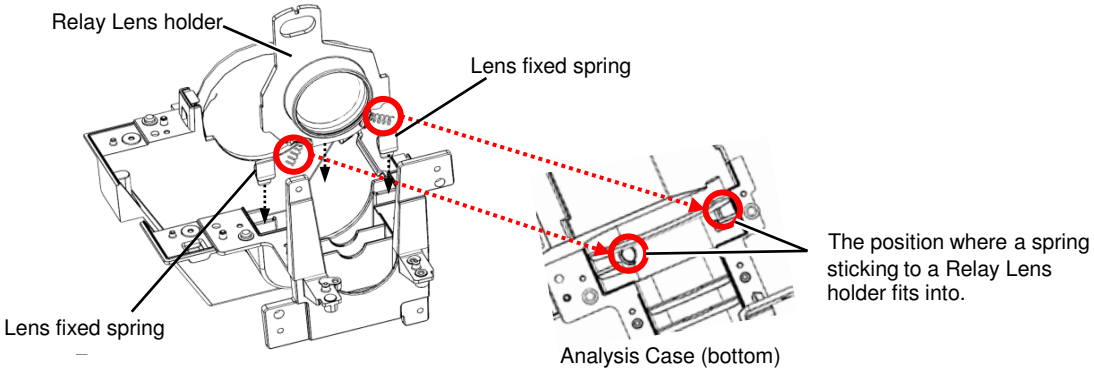


・Take off a Lens fixed spring (two places) and remove a Relay Lens.



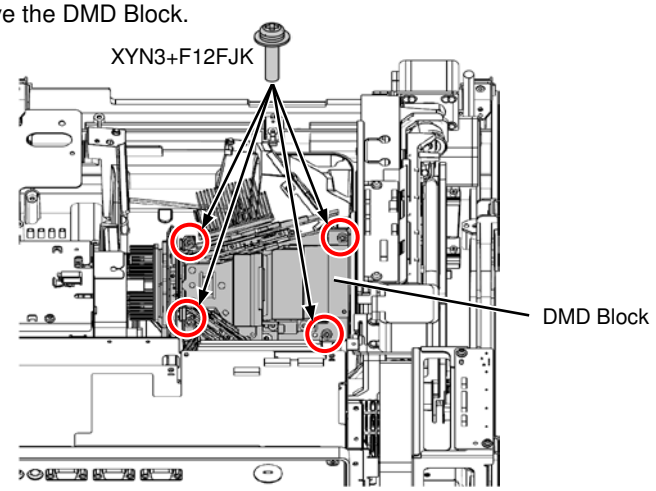
<u>* Attention when assemble the Analysis Case (Top).</u>

Careful so that the spring of the Relay Lens holder fits into the prescribed position properly.

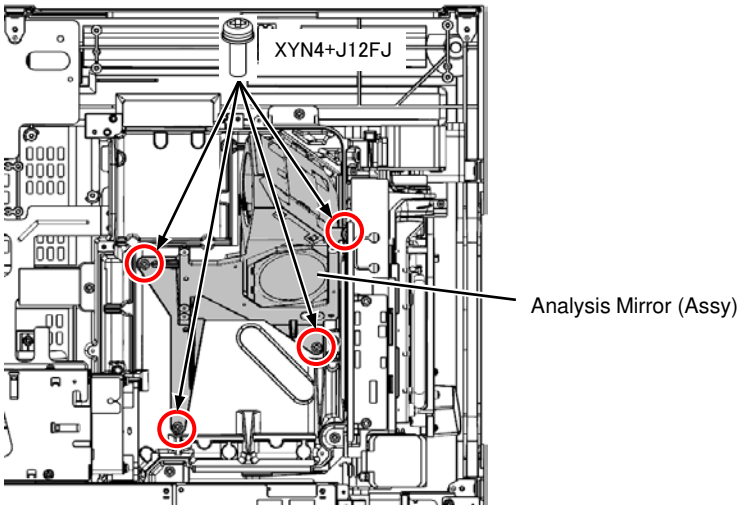


2. 8. Removal of Analysis Mirror (Assy)

1. Remove the Analysis Block according to the steps 1 through 5 in the section 2.6. "Removal of Analysis Block / Synthesis Block / Synthetic Mirror".
2. Unscrew the 4 screws and remove the DMD Block.

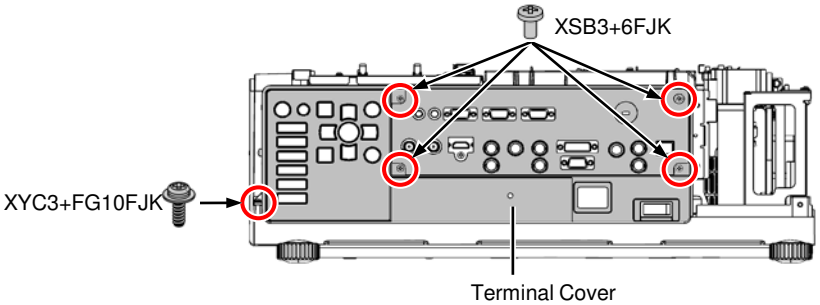


・Unscrew the 4 screws and remove the Analysis Mirror (Assy).

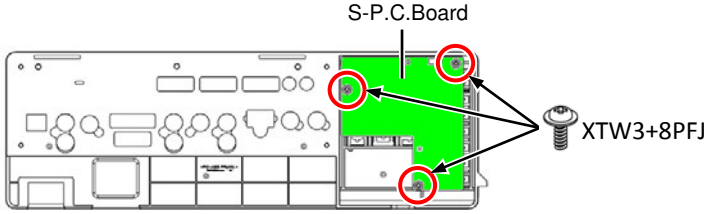


2. 9. Removal of Terminal Cover (S-P.C.Board)

1. Remove the Upper Case according to the section 2.3. "Removal of Upper Case".
2. Unscrew the 5 screws and remove the Terminal Cover.

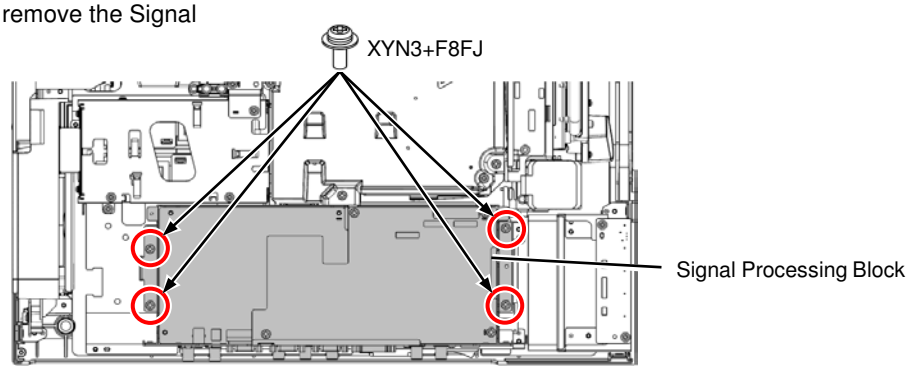


・Unscrew the 3 screws and remove the S-P.C.Board.

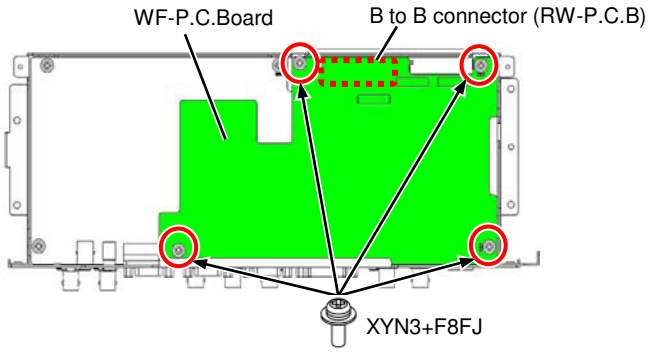


2.10. Removal of Signal Processing Block (A/G/WF/WL-P.C.Board)

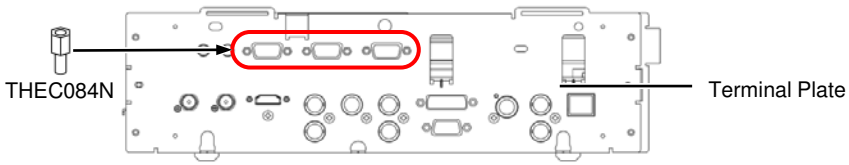
1. Remove the Terminal Cover according to the section 2.9. "Removal of Terminal Cover".
2. Unscrew the 4 screws and remove the Signal Processing Block.

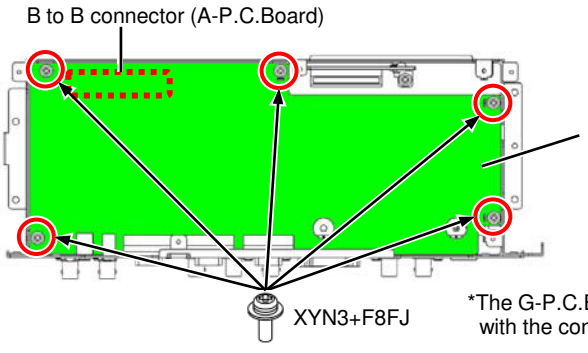


・Unscrew the 3 screws and remove the WF-P.C.Board.



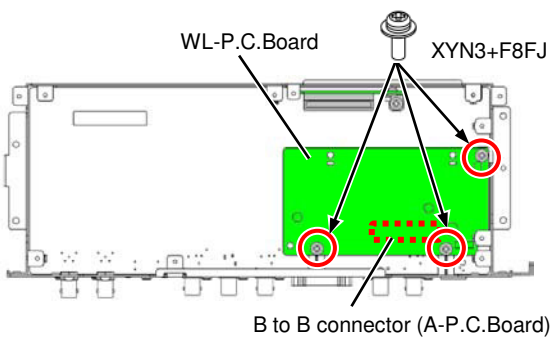
3. 1) Unscrew the 6 screws fixing a Terminal.
   2) Unscrew the 5 screws and remove the G-P.C.Board.

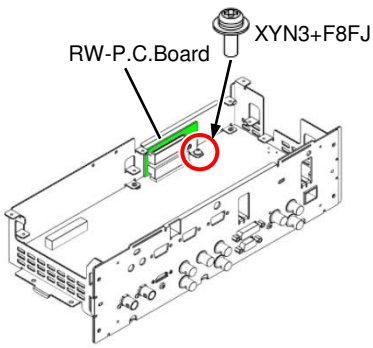




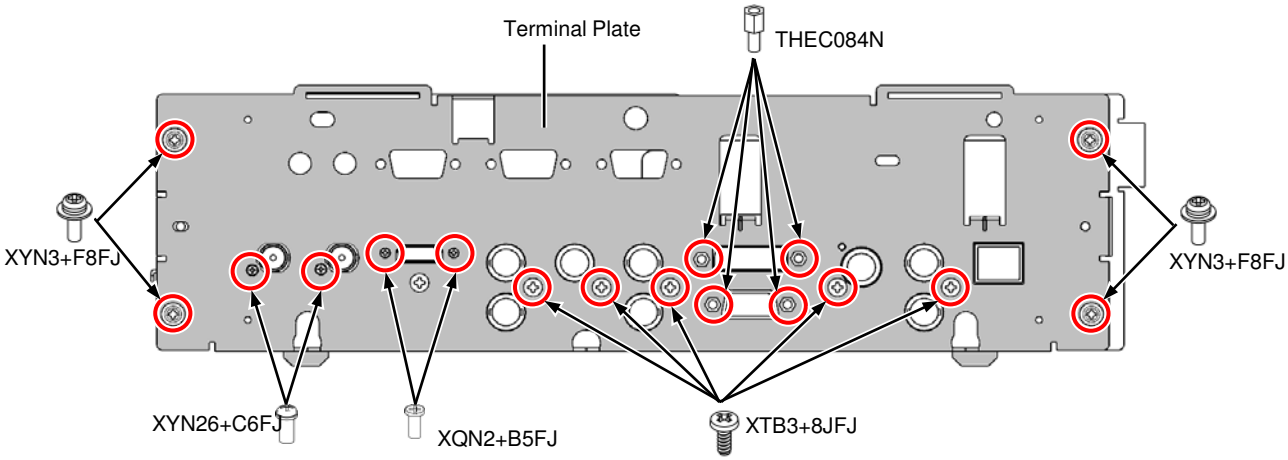
*The G-P.C.Board is connected onto the A-P.C.Board with the connector. Carefully when removing it.

・Unscrew the 3 screws and remove the WL-P.C.Board.
・Unscrew the 1 screw and remove the RW-P.C.Board.

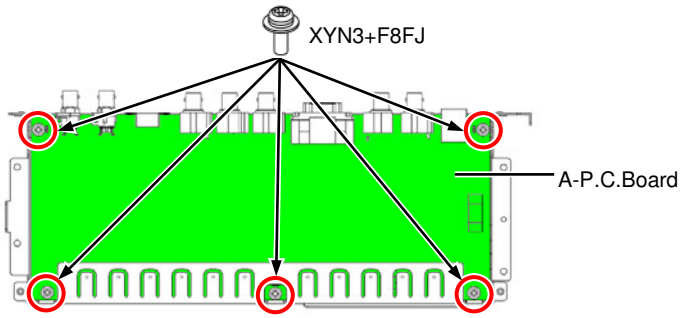




4. Unscrew the 17 screws and remove the Terminal Plate.

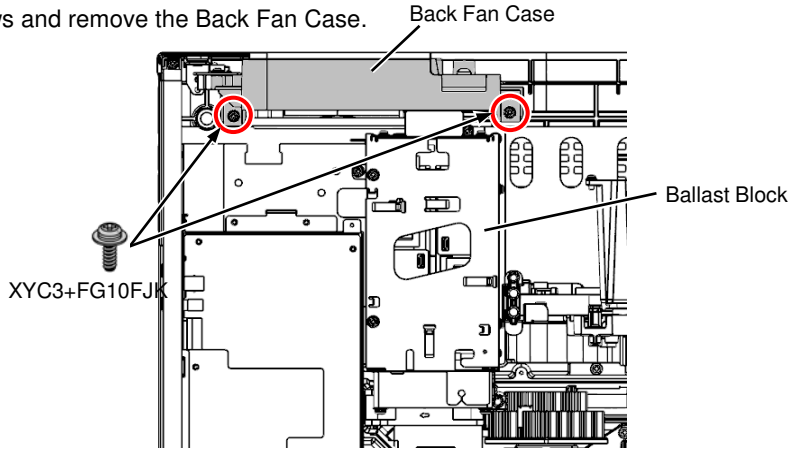


・Unscrew the 5 screws and remove the A-P.C.Board.

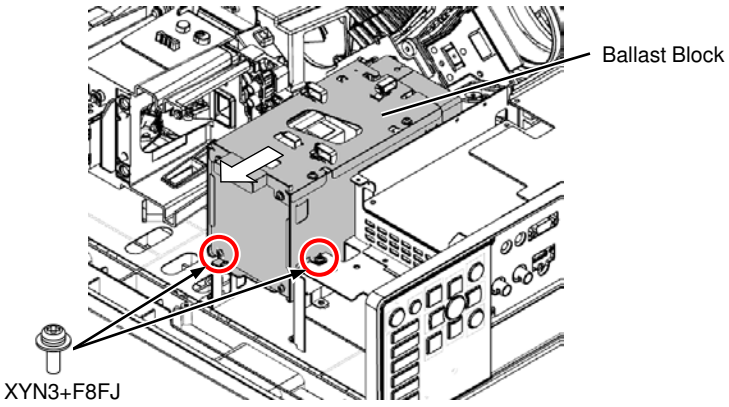


2.11. Removal of Ballast Block (B/Q-P.C.Board)

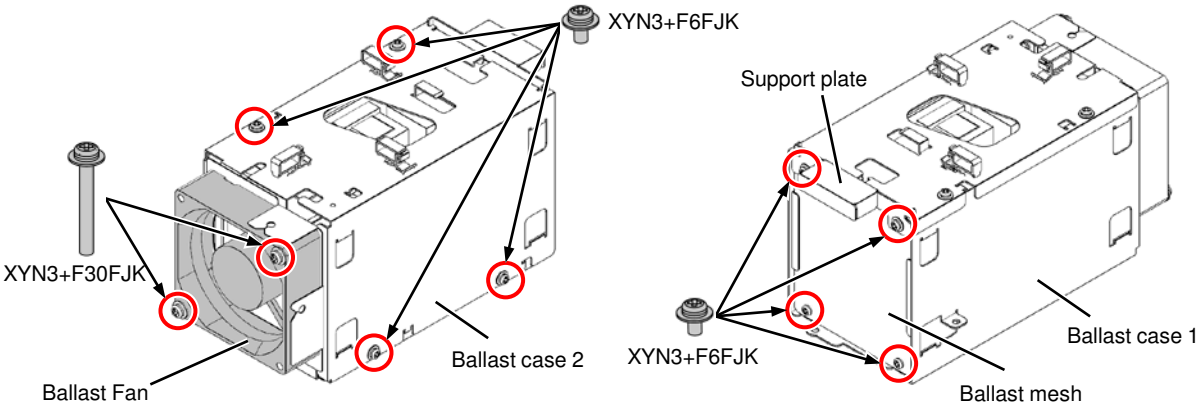
1. Remove the Lamp Cable Socket (two places) according to the steps 1 through 4 in the section 2.6. "Removal of Analysis Block / Synthesis Block / Synthetic Mirror".
2. Unscrew the 2 screws and remove the Back Fan Case.



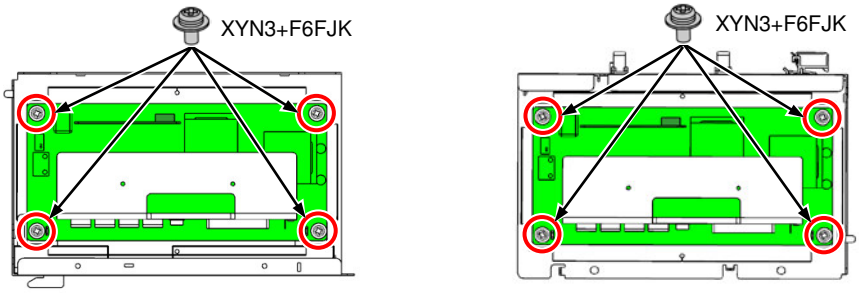
3. Unscrew the 2 screws and remove a Ballast Block in an upside after sliding to the direction of the arrow.



4. 1) Unscrew the 2 screws and remove the Ballast Fan.
   2) Unscrew the 4 screws and remove the Support plate, Ballast mesh.
   3) Unscrew the 4 screws, separate the Ballast case 1 and Ballast case 2.



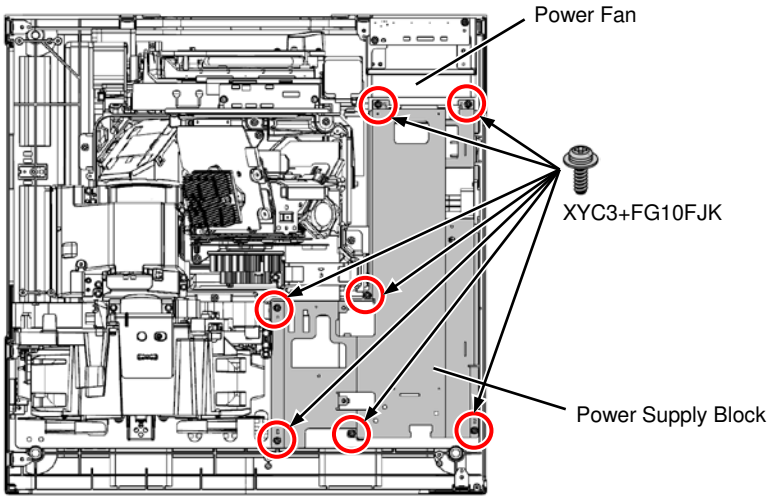
・Unscrew the each 4 screws and remove the each B/Q-P.C.Board.



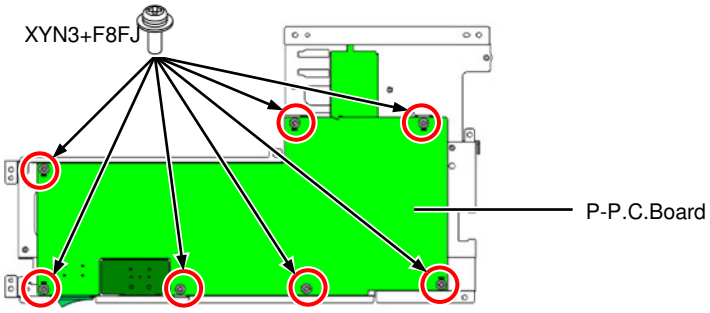
B/Q-P.C.Board (Lamp 1)　　B/Q-P.C.Board (Lamp 2)

2.12. Removal of Power Supply Block (PC-P.C.Board)

1. Remove the Signal Processing Block according to the steps 1 through 3 in the section 2.10. "Removal of Signal Processing Block".
2. Remove the Ballast Block according to the steps 1 through 3 in the section 2.11. "Removal of Ballast Block".
3. Unscrew the 7 screws and remove the Power Supply Block.

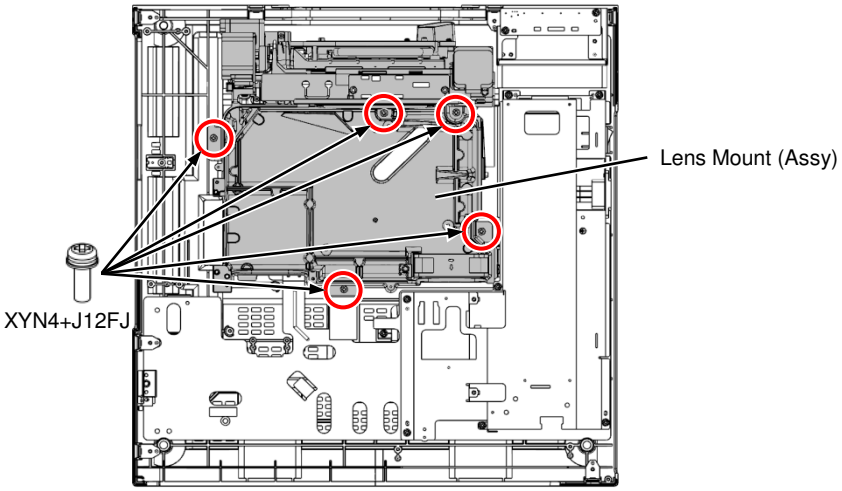


・Unscrew the 7 screws and remove the PC-P.C.Board.



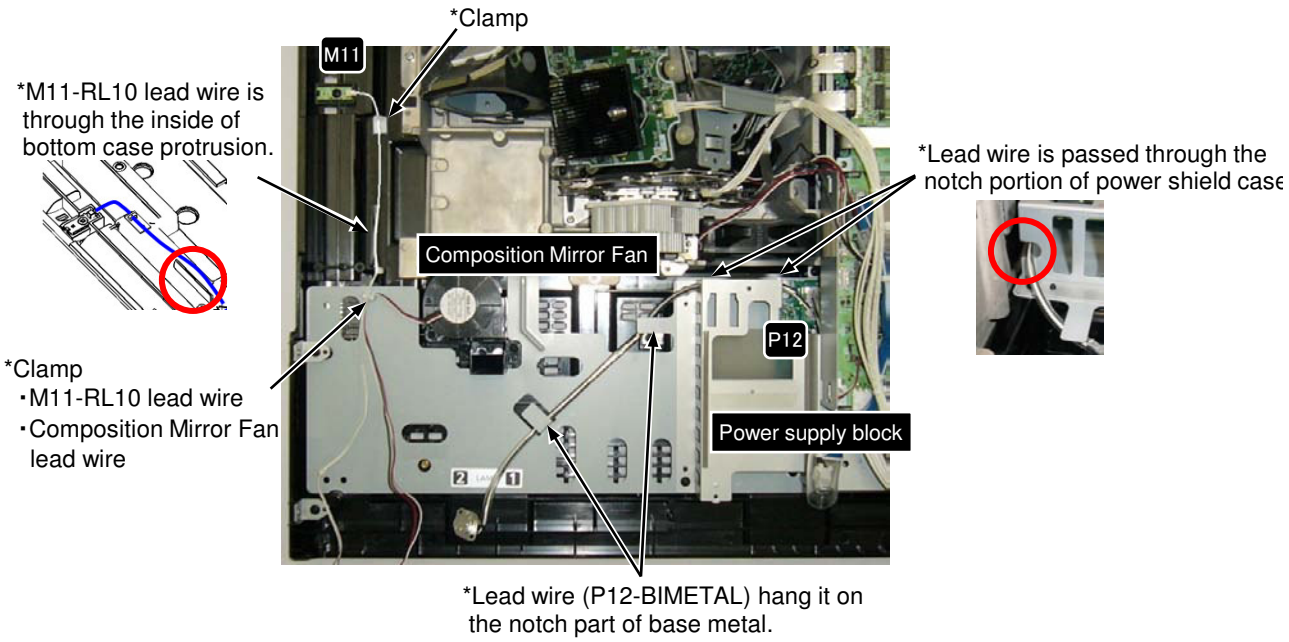
2.13. Removal of Lens Mount (Assy)

1. Remove the Analysis Mirror (Assy) according to the section 2.8. "Removal of Analysis Mirror (Assy)".
2. Remove the Signal Processing Block according to the steps 1 through 3 in the section 2.10. "Removal of Signal Processing Block".
3. Remove the Ballast Block according to the steps 1 through 3 in the section 2.11. "Removal of Ballast Block".
4. Unscrew the 5 screws and remove the Lens Mount (Assy).

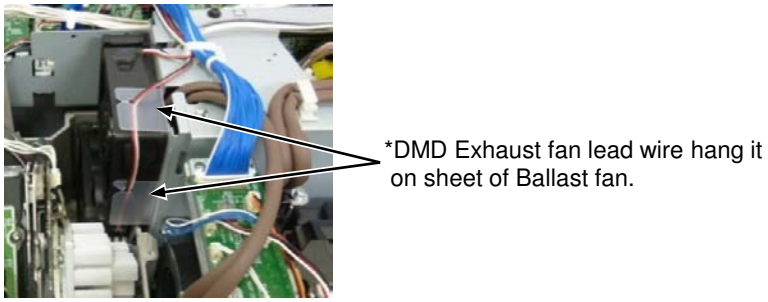


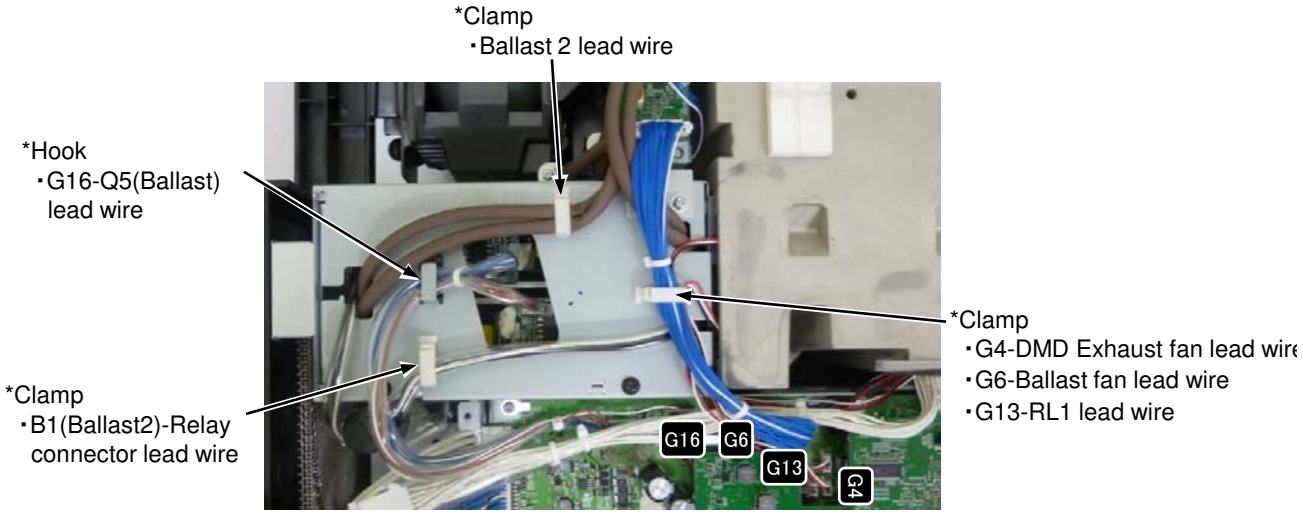
3. Wiring

3. 1. Bottom case

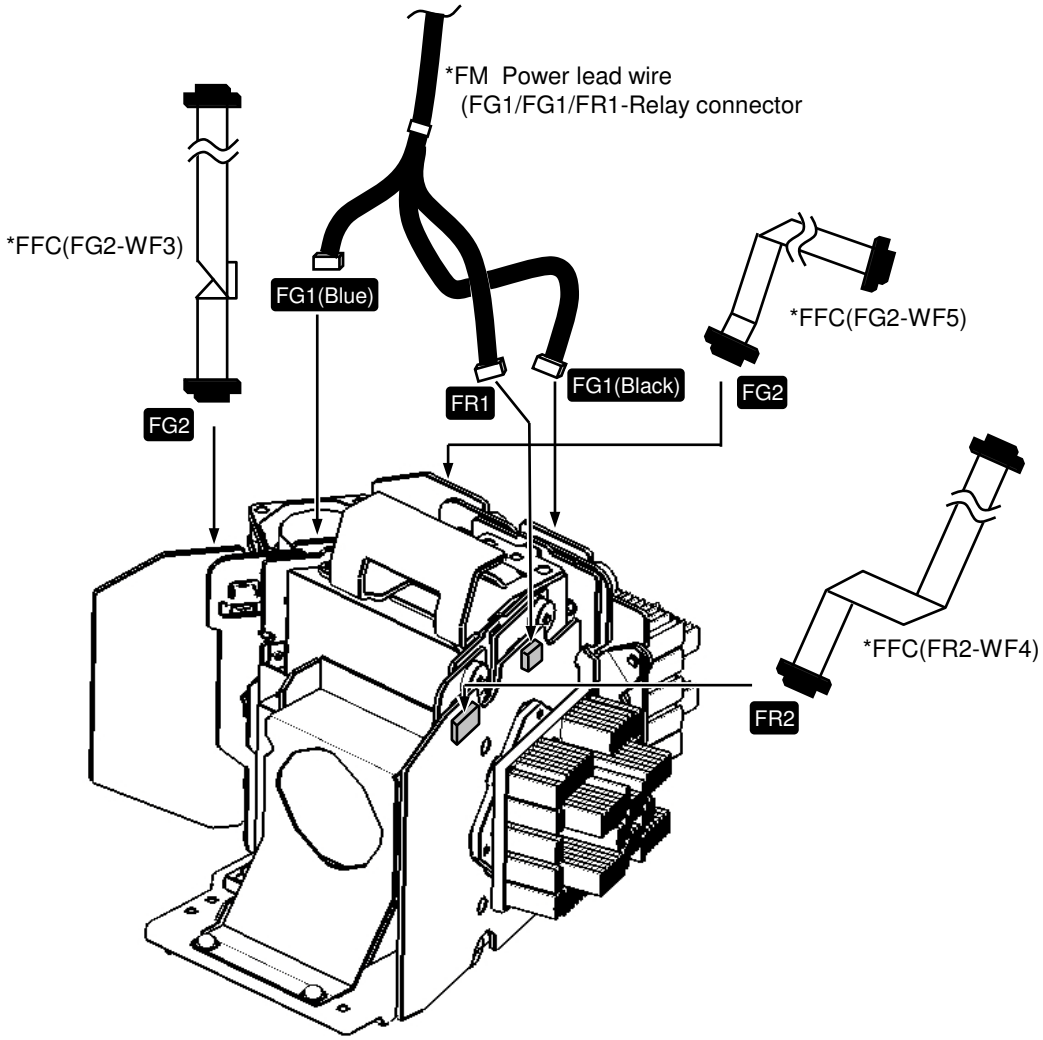


3. 2. Ballast block



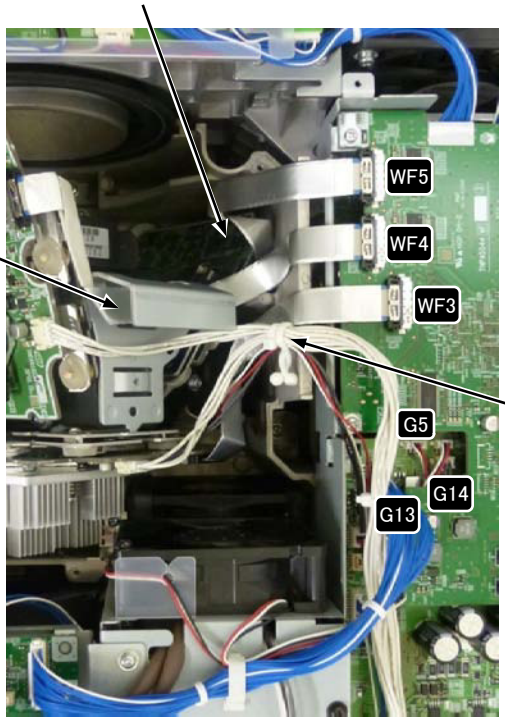


3. 3. DMD block



*Each flexible cable is tuck down on the downside.

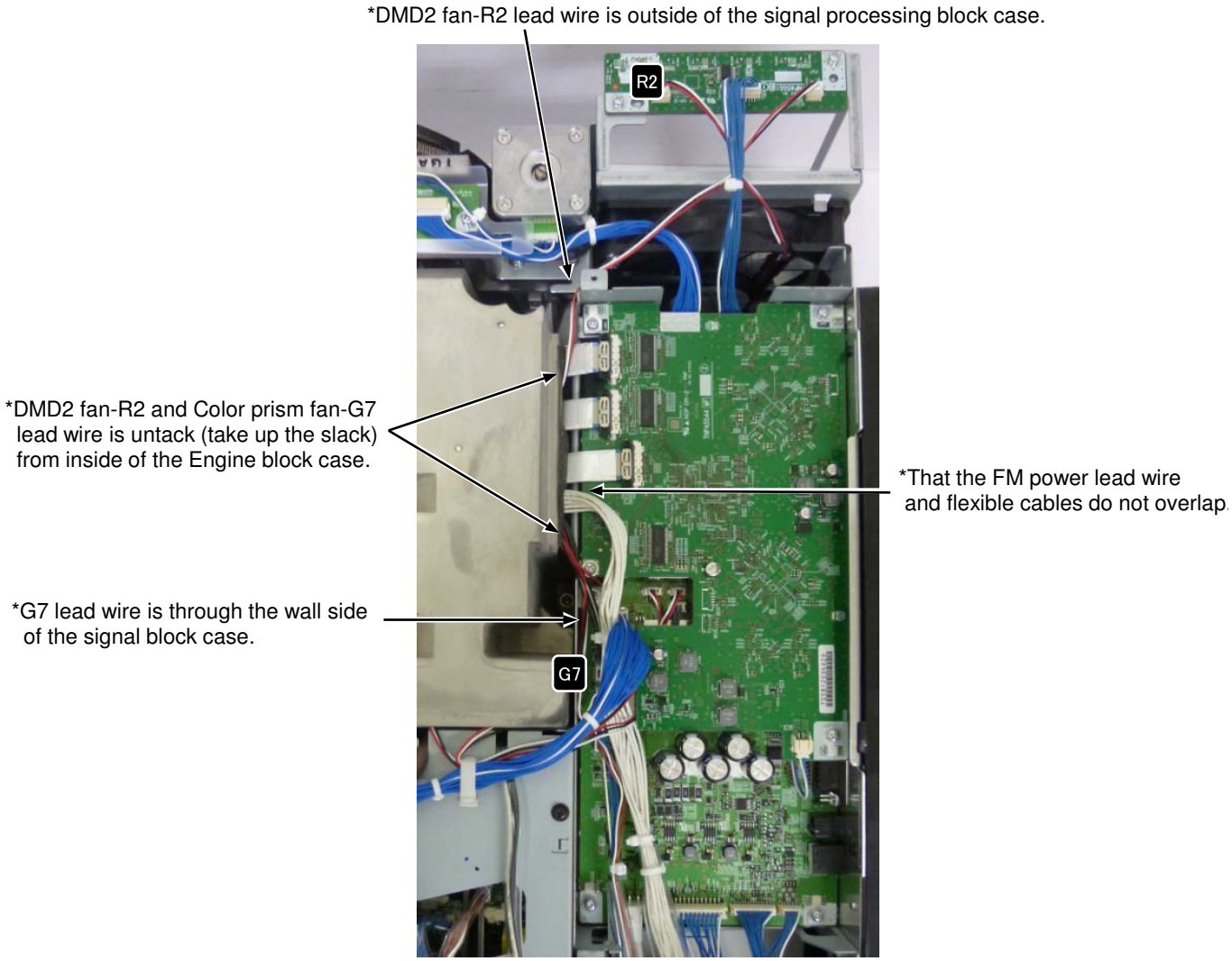
*WF4-FR2 flexible cable is through between the absorber bracket.



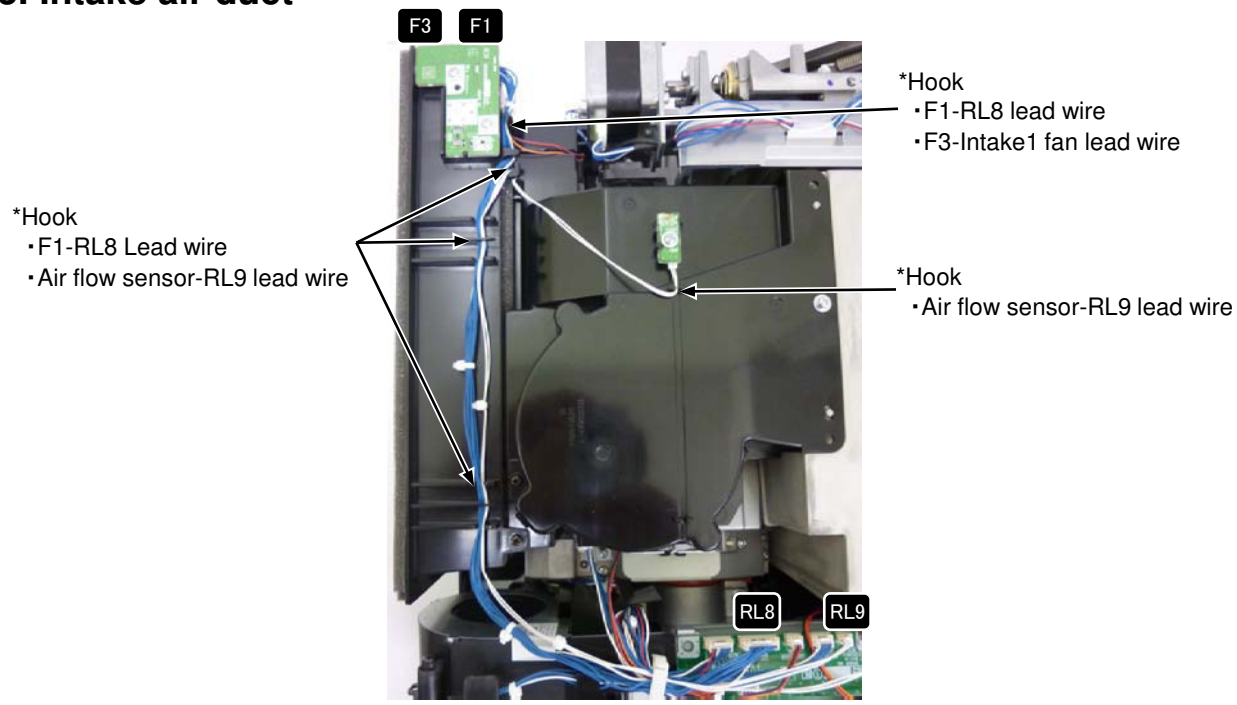
*Clamp
・DMD1 fan-G5 lead wire
・DMD temperature sensor-G14 lead wire
・FM Power lead wire
The tip of a clamp is turned to under side.

*G5/G14 lead wires is under side of G13 lead wire.

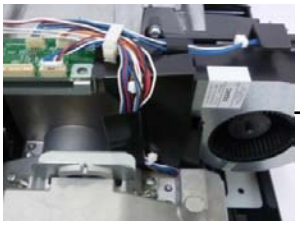
3. 4. Signal processing block



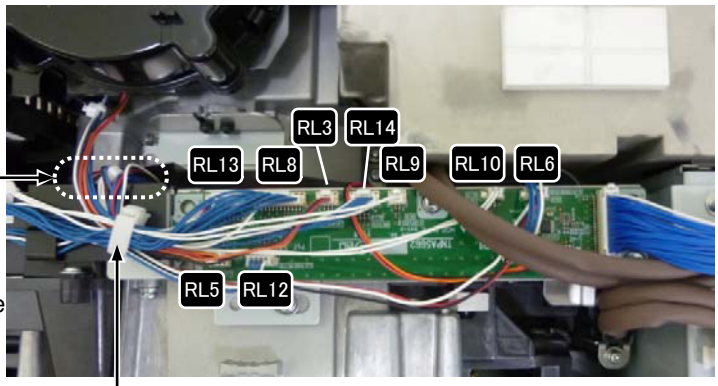
3. 5. Intake air duct



3. 6. RL-P.C.Board

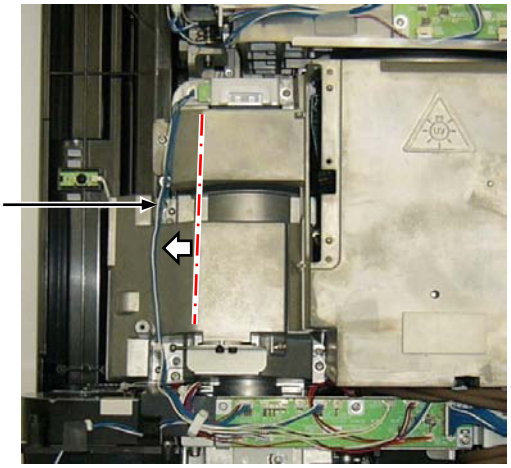


*The lead wires lets the inside of the line processing sheet go through.

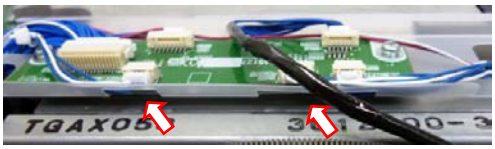


*Clamp
- RL3-Intake2 fan lead wire
- RL5-Lamp2 fan lead wire
- RL6-Composition mirror fan lead wire
- RL8-F1 lead wire
- RL9-M21(Air flow sensor) lead wire
- RL10-M11(Intake temperature sensor) lead wire
- RL12-L21(Lamp2 memory) lead wire
- RL13-H1/MR1(Iris) lead wire
- RL14-M31(Luminance sensor) lead wire

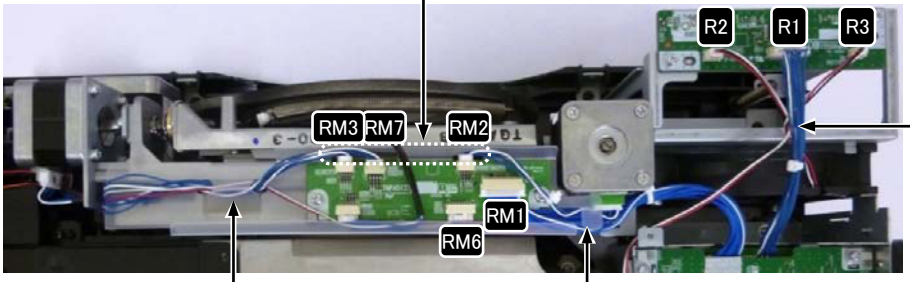
*RL14-M31(Luminance sensor) lead wire



3. 7. R-P.C.Board/RM-P.C.Board



*The lead wires is not good through the rectangles hole of the line processing sheet.



*Under R1 lead wire, intersect R2 lead wire in R3 lead wire.

*Hook
- RM3－MF lead wire
- RM6－Position SW lead wire
- RM7－MH lead wire

*Hook
- RM1－G12 lead wire
- RM2－MV lead wire

SECTION 3

Adjustments

Model No. **PT-DZ13KU / DZ13KE**
PT-DS12KU / DS12KE
PT-DW11KU / DW11KE
PT-DZ10KU / DZ10KE

CONTENTS

1. Adjustment items and procedure ADJ-2
   - 1. 1. Lighting area adjustment
   - 1. 2. Electrical convergence adjustment
   - 1. 3. Lens calibration
   - 1. 4. EEPROM Data transfer
   - 1. 5. Model information setup
   - 1. 6. Clog sensor calibration
   - 1. 7. Contrast adjustment

2. Software Update procedure .....
   - 2. 1. Update by LAN Terminal connection (Main, Sub, Network Microprocessor)
   - 2. 2. Update by Serial Terminal Cnnection (Main, Sub Microprocessor)

1. Adjustment item and a procedure

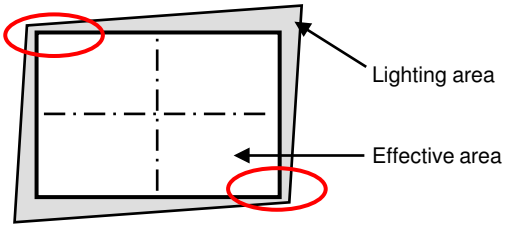
When the following components in this projector are replaced, adjustments are required.
Adjust each item according to the table below.

Adjustment Item	Replaced Component	Remarks
1.1. Lighting Area Adjustment	DMD Block / Each Analysis Block part	
1.2. Electrical Convergence Adjustment	DMD Block	Only DW11K* is effective.
1.3. Lens Calibration	Stepper motor (H/V/F)	When a power supply was cut during shift/focus movement, carry it out.
1.4. EEPRPM Data transmission	A-P.C.Board	Save data to a PC before A-P.C.B exchange once and write in the data which saved at a new A-P.C.B
1.5. Model Information Setup	A-P.C.Board	When data transmission was finished, it is not necessary.
1.6. Clog Sensor Calibration	G-P.C.Board / M2-P.C.Board	
1.7. Contrast Adjustment	DMD Block / Iris unit	

1.1. Lighting Area Adjustment

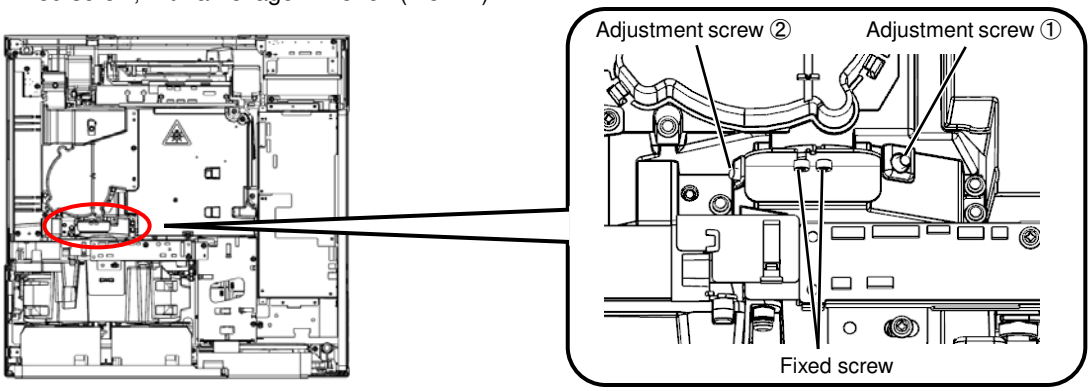
1. 1. 1. Lighting area confirmation

1. After replacing the DMD block, check if any shade is visible in the DMD effective display area.
   * Make the projection environment as dark as possible and project an all-white and all-black pattern (internal test pattern) for this check.
   * Change lamp select to "DUAL" "LAMP1" "LAMP2", and please confirm it.
2. When the Lighting area interferes with the effective area, adjust the Relay Lens Holder.

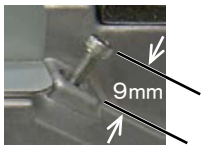


1. 1. 2. Lighting area adjustment

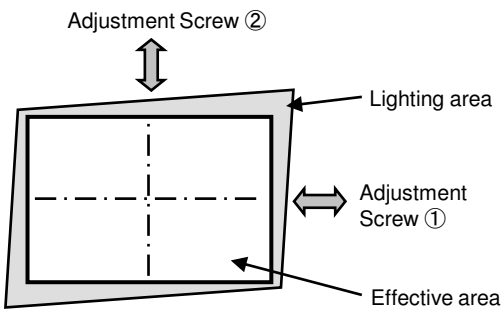
1. Projection "All White" in internal test pattern. (Lamp select "DUAL" and Lamp power "HIGH")
2. Loosen the 2 fixed screw, with a hexagon wrench (2.5mm).



3. Make quantity of prominence of adjustment screw ① and ② about 9mm beforehand.



4. Adjustment screw ① coordinates the vertical direction of the Lighting area.
   ・The Lighting area moves to the rightward when turn a screw in the right direction.
5. Adjustment screw ② coordinates the vertical direction of the Lighting area.
   ・The Lighting area moves to an upper direction when turn a screw in the right direction.
6. When adjustment is completed, tighten two fixation screws.

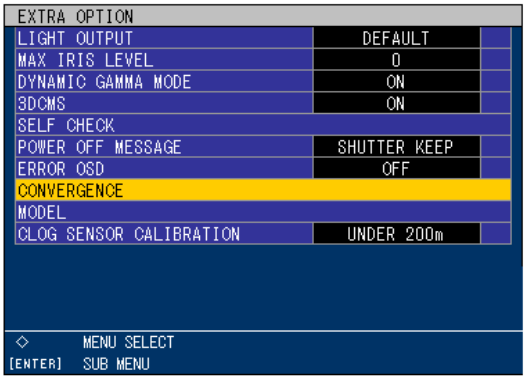


1. 2. Electrical Convergence Adjustment

It is a function to correct a convergence by a pixel unit every R/G/B ingredient.

Note ・When adjust the DZ/DS models, because it uses the entire pixel of DMD, the edge pixel of the projection screen is missing.

1. Projected cross-hatch pattern, confirm a position gap of R/G/B.
2. Setting to service mode, and select sub menu "CONVERGENCE" of main menu "EXTRA OPTION".



3. Select a color to be adjusted.

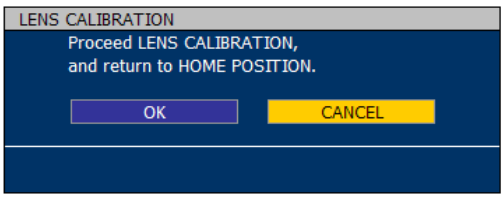
4. Press " ▲ " " ▼ " button to adjust the vertical direction, press " ◀ " " ▶ " button to adjust the horizontal direction.

* Default : 0
* Variable range of adjustment
[DW11K]
V : -64 ～ 64, H : -16 ～ 16
[DZ13K/DS12K/DZ10K]
V : -64 ～ 0, H : 0 ～ 16

5. After adjustment completion, resetting to user mode.

1. 3. Lens calibration

1. Select sub menu "LENS CALIBRATION" of main menu "PROJECTOR SETUP".
2. Because a confirmation message is displayed, select "OK".



3. The lens will move vertically and horizontally, and the limit value of the lens shift and home position are set automatically.

4. When the lens has been completely stopped, calibration is complete.
・If the calibration has not been correctly executed, a message [INCOMPLETE] will appear.
In this case, please start again from 1.

1. 4. EEPROM data transfer

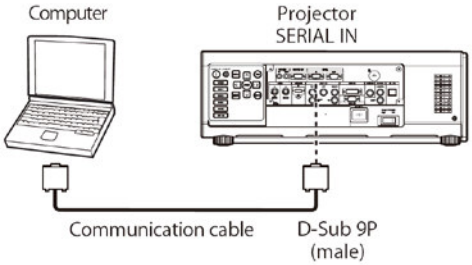
1. 4. 1. Equipment to be used

1. Computer : Use it for the transfer of backup data.
2. Communication cable : D-sub 9pin (male/female RS-232C straight)
3. Service Software : [DataLogBackup.exe] Service software is downloaded from the projector service homepage.

1. 4. 2. Connection preparations

1. Confirm the projector's ID, baudrate, prity and take a memo.
2. Connect the serial terminals on the projector and the PC by using a communication cable.

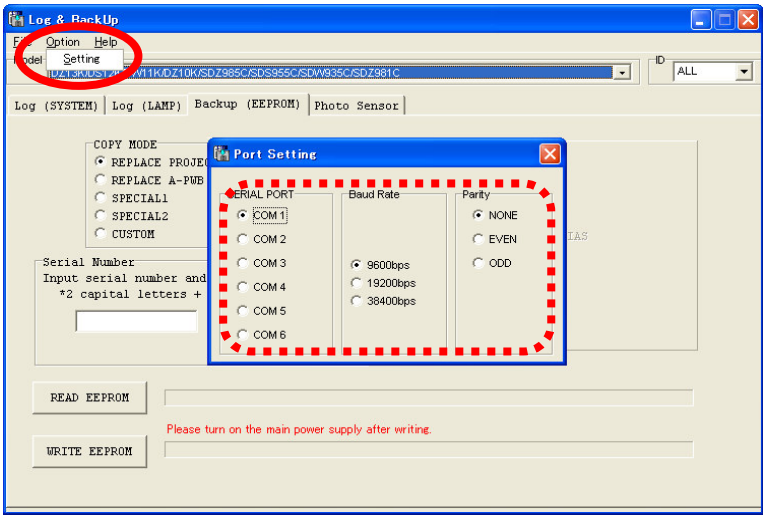
Attention : Computer, please set so as not to standby or shutdown.



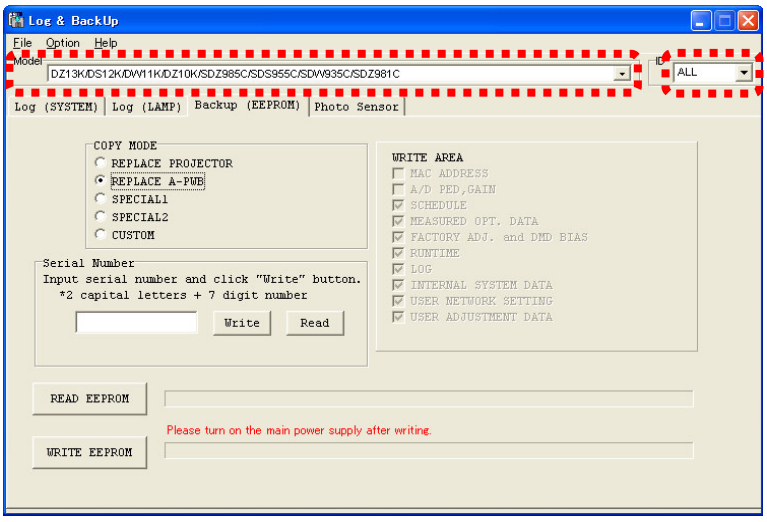
1. 4. 3. Backup the EEPROM data (It is before circuit board exchange)

1. Switch the projector to "Normal-Standby" mode (POWER indicator is Lighting in red).
2. Start up service software [DataLogBackup.exe] with a computer.

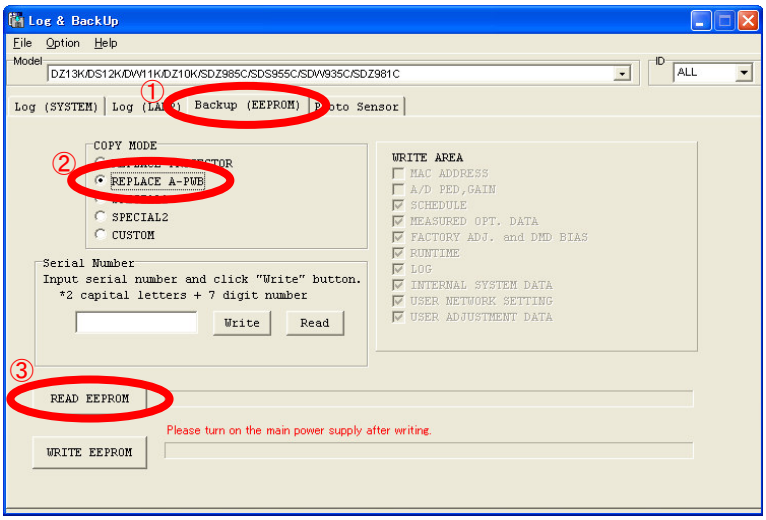
3. Select "Option " ⇒ " Setting" and set Serial Port of the computer, Baud Rate and Parity.



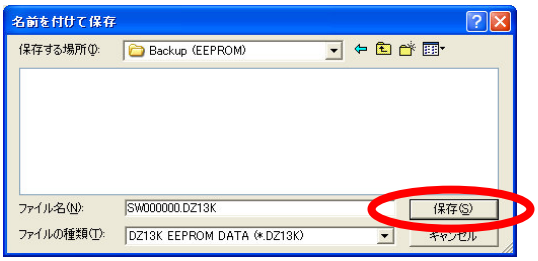
4. Select a model number and ID.

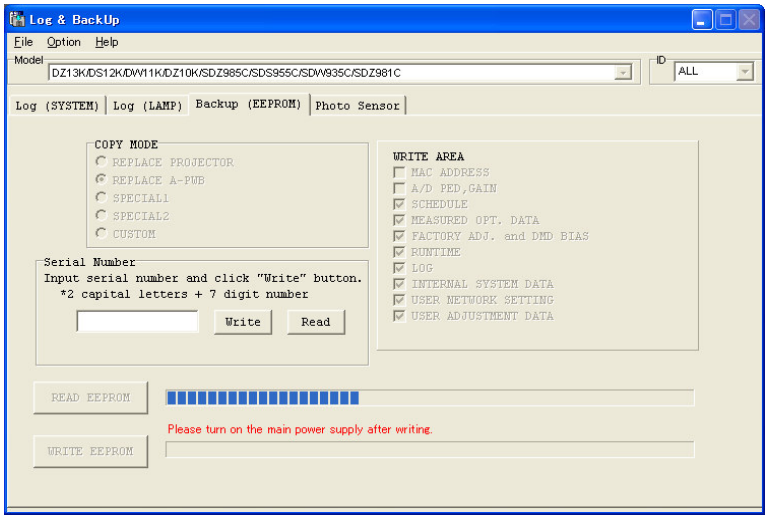


5. 1) Select "Backup (EEPROM)".
   2) Checkmark in "REPLACE A-PWB" of "COPY MODE".
   3) Click an [READ EEPROM] button.



6. Select the save place and click the [Save(S)] button.

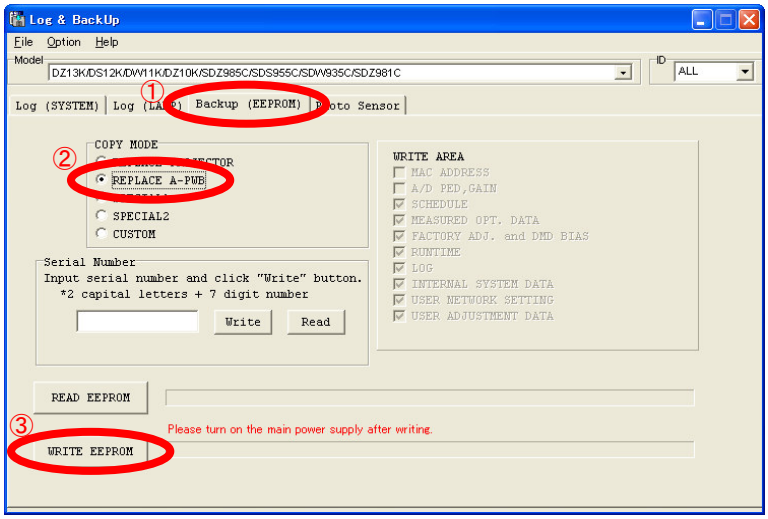




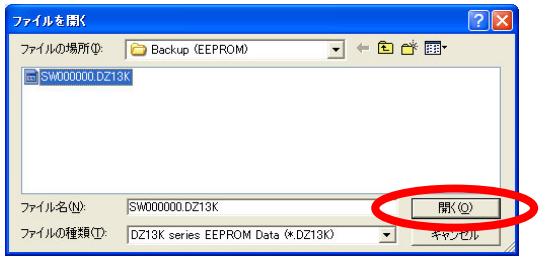
7. When the progress bar reaches the right-side end, the read of data is completion.
   Select "File" ⇒ "Quit", please exit.

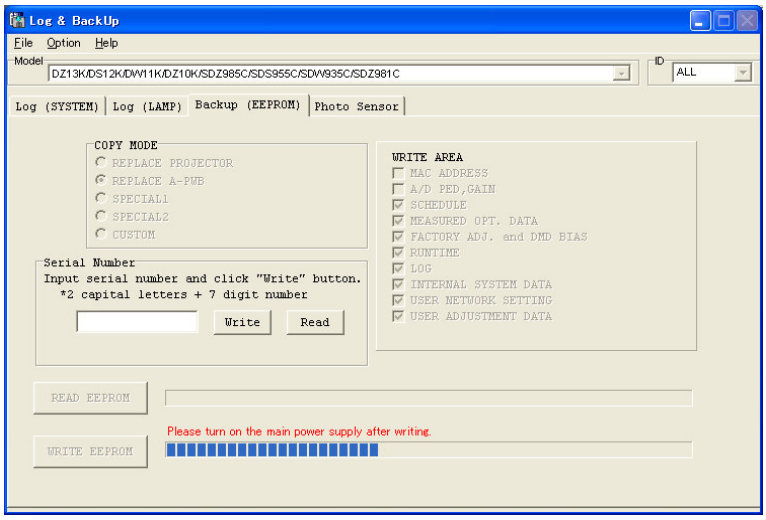
1. 4. 4. Restore the backup EEPROM Data (After circuit board exchange)

1. Switch the projector to "Normal-Standby" mode (POWER indicator is Lighting in red).
2. Start up service software［DataLogBackup.exe］with a computer.
3. Select "Option " ⇒ " Setting" and set Serial Port of the computer, Baud Rate and Parity.
4. Select a model number and ID.
5. 1) Choose "Backup" (an EEPROM).
   2) Checkmark in "REPLACE A-PWB" of "COPY MODE".
   3) Click an [WRITE EEPROM] button.



6. Select the file and click the [OPEN(O)] button.

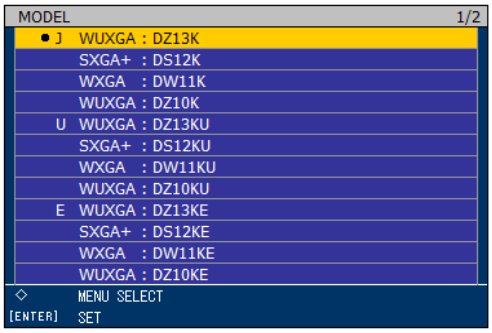


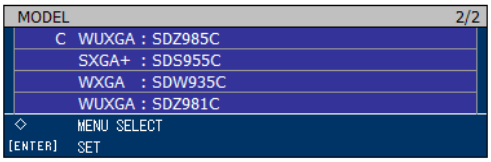


7. When the progress bar reaches the right-side end, the write of data is completion.
   Select "File" ⇒ "Quit", please exit.
8. When to turn off the main power and turned on again, the setting is complete.

1. 5. Model Information Setup

1. Setting to service mode and select sub menu "MODEL" of main menu "EXTRA OPTION".
2. Select a model and push the “ENTER” button.
3. When to turn off the main power and turned on again, the setting is complete.

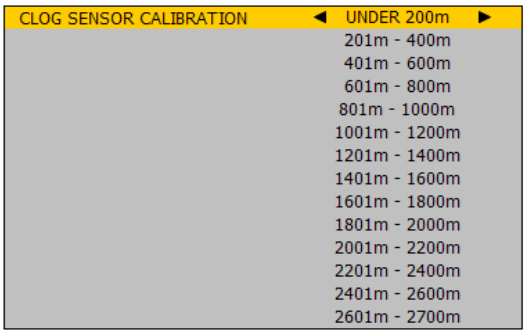




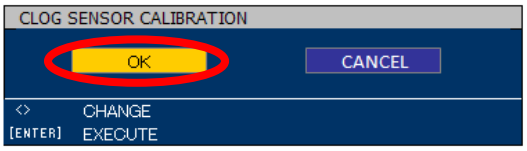
1. 6. Clog sensor calibration

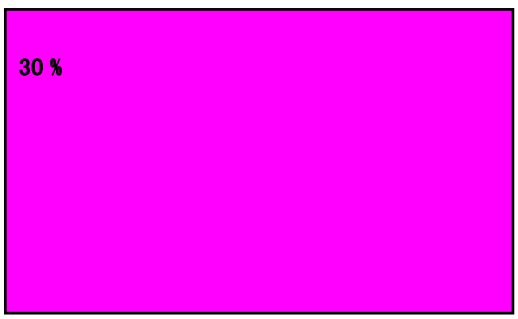
Notes : ・After completing the "EEPROM data transfer", Please carry out.
・Please replace with a new air filter before starting calibration.
・This operation should be done with the main body is completely assembled and set on the floor and the adjuster legs are set in the main body.
・Please calibration at a location where there are no heat apparatus and supply opening of the air-conditioner.

1. Setting to Service mode and select sub menu "CLOG SENSOR CALIBRATION" of main menu "EXTRA OPTION".
2. Select the meters above the sea level of the work place and push the "ENTER" button.



3. When [OK] is selected and ENTER button is pressed, the calibration is executed.





・When the calibration is started, the screen becomes whole magenta.
・While calibrating, all lamps will light (DUAL mode).
・Do not shut down the power of projector during the calibration.
・The progress is shown at the left top portion of the display with % unit.

4. When the magenta screen will disappear in approx 15 minutes and it returns to the normal screen, the calibration is completed.
Turn the POWER switch OFF and turn ON it again, then confirm whether to operate normally.

1. 7. Contrast adjustment

1. 7. 1. Equipment to be used

1. Luminance meter : Konica Minolta T-10 or CL-200
2. Projection lens : ET-D75LE20
3. Adjust it in a darkroom.

1. 7. 2. Set up the projector

1. Setting to service mode.
2. Set up the menu and lens as follows.

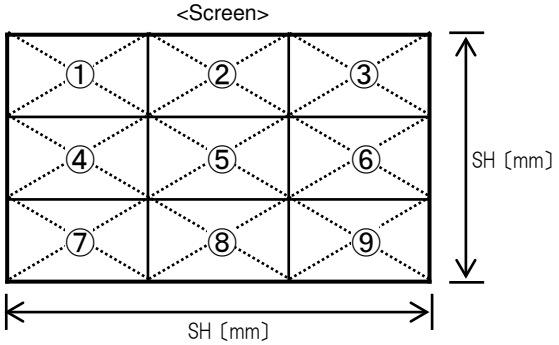
Lens setting	Item		Setting
	Shift		Center
	Zoom		Wide end
Menu setting	Main menu	Sub menu	Setting
	PICTURE	PICTURE MODE	DYNAMIC
		COLOR TEMPERATURE	DEFAULT
	DISPLAY OPTION	COLOR MATCHING	OFF
	PROJECTOR SETUP	LAMP SELECT	DUAL
		LAMP POWER	HIGH (DZ10K : NORMAL)
		BRIGHTNESS CONTROL	BRIGHTNESS CONTROL GAIN = 100%
			BRIGHTNESS CONTROL MODE = OFF

3. Install as follows the projection size.

Model	Aspect ratio	Screen size	SH (mm)	SH (mm)	L (mm)
DZ13K/DZ10K	16 : 10	40 Inch	862	538	1412
DW11K	16 : 9	40 Inch	886	498	1617
DS12K	4 : 3	40 Inch	813	610	1443

1. 7. 3. Contrast adjustment procedure

1. Set the submenu "DYNAMIC IRIS" of the main menu "PICTURE", to "OFF".
2. All white of an internal test pattern are projected, and the illuminance of nine points is measured.



3. Derive the "All white average illuminance" from the following calculation formula.

・All white average illuminance (lx) = (①～⑨ total illuminance) / 9

4. Set the submenu "DYNAMIC IRIS" of the main menu "PICTURE", to " 3 ".
5. All black of an internal test pattern are projected, and the illuminance of nine points is measured.

* With on-screen menu as off, please measure it in a state of all complete black.

6. Derive the "All black average illuminance" from the following calculation formula.

・All black average illuminance (lx) = (①～⑨ total illuminance) / 9

7. Adjustment (-15 or more +15) of sub menu "MAX IRIS LEVEL" of main menu "EXTRA OPTION", so that the value that divided "All white average illuminance" that measured by "All black average illuminance" becomes the following value.

・Adjusted value : All white average illuminance〔lx〕/ All black average illuminance〔lx〕= 10 000

* Adjusted acceptable value : ±10 %

- Make contrast high : Please decrease the value of MAX IRIS LEVEL.
- Make contrast low : Please increase the value of MAX IRIS LEVEL.

2. Software Update procedure

* LAN terminal connection, be able to update the Maine, Sub, Network microprocessor software.
* Serial terminal connection, be able to update Maine, Sub microprocessor software.

2. 1. Update by the LAN terminal connection (Main/Sub/Network)

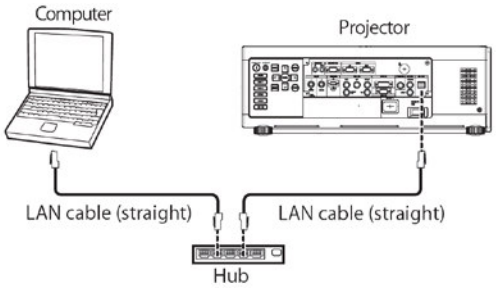
2. 1. 1. Equipment to be used

1. Computer : Use it for the transfer of software.
2. Communication cable : LAN cable. (When connecting directly, use a cross cable)
3. Service Software : [MainSubNet Update Tool.exe] Service software is downloaded from the projector service homepage.
4. Microprocessor Software: Please download the file from the projector service homepage to the PC.

2. 1. 2. Connection Preparations

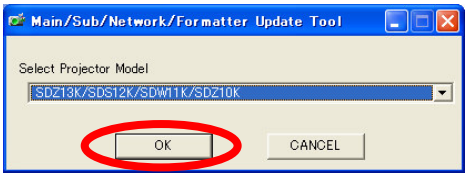
1. Confirm the network IP address of the projector and take a note.
2. Set the IP address of computer to approximate value of projector IP address.
3. Connect the LAN terminal of projector to PC with a LAN cable.

Attention : Computer, please set so as not to standby or shutdown.

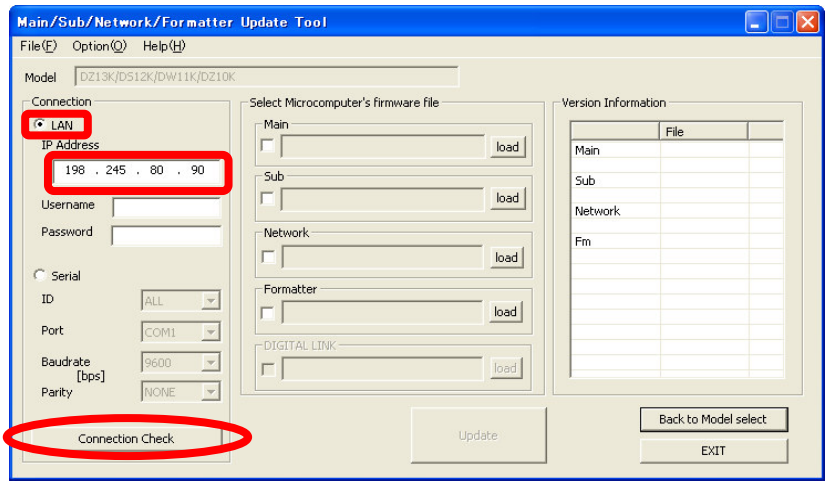


2. 1. 3. Update procedure

1. Switch the projector to "Normal-Standby" mode (POWER indicator is Lighting in red).
2. Start up service software with a computer, select Model, and then click the [OK] button.



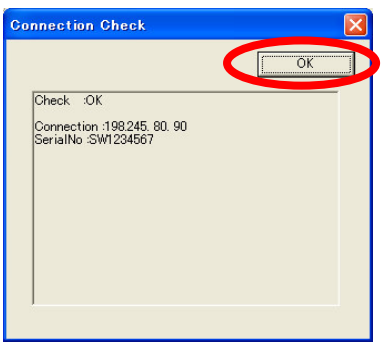
3. Select "LAN" in "Connection" and input the IP address of the projector, and click [Connection Check] button.



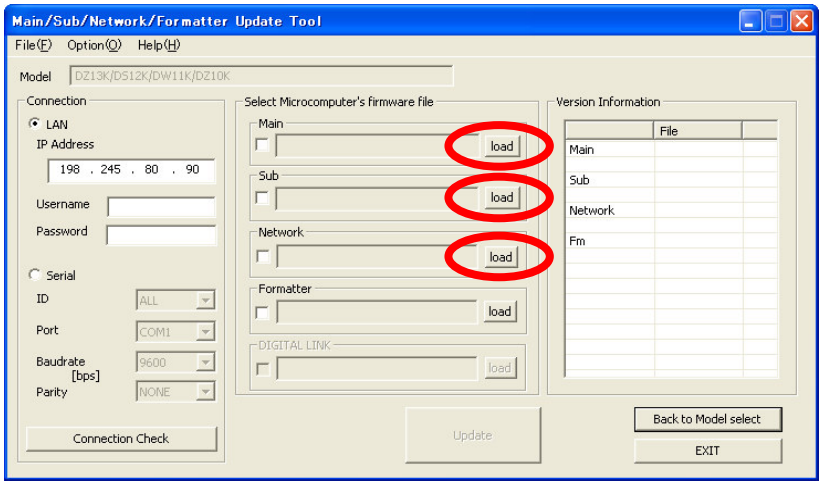
4. A result of the connection confirmation is displayed.

"Check: OK" ⇒ Click a [OK] button and advance next.

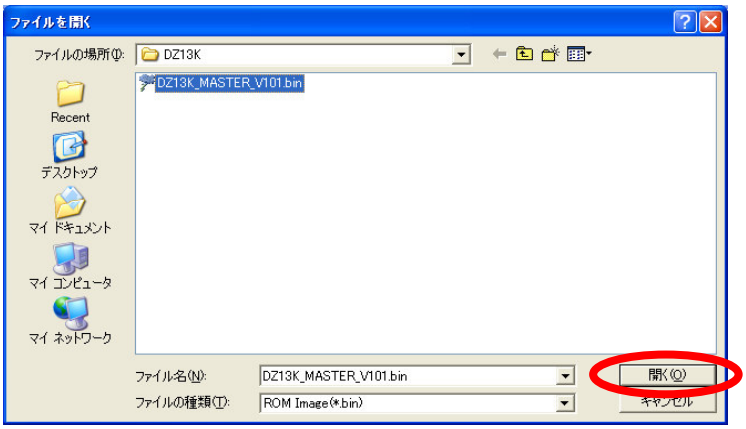
"Check: NG" ⇒ Come back to item 3., and please confirm whether setting is right.



5. Select Microprocessor to update, and click [load] button.

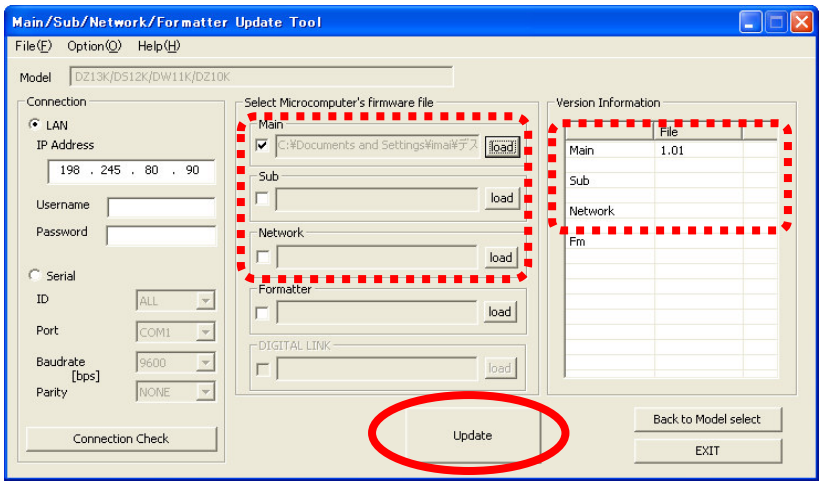


6. Appoint the microcomputer software that took in a computer beforehand, and click [Open] button.

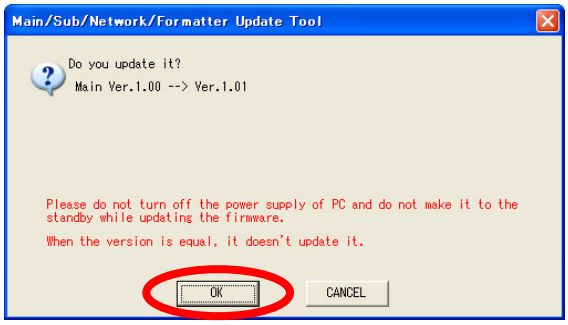


7. When load of the microcomputer software is completed, a checkmark and path and a version are displayed.
   * When do not do update in Microprocessor Software which did load, exclude a checkmark of Microprocessor to fall under.

Without a mistake, click a [Update] button.



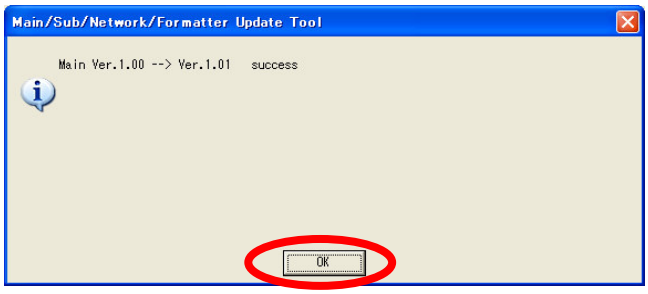
8. Click [OK] button and start update.



While update it, Lamp1-2 indicator indicates as follows.

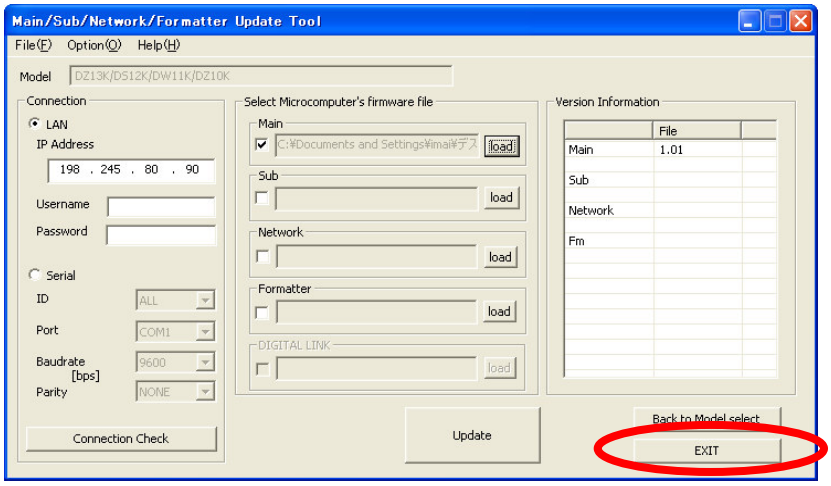
*Main:Lamp indicator 1-2, alternately flashing red.
*Sub:Lamp indicator all lit red.
*Network:Lamp indicator 1-2, alternately flashing red.

9. If completion and a message are displayed, click [OK] button.



*Rewrite the same version of software will be skipped.

10. Click [EXIT]button, and please be finished.



* Reboot Projector, and please confirm whether the version of the Microprocessor Software is updated definitely, with sub menu " STATUS" of the main menu " PROJECTOR SETUP" .

2. 2. Update by the SERIAL terminal connection (Main/Sub/Formatter)

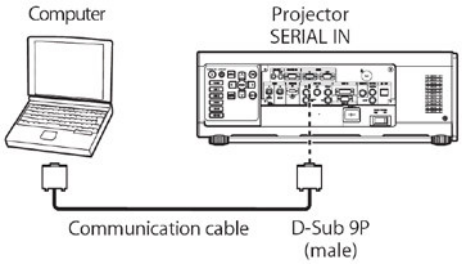
2. 2. 1. Equipment to be used

1. Computer : Use it for the transfer of software.
2. Communication cable : D-sub 9pin (male/female RS-232C straight)
3. Service Software : [MainSubNet Update Tool.exe] Service software is downloaded from the projector service homepage.
4. Microprocessor Software: Please download the file from the projector service homepage to the PC.

2. 2. 2. Connection Preparations

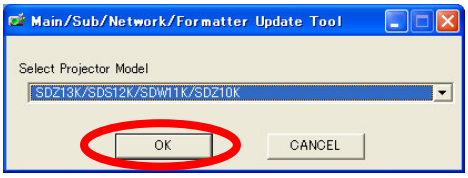
1. Confirm the projector's ID, baudrate, prity and take a memo.
2. Connect the "SERIAL IN" terminal of projector and PC with a RS-232C cable.

Attention : Computer, please set so as not to standby or shutdown.

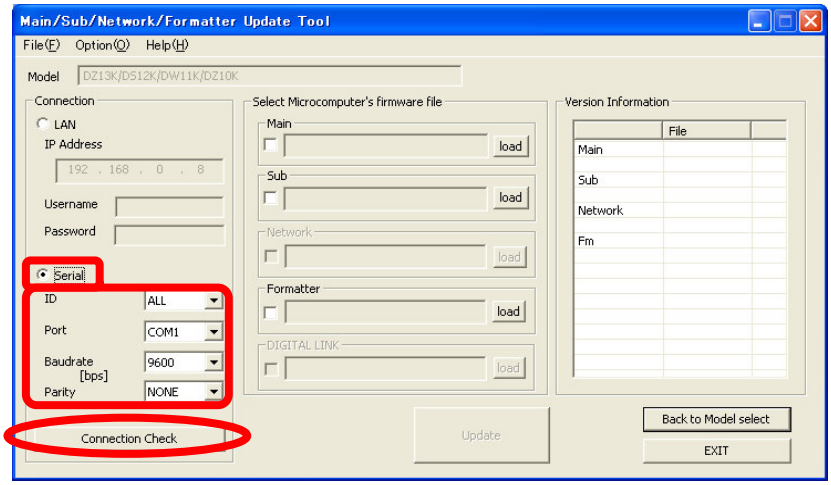


2. 2. 3. Update procedure

1. Switch the projector to "Normal-Standby" mode (POWER indicator is Lighting in red).
2. Start up service software with a computer, select Model, and then click the [OK] button.



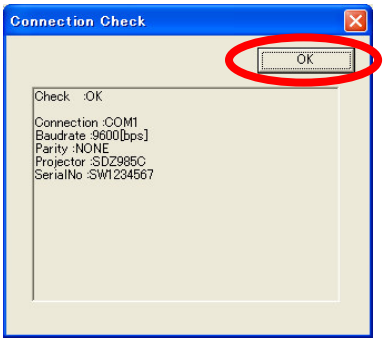
3. Select "Serial" in "Connection", and input the ID, Port, Baudrate, Parity , and click [Connection Check] button.



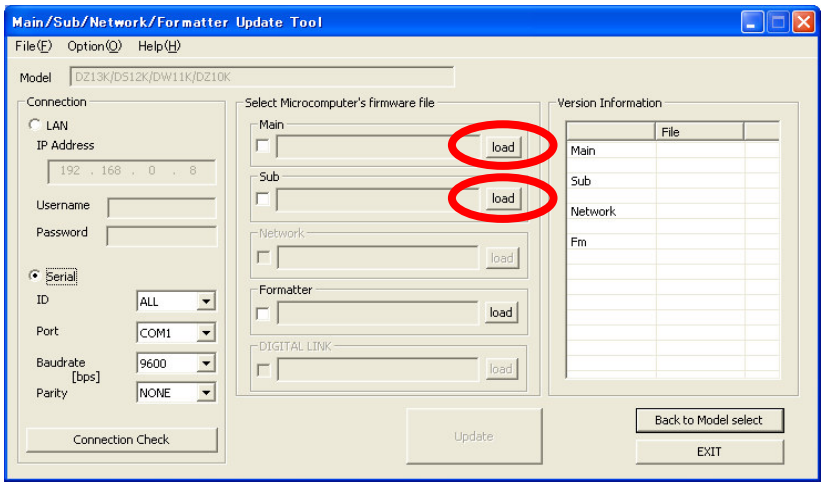
4. A result of the connection confirmation is displayed.

"Check: OK" ⇒ Click a [OK] button and advance next.

"Check: NG" ⇒ Come back to item 3., and please confirm whether setting is right.

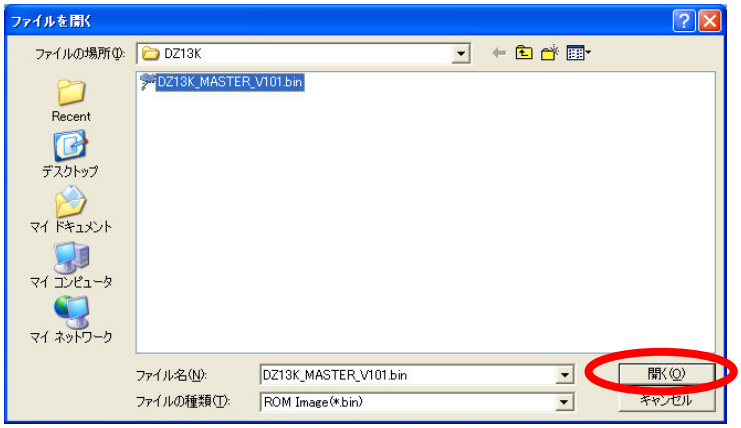


5. Select Microprocessor to update, and click [load] button.



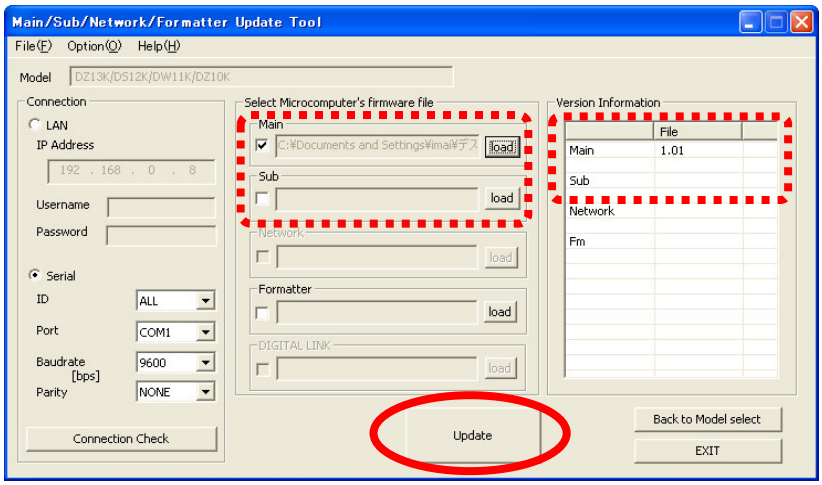
*Update of the network software by serial terminal connection is not possible.

6. Appoint the microcomputer software that took in a computer beforehand, and click [Open] button.

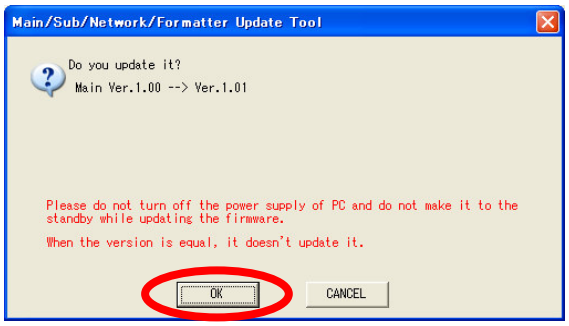


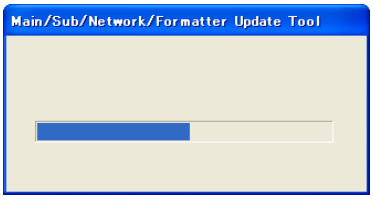
7. When load of the microcomputer software is completed, a checkmark and path and a version are displayed.
   * When do not do update in Microprocessor Software which did load, exclude a checkmark of Microprocessor to fall under.

Without a mistake, click a [Update] button.



8. Click [OK] button and start update.

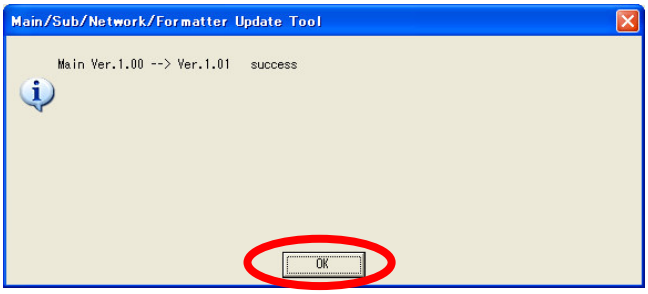




While update it, Lamp1-2 indicator indicates as follows.

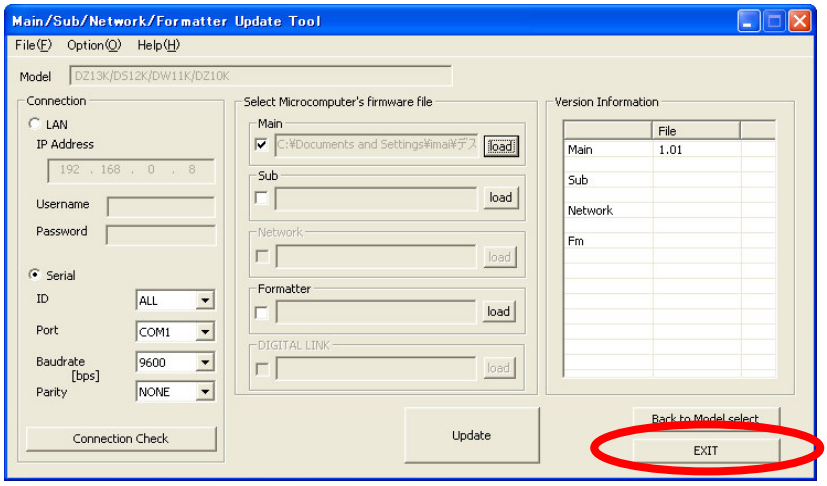
*Main:Lamp indicator 1-2, alternately flashing red.
*Sub:Lamp indicator all lit red.

9. If completion and a message are displayed, click [OK] button.



*Rewrite the same version of software will be skipped.

10. Click [EXIT]button, and please be finished.



* Reboot Projector, and please confirm whether the version of the Microprocessor Software is updated definitely, with sub menu " STATUS" of the main menu " PROJECTOR SETUP".

SECTION 4

Schematic Diagram

Model No. **PT-DZ13KU / DZ13KE**
PT-DS12KU / DS12KE
PT-DW11KU / DW11KE
PT-DZ10KU / DZ10KE

CONTENTS

1. Block Diagram DIA-2
   1. 1. Power Supply and Ballast
   1. 2. Control and Driving System
   1. 3. Signal Processing

2. Interconnection Block Diagram DIA-5

3. Schematic Diagram DIA-6
   3. 1. A-P.C.Board
   3. 2. G-P.C.Board
   3. 3. S-P.C.Board
   3. 4. F-P.C.Board
   3. 5. RM-P.C.Board
   3. 6. RL-P.C.Board
   3. 7. R-P.C.Board
   3. 8. R2-P.C.Board
   3. 9. R3-P.C.Board

4. Circuit Boards Diagram DIA-13
   4. 1. A-P.C.Board
   4. 2. G-P.C.Board

Important Safety Notice

Components identified by the international symbol ⚠ have special characteristics important for safety.
When replacing any of these components, use only the manufacturer's specified ones.

■Notes

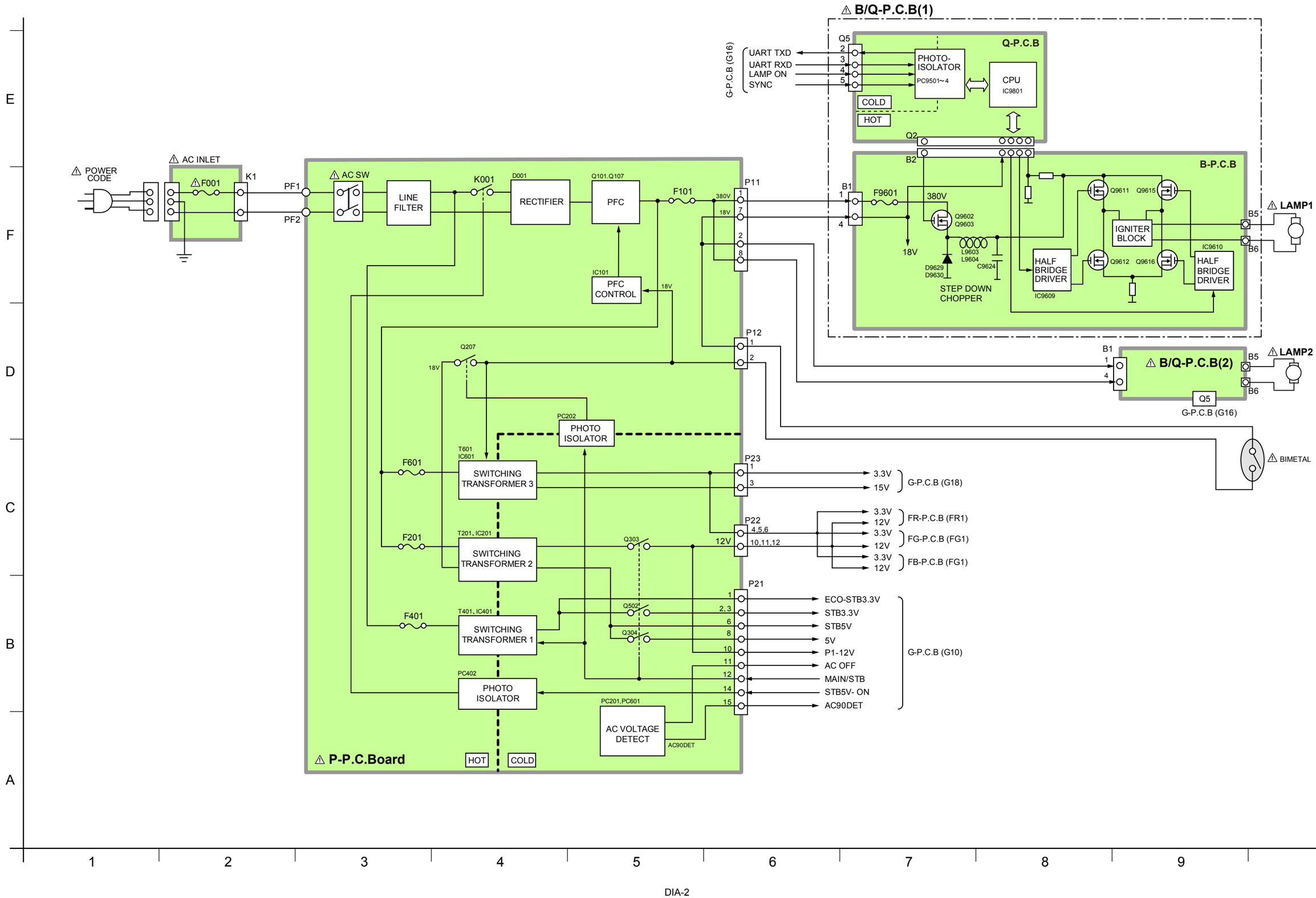
1. Resistor
   All the resistors are carbon 1/4W resistors, unless marked as follows.
   The unit of resistance is an OHM [Ω] (K=1 000 M=1 000000).
   - ○ : Nonflammable
   - △ : Solid
   - ⊠ : Wire Wound
   - ⊠ : Metal Oxide
   - ◎ : Metal Film
   - ⊗ : Fuse
2. Capacitor
   - ⊗ : Temperature Compensation
   - Ⓜ : Polyester
   - ⓜ : Metalized Polyester
   - ⊠ : Polypropylene
   - ⁺Ⓐ⁻ : Electrolytic
   - ᴺᴾⒶ : Bipolar
   - ⓣ : Dipped Tantalum
   - ⓩ : Z-Type
3. Coil
   The unit of inductance is a H, unless otherwise noted.
4. Test Point
   - ● : Test Point
5. HOT and COLD indications
   The power circuit board contains a circuit area using a separate power supply to isolate the ground connection.
   The circuit is defined by HOT and COLD indications in the schematic diagram. Take the precautions below:
6. This schematic diagram is the latest at the time of printing and the subject to change without notice.

■Precautions

1. NEVER touch the HOT part or the HOT and COLD parts at the same time, or you may get an electric shock.
2. NEVER short-circuit the HOT and COLD circuits, or the fuse may blow and the parts may break.
3. NEVER connect an instrument such oscilloscope to the HOT and COLD circuit simultaneously, or the fuse may blow.
   Connect the ground of instruments to the ground of the circuit being measured.
4. MAKE SURE to unplug the power cord from the power outlet before removing the chassis.
5. Be sure to make your orders of replacement parts according to parts list section.

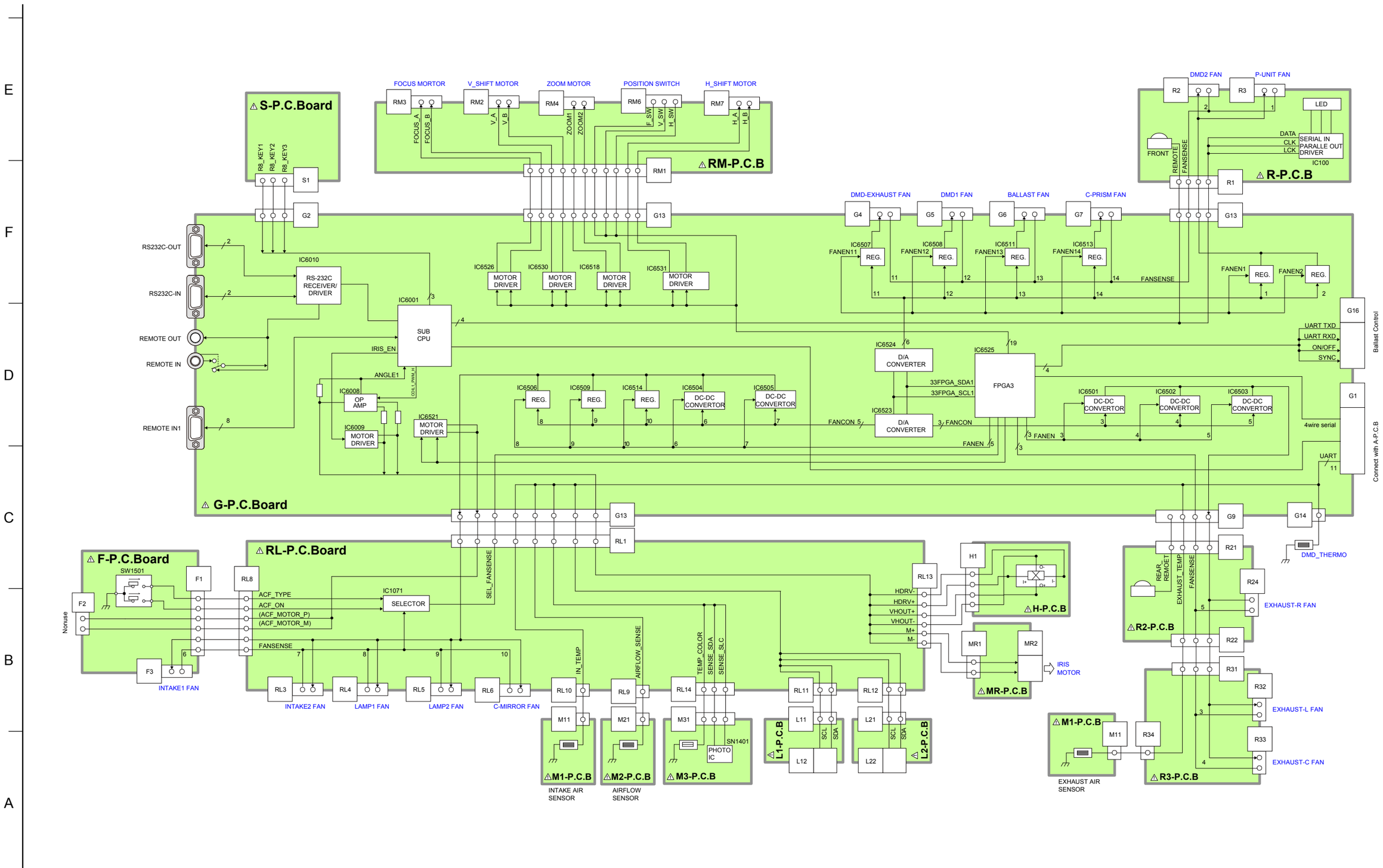
1. Block Diagram

1. 1. Power Supply and Ballast



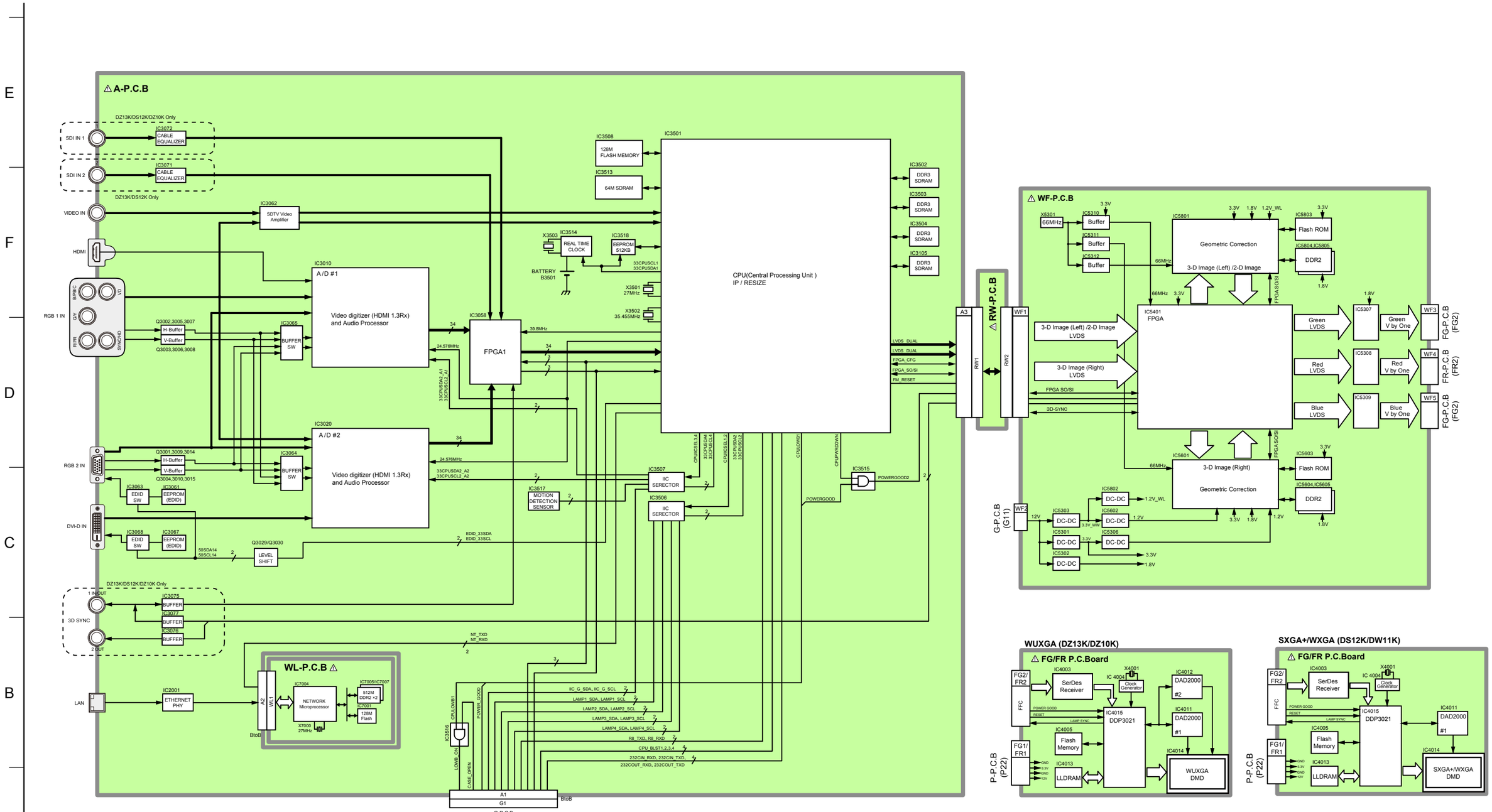
1. Block Diagram

1. 2. Control and Driving System

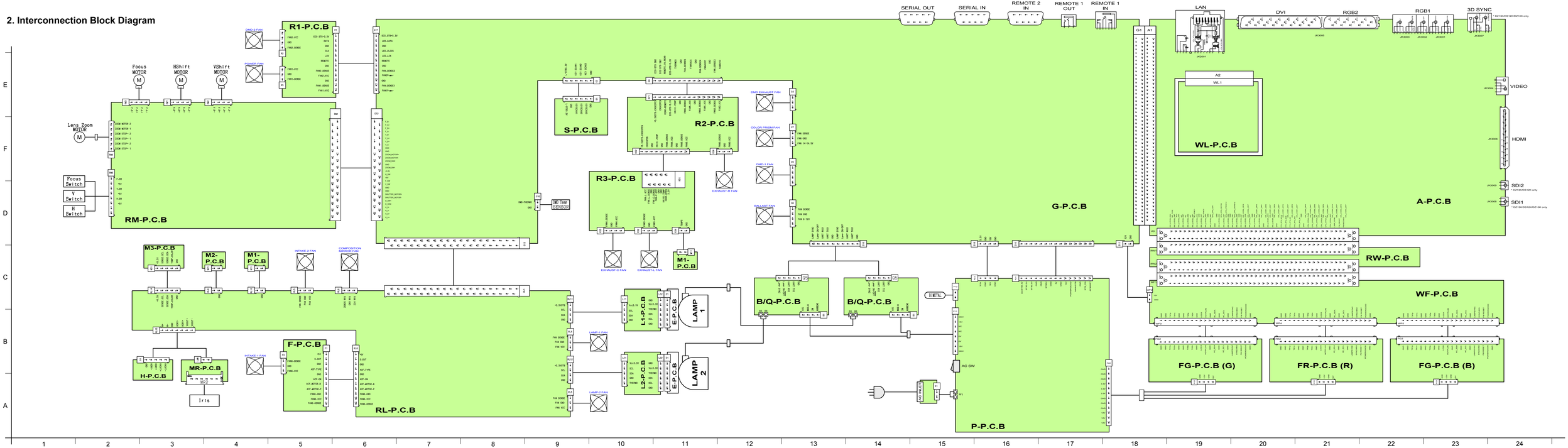


1. Block Diagram

1. 3. Signal Processing



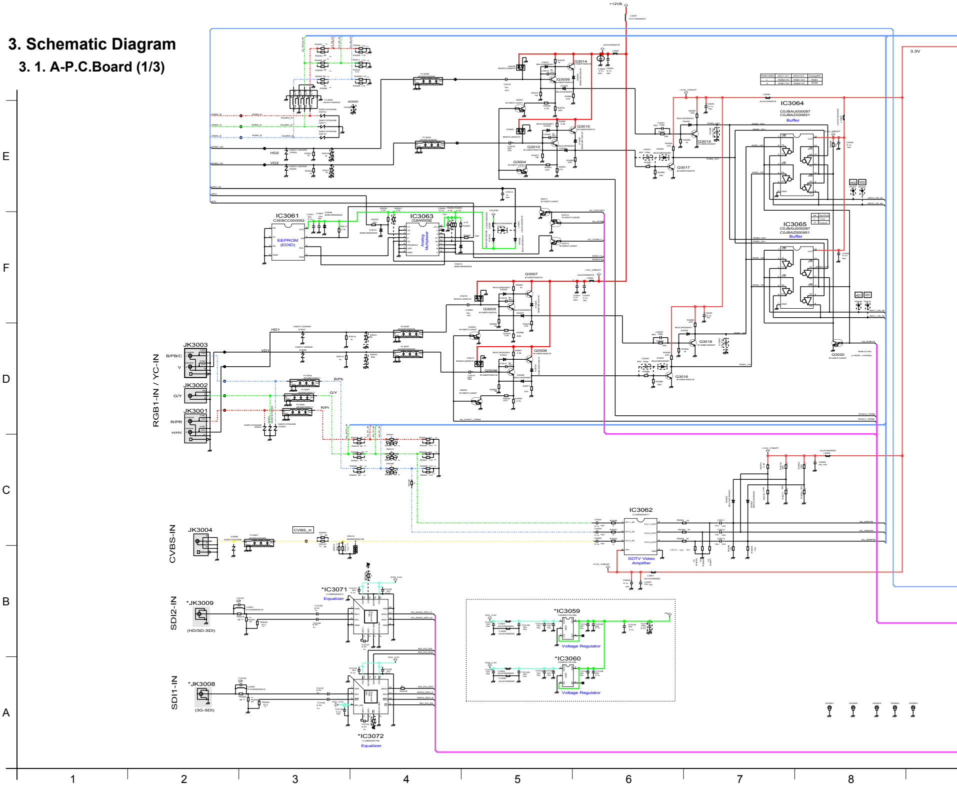
2. Interconnection Block Diagram



DIA-5

3. Schematic Diagram

3. 1. A-P.C.Board (1/3)



+12VB
3.3V
IC3064
C0JBAU000087
C0JBAZ000851
Buffer
IC3065
C0JBAU000087
C0JBAZ000851
Buffer
IC3061
C3EBCC000052
EEPROM
(EDID)
IC3063
C0JBAR000582
Analog Multiplexer
IC3062
C1AB00003211
SDTV Video Amplifier
*IC3071
C1AB00003374
Equalizer
*IC3072
C1AB00003759
Equalizer
*IC3059
C0DBGYY01386
Voltage Regulator
*IC3060
C0DBGYY01386
Voltage Regulator
Q3014
Q3009
Q3015
Q3010
Q3004
Q3001
Q3019
Q3017
Q3011
Q3012
Q3013
Q3007
Q3005
Q3002
Q3008
Q3006
Q3003
Q3018
Q3016
Q3020
JK3003
JK3002
JK3001
JK3004
*JK3009
*JK3008
RGB1-IN / YC-IN
B/PB/C
V
G/Y
R/PR
H/HV
B/Pb
G/Y
R/Pr
HD1
VD1
HD2
VD2
CVBS-IN
CVBS_in
SDI2-IN
(HD/SD-SDI)
SDI1-IN
(3G-SDI)
AGND
FL3001
FL3002
FL3003
FL3004
FL3005
FL3006
FL3007
FL3008
FL3009
ZA3001
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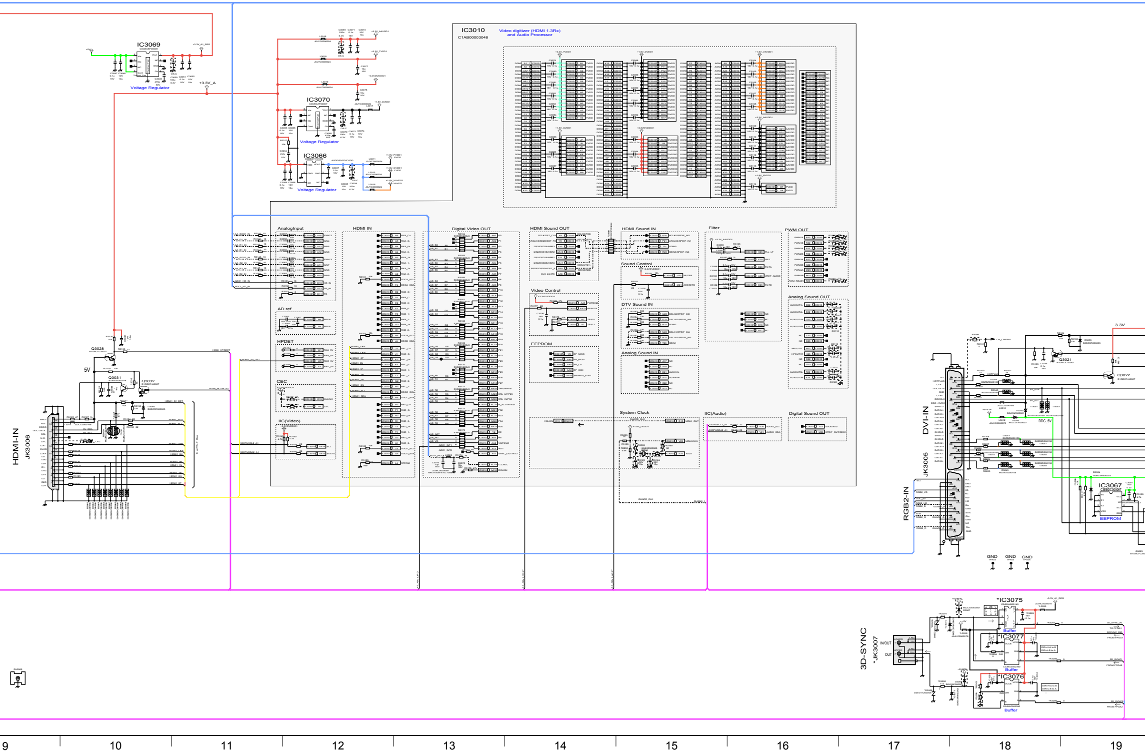
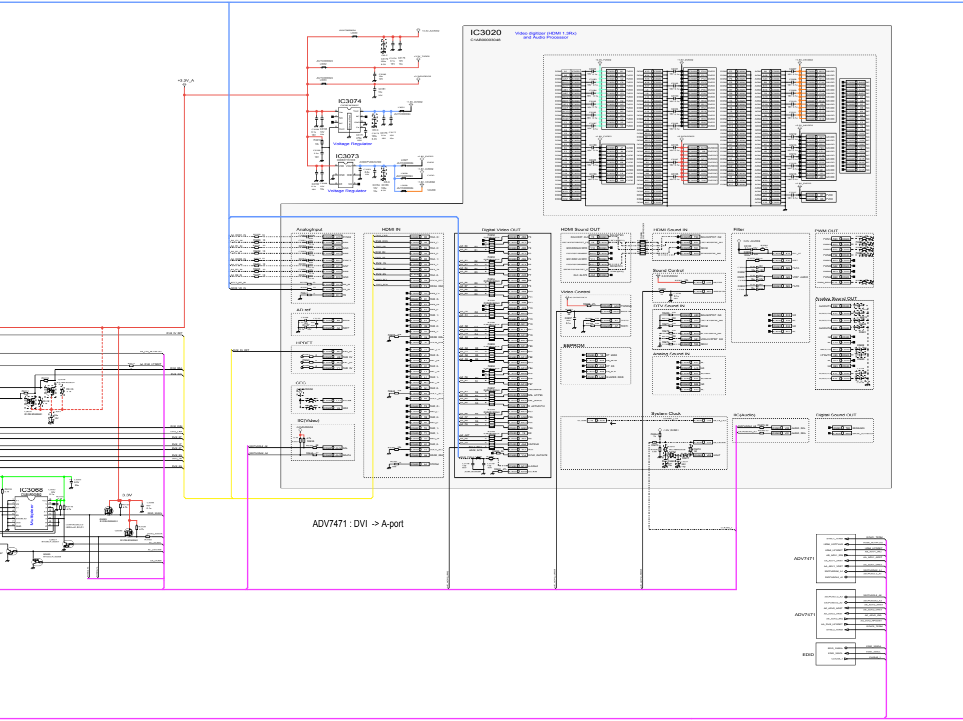
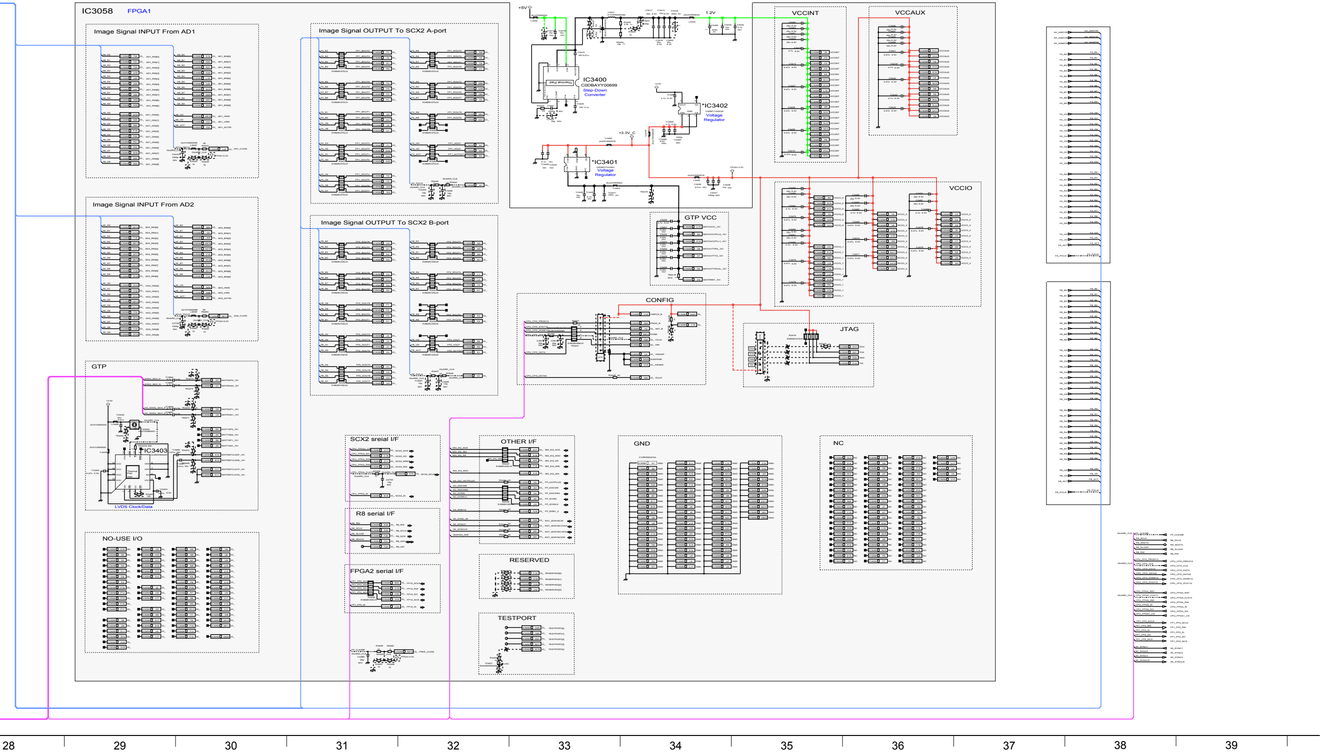

IC3069
Voltage Regulator
+3.3V_A
IC3070
Voltage Regulator
IC3066
Voltage Regulator
IC3010
C1AB00003048
Video digitizer (HDMI 1.3Rx)
and Audio Processor
AnalogInput
HDMI IN
Digital Video OUT
HDMI Sound OUT
HDMI Sound IN
Filter
PWM OUT
Sound Control
Video Control
DTV Sound IN
Analog Sound IN
Analog Sound OUT
EEPROM
AD ref
HPDET
CEC
IIC(Video)
System Clock
IIC(Audio)
Digital Sound OUT
Q3028
Q3031
Q3032
5V
HDMI-IN
JK3006
DVI-IN
JK3005
RGB2-IN
Q3021
Q3022
3.3V
IC3067
EEPROM
DDC_5V
GND
GND
GND
3D-SYNC
*JK3007
IN/OUT
OUT
*IC3075
Buffer
*IC3077
Buffer
*IC3076
Buffer
9
10
11
12
13
14
15
16
17
18
19


IC3020
C1AB00003048
Video digitizer (HDMI 1.3Rx)
and Audio Processor
+3.3V_A
IC3074
Voltage Regulator
IC3073
Voltage Regulator
AnalogInput
HDMI IN
Digital Video OUT
HDMI Sound OUT
HDMI Sound IN
Filter
PWM OUT
AD ref
HPDET
CEC
IIC(Video)
Sound Control
Video Control
DTV Sound IN
EEPROM
Analog Sound IN
Analog Sound OUT
System Clock
IIC(Audio)
Digital Sound OUT
IC3068
C0JBAR000582
Multiplexer
3.3V
ADV7471
ADV7471
EDID

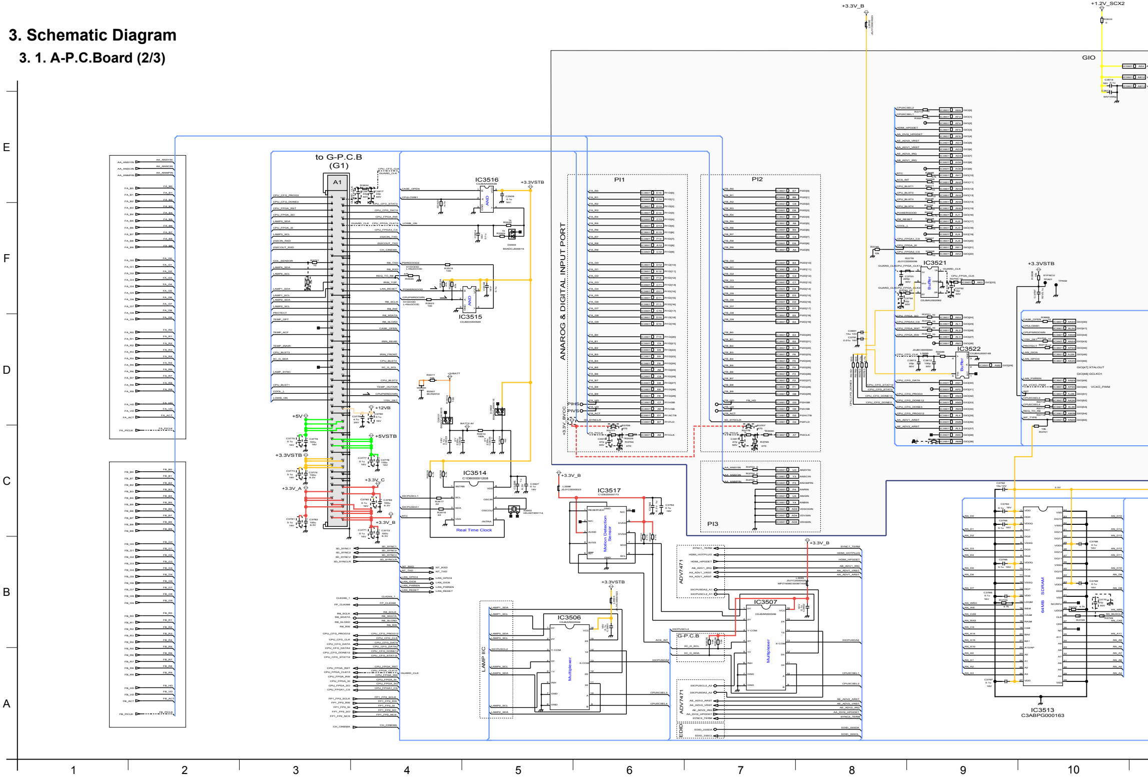
ADV7471 : DVI -> A-port

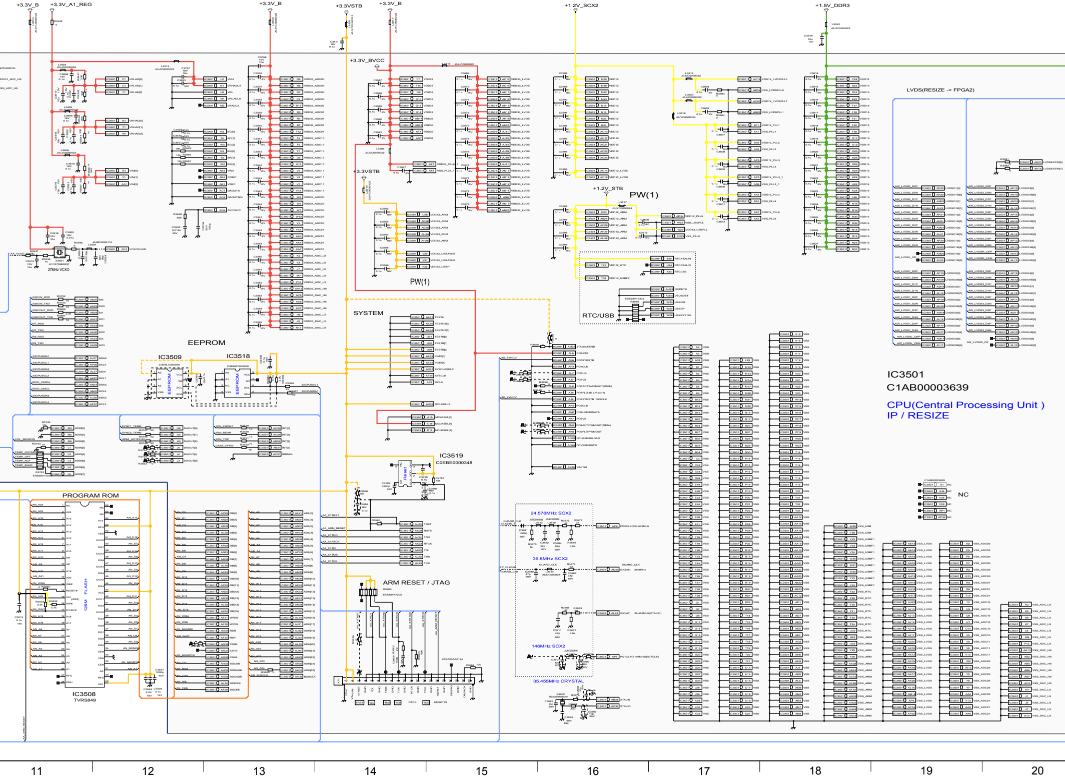
20 21 22 23 24 25 26 27

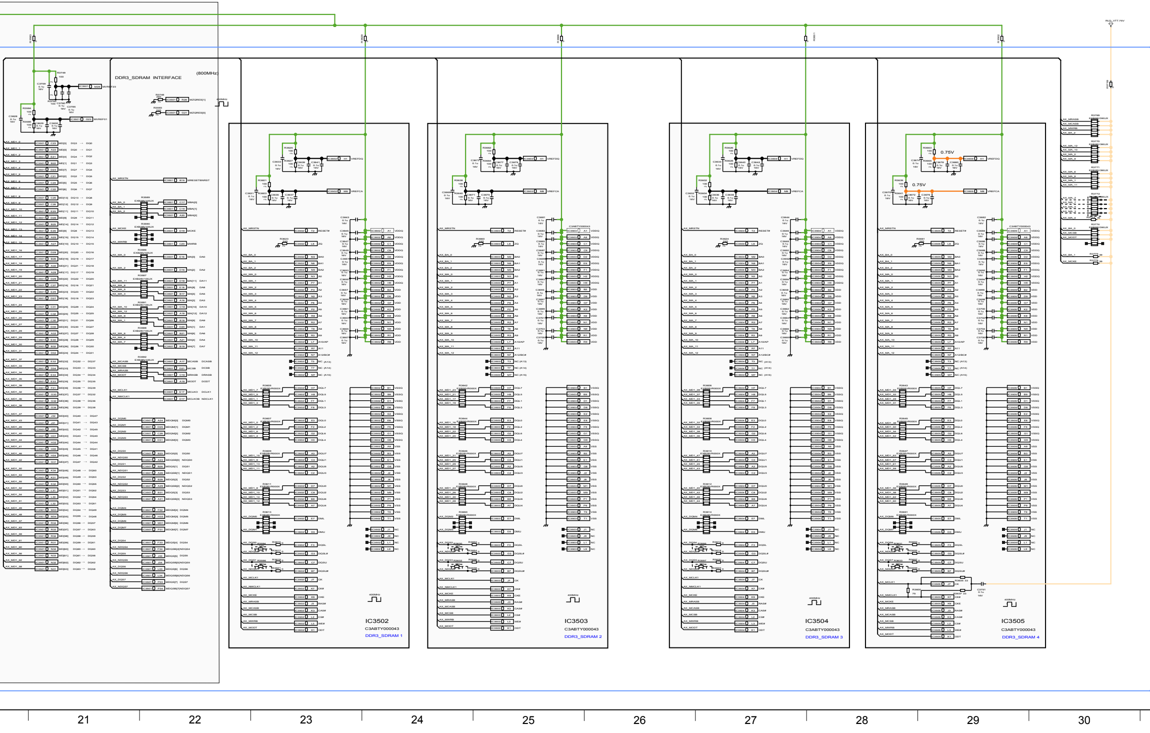

IC3058
FPGA1
Image Signal INPUT From AD1
Image Signal INPUT From AD2
GTP
IC3403
LVDS Clock/Data
NO-USE I/O
Image Signal OUTPUT To SCX2 A-port
Image Signal OUTPUT To SCX2 B-port
SCX2 sreial I/F
R8 serial I/F
FPGA2 serial I/F
+5V
1.2V
IC3400
C0DBAYY00699
Step-Down
Converter
IC3402
Voltage
Regulator
+3.3V_C
IC3401
Voltage
Regulator
VCCINT
VCCAUX
VCCIO
GTP VCC
CONFIG
JTAG
OTHER I/F
RESERVED
TESTPORT
GND
NC
28
29
30
31
32
33
34
35
36
37
38
39

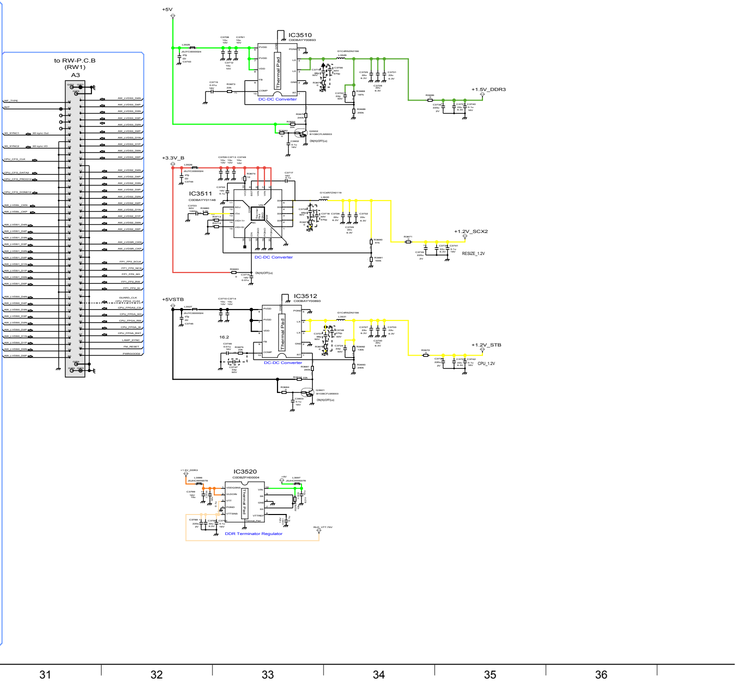
3. Schematic Diagram

3. 1. A-P.C.Board (2/3)


E
F
D
C
B
A
1
2
3
4
5
6
7
8
9
10
to G-P.C.B
(G1)
A1
IC3516
AND
+3.3VSTB
IC3515
AND
+12VB
+5V
+5VSTB
+3.3VSTB
+3.3V_C
+3.3V_A
+3.3V_B
IC3514
Real Time Clock
ANAROG & DIGITAL INPUT PORT
PI1
PI2
PI3
IC3517
Motion Detection Sensor
ADV7471
IC3507
Multiplexer
G-P.C.B
IC3506
Multiplexer
LAMP IIC
ADV7471
EDID
GIO
+3.3V_B
+1.2V_SCX2
IC3521
Buffer
IC3522
Buffer
+3.3VSTB
IC3513
C3ABPG000163
64MB SDRAM
VCXO_PWM

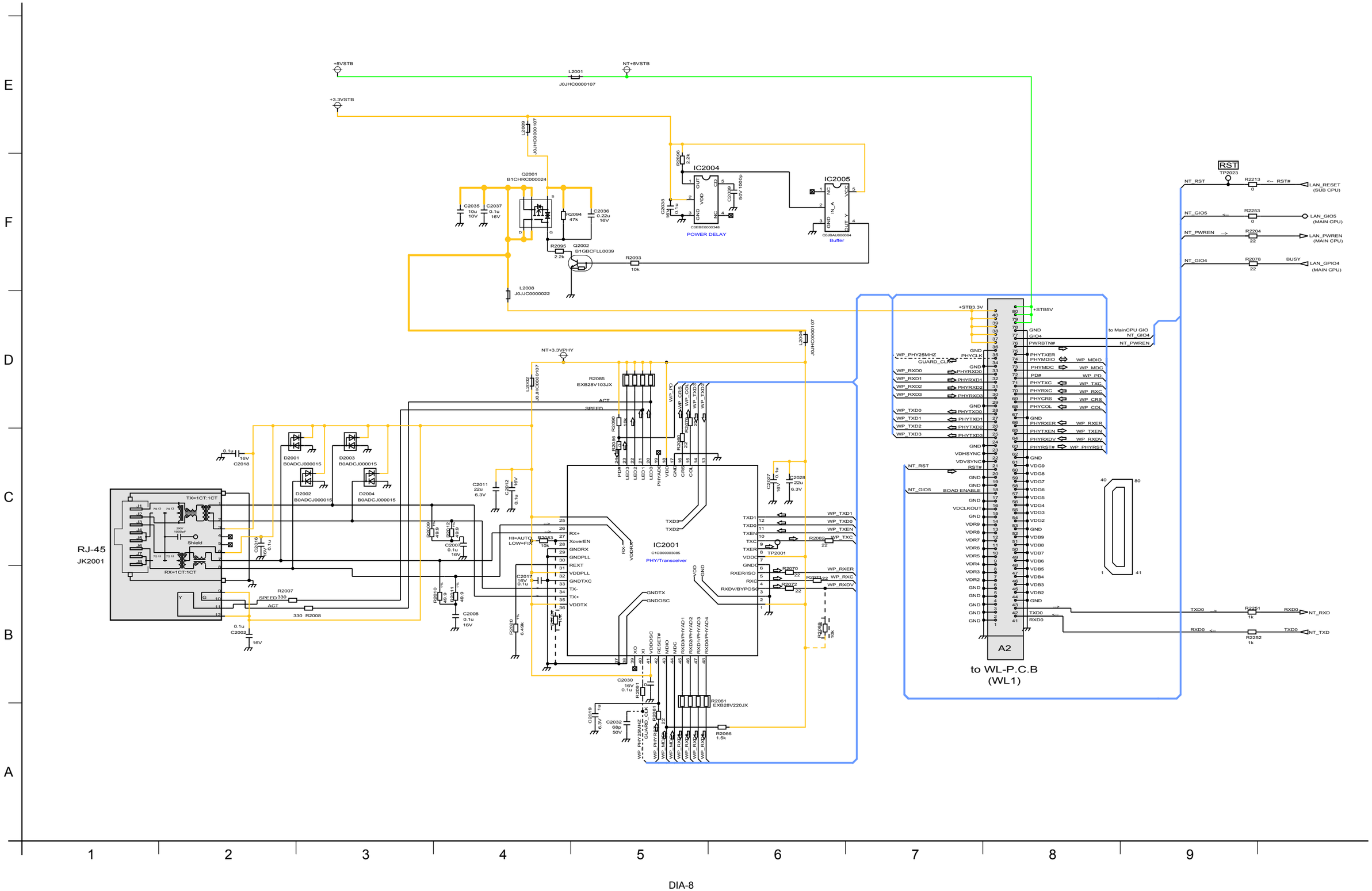

+3.3V_B
+3.3V_A1_REG
+3.3V_B
+3.3VSTB
+3.3V_B
+1.2V_SCX2
+1.5V_DDR3
+3.3V_BVCC
+3.3VSTB
+1.2V_STB
PW(1)
PW(1)
LVDS(RESIZE -> FPGA2)
27MHz VCXO
SYSTEM
RTC/USB
EEPROM
IC3509
IC3518
EEPROM
EEPROM
IC3519
C0EBE0000348
Reset
IC3501
C1AB00003639
CPU(Central Processing Unit)
IP / RESIZE
NC
PROGRAM ROM
128M FLASH
IC3508
TVRS849
ARM RESET / JTAG
24.576MHz SCX2
39.8MHz SCX2
146MHz SCX2
35.455MHz CRYSTAL
11
12
13
14
15
16
17
18
19
20


DDR3_SDRAM INTERFACE
(800MHz)
RLD_VTT.75V
0.75V
0.75V
IC3502
C3ABTY000043
DDR3_SDRAM 1
IC3503
C3ABTY000043
DDR3_SDRAM 2
IC3504
C3ABTY000043
DDR3_SDRAM 3
IC3505
C3ABTY000043
DDR3_SDRAM 4
VREFDQ
VREFCA
400MHz
21
22
23
24
25
26
27
28
29
30


to RW-P.C.B
(RW1)
A3
WF_TYPE
INIT
3D_SYNC1
3D sync Out
3D_SYNC2
3D sync I/O
CPU_CFG_CLK
CPU_CFG_DATA2
CPU_CFG_PROG12
CPU_CFG_DONE12
AW_LVDSL_CKN
AW_LVDSL_CKP
AW_LVDS1_D4N
AW_LVDS1_D4P
AW_LVDS1_D3N
AW_LVDS1_D3P
AW_LVDS1_D2N
AW_LVDS1_D2P
AW_LVDS1_D1N
AW_LVDS1_D1P
AW_LVDS1_D0N
AW_LVDS1_D0P
AW_LVDS0_D4N
AW_LVDS0_D4P
AW_LVDS0_D3N
AW_LVDS0_D3P
AW_LVDS0_D2N
AW_LVDS0_D2P
AW_LVDS0_D1N
AW_LVDS0_D1P
AW_LVDS0_D0N
AW_LVDS0_D0P
AW_LVDS3_D4N
AW_LVDS3_D4P
AW_LVDS3_D3N
AW_LVDS3_D3P
AW_LVDS3_D2N
AW_LVDS3_D2P
AW_LVDS3_D1N
AW_LVDS3_D1P
AW_LVDS3_D0N
AW_LVDS3_D0P
AW_LVDS2_D4N
AW_LVDS2_D4P
AW_LVDS2_D3N
AW_LVDS2_D3P
AW_LVDS2_D2N
AW_LVDS2_D2P
AW_LVDS2_D1N
AW_LVDS2_D1P
AW_LVDS2_D0N
AW_LVDS2_D0P
AW_LVDSR_CKN
AW_LVDSR_CKP
FP1_FP2_SCLK
FP1_FP2_NCS
FP1_FP2_SO
FP1_FP2_RW
FP1_FP2_SI
GUARD_CLK
CPU_FPGA_CLK2
CPU_FPGA2_CS
CPU_FPGA_SO
CPU_FPGA_RW
CPU_FPGA_SI
CPU_FPGA_RST
LAMP_SYNC
FM_RESET
PWRGOOD2
+5V
L3525
J0JYC0000024
C3743
C3708 10u 10V
C3761 10u 10V
C3712 10u 10V
C3715 0.01u 16V
R3673 22k
IC3510
C0DBAYY00893
PVDD
VDD
FB
COMP
PGND
LX
GND
RT
Thermal Pad
DC-DC Converter
G1C4R5ZA0186
L3529
C3719 68p 50V
C3756 50V 470p
R3678 0
C3722 22p 50V
R3688 187k
R3689 200k
C3725 22u 6.3V
C3728 22u 6.3V
C3731 22u 6.3V
R3679 240k
R3694 22k
R3682 0
Q3502
B1GBCFLM0003
C3802 0.1u 16V
ON(Hi)/OFF(Lo)
R3695 0
C3734 220u 2V
C3737 22u 6.3V
C3740 0.1u 16V
+1.5V_DDR3
+3.3V_B
L3526
J0JYC0000024
C3744
C3709 10u 10V
C3713 10u 10V
C3749 10u 10V
R3674 10
C3717 16V 0.1u
C3755 16V 0.1u
IC3511
C0DBAYY01148
C3723 50V 1000p
R3680 6.8k
R3713
R3714
ADJ
ITH
VID<1>
VID<0>
VCC
BST
VIN
GND
Thermal Pad GND
NC
EN
PGND
SW
DC-DC Converter
G1C4R7ZA0119
L3530
C3720 68p 50V
C3718 50V 470p
R3677 0
C3726 22u 6.3V
C3729 22u 6.3V
C3732 22u 6.3V
R3690 51k
R3691 100k
R3671 0
C3735 220u 2V
C3738 22u 6.3V
C3741 0.1u 16V
+1.2V_SCX2
RESIZE_1.2V
R3683 0
C3716 16V 0.01u
ON(Hi)/OFF(Lo)
+5VSTB
L3527
J0JYC0000024
C3745
C3710 10u 10V
C3714 10u 10V
IC3512
C0DBAYY00893
16.2
C3746 0.01u 16V
R3675 22k
C3747 33p 50V
Thermal Pad
DC-DC Converter
G1C4R5ZA0186
L3531
C3721 68p 50V
C3748 470p 50V
R3676 0
C3724 22p 50V
R3692 130k
R3693 240k
C3727 22u 6.3V
C3730 22u 6.3V
C3733 22u 6.3V
R3681 240k
R3712 22k
R3684 0
Q3501
B1GBCFLM0003
C3803 0.1u 16V
ON(Hi)/OFF(Lo)
R3672 0
C3736 220u 2V
C3739 22u 6.3V
C3742 0.1u 16V
+1.2V_STB
CPU_1.2V
+1.5V_DDR3
L3996
J0JHC0000078
C3799 16V 10u
IC3520
C0DBZFH00004
VDDQSNS
VLDOIN
VTT
PGND
VTTSNS
VIN
S5
GND
S3
VTTREF
Thermal Pad
Thermal_Pad
+5V
L3997
J0JHC0000078
C3800 10u 6.3V
C3801 0.1u 16V
C3788 220u 2V
C3789 22u 6.3V
C3790 0.1u 16V
DDR Terminator Regulator
RLD_VTT.75V
31
32
33
34
35
36

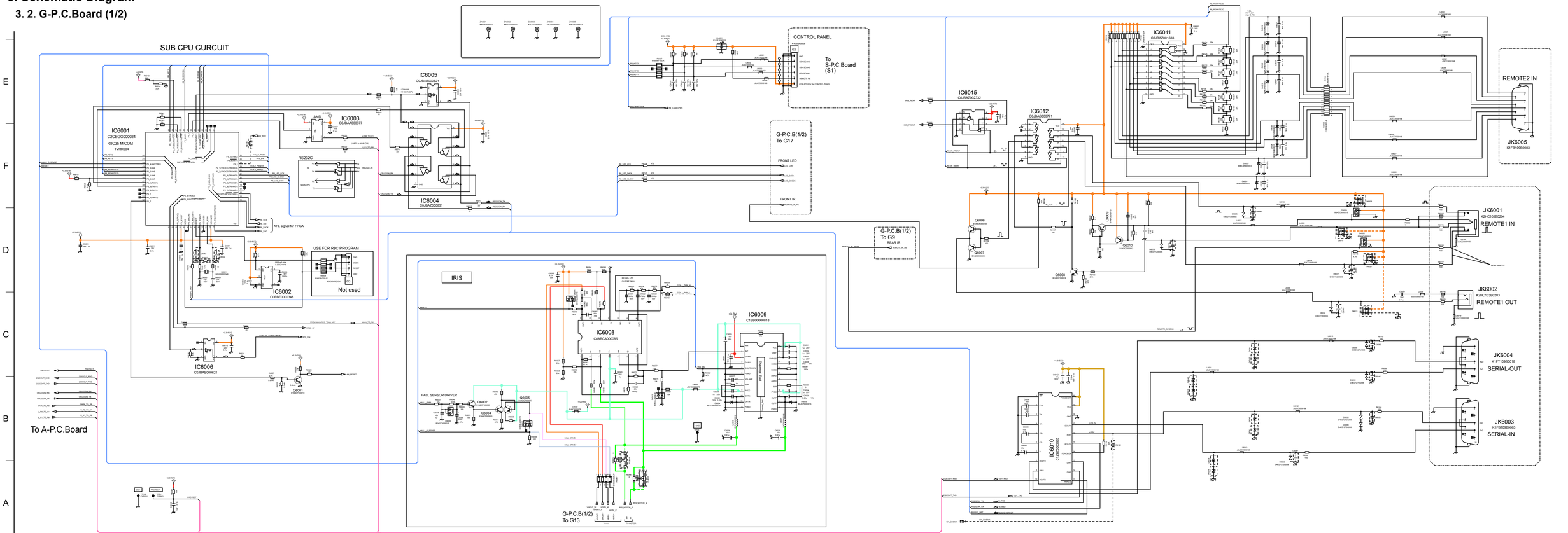
3. Schematic Diagram

3. 1. A-P.C.Board (3/3)



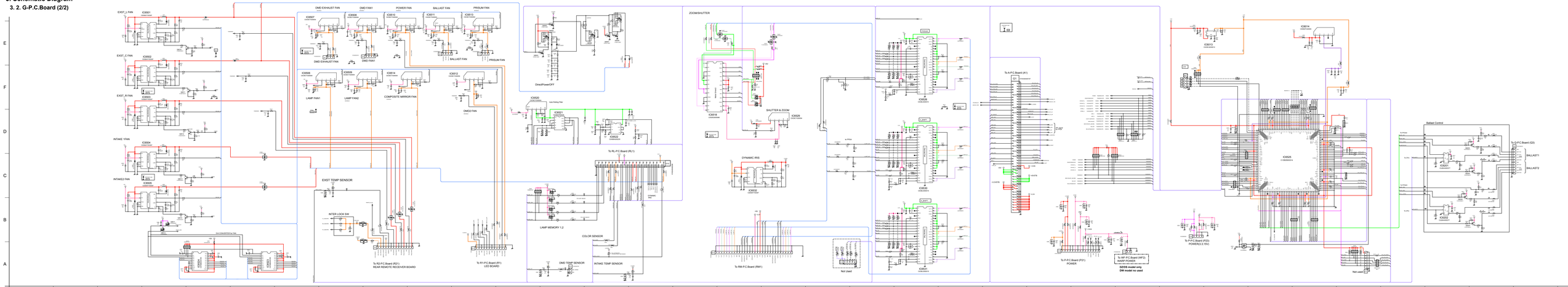
3. Schematic Diagram

3. 2. G-P.C.Board (1/2)



3. Schematic Diagram

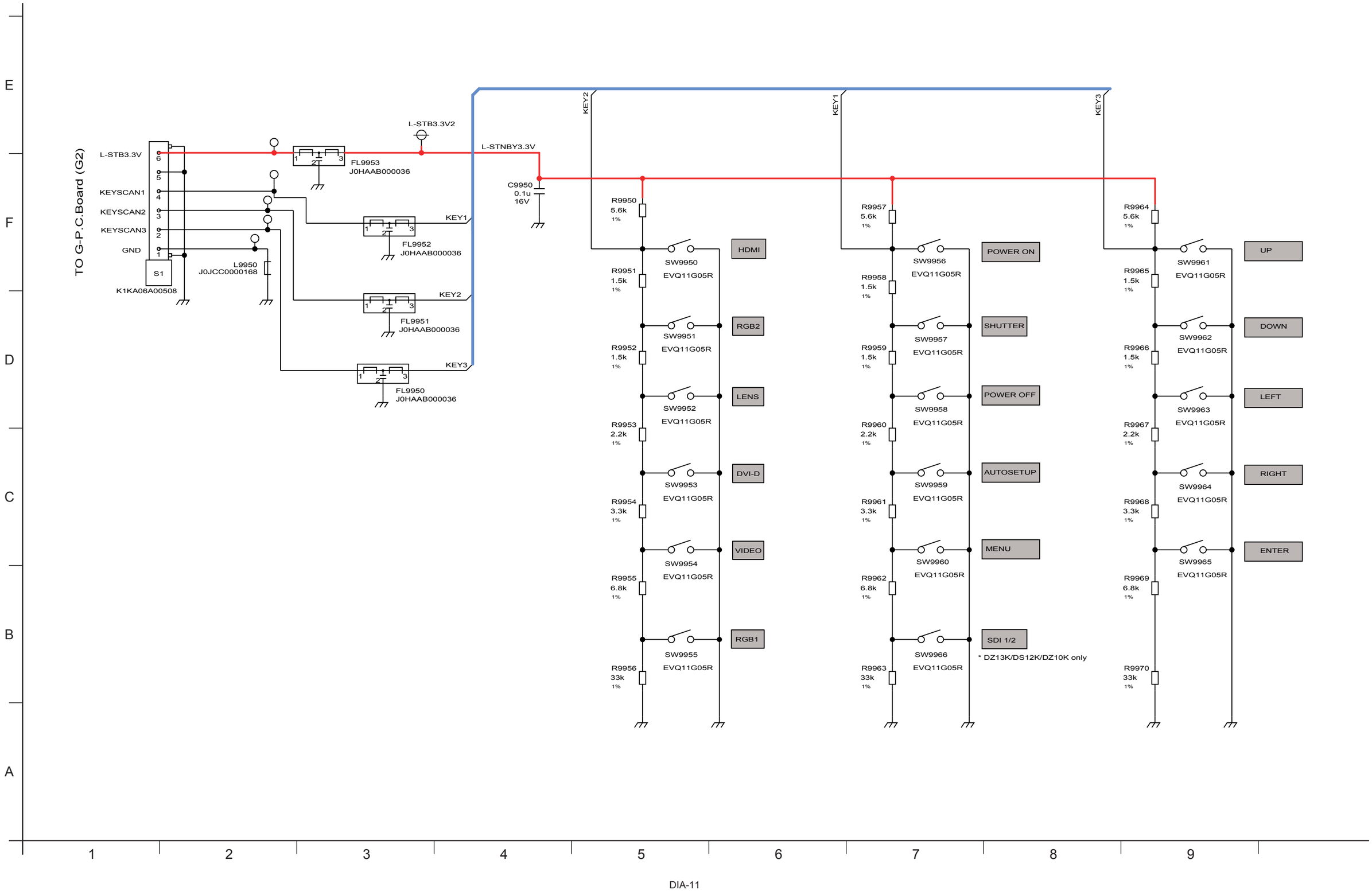
3. 2. G-P.C.Board (2/2)



DVA-10

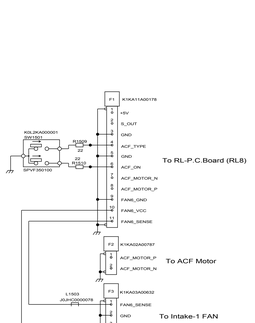
3. Schematic Diagram

3. 3. S-P.C.Board

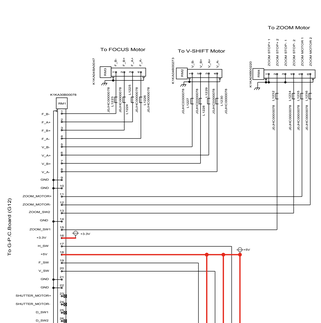


3. Schematic Diagram

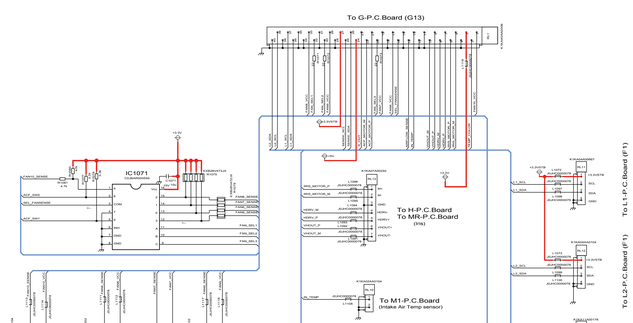
3. 4. F-P.C.Board



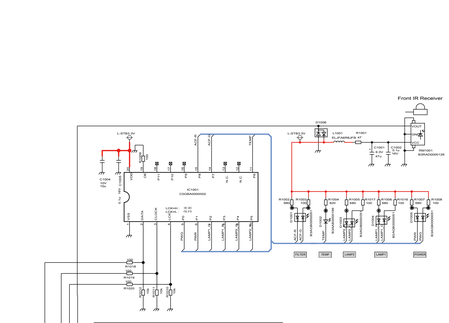
3. 5. RM-P.C.Board



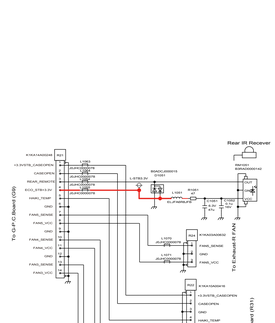
3. 6. RL-P.C.Board



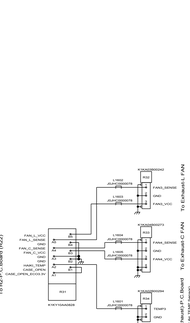
3. 7. R-P.C.Board



3. 8. R2-P.C.Board

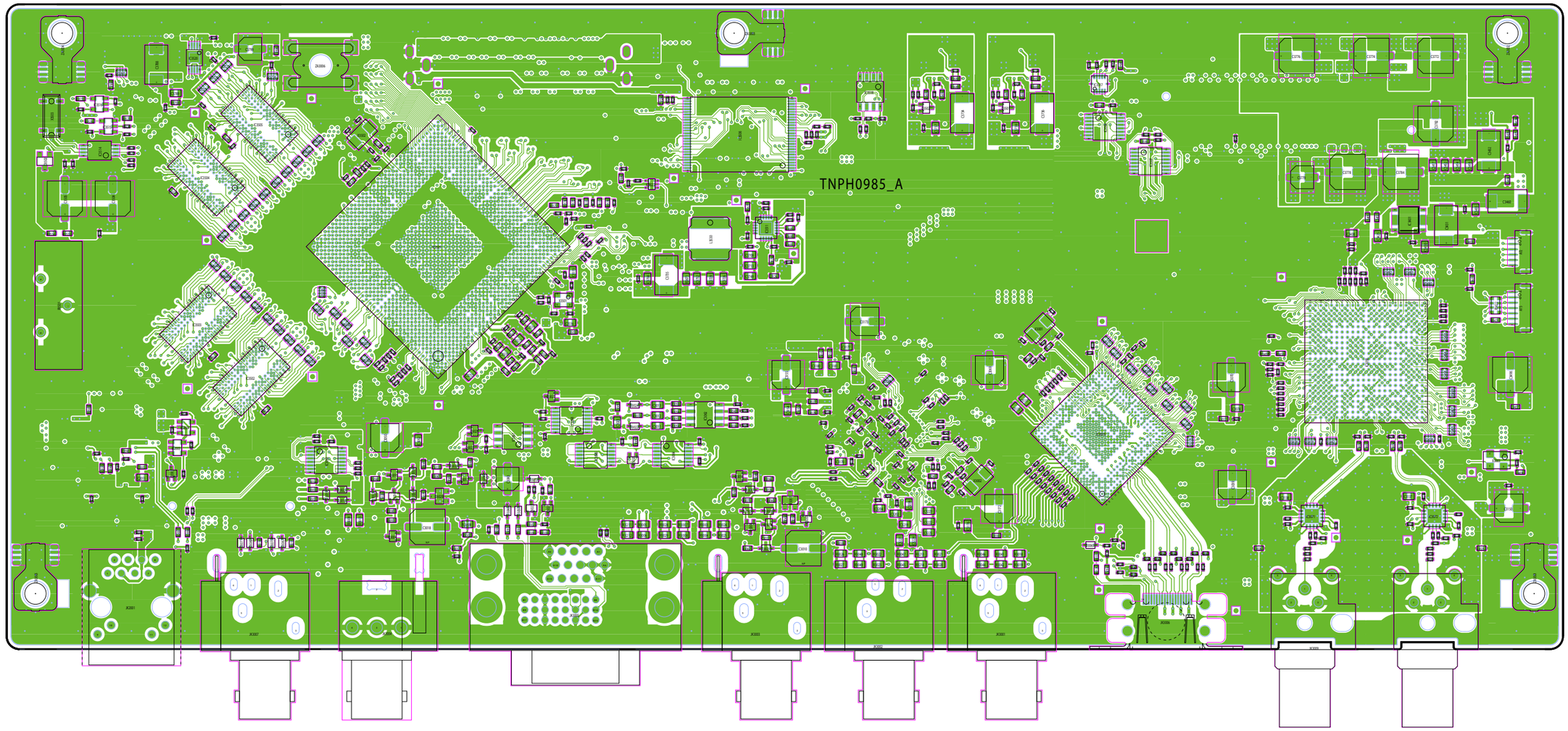


3. 9. R3-P.C.Board



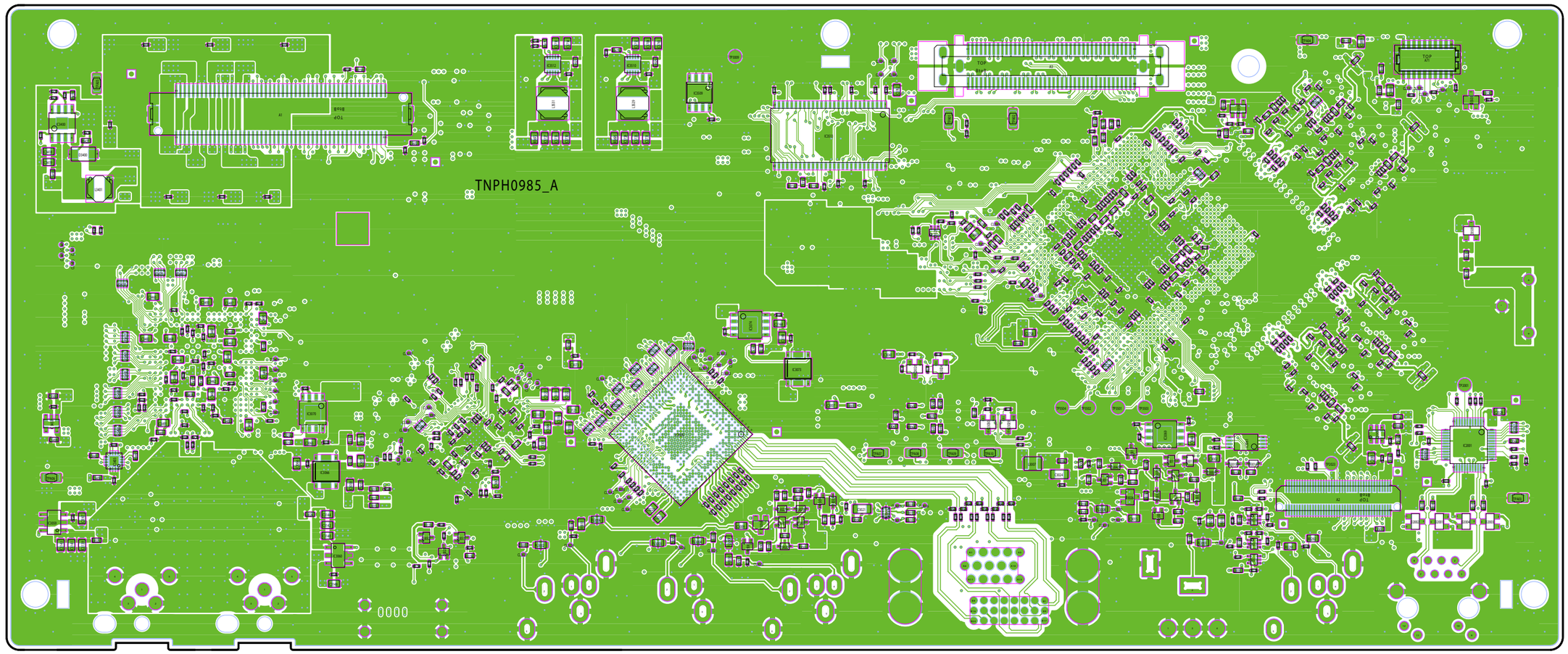
4. Circuit Boards Diagram

4. 1. A-P.C.Board (A-side)



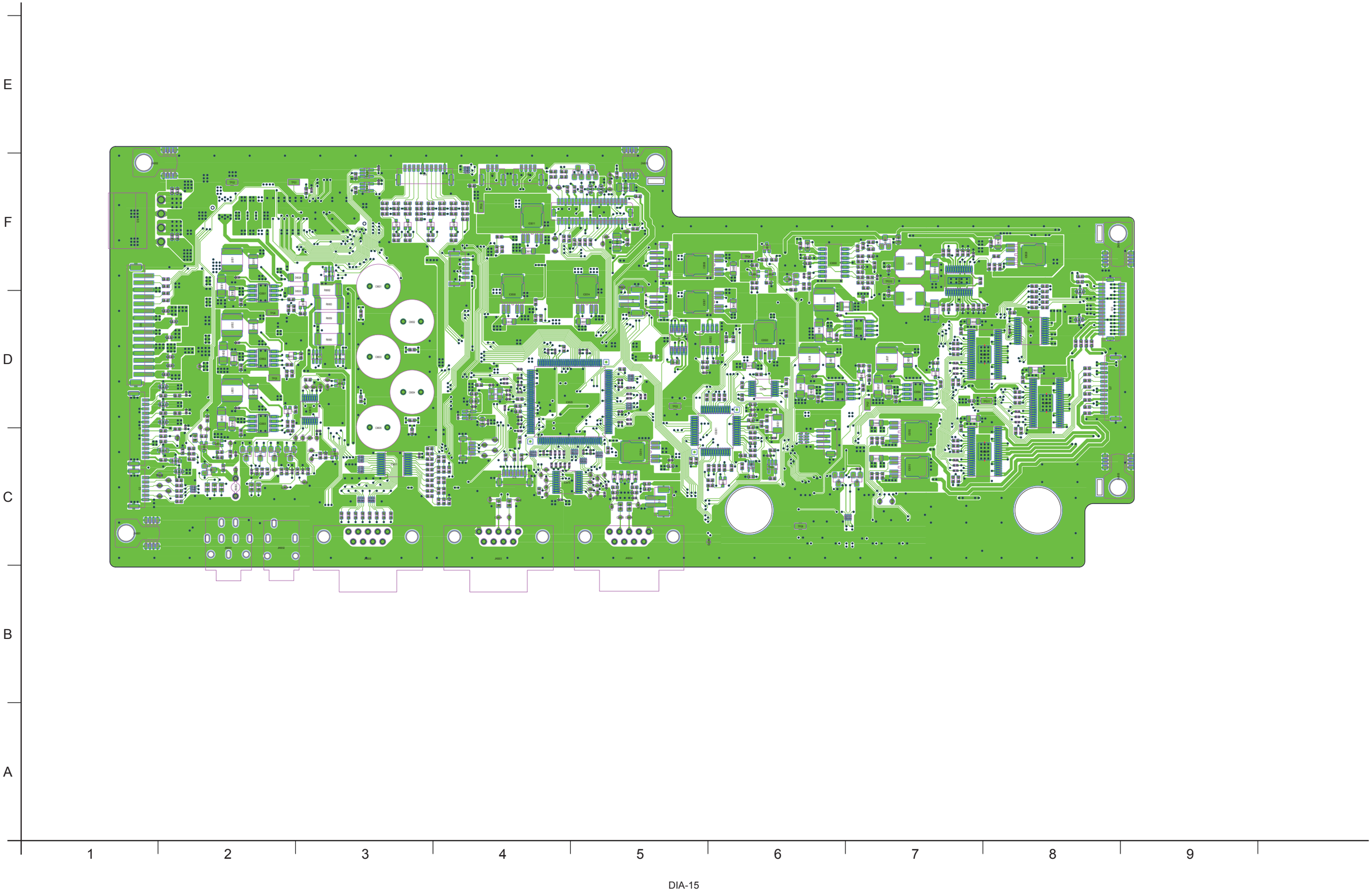
4. Circuit Boards Diagram

4. 1. A-P.C.Board (B-side)



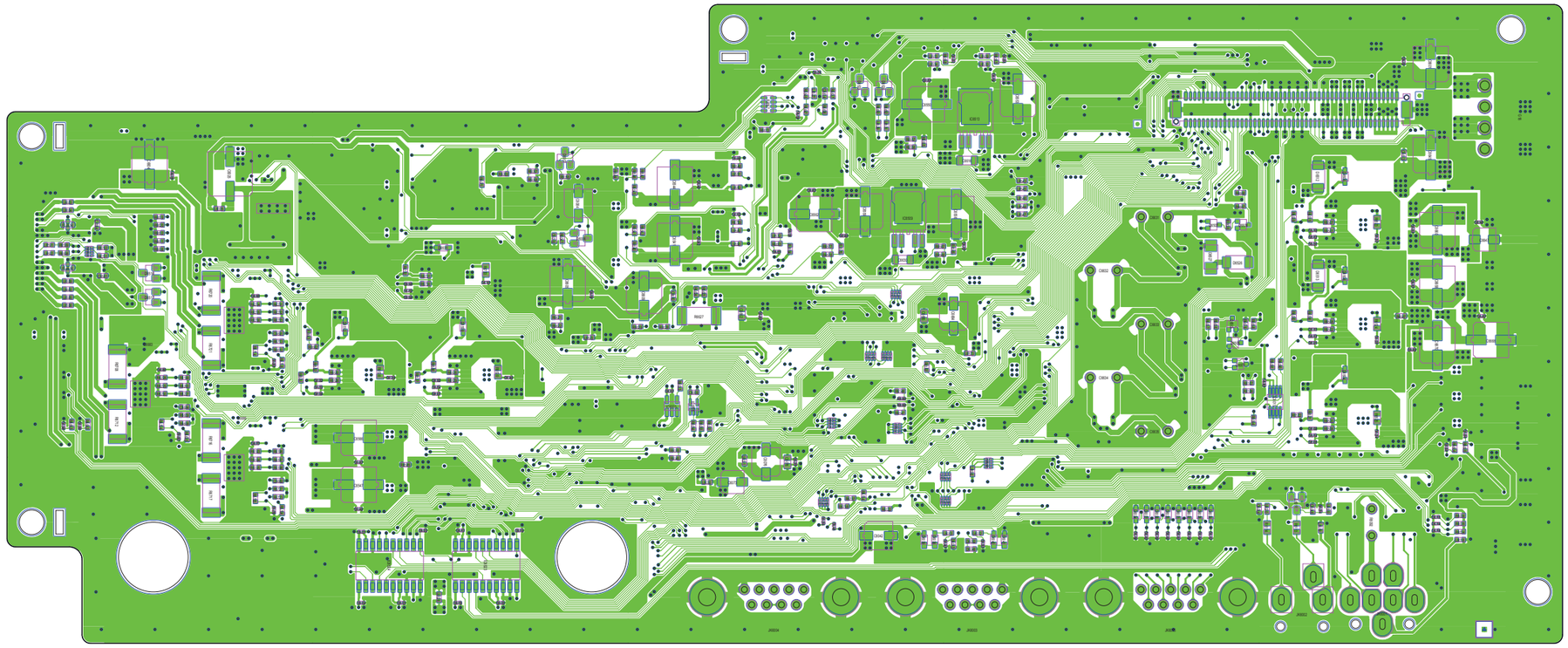
4. Circuit Boards Diagram

4. 2. G-P.C.Board (A-side)



4. Circuit Boards Diagram

4. 2. G-P.C.Board (B-side)



SECTION 5

Exploded Views & Parts List

Model No. **PT-DZ13KU / DZ13KE**
PT-DS12KU / DS12KE
PT-DW11KU / DW11KE
PT-DZ10KU / DZ10KE

CONTENTS

1. Exploded Views ····· SPL-2
   1. 1. Parts Location
   1. 2. Packing Parts

2. Replacement Parts List ····· SPL-6

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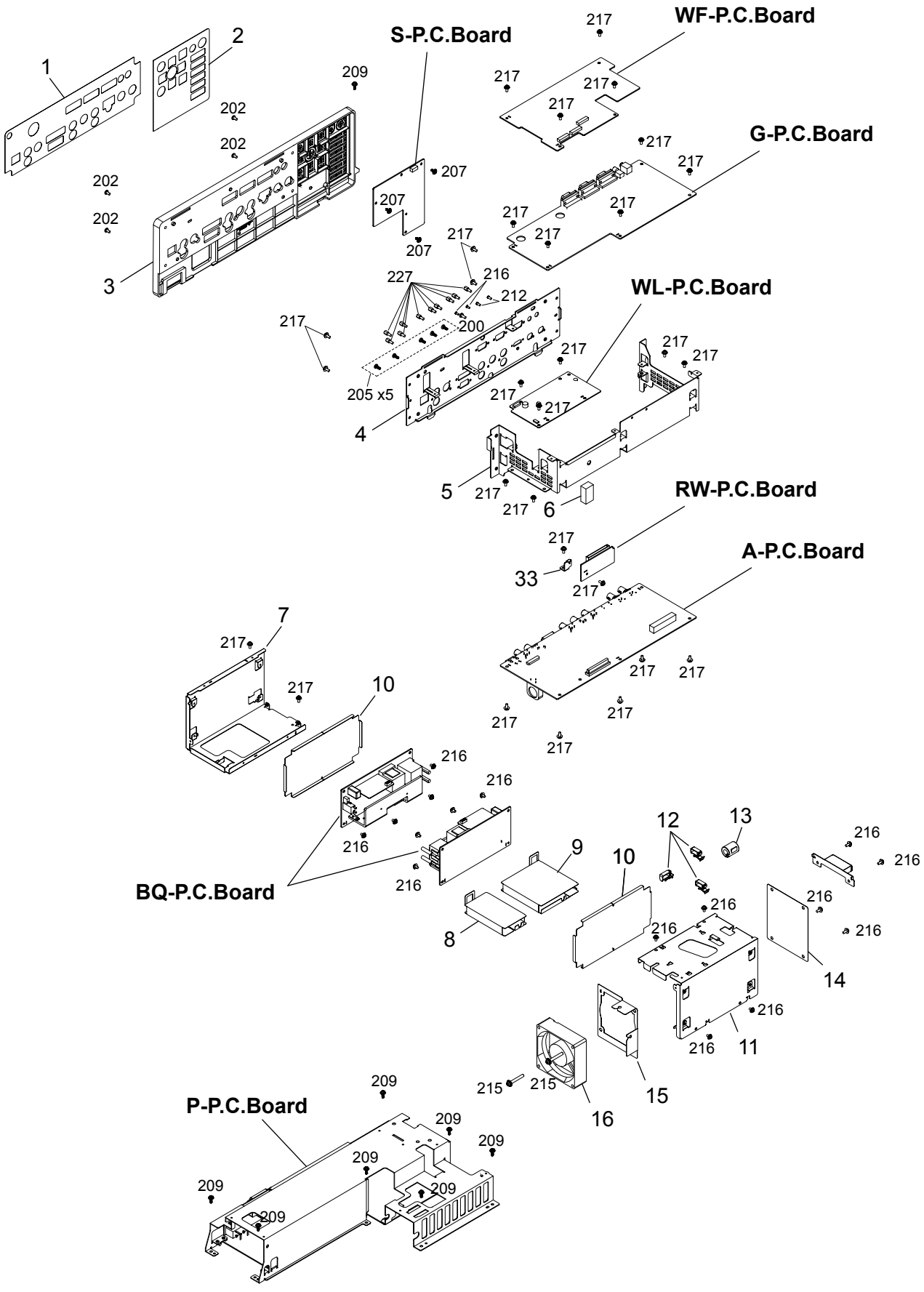
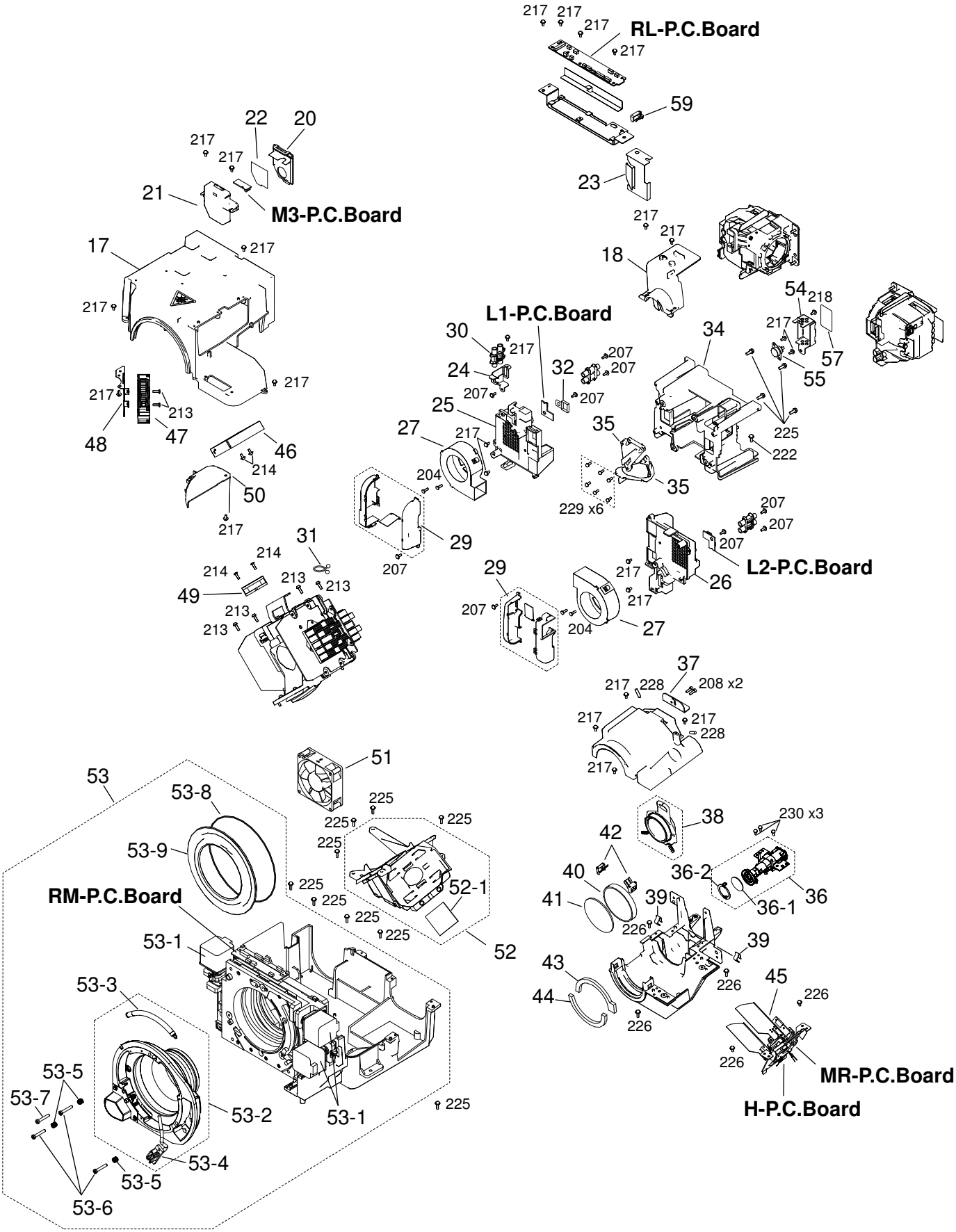
1. Exploaded Views

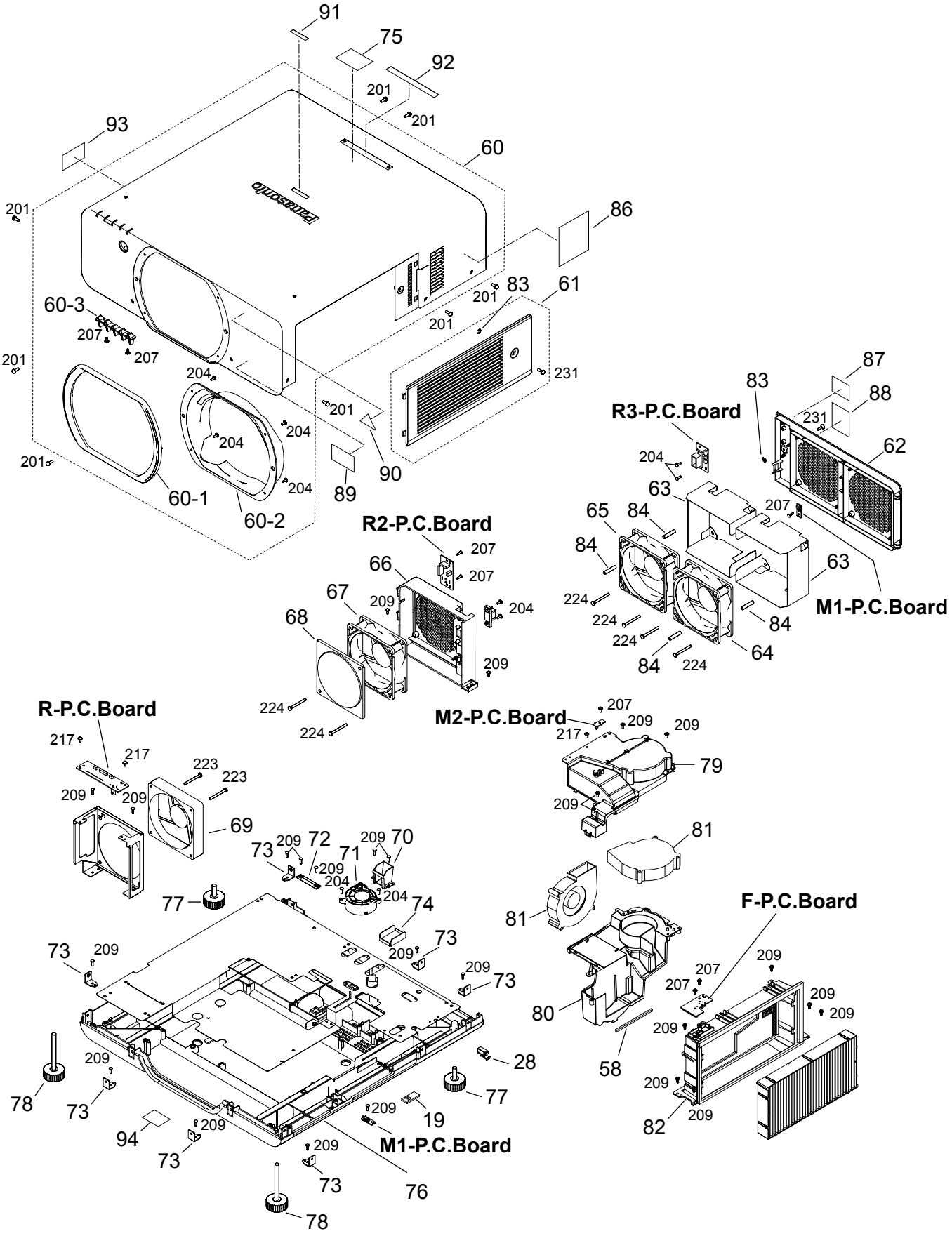
1.1. Part Location (1/3)



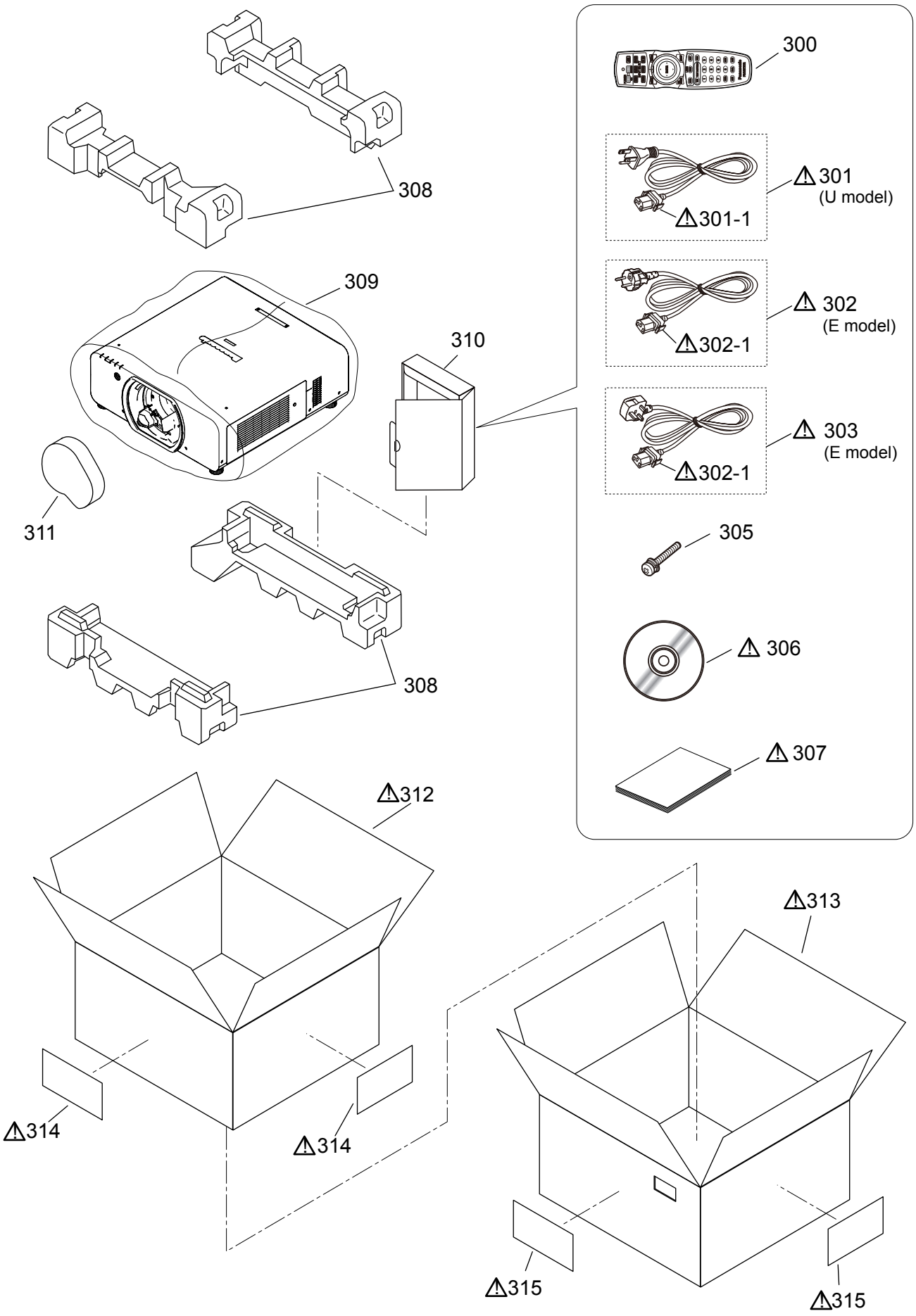
1.1. Part Location (2/3)



1.1. Part Location (3/3)



1.2. Packing Parts



2. Replacement Parts List

Important Safety Notice

Components identified by the International symbol ⚠ have special characteristics important for safety.
When replacing any of these components, use only the manufacturer's specified parts.

Abbreviation of part name and description

1. Resistor

Example:

ERD25TJ104 C 100KOHM, J, 1/4W

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Carbon	F : ± 1 %
F : Fuse	G : ± 2 %
M : Metal Oxide	J : ± 5 %
Metal Film	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

2. Capacitor

Example:

ECKF1H103ZF C 0.01PF, Z, 50V

TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic	C : ±0.25 pF
E : Electrolytic	D : ±0.5 pF
P : Polyester	F : ± 1 pF
PP : Polypropylene	J : ± 5 %
S : Polystyrol	K : ±10 %
T : Tantalum	L : ±15 %
	M : ±20 %
	P : +100 %, -0 %
	Z : +80 %, -20 %

Notes:

Printed circuit board assembly with mark (RTL) is no longer available after production discontinuation of the complete set.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MECHANICAL PARTS		
1	TBMV340	TERMINAL INDICATION SHEET	1	DZ13K / DS12K
1	TBMV341	TERMINAL INDICATION SHEET	1	DW11K
1	TBMV342	TERMINAL INDICATION SHEET	1	DZ10K
2	TBMV122	BUTTON INDICATION SHEET	1	DZ13K / DS12K / DZ10K
2	TBMV123	BUTTON INDICATION SHEET	1	DW11K
⚠ 3	TKPB62401	TERMINAL COVER	1	
4	TKZF5086	TERMINAL METAL	1	
5	TUCC6524	SIGNAL CASE	1	
6	TEWB695	GASKET	1	
7	TUCC6527	BALLAST METAL 1	1	
⚠ 8	TMKZ532	BALLAST AIR_GUIDE SHEET	1	
⚠ 9	TMKZ537	BALLAST AIR GUIDE SHEET B	1	
⚠ 10	TMKZ497	BALLAST INSULATION SHEET	2	
11	TUCC6528	BALLAST METAL 2	1	
12	TMME396	CLAMP	3	
13	J0KG00000036	CORE	1	
14	TUCC6437	BALLAST MESH	1	
⚠ 15	TMKZ499	BALLAST AIR GUIDE SHEET	1	
⚠ 16	L6FAYYYH0154	BALLAST FAN	1	
17	TXZED02VLF9	DMD UPPER CASE ASSY	1	
18	VUS87CASKIT	ROD CASE KIT	1	
19	T1FX9KB27--	CLAMP	1	
20	TEEC5444	COLOR SENSOR LID	1	
21	TEEC5443	COLOR SENSOR CASE	1	
22	TKGX5033	DEFUSION SHEET2	1	
23	TMKZ058-1	SHEET L2	1	
24	TENC5614	SOCKET HOLDER	1	
25	TEEC5458-1	LAMP DUCT 01B	1	
26	TEEC5430-1	LAMP DUCT 01	1	
⚠ 27	TXFMK06VKN2	LAMP FAN ASSY	2	
28	TMME309	CLAMP	1	
⚠ 29	TXFEC04VKN2	LAMP DUCT ASSY	2	
⚠ 30	TXJ/L3VKN2	LAMP EXTENTION CABLE	1	
31	TMM7468-1	CLAMP	1	
32	TMKZ036-1	LAMP MEMORY COVER	1	
33	TENC5716	METAL(RW P.C.B)	1	
34	TEDC5121-1	OPTICAL BLOCK CASE	1	
35	TXZKG05VKN2	OPTICAL MIRROR ASSY	2	
36	TXZEE03VLF9	ROD ASSY	1	DZ13K / DZ10K
36	TXZEE02VLG1	ROD ASSY	1	DS12K
36	TXZEE02VLG2	ROD ASSY	1	DW11K
36-1	TKGJ5166-1	UV CUT FILTER	1	
36-2	TESA372	ROD CAP SPRING	1	
37	TENC5612	LENS HOLDER HOLD PLATE	1	
38	TXZEE09VKN2	RELAY LENS HOLDER ASSY	1	
39	TESA349	LENS HOLDER HOLD SPRING	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
40	TKGF5354-2	RELAY LENS 3	1	
41	TKGF5355	RELAY LENS 4	1	
42	TESA350	LENS HOLD SPRING	2	
43	TMKH226-1	LIGHTING CASE TOP SPONGE	1	
44	TMKH227-1	LIGHTING CASE BOTTOM SPONGE	1	
45	TXZTE02VKN2	IRIS UNIT ASSY	1	
⚠ 46	L6FAYYYH0149	COLOR PRISM FAN	1	
⚠ 47	L6FCYYYH0050	DMD2 FAN	1	
48	TENC5616	FAN HOLD PLATE	1	
⚠ 49	L6FAYYYH0150	DMD FAN 1	1	
50	TEEC5454	DMD DUCT	1	
⚠ 51	TXFMK01VKN2	DMD EXHAUST FAN ASSY	1	
52	TXZEE02VKN2	ANALYSIS MIRROR ASSY	1	
52-1	TKGX5032	DEFUSION SHEET1	1	
53	TXFED01VLF9	LENS MOUNT ASSY	1	
53-1	TEKH030	STEPPER MOTOR	3	
53-2	TXFED02VKN2	LENS MOUNT UNIT SUB ASSY	1	
53-3	TESD112	COIL SPRING A	1	
53-4	TXJRM4VKN2-1	RM4 - ZOOM CABLE	1	
53-5	TESD104	COIL SPRING	3	
53-6	THEA229	LOW HEAD CAP SCREW	3	
53-7	THEA230	SCREW	1	
53-8	TENC5660	SHIELD RUBBER RING	1	
53-9	TEFC5039-1	SHIELD RUBBER	1	
54	TXFEN03VKN2	BI METAL PLATE ASSY	1	
⚠ 55	TXJP12VKN2	P12-BIMETAL CABLE	1	
⚠ 57	TQFX216	BIMETAL CAUTION LABEL	1	
58	TMKH350	SPONGE	1	
59	TMME363	CLAMP	1	
⚠ 60	TXFKF05VLF9	TOP CASE ASSY	1	
60-1	TKPB53101	LENS RING	1	
60-2	TEEC5419-1	LENS COVER	1	
60-3	TKKC5402	LED DIFFUSION PLATE	1	
⚠ 61	TXFKF04VLF9	FILTER COVER ASSY	1	
⚠ 62	TXFKF07VKN2	BACK COVER	1	
63	TMKZ012-1	EXAUST FAN GUIDE	2	
⚠ 64	TXFMK03VKN2	EXAUST FAN ASSY L	1	
⚠ 65	TXFMK02VKN2	EXAUST FAN ASSY C	1	
⚠ 66	VVS13CASKIT	BACK FAN CASE	1	
⚠ 67	L6FAYYYH0148	EXHAUST FAN R	1	
68	TUCC6438-1	AIR EXHAUST FAN MESH	1	
⚠ 69	L6FAYYYH0153	POWER FAN	1	
70	TEEC5429	COMPOSITION DUCT	1	
⚠ 71	L6FCYYYH0048	COMPOSITION MIRROR FAN	1	
72	TKZX5234	WIRE METAL	1	
73	TKZG5058	TOP CASE FIXATION METAL	7	
74	TUCC6451-1	MESH (BOTTOM)	1	
75	TBMA499	3D LABEL	1	DZ13K / DS12K / DW11K series

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 76	TKFE18201	BOTTOM CASE	1	
77	TBLB3500	ADJUSTER LEG REAR	2	
78	TBLB3081	ADJUSTER	2	
79	TEEC5427-1	INTAKE DUCT TOP	1	
80	TEEC5428	INTAKE DUCT BOTTOM	1	
⚠ 81	L6FCYYYH0052	INTAKE FAN	2	
⚠ 82	TXFEC03VLF9	FILTER BOX ASSY	1	
83	XUC3FJ	E RING	2	
84	TUXK075	FAN SPACER	4	
⚠ 86	TQFX345	LAMP EXCHANGE LABEL	1	
87	TQFX229	COVER REMOVE LABEL	1	
⚠ 88	TQFX225	REAR CAUTION LABEL	1	
⚠ 89	TQFX180	PEEP CAUTION LABEL	1	
⚠ 90	TQFE023	FINGER INSERT CAUTION LABEL	1	
91	TBMA491	MODEL NAME LABEL	1	DZ13K
91	TBMA492	MODEL NAME LABEL	1	DS12K
91	TBMA493	MODEL NAME LABEL	1	DW11K
91	TBMA494	MODEL NAME LABEL	1	DZ10K
92	TBMA483	PRODUCT LABEL	1	DZ13K
92	TBMA484	PRODUCT LABEL	1	DS12K
92	TBMA485	PRODUCT LABEL	1	DW11K
92	TBMA486	PRODUCT LABEL	1	DZ10K
⚠ 93	TQFG586	EARTH CAUTION LABEL	1	E / EJ model only
94	TQFX359	LABEL SCREW HOLE	1	
	<CABLE>			
	TSXM144-3	FFC (FR2-WF4)	1	FR2 - WF4
	TSXM145-1	FFC (FG2-WF3)	1	FG2 - WF3
	TSXM146-1	FFC (FB2-WF5)	1	FB2 - WF5
	TXJP11VKN2	P11-BRE CABLE	1	P11 - CONNECTOR
	TXJP21VKN2	P21-G10 CABLE	1	P21 - G10
	TXJP22VKN2	P22-FMRE CABLE	1	P22 - CONNECTOR
	TXJP23VKN2	P23-G18 CABLE	1	P23 - G18
	TXJG12VKN2	G12-RM1 CABLE	1	G12 - RM1
	TXJG17VKN2	G17-R1 CABLE	1	G17 - R1
	TXJWF2VLF9	WF2-G11_CABLE	1	G11 - WF2
⚠	TXJ/B1VLF9-1	B1-BRE CABLE (PC2)	1	B1 (B1) / B1 (B2) - CONNECTOR
	TXJ/Q5VLF9	Q3-G16 CABLE	1	G16 - Q3 (Q1) / Q3 (Q2)
⚠	TXJ/L2VLF9-1	BALLAST CABLE	1	
	TXJ/F1VLF9	F1-RL8 CABLE	1	F1 - RL8
	TXJM21VLF9	M21-RL9 CABLE	1	M21 - RL9
	TXJ/MFVKN2	MF-RM3 CABLE	1	RM3 - MF (FOCUS MOTOR)
	TXJ/MHVKN2	MH-RM7 CABLE	1	RM7 - MH (H-SHIFT MOTOR)
	TXJ/MVVKN2	MV-RM2 CABLE	1	RM2 - MV (V-SHIFT MOTOR)
	TXJR34VKN2	M11 - R34 CABLE	1	M11 - R34
	TXJR21VKN2	R21-G9 CABLE	1	R21 - G9
	TXJR22VKN2-1	R22-CNT CABLE	1	R22 (R2) - R34 (R3)
	TXJ/S1VKN2	S1-G2 CABLE	1	S1 - G2
	TXJFR1VKN2-1	FM POWER CABLE	1	FR1/FG1/FB1 - CONNECTOR
	TXJG13VKN2	G13-RL1 CABLE	1	G13 - RL1
	TXJM11VKN2	M11 - RL10 CABLE	1	M11 - RL10
	TXJM31VKN2	M31 - RL14 CABLE	1	M31 - RL14
	TXJL11VKN2	L11-RL11 CABLE	1	L11 - RL11
	TXJL21VKN2	L21-RL12 CABLE	1	L21 - RL12
	TXJ/H1VKN2	H1-RL13 CABLE	1	MR1/H1 - RL13
	<SCREW>			
200	XSB3+8FN	SCREW	1	
201	XSB4+10FJK	SCREW	8	
202	XSB3+6FJK	SCREW	4	
204	XTB3+12GFJK	SCREW	14	
205	XTB3+8JFJ	SCREW	5	
207	XTW3+8PFJ	SCREW	21	
208	XVE3A10FT	SCREW	2	
209	XYC3+FG10FJK	SCREW	31	
212	XYN26+C6FJ	SCREW	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
213	XYN3+F12FJK	SCREW	6	
214	XYN3+F20FJ	SCREW	4	
215	XYN3+F30FJK	SCREW	2	
216	XYN3+F6FJK	SCREW	16	
217	XYN3+F8FJ	SCREW	55	
218	XYN3+F8FJK	SCREW	1	
222	XYN4+F10FJK	SCREW	1	
223	XYN4+F35FJ	SCREW	2	
224	THEL130J	SCREW	6	
225	XYN4+J12FJ	SCREW	13	
226	XYN4+J8FJ	SCREW	5	
227	THEC084N	SCREW	10	
228	THEC136	SCREW	2	
229	XYN3+F8FN	SCREW	6	
230	XYN3+F10FN	SCREW	3	
231	THEC133	SCREW	2	
	< Packing Parts >			
300	N2QAYB000769	REMOTE CONTROL	1	
⚠ 301	TXFSX01RGQZ	AC CORD ASSY	1	U model
⚠ 301-1	TMMX183-1	AC CODE ROCK	1	U model
⚠ 302	TXFSX01RGRZP	AC CORD ASSY EU	1	E / EJ model
⚠ 302-1	TMMX169-1	AC CODE ROCK	1	E / EJ model
⚠ 303	TXFSX02RGRZP	AC CORD ASSY EK	1	E / EJ model
⚠ 302-1	TMMX169-1	AC CODE ROCK	1	E / EJ model
305	XYN4+J18FJ	SCREW	1	
⚠ 306	TXFQB02VLF9	CD ROM ASSY	1	
⚠ 307	TQBJ0519	INSTRUCTION BOOK	1	U model
⚠ 307	TQBJ0520	INSTRUCTION BOOK	1	E / EJ model
308	TPDA2280-1	CUSHION	1	
309	TPEH539	SET COVER	1	
310	TPDF0818	ACCESSORIES PACKING CASE	1	
311	TPDA2291	LENS PAD	1	
⚠ 312	TPCC81001	PACKING CASE	1	
313	TPGA4700	DOUBLE PACKING CASE	1	DZ13KU / KEJ, DS12KU / KEJ, DW11KU / KEJ, DZ10KU / KEJ
314	TQFM286	PC LABEL	2	DZ13KU
⚠ 314	TQFM290	PC LABEL	2	DZ13KE / DZ13KEJ
314	TQFM287	PC LABEL	2	DS12KU
⚠ 314	TQFM291	PC LABEL	2	DS12KE / DS12KEJ
314	TQFM288	PC LABEL	2	DW11KU
⚠ 314	TQFM292	PC LABEL	2	DW11KE / DW11KEJ
314	TQFM289	PC LABEL	2	DZ10KU
⚠ 314	TQFM293	PC LABEL	2	DZ10KE / DZ10KEJ
315	TQFM302	DOUBLE PC LABEL	2	DZ13KU
⚠ 315	TQFM298	DOUBLE PC LABEL	2	DZ13KEJ
315	TQFM303	DOUBLE PC LABEL	2	DS12KU
⚠ 315	TQFM299	DOUBLE PC LABEL	2	DS12KEJ
315	TQFM304	DOUBLE PC LABEL	2	DW11KU
⚠ 315	TQFM300	DOUBLE PC LABEL	2	DW11KEJ
315	TQFM305	DOUBLE PC LABEL	2	DZ10KU
⚠ 315	TQFM301	DOUBLE PC LABEL	2	DZ10KEJ

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ ■ A	TXN/99VLF9	CIRCUIT BOARD (A)	1	DZ13K / DS12K series
⚠ ■ A	TXN/99VLG2	CIRCUIT BOARD (A)	1	DW11K series
⚠ ■ A	TXN/99VLK4	CIRCUIT BOARD (A)	1	DZ10K series
⚠ ■ G	TXN/G1VLF9	CIRCUIT BOARD (G)	1	(RTL)
⚠ ■ R	TNPA5661	CIRCUIT BOARD (R)	1	(RTL)
⚠ ■ RL	TNPA5662	CIRCUIT BOARD (RL)	1	(RTL)
⚠ ■ R2	TNPA5052	CIRCUIT BOARD (R2)	1	(RTL)
⚠ ■ F	TNPA5053AB	CIRCUIT BOARD (F)	1	(RTL)
⚠ ■ RM	TNPA5127	CIRCUIT BOARD (RM)	1	(RTL)
⚠ ■ S	TNPA5188	CIRCUIT BOARD (S)	1	(RTL)
⚠ ■ P	TXAUX01TKAZ	POWER UNIT ASSY	1	U model
⚠ ■ P	TXAUX01TKCZ	POWER UNIT ASSY	1	E / EJ model
⚠ ■ BQ	TXN/B1VLF9	BALLAST UNIT	2	
⚠ ■ WL	TNPA5467AE	CIRCUIT BOARD (WL)	1	
⚠ ■ WF	TXNWF1VKR9	CIRCUIT BOARD (WF)	1	DZ13K / DS12K series
⚠ ■ WF	TXNWF1VLA2	CIRCUIT BOARD (WF)	1	DW11K series
⚠ ■ WF	TXNWF1VLK4	CIRCUIT BOARD (WF)	1	DZ10K series
⚠ ■ H	TNPA5049	CIRCUIT BOARD (H)	1	
⚠ ■ MR	TNPA5302	CIRCUIT BOARD (MR)	1	
⚠ ■ M3	TNPA5118	CIRCUIT BOARD (M3)	1	
⚠ ■ R3	TNPA5120AB	CIRCUIT BOARD (R3)	1	
⚠ ■ L1	TNPA5189	CIRCUIT BOARD (L1)	1	
⚠ ■ L2	TNPA5190	CIRCUIT BOARD (L2)	1	
⚠ ■ M1	TNPA5192	CIRCUIT BOARD (M1)	1	
⚠ ■ M2	TNPA5193	CIRCUIT BOARD (M2)	1	
■ RW	TNPA5545	CIRCUIT BOARD (RW)	1	
■ A	TXN/99VLF9	CIRCUIT BOARD (A)		DZ13K / DS12K series
A1	K1KYA0AA0835	CONNECTOR	1	
A2	K1KB80A00142	CONNECTOR	1	
A3	K1KY80B00005	CONNECTOR	1	
B3501	BCR20V4	BATTERY HOLDER	1	
C2002	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2007,08	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C2011	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C2012	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2016-18	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C2019	F1G0J1050007	CAPACITOR	1	
C2027	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2028	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C2030	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2032	F1G1H680A541	CERAMIC 68P J 50V	1	
C2035	F1J1A106A024	CERAMIC 10U K 10V	1	
C2036	F1H1C2240011	CERAMIC 0.22U K 16V	1	
C2037,38	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C2039	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3001	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3002	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3003-06	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3007	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3008	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3009	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3010	EEEHP1E220P	CAPACITOR	1	
C3011-13	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3014	F1H1C105A157	CAPACITOR	1	
C3015	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3016,17	F1H1H3R0A508	C.CAPACITOR CH 50V 3P	2	
C3018	EEEHP1E220P	CAPACITOR	1	
C3019,20	F1H1H3R0A508	C.CAPACITOR CH 50V 3P	2	
C3021	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C3022	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3023	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3024	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C3025	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3030,31	F1H1H1010005	C.CAPACITOR CH 50V 100P	2	
C3032-36	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	5	
C3037	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3038	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3040	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3042	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3043	F2G0J3300014	E.CAPACITOR CH 6.3V 33U	1	
C3044-47	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3048	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3049	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3051	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3052	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3053-56	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3057	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3058-60	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3061	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3062-64	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3065-67	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3068	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3071,72	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3073,74	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3075,76	F1G1H120A789	CERAMIC 12P J 50V	2	
C3077,78	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3079-96	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	18	
C3097	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3098	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3099	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3100	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3101	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3102	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3103	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3104-14	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3125	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3126-29	F1G0J1050007	CAPACITOR	4	
C3130-32	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3133,34	F1G0J1050007	CAPACITOR	2	
C3135,36	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3137-44	F1J1A106A043	C.CAPACITOR CH 10V 10U	8	
C3145,46	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3147,48	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3149	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3151,52	F1G1HR50A561	CAPACITOR	2	
C3153	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3154	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3156-59	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3160	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3161-63	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3164	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3165-67	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3168-70	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3171	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3174,75	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3176,77	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3178,79	F1G1H120A789	CERAMIC 12P J 50V	2	
C3180,81	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3182-99	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	18	
C3200	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3201	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3202	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3203	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3204	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3205	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3206	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3207-17	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3228-33	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	6	
C3234,35	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	2	
C3236,37	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3400	F1H0J4750004	CAPACITOR	1	
C3401-06	F1G1A2240011	CAPACITOR	6	
C3407-10	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	4	
C3412	F1H0J4750004	CAPACITOR	1	
C3413	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	1	
C3414	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3415	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3416,17	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	2	
C3418	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3420	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3421	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C3425	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3426	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3429	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3430	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3431	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3434	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3435	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3436	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3437	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3438	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3439,40	F1H0J4750004	CAPACITOR	2	
C3441-43	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	3	
C3445	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3452	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3453,54	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3460	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3461-68	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	8	
C3469-72	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	4	
C3475,76	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3478,79	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3480,81	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	2	
C3482	F1H0J4750004	CAPACITOR	1	
C3483	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3484-86	F1H0J4750004	CAPACITOR	3	
C3487-93	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	7	
C3497	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3499,00	F1H0J4750004	CAPACITOR	2	
C3501-03	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3504,05	F2G0G2210009	E.CAPACITOR CH 4V 220U	2	
C3506	F1G0J1050007	CAPACITOR	1	
C3507-09	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3512	F1G1H102A808	CAPACITOR	1	
C3513,14	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3515-19	F1J1A106A043	C.CAPACITOR CH 10V 10U	5	
C3520	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3521-23	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3524	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3525	F1G1H220A541	CERAMIC 22P J 50V	1	
C3526	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3527	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3528	F1G1H560A565	C.CAPACITOR CH 50V 56P	1	
C3529-31	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3532	F1H1H153A219	C.CAPACITOR CH 50V 0.015U	1	
C3533	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3534	F1H1H151A792	C.CAPACITOR CH 50V 150P	1	
C3535-55	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	21	
C3557-67	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3568	F1H1H1010005	C.CAPACITOR CH 50V 100P	1	
C3569-79	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3580	F1G1H4700003	CERAMIC 47P J 50V	1	
C3581	F1G1H102A808	CAPACITOR	1	
C3582	F1G1H220A541	CERAMIC 22P J 50V	1	
C3583	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3584	F1G1H820A659	CAPACITOR	1	
C3585	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3586	F1G1H220A541	CERAMIC 22P J 50V	1	
C3587	F1G1H330A541	CAPACITOR	1	
C3588-99	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	12	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3601	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3604,05	F1G1A105A047	CERAMIC 1U K 10V	2	
C3606-08	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3609	F1G1A105A047	CERAMIC 1U K 10V	1	
C3610-06	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	97	
C3708-10	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3711	F1G1H4700003	CERAMIC 47P J 50V	1	
C3712-14	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3715,16	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	2	
C3717	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3722	F1G1H220A541	CERAMIC 22P J 50V	1	
C3723	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3724	F1G1H220A541	CERAMIC 22P J 50V	1	
C3725-33	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	9	
C3734-36	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	3	
C3737-39	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	3	
C3740-42	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3743-45	F1G1H471A541	CAPACITOR	3	
C3746	F1G1C103A082	CAPACITOR	1	
C3749	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3750	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3751	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3753	F1G1H221A571	C.CAPACITOR CH 50V 220P	1	
C3755	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3757,58	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3759,60	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3761,62	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3763-69	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	7	
C3772	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3774	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3776	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C3778	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C3779	F2G1E4R70007	E.CAPACITOR CH 25V 4.7U	1	
C3782	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3785-87	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3788	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3789	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3790	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3791	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3793	F1G0J1050007	CAPACITOR	1	
C3794,95	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3796	F1H1H332A219	C.CAPACITOR CH 50V 3300P	1	
C3798	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3799	F2G1C1000013	E.CAPACITOR CH 16V 10U	1	
C3800	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
C3801	F1H1C104A008	C.CAPACITOR CH 16V 0.1U	1	
C3802,03	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3804-07	F1H0J4750004	CAPACITOR	4	
C3808-11	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3812	F1G1H101A541	CAPACITOR	1	
C3813	F1G1H220A541	CERAMIC 22P J 50V	1	
C3814	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3819	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3820	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3822	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3823	F1G1A105A047	CERAMIC 1U K 10V	1	
D2001-04	DA3X101F0L	DIODE	4	
D3001-03	D4ED1270A008	VARISTOR	3	
D3004,05	D4ED11200005	VARISTOR	2	
D3006	D4ED1270A008	VARISTOR	1	
D3007,08	D4ED11200005	VARISTOR	2	
D3009	B0BC5R600003	DIODE	1	
D3010-12	D4ED1270A008	VARISTOR	3	
D3013	B0ZBZ0000156	DIODE	1	
D3014,15	B0BC5R600003	DIODE	2	
D3016,17	DA3X101F0L	DIODE	2	
D3018	B0JCGD000002	DIODE	1	
D3020-24	B0JCAE000001	DIODE	5	
D3025,26	DA3X101F0L	DIODE	2	
D3027,28	B0JCAE000001	DIODE	2	
D3029,30	B0BC6R100010	DIODE	2	
D3031-34	B0JCAE000001	DIODE	4	
D3035,36	B0BC6R100010	DIODE	2	
D3039,40	B0JCAE000001	DIODE	2	
D3041-45	B0ZBZ0000158	DIODE	5	
D3046	B0JCGD000002	DIODE	1	
D3047-49	B0ZBZ0000158	DIODE	3	
D3050	B0JCAE000001	DIODE	1	
D3051,52	B0ZBZ0000158	DIODE	2	
D3053,54	B0BC5R600003	DIODE	2	
D3055-64	B0ZBZ0000158	DIODE	10	
D3065	B0BC5R600003	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D3066	D4ED11200005	VARISTOR	1	
D3068	D4ED11200005	VARISTOR	1	
D3070,71	B0BC5R600003	DIODE	2	
D3400	B0JCPD000026	DIODE	1	
D3501-03	DA3X101F0L	DIODE	3	
FL3001	J0HABC000009	EMI FILTER	1	
FL3002-04	J0HABC000011	EMI FILTER	3	
FL3005	J0HAYY000046	EMI FILTER	1	
FL3006-09	J0HABC000009	EMI FILTER	4	
FL3010,11	J0HAAB000036	EMI FILTER	2	
IC2001	C1CB00003085	IC	1	
IC2004	C0EBE0000348	IC	1	
IC2005	C0JBAU000084	IC	1	
IC3010	C1AB00003048	IC	1	
IC3020	C1AB00003048	IC	1	
IC3058	C1ZBZ0004744	IC	1	
IC3059,60	C0DBGYY01395	IC	2	
IC3061	C3EBCC000052	IC	1	
IC3062	C1AB00003211	IC	1	
IC3063	C0JBAR000582	IC	1	
IC3064,65	C0JBAU000087	IC	2	
IC3066	C0DBGYY01359	IC	1	
IC3067	C3EBDC000067	IC	1	
IC3068	C0JBAR000582	IC	1	
IC3069	C0CBCBF00009	IC	1	
IC3070	C0CBCAF00007	IC	1	
IC3071	C1AB00003074	IC	1	
IC3072	C1AB00003750	IC	1	
IC3073	C0DBGYY01359	IC	1	
IC3074	C0CBCAF00007	IC	1	
IC3075	C0JBAU000145	IC	1	
IC3076,77	C0JBAZ002390	IC	2	
IC3400	C0DBAYY00699	IC	1	
IC3401	C0DBGYY01551	IC	1	
IC3402	C0DBFYY00239	IC	1	
IC3403	C0JBZZ000425	IC	1	
IC3501	C1AB00003639	IC	1	
IC3502-05	C3ABTY000043	IC	4	
IC3506,07	C0JBAR000556	IC	2	
IC3508	TVRT305AA	IC	1	
IC3510	C0DBAYY00893	IC	1	
IC3511	C0DBAYY01148	IC	1	
IC3512	C0DBAYY00893	IC	1	
IC3513	C3ABPG000163	IC	1	
IC3514	C1DB00001208	IC	1	
IC3515,16	C0JBAA000549	IC	2	
IC3517	C1ZBZ0004173	IC	1	
IC3518	C3EBMY000006	IC	1	
IC3519	C0EBE0000348	IC	1	
IC3520	C0DBZFH00004	IC	1	
IC3521	C0JBAU000082	IC	1	
IC3522	C0JBAU000148	IC	1	
JK2001	K2LC108B0097	CONNECTOR	1	
JK3001	K1QBB2YB0001	CONNECTOR	1	
JK3002	K1QBB1YB0001	CONNECTOR	1	
JK3003	K1QBB2YB0001	CONNECTOR	1	
JK3004	K1QBB1CB0005	CONNECTOR	1	
JK3005	K1FY239B0001	CONNECTOR	1	
JK3006	K1FY119E0013	CONNECTOR	1	
JK3007	K1QBB2YB0001	CONNECTOR	1	
JK3008,09	K1QYY1YB0090	CONNECTOR	2	
L2001,02	J0JHC0000107	EMI FILTER	2	
L2004	J0JHC0000107	EMI FILTER	1	
L2008	J0JJC0000022	EMI FILTER	1	
L2009	J0JHC0000107	EMI FILTER	1	
L3001	J0JJC0000022	EMI FILTER	1	
L3002-04	J0JHC0000078	EMI FILTER	3	
L3005	J0JJC0000022	EMI FILTER	1	
L3006	J0JHC0000078	EMI FILTER	1	
L3007	G1C100K00031	INDUCTOR	1	
L3008,09	J0JHC0000078	EMI FILTER	2	
L3010	J0JCC0000168	EMI FILTER	1	
L3011	J0JYC0000024	EMI FILTER	1	
L3012	J0JHC0000078	EMI FILTER	1	
L3013	J0JYC0000024	EMI FILTER	1	
L3014	J0JCC0000168	EMI FILTER	1	
L3015-19	J0JYC0000024	EMI FILTER	5	
L3020	J0JBC0000099	EMI FILTER	1	
L3021,22	G1C5N6Z00019	INDUCTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3023-26	J0JJC0000022	EMI FILTER	4	
L3027-33	J0JYC0000024	EMI FILTER	7	
L3034	J0JBC0000099	EMI FILTER	1	
L3035,36	J0JHC0000078	EMI FILTER	2	
L3037,38	J0JYC0000066	EMI FILTER	2	
L3400	J0JJC0000022	EMI FILTER	1	
L3401	G1C2R2ZA0240	INDUCTOR	1	
L3402	J0JHC0000078	EMI FILTER	1	
L3403,04	J0JJC0000022	EMI FILTER	2	
L3405	J0JHC0000078	EMI FILTER	1	
L3407	J0JJC0000022	EMI FILTER	1	
L3408,09	J0JYC0000024	EMI FILTER	2	
L3503	J0JYC0000023	EMI FILTER	1	
L3504-06	J0JJC0000022	EMI FILTER	3	
L3507	J0JBC0000116	EMI FILTER	1	
L3508	J0JYC0000023	EMI FILTER	1	
L3509	J0JJC0000022	EMI FILTER	1	
L3510,11	J0JYC0000023	EMI FILTER	2	
L3512	J0JJC0000022	EMI FILTER	1	
L3513	J0JBC0000080	EMI FILTER	1	
L3514	J0JDC0000081	EMI FILTER	1	
L3515	J0JBC0000080	EMI FILTER	1	
L3516	J0JJC0000022	EMI FILTER	1	
L3517,18	J0JYC0000024	EMI FILTER	2	
L3519,20	J0JJC0000022	EMI FILTER	2	
L3523	J0JJC0000022	EMI FILTER	1	
L3524	J0JBC0000099	EMI FILTER	1	
L3525-27	J0JYC0000024	EMI FILTER	3	
L3529	G1C4R5ZA0156	COIL 4.5uH	1	
L3530	G1C4R7ZA0119	COIL	1	
L3531	G1C4R5ZA0156	COIL 4.5uH	1	
L3592-95	J0JYC0000023	EMI FILTER	4	
L3596,97	J0JHC0000078	EMI FILTER	2	
L3598	J0JYC0000023	EMI FILTER	1	
L3599	J0JBC0000080	EMI FILTER	1	
L3600	J0JYC0000056	EMI FILTER	1	
L3601,02	J0JBC0000080	EMI FILTER	2	
Q2001	B1CHRC000024	TRANSISTOR	1	
Q2002	B1GBCFLL0039	TRANSISTOR	1	
Q3001-04	B1GBCFJJ0007	TRANSISTOR	4	
Q3005-10	B1ABDF000018	TRANSISTOR	6	
Q3011	B1GBCFJJ0007	TRANSISTOR	1	
Q3012	B1GDCFJJ0008	TRANSISTOR	1	
Q3013	B1GBCFJJ0007	TRANSISTOR	1	
Q3014-17	B1ABDF000018	TRANSISTOR	4	
Q3018,19	B1ABBC000027	TRANSISTOR	2	
Q3020-23	B1GBCFJJ0007	TRANSISTOR	4	
Q3025	B1GDCFJJ0008	TRANSISTOR	1	
Q3027,28	B1GBCFJJ0007	TRANSISTOR	2	
Q3029,30	B1CBHD000002	TRANSISTOR	2	
Q3031	B1ABDF000018	TRANSISTOR	1	
Q3032	B1GBCFJJ0007	TRANSISTOR	1	
Q3501,02	B1GBCFLM0003	TRANSISTOR	2	
R2007,08	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R2009-12	ERJ3EKF49R9	MT-GLAZE 49.9 FA 1/10W	4	
R2020	ERJ3EKF6491	RESISTOR	1	
R2060	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R2061	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R2066	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	1	
R2070-72	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R2078,79	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R2081,82	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R2083	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R2085	EXB28V103J	RESISTOR ARRAY	1	
R2086	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2090	ERJ3GEYJ103	RESISTOR	1	
R2091	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2093	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R2094	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R2095,96	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	2	
R2204	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R2213	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2251,52	ERJ2GEJ102	M 1K OHM, 0.063W	2	
R2253	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3001,02	ERJ3GEYJ102	RESISTOR	2	
R3003-10	ERJ6ENF36R0	M 36 OHM, 1/10W	8	
R3011	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3012,13	ERJ6ENF1130	RESISTOR	2	
R3014,15	ERJ3GEYJ102	RESISTOR	2	
R3018-23	ERJ6ENF36R0	M 36 OHM, 1/10W	6	
R3024-29	ERJ6ENF1130	RESISTOR	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3032	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3033	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R3034	ERJ3GEYJ621	MT-GLAZE 620 JA 1/10W	1	
R3035	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3036,37	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3038	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3039,40	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3041	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3044-47	ERJ6ENF1130	RESISTOR	4	
R3048	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3050	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R3051	ERJ3GEYJ621	MT-GLAZE 620 JA 1/10W	1	
R3053	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3054-56	ERJ3GEYJ180	M 18 OHM,J,1/16W	3	
R3057	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3058	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3059-61	ERJ3GEYJ750	RESISTOR	3	
R3062,63	ERJ3GEYJ105	M 1M OHM,J,1/16W	2	
R3064	ERJ3GEYJ103	RESISTOR	1	
R3065	ERJ3GEYJ102	RESISTOR	1	
R3066	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R3067	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	1	
R3068	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R3069	ERJ3GEYJ103	RESISTOR	1	
R3070,71	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3072,73	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	2	
R3074,75	ERJ3GEYJ105	M 1M OHM,J,1/16W	2	
R3076	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R3077	ERJ3EKF3300	RESISTOR	1	
R3078	ERJ3GEYJ102	RESISTOR	1	
R3079	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R3080	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	1	
R3081	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R3082	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R3083	ERJ3EKF3300	RESISTOR	1	
R3084,85	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3086,87	ERJ3GEYJ271	M 270 OHM,J,1/16W	2	
R3088,89	ERJ3GEYJ682	M 6.8K OHM,J,1/16W	2	
R3090,91	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R3092,93	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3094,95	ERJ3GEYJ102	RESISTOR	2	
R3096	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R3097	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3098	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3100	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3101	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3102	ERJ3GEYJ102	RESISTOR	1	
R3103	ERJ3GEYJ393	RESISTOR	1	
R3104	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3105	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3106,07	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3108	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3109,10	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3111	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3113	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3114	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3116	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3117-24	ERJ2GEJ3R0	RESISTOR	8	
R3125	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3127	ERJ3GEYJ102	RESISTOR	1	
R3128	ERJ3GEYJ393	RESISTOR	1	
R3129	ERJ3GEYJ103	RESISTOR	1	
R3130	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3131	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3132	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3133	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3134-36	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R3137	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3138	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3139	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3140	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3141-48	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3149,50	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3151,52	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3153-56	ERJ2GE0R00	M 0 OHM, 0.063W	4	
R3159,60	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3161,62	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3163	ERJ3EKF4990	M 499 OHM, 1/16W	1	
R3164-72	EXB28V220J	RESISTOR ARRAY 22 OHM	9	
R3173	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R3174	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3175,76	ERJ2GEJ473	M 47K OHM, 0.063W	2	
R3177	ERJ2GEJ220	M 22 OHM, 0.063W	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3178,79	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3180	EXB28V330J	RESISTOR ARRAY 33 OHM	1	
R3181	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3182	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3183-88	ERJ2GEJ331	M 330 OHM, 0.063W	6	
R3189	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3192	ERJ3EKF2002	RESISTOR	1	
R3193,94	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3195	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R3201	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3202	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3203-10	ERJ2GEJ3R0	RESISTOR	8	
R3211,12	ERJ6ENF1130	RESISTOR	2	
R3213	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3215	ERJ3GEYJ103	RESISTOR	1	
R3216	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3217,18	ERJ3GEYJ103	RESISTOR	2	
R3219,20	ERJ2RKF56R0	MT-GLAZE 56 FA 1/16W	2	
R3221,22	ERJ2RKF75R0	RESISTOR	2	
R3223,24	ERJ2RKF37R4	RESISTOR	2	
R3227	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3228	ERJ3GEYJ102	RESISTOR	1	
R3229-36	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3237,38	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3239,40	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3241-44	ERJ2GE0R00	M 0 OHM, 0.063W	4	
R3247,48	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3249,50	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3251	ERJ3EKF4990	M 499 OHM, 1/16W	1	
R3252-58	EXB28V220J	RESISTOR ARRAY 22 OHM	7	
R3259	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R3260	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3261,62	ERJ2GEJ473	M 47K OHM, 0.063W	2	
R3263	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3264,65	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3266	EXB28V330J	RESISTOR ARRAY 33 OHM	1	
R3267	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3268	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3269-74	ERJ2GEJ331	M 330 OHM, 0.063W	6	
R3275	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3278	ERJ3EKF2002	RESISTOR	1	
R3279,80	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3281	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R3287	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3288	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3289,90	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R3291,92	ERJ6ENF1130	RESISTOR	2	
R3293	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3294	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3295	ERJ2GEJ562	M 5.6K OHM, 0.063W	1	
R3297	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3298,99	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3303	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3304	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3305	ERJ2GEJ562	M 5.6K OHM, 0.063W	1	
R3418	ERJ3EKF49R9	MT-GLAZE 49.9 FA 1/10W	1	
R3419	EXB28V472J	RESISTOR ARRAY	1	
R3421	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R3422	EXB38V680J	RESISTOR ARRAY	1	
R3423	ERJ3GEYJ153	RESISTOR	1	
R3424	ERJ3EKF1002	M 10K OHM, 1/16W	1	
R3425	ERJ3EKF3301	M 3.3K OHM, 1/16W	1	
R3428	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3437	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3438,39	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R3440,41	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3442	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R3443	ERJ3EKF2491	RESISTOR	1	
R3444	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3445	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3446	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3447	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3448	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3455,56	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3459	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3460	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3461	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3464	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3468	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3476-84	EXB28V270J	RESISTOR ARRAY	9	
R3485-93	EXB28V330J	RESISTOR ARRAY 33 OHM	9	
R3501-04	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R3505,06	ERJ2GEJ103	M 10K OHM, 0.063W	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3507	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3509,10	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3511	ERJ3GEYJ103	RESISTOR	1	
R3512	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3513	ERJ3GEYJ184	M 180K OHM,J,1/16W	1	
R3514	ERJ3GEYJ105	M 1M OHM,J,1/16W	1	
R3515,16	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3517,18	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3519	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3520	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3521	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3522	ERJ3GEYJ102	RESISTOR	1	
R3523	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3524	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3525	ERJ3GEYJ102	RESISTOR	1	
R3527	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3529-31	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3533	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3535	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3536	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3537,38	ERJ2GEJ102	M 1K OHM, 0.063W	2	
R3539	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3541	ERJ3EKF3300	RESISTOR	1	
R3542,43	ERJ3EKF2000	MT-GLAZE 200 FA 1/10W	2	
R3544	ERJ3EKF3300	RESISTOR	1	
R3545	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3546,47	ERJ3EKF3300	RESISTOR	2	
R3548	ERJ2GEJ561	RESISTOR	1	
R3549-51	ERJ2GEJ153	RESISTOR	3	
R3552,53	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3554,55	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3556,57	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3560	EXB28V472J	RESISTOR ARRAY	1	
R3561	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3562	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3565	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3568	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3570	ERJ3GEYJ102	RESISTOR	1	
R3571	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	1	
R3572	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3573	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R3574	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3575	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3576	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	1	
R3577	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R3578	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3579	ERJ3GEYJ680	M 68 OHM,J,1/16W	1	
R3580	EXB28V103J	RESISTOR ARRAY	1	
R3581,82	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3583	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3584,85	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R3586-92	EXB28V100J	RESISTOR ARRAY	7	
R3593	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	1	
R3599	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3601-04	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3605-14	EXB28VR000	RESISTOR ARRAY	10	
R3615-22	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3623,24	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	2	
R3625-28	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3629	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3635	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3637	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3638-41	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3642-51	EXB28VR000	RESISTOR ARRAY	10	
R3652-59	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3660,61	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	2	
R3662-65	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3666	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3669	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3671,72	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R3673	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R3674	ERJ3EKF10R0	MT-GLAZE 10 FA 1/10W	1	
R3675	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R3679	ERJ3EKF2403	RESISTOR	1	
R3680	ERJ3EKF6801	M 6.8K OHM, 1/16W	1	
R3681	ERJ3EKF2403	RESISTOR	1	
R3682-84	ERJ2GE0R00	M 0 OHM, 0.063W	3	
R3688	ERJ3EKF1873	RESISTOR	1	
R3689	ERJ3EKF2003	RESISTOR	1	
R3690	ERJ3EKF5102	RESISTOR	1	
R3691	ERJ3EKF1003	M 100KOHM, 1/16W	1	
R3692	ERJ3EKF1303	RESISTOR	1	
R3693	ERJ3EKF2403	RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3694	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3695	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3696	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3697	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3698	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3700-02	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3703-05	ERJ2GE0R00	M 0 OHM, 0.063W	3	
R3708	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3709-11	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3712	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3713,14	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3715-22	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3723	EXB28V103J	RESISTOR ARRAY	1	
R3725	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3726,27	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3728,29	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3731	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3732	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3733-36	ERJ2GEJ100	M 10 OHM, 0.063W	4	
R3737	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3738,39	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3740-42	ERJ2GEJ103	M 10K OHM, 0.063W	3	
R3743	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3745-47	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R3748	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	1	
R3749,50	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R3751,52	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3759	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3760	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3761,62	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R3763	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3766	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3767	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3768	ERJ3GEYJ103	RESISTOR	1	
R3769-72	EXB28V390J	RESISTOR ARRAY	4	
R3773	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3774	EXB28V390J	RESISTOR ARRAY	1	
R3775,76	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	2	
R3777,78	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3780	ERJ2GEJ220	M 22 OHM, 0.063W	1	
X3003	H1A7425B0001	CRYSTAL	1	
X3501	H1C2705B0037	CRYSTAL	1	
X3502	H0J355500001	CRYSTAL	1	
X3503	H0J327200114	CRYSTAL	1	
		MISCELLANEOUS		
⚠	TMMX263	BUTTON BATTERY CAP	1	
	XYN26+C6FJ	SCREW	2	
■ A	**TXN/99VLG2**	**CIRCUIT BOARD (A)**		**DW11K series**
A1	K1KYA0AA0835	CONNECTOR	1	
A2	K1KB80A00142	CONNECTOR	1	
A3	K1KY80B00005	CONNECTOR	1	
B3501	BCR20V4	BATTERY HOLDER	1	
C2002	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2007,08	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C2011	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C2012	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2016-18	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C2019	F1G0J1050007	CAPACITOR	1	
C2027	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2028	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C2030	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2032	F1G1H680A541	CERAMIC 68P J 50V	1	
C2035	F1J1A106A024	CERAMIC 10U K 10V	1	
C2036	F1H1C2240011	CERAMIC 0.22U K 16V	1	
C2037,38	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C2039	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3001	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3002	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3003-06	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3007	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3008	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3009	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3010	EEEHP1E220P	CAPACITOR	1	
C3011-13	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3014	F1H1C105A157	CAPACITOR	1	
C3015	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3016,17	F1H1H3R0A508	C.CAPACITOR CH 50V 3P	2	
C3018	EEEHP1E220P	CAPACITOR	1	
C3019,20	F1H1H3R0A508	C.CAPACITOR CH 50V 3P	2	
C3021	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C3022	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3023	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3024	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C3025	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3030,31	F1H1H1010005	C.CAPACITOR CH 50V 100P	2	
C3032-36	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	5	
C3037	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3038	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3040	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3042	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3043	F2G0J3300014	E.CAPACITOR CH 6.3V 33U	1	
C3044-47	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3048	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3049	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3051	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3052	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3053-56	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3057	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3058-60	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3061	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3062-64	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3065-67	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3068	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3071,72	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3073,74	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3075,76	F1G1H120A789	CERAMIC 12P J 50V	2	
C3077,78	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3079-96	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	18	
C3097	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3098	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3099	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3100	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3101	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3102	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3103	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3104-14	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3125	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3153	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3154	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3156-59	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3160	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3161-63	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3164	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3165-67	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3168-70	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3171	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3174,75	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3176,77	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3178,79	F1G1H120A789	CERAMIC 12P J 50V	2	
C3180,81	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3182-99	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	18	
C3200	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3201	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3202	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3203	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3204	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3205	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3206	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3207-17	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3228-33	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	6	
C3234,35	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	2	
C3236,37	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3400	F1H0J4750004	CAPACITOR	1	
C3401-06	F1G1A2240011	CAPACITOR	6	
C3407-10	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	4	
C3412	F1H0J4750004	CAPACITOR	1	
C3413	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	1	
C3414	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3415	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3416,17	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	2	
C3418	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3420	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3421	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C3434	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3435	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3436	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3437	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3438	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3439,40	F1H0J4750004	CAPACITOR	2	
C3441-43	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	3	
C3452	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3460	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3461-68	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	8	
C3469-72	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	4	
C3475,76	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3478,79	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3482	F1H0J4750004	CAPACITOR	1	
C3483	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3484-86	F1H0J4750004	CAPACITOR	3	
C3487-93	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	7	
C3501-03	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3504,05	F2G0G2210009	E.CAPACITOR CH 4V 220U	2	
C3506	F1G0J1050007	CAPACITOR	1	
C3507-09	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3512	F1G1H102A808	CAPACITOR	1	
C3513,14	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3515-19	F1J1A106A043	C.CAPACITOR CH 10V 10U	5	
C3520	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3521-23	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3524	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3525	F1G1H220A541	CERAMIC 22P J 50V	1	
C3526	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3527	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3528	F1G1H560A565	C.CAPACITOR CH 50V 56P	1	
C3529-31	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3532	F1H1H153A219	C.CAPACITOR CH 50V 0.015U	1	
C3533	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3534	F1H1H151A792	C.CAPACITOR CH 50V 150P	1	
C3535-55	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	21	
C3557-67	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3568	F1H1H1010005	C.CAPACITOR CH 50V 100P	1	
C3569-79	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3580	F1G1H4700003	CERAMIC 47P J 50V	1	
C3581	F1G1H102A808	CAPACITOR	1	
C3582	F1G1H220A541	CERAMIC 22P J 50V	1	
C3583	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3584	F1G1H820A659	CAPACITOR	1	
C3585	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3586	F1G1H220A541	CERAMIC 22P J 50V	1	
C3587	F1G1H330A541	CAPACITOR	1	
C3588-99	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	12	
C3601	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3604,05	F1G1A105A047	CERAMIC 1U K 10V	2	
C3606-08	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3609	F1G1A105A047	CERAMIC 1U K 10V	1	
C3610-06	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	97	
C3708-10	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3711	F1G1H4700003	CERAMIC 47P J 50V	1	
C3712-14	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3715,16	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	2	
C3717	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3722	F1G1H220A541	CERAMIC 22P J 50V	1	
C3723	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3724	F1G1H220A541	CERAMIC 22P J 50V	1	
C3725-33	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	9	
C3734-36	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	3	
C3737-39	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	3	
C3740-42	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3743-45	F1G1H471A541	CAPACITOR	3	
C3746	F1G1C103A082	CAPACITOR	1	
C3749	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3750	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3751	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3753	F1G1H221A571	C.CAPACITOR CH 50V 220P	1	
C3755	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3757,58	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3759,60	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3761,62	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3763-69	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	7	
C3772	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3774	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3776	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C3778	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C3779	F2G1E4R70007	E.CAPACITOR CH 25V 4.7U	1	
C3782	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3785-87	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3788	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3789	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3790	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3791	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3793	F1G0J1050007	CAPACITOR	1	
C3794,95	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3796	F1H1H332A219	C.CAPACITOR CH 50V 3300P	1	
C3798	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3799	F2G1C1000013	E.CAPACITOR CH 16V 10U	1	
C3800	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
C3801	F1H1C104A008	C.CAPACITOR CH 16V 0.1U	1	
C3802,03	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3808-11	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3812	F1G1H101A541	CAPACITOR	1	
C3813	F1G1H220A541	CERAMIC 22P J 50V	1	
C3814	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3819	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3820	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3822	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3823	F1G1A105A047	CERAMIC 1U K 10V	1	
D2001-04	DA3X101F0L	DIODE	4	
D3001-03	D4ED1270A008	VARISTOR	3	
D3004,05	D4ED11200005	VARISTOR	2	
D3006	D4ED1270A008	VARISTOR	1	
D3007,08	D4ED11200005	VARISTOR	2	
D3009	B0BC5R600003	DIODE	1	
D3010-12	D4ED1270A008	VARISTOR	3	
D3013	B0ZBZ0000156	DIODE	1	
D3014,15	B0BC5R600003	DIODE	2	
D3016,17	DA3X101F0L	DIODE	2	
D3018	B0JCGD000002	DIODE	1	
D3020-24	B0JCAE000001	DIODE	5	
D3025,26	DA3X101F0L	DIODE	2	
D3027,28	B0JCAE000001	DIODE	2	
D3029,30	B0BC6R100010	DIODE	2	
D3031-34	B0JCAE000001	DIODE	4	
D3035,36	B0BC6R100010	DIODE	2	
D3039,40	B0JCAE000001	DIODE	2	
D3041-45	B0ZBZ0000158	DIODE	5	
D3046	B0JCGD000002	DIODE	1	
D3047-49	B0ZBZ0000158	DIODE	3	
D3050	B0JCAE000001	DIODE	1	
D3051,52	B0ZBZ0000158	DIODE	2	
D3053,54	B0BC5R600003	DIODE	2	
D3055-64	B0ZBZ0000158	DIODE	10	
D3065	B0BC5R600003	DIODE	1	
D3066	D4ED11200005	VARISTOR	1	
D3068	D4ED11200005	VARISTOR	1	
D3070,71	B0BC5R600003	DIODE	2	
D3400	B0JCPD000026	DIODE	1	
D3501-03	DA3X101F0L	DIODE	3	
FL3001	J0HABC000009	EMI FILTER	1	
FL3002-04	J0HABC000011	EMI FILTER	3	
FL3005	J0HAYY000046	EMI FILTER	1	
FL3006-09	J0HABC000009	EMI FILTER	4	
FL3010,11	J0HAAB000036	EMI FILTER	2	
IC2001	C1CB00003085	IC	1	
IC2004	C0EBE0000348	IC	1	
IC2005	C0JBAU000084	IC	1	
IC3010	C1AB00003048	IC	1	
IC3020	C1AB00003048	IC	1	
IC3058	C1ZBZ0004744	IC	1	
IC3061	C3EBCC000052	IC	1	
IC3062	C1AB00003211	IC	1	
IC3063	C0JBAR000582	IC	1	
IC3064,65	C0JBAU000087	IC	2	
IC3066	C0DBGYY01359	IC	1	
IC3067	C3EBDC000067	IC	1	
IC3068	C0JBAR000582	IC	1	
IC3069	C0CBCBF00009	IC	1	
IC3070	C0CBCAF00007	IC	1	
IC3073	C0DBGYY01359	IC	1	
IC3074	C0CBCAF00007	IC	1	
IC3075	C0JBAU000145	IC	1	
IC3076,77	C0JBAZ002390	IC	2	
IC3400	C0DBAYY00699	IC	1	
IC3501	C1AB00003639	IC	1	
IC3502-05	C3ABTY000043	IC	4	
IC3506,07	C0JBAR000556	IC	2	
IC3508	TVRT305AA	IC	1	
IC3510	C0DBAYY00893	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC3511	C0DBAYY01148	IC	1	
IC3512	C0DBAYY00893	IC	1	
IC3513	C3ABPG000163	IC	1	
IC3514	C1DB00001208	IC	1	
IC3515,16	C0JBAA000549	IC	2	
IC3517	C1ZBZ0004173	IC	1	
IC3518	C3EBMY000006	IC	1	
IC3519	C0EBE0000348	IC	1	
IC3520	C0DBZFH00004	IC	1	
IC3521	C0JBAU000082	IC	1	
IC3522	C0JBAU000148	IC	1	
JK2001	K2LC108B0097	CONNECTOR	1	
JK3001	K1QBB2YB0001	CONNECTOR	1	
JK3002	K1QBB1YB0001	CONNECTOR	1	
JK3003	K1QBB2YB0001	CONNECTOR	1	
JK3004	K1QBB1CB0005	CONNECTOR	1	
JK3005	K1FY239B0001	CONNECTOR	1	
JK3006	K1FY119E0013	CONNECTOR	1	
JK3007	K1QBB2YB0001	CONNECTOR	1	
JK3008	K1QYY1YB0090	CONNECTOR	1	
L2001,02	J0JHC0000107	EMI FILTER	2	
L2004	J0JHC0000107	EMI FILTER	1	
L2008	J0JJC0000022	EMI FILTER	1	
L2009	J0JHC0000107	EMI FILTER	1	
L3001	J0JJC0000022	EMI FILTER	1	
L3002-04	J0JHC0000078	EMI FILTER	3	
L3005	J0JJC0000022	EMI FILTER	1	
L3006	J0JHC0000078	EMI FILTER	1	
L3007	G1C100K00031	INDUCTOR	1	
L3008,09	J0JHC0000078	EMI FILTER	2	
L3010	J0JCC0000168	EMI FILTER	1	
L3011	J0JYC0000024	EMI FILTER	1	
L3012	J0JHC0000078	EMI FILTER	1	
L3013	J0JYC0000024	EMI FILTER	1	
L3014	J0JCC0000168	EMI FILTER	1	
L3015-19	J0JYC0000024	EMI FILTER	5	
L3020	J0JBC0000099	EMI FILTER	1	
L3025	J0JJC0000022	EMI FILTER	1	
L3027-33	J0JYC0000024	EMI FILTER	7	
L3034	J0JBC0000099	EMI FILTER	1	
L3035,36	J0JHC0000078	EMI FILTER	2	
L3037,38	J0JYC0000066	EMI FILTER	2	
L3400	J0JJC0000022	EMI FILTER	1	
L3401	G1C2R2ZA0240	INDUCTOR	1	
L3404	J0JJC0000022	EMI FILTER	1	
L3405	J0JHC0000078	EMI FILTER	1	
L3503	J0JYC0000023	EMI FILTER	1	
L3504-06	J0JJC0000022	EMI FILTER	3	
L3507	J0JBC0000116	EMI FILTER	1	
L3508	J0JYC0000023	EMI FILTER	1	
L3509	J0JJC0000022	EMI FILTER	1	
L3510,11	J0JYC0000023	EMI FILTER	2	
L3512	J0JJC0000022	EMI FILTER	1	
L3513	J0JBC0000080	EMI FILTER	1	
L3514	J0JDC0000081	EMI FILTER	1	
L3515	J0JBC0000080	EMI FILTER	1	
L3516	J0JJC0000022	EMI FILTER	1	
L3517,18	J0JYC0000024	EMI FILTER	2	
L3519,20	J0JJC0000022	EMI FILTER	2	
L3523	J0JJC0000022	EMI FILTER	1	
L3524	J0JBC0000099	EMI FILTER	1	
L3525-27	J0JYC0000024	EMI FILTER	3	
L3529	G1C4R5ZA0156	COIL 4.5uH	1	
L3530	G1C4R7ZA0119	COIL	1	
L3531	G1C4R5ZA0156	COIL 4.5uH	1	
L3592-95	J0JYC0000023	EMI FILTER	4	
L3596,97	J0JHC0000078	EMI FILTER	2	
L3598	J0JYC0000023	EMI FILTER	1	
L3599	J0JBC0000080	EMI FILTER	1	
L3600	J0JYC0000056	EMI FILTER	1	
L3601,02	J0JBC0000080	EMI FILTER	2	
Q2001	B1CHRC000024	TRANSISTOR	1	
Q2002	B1GBCFLL0039	TRANSISTOR	1	
Q3001-04	B1GBCFJJ0007	TRANSISTOR	4	
Q3005-10	B1ABDF000018	TRANSISTOR	6	
Q3011	B1GBCFJJ0007	TRANSISTOR	1	
Q3012	B1GDCFJJ0008	TRANSISTOR	1	
Q3013	B1GBCFJJ0007	TRANSISTOR	1	
Q3014-17	B1ABDF000018	TRANSISTOR	4	
Q3018,19	B1ABBC000027	TRANSISTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3020-23	B1GBCFJJ0007	TRANSISTOR	4	
Q3025	B1GDCFJJ0008	TRANSISTOR	1	
Q3027,28	B1GBCFJJ0007	TRANSISTOR	2	
Q3029,30	B1CBHD000002	TRANSISTOR	2	
Q3031	B1ABDF000018	TRANSISTOR	1	
Q3032	B1GBCFJJ0007	TRANSISTOR	1	
Q3501,02	B1GBCFLM0003	TRANSISTOR	2	
R2007,08	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R2009-12	ERJ3EKF49R9	MT-GLAZE 49.9 FA 1/10W	4	
R2020	ERJ3EKF6491	RESISTOR	1	
R2060	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R2061	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R2066	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	1	
R2070-72	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R2078,79	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R2081,82	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R2083	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R2085	EXB28V103J	RESISTOR ARRAY	1	
R2086	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2090	ERJ3GEYJ103	RESISTOR	1	
R2091	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2093	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R2094	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R2095,96	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	2	
R2204	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R2213	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2251,52	ERJ2GEJ102	M 1K OHM, 0.063W	2	
R2253	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3001,02	ERJ3GEYJ102	RESISTOR	2	
R3003-10	ERJ6ENF36R0	M 36 OHM, 1/10W	8	
R3011	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3012,13	ERJ6ENF1130	RESISTOR	2	
R3014,15	ERJ3GEYJ102	RESISTOR	2	
R3018-23	ERJ6ENF36R0	M 36 OHM, 1/10W	6	
R3024-29	ERJ6ENF1130	RESISTOR	6	
R3032	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3033	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R3034	ERJ3GEYJ621	MT-GLAZE 620 JA 1/10W	1	
R3035	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3036,37	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3038	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3039,40	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3041	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3044-47	ERJ6ENF1130	RESISTOR	4	
R3048	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3050	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R3051	ERJ3GEYJ621	MT-GLAZE 620 JA 1/10W	1	
R3053	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3054-56	ERJ3GEYJ180	M 18 OHM,J,1/16W	3	
R3057	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3058	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3059-61	ERJ3GEYJ750	RESISTOR	3	
R3062,63	ERJ3GEYJ105	M 1M OHM,J,1/16W	2	
R3064	ERJ3GEYJ103	RESISTOR	1	
R3065	ERJ3GEYJ102	RESISTOR	1	
R3066	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R3067	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	1	
R3068	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R3069	ERJ3GEYJ103	RESISTOR	1	
R3070,71	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3072,73	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	2	
R3074,75	ERJ3GEYJ105	M 1M OHM,J,1/16W	2	
R3076	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R3077	ERJ3EKF3300	RESISTOR	1	
R3078	ERJ3GEYJ102	RESISTOR	1	
R3079	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R3080	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	1	
R3081	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R3082	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R3083	ERJ3EKF3300	RESISTOR	1	
R3084,85	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3086,87	ERJ3GEYJ271	M 270 OHM,J,1/16W	2	
R3088,89	ERJ3GEYJ682	M 6.8K OHM,J,1/16W	2	
R3090,91	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R3092,93	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3094,95	ERJ3GEYJ102	RESISTOR	2	
R3096	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R3097	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3098	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3100	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3101	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3102	ERJ3GEYJ102	RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3103	ERJ3GEYJ393	RESISTOR	1	
R3104	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3105	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3106,07	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3108	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3109,10	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3111	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3113	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3114	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3116	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3117-24	ERJ2GEJ3R0	RESISTOR	8	
R3125	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3127	ERJ3GEYJ102	RESISTOR	1	
R3128	ERJ3GEYJ393	RESISTOR	1	
R3129	ERJ3GEYJ103	RESISTOR	1	
R3130	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3131	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3132	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3133	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3134-36	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R3137	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3138	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3139	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3140	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3141-48	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3149,50	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3151,52	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3153-56	ERJ2GE0R00	M 0 OHM, 0.063W	4	
R3159,60	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3161,62	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3163	ERJ3EKF4990	M 499 OHM, 1/16W	1	
R3164-72	EXB28V220J	RESISTOR ARRAY 22 OHM	9	
R3173	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R3174	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3175,76	ERJ2GEJ473	M 47K OHM, 0.063W	2	
R3177	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3178,79	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3180	EXB28V330J	RESISTOR ARRAY 33 OHM	1	
R3181	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3182	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3183-88	ERJ2GEJ331	M 330 OHM, 0.063W	6	
R3189	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3192	ERJ3EKF2002	RESISTOR	1	
R3193,94	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3195	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R3201	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3202	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3203-10	ERJ2GEJ3R0	RESISTOR	8	
R3211,12	ERJ6ENF1130	RESISTOR	2	
R3213	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3215	ERJ3GEYJ103	RESISTOR	1	
R3217,18	ERJ3GEYJ103	RESISTOR	2	
R3228	ERJ3GEYJ102	RESISTOR	1	
R3229-36	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3237,38	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3239,40	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3241-44	ERJ2GE0R00	M 0 OHM, 0.063W	4	
R3247,48	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3249,50	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3251	ERJ3EKF4990	M 499 OHM, 1/16W	1	
R3252-58	EXB28V220J	RESISTOR ARRAY 22 OHM	7	
R3259	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R3260	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3261,62	ERJ2GEJ473	M 47K OHM, 0.063W	2	
R3263	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3264,65	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3266	EXB28V330J	RESISTOR ARRAY 33 OHM	1	
R3267	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3268	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3269-74	ERJ2GEJ331	M 330 OHM, 0.063W	6	
R3275	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3278	ERJ3EKF2002	RESISTOR	1	
R3279,80	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3281	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R3287	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3288	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3289,90	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R3291,92	ERJ6ENF1130	RESISTOR	2	
R3293	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3294	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3295	ERJ2GEJ562	M 5.6K OHM, 0.063W	1	
R3297	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3298,99	ERJ2GE0R00	M 0 OHM, 0.063W	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3303	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3304	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3305	ERJ2GEJ562	M 5.6K OHM, 0.063W	1	
R3418	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3419	EXB28V472J	RESISTOR ARRAY	1	
R3421	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R3422	EXB38V680J	RESISTOR ARRAY	1	
R3423	ERJ3GEYJ153	RESISTOR	1	
R3424	ERJ3EKF1002	M 10K OHM, 1/16W	1	
R3425	ERJ3EKF3301	M 3.3K OHM, 1/16W	1	
R3428	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3437	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3438,39	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R3440,41	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3442	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R3444	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3445	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3446	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3447	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3448	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3455,56	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3459	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3460	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3461	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3464	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3468-75	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3476-84	EXB28V270J	RESISTOR ARRAY	9	
R3485-93	EXB28V330J	RESISTOR ARRAY 33 OHM	9	
R3501-04	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R3505,06	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3507	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3509,10	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3511	ERJ3GEYJ103	RESISTOR	1	
R3512	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3513	ERJ3GEYJ184	M 180K OHM,J,1/16W	1	
R3514	ERJ3GEYJ105	M 1M OHM,J,1/16W	1	
R3515,16	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3517,18	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3519	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3520	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3521	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3522	ERJ3GEYJ102	RESISTOR	1	
R3523	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3524	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3525	ERJ3GEYJ102	RESISTOR	1	
R3527	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3529-31	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3533	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3535	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3536	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3537,38	ERJ2GEJ102	M 1K OHM, 0.063W	2	
R3539	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3541	ERJ3EKF3300	RESISTOR	1	
R3542,43	ERJ3EKF2000	MT-GLAZE 200 FA 1/10W	2	
R3544	ERJ3EKF3300	RESISTOR	1	
R3545	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3546,47	ERJ3EKF3300	RESISTOR	2	
R3548	ERJ2GEJ561	RESISTOR	1	
R3549-51	ERJ2GEJ153	RESISTOR	3	
R3552,53	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3554,55	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3556,57	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3560	EXB28V472J	RESISTOR ARRAY	1	
R3561	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3562	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3565	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3568	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3570	ERJ3GEYJ102	RESISTOR	1	
R3571	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	1	
R3572	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3573	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R3574	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3575	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3576	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	1	
R3577	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R3578	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3579	ERJ3GEYJ680	M 68 OHM,J,1/16W	1	
R3580	EXB28V103J	RESISTOR ARRAY	1	
R3581,82	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3583	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3584,85	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R3586-92	EXB28V100J	RESISTOR ARRAY	7	
R3593	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3599	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3601-04	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3605-14	EXB28VR000	RESISTOR ARRAY	10	
R3615-22	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3623,24	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	2	
R3625-28	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3629	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3635	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3637	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3638-41	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3642-51	EXB28VR000	RESISTOR ARRAY	10	
R3652-59	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3660,61	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	2	
R3662-65	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3666	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3669	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3671,72	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R3673	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R3674	ERJ3EKF10R0	MT-GLAZE 10 FA 1/10W	1	
R3675	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R3679	ERJ3EKF2403	RESISTOR	1	
R3680	ERJ3EKF6801	M 6.8K OHM, 1/16W	1	
R3681	ERJ3EKF2403	RESISTOR	1	
R3682-84	ERJ2GE0R00	M 0 OHM, 0.063W	3	
R3688	ERJ3EKF1873	RESISTOR	1	
R3689	ERJ3EKF2003	RESISTOR	1	
R3690	ERJ3EKF5102	RESISTOR	1	
R3691	ERJ3EKF1003	M 100KOHM, 1/16W	1	
R3692	ERJ3EKF1303	RESISTOR	1	
R3693	ERJ3EKF2403	RESISTOR	1	
R3694	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3695	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3696	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3697	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3698	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3700-02	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3703-05	ERJ2GE0R00	M 0 OHM, 0.063W	3	
R3708	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3709-11	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3712	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3713,14	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3715-22	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3723	EXB28V103J	RESISTOR ARRAY	1	
R3725	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3726,27	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3728,29	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3731	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3732	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3733-36	ERJ2GEJ100	M 10 OHM, 0.063W	4	
R3737	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3738,39	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3740-42	ERJ2GEJ103	M 10K OHM, 0.063W	3	
R3743	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3745-47	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R3748	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	1	
R3749,50	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R3751,52	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3759	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3760	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3761,62	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R3763	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3766	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3767	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3768	ERJ3GEYJ103	RESISTOR	1	
R3769-72	EXB28V390J	RESISTOR ARRAY	4	
R3773	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3774	EXB28V390J	RESISTOR ARRAY	1	
R3775,76	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	2	
R3777,78	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3780	ERJ2GEJ220	M 22 OHM, 0.063W	1	
X3501	H1C2705B0037	CRYSTAL	1	
X3502	H0J355500001	CRYSTAL	1	
X3503	H0J327200114	CRYSTAL	1	
		MISCELLANEOUS		
⚠	TMMX263	BUTTON BATTERY CAP	1	
	XYN26+C6FJ	SCREW	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ A	TXN/99VLK4	CIRCUIT BOARD (A)		DZ10K series
A1	K1KYA0AA0835	CONNECTOR	1	
A2	K1KB80A00142	CONNECTOR	1	
A3	K1KY80B00005	CONNECTOR	1	
B3501	BCR20V4	BATTERY HOLDER	1	
C2002	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2007,08	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C2011	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C2012	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2016-18	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C2019	F1G0J1050007	CAPACITOR	1	
C2027	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2028	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C2030	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C2032	F1G1H680A541	CERAMIC 68P J 50V	1	
C2035	F1J1A106A024	CERAMIC 10U K 10V	1	
C2036	F1H1C2240011	CERAMIC 0.22U K 16V	1	
C2037,38	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C2039	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3001	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3002	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3003-06	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3007	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3008	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3009	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3010	EEEHP1E220P	CAPACITOR	1	
C3011-13	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3014	F1H1C105A157	CAPACITOR	1	
C3015	F1J1C106A059	C.CAPACITOR CH 16V 10U	1	
C3016,17	F1H1H3R0A508	C.CAPACITOR CH 50V 3P	2	
C3018	EEEHP1E220P	CAPACITOR	1	
C3019,20	F1H1H3R0A508	C.CAPACITOR CH 50V 3P	2	
C3021	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C3022	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3023	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3024	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C3025	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3030,31	F1H1H1010005	C.CAPACITOR CH 50V 100P	2	
C3032-36	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	5	
C3037	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3038	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3040	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3042	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3043	F2G0J3300014	E.CAPACITOR CH 6.3V 33U	1	
C3044-47	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3048	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3049	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3051	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3052	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3053-56	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3057	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3058-60	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3061	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3062-64	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3065-67	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3068	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3071,72	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3073,74	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3075,76	F1G1H120A789	CERAMIC 12P J 50V	2	
C3077,78	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3079-96	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	18	
C3097	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3098	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3099	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3100	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3101	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3102	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3103	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3104-14	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3125	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3127	F1G0J1050007	CAPACITOR	1	
C3129	F1G0J1050007	CAPACITOR	1	
C3130	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3132	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3134	F1G0J1050007	CAPACITOR	1	
C3136	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3137	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3139	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3141	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3143	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3145	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3147	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3149	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3152	F1G1HR50A561	CAPACITOR	1	
C3153	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3154	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3156-59	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3160	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3161-63	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3164	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3165-67	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3168-70	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3171	F1G1H4710004	C.CAPACITOR CH 50V 470P	1	
C3174,75	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3176,77	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3178,79	F1G1H120A789	CERAMIC 12P J 50V	2	
C3180,81	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3182-99	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	18	
C3200	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3201	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3202	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3203	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3204	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3205	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3206	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3207-17	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3228	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3234,35	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	2	
C3236,37	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3400	F1H0J4750004	CAPACITOR	1	
C3401-06	F1G1A2240011	CAPACITOR	6	
C3407-10	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	4	
C3412	F1H0J4750004	Ceramic Chip Capacitor	1	
C3413	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	1	
C3414	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3415	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3416,17	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	2	
C3418	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3420	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3421	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C3425	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3426	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3429	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3430	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3431	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3434	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3435	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3436	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3437	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3438	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3439,40	F1H0J4750004	CAPACITOR	2	
C3441-43	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	3	
C3445	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3452	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3453,54	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3460	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3461-68	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	8	
C3469-72	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	4	
C3475,76	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3478,79	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	2	
C3480,81	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	2	
C3482	F1H0J4750004	CAPACITOR	1	
C3483	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3484-86	F1H0J4750004	CAPACITOR	3	
C3487-93	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	7	
C3497	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3499,3500	F1H0J4750004	CAPACITOR	2	
C3501-03	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3504,05	F2G0G2210009	E.CAPACITOR CH 4V 220U	2	
C3506	F1G0J1050007	CAPACITOR	1	
C3507-09	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3512	F1G1H102A808	CAPACITOR	1	
C3513,14	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3515-19	F1J1A106A043	C.CAPACITOR CH 10V 10U	5	
C3520	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3521-23	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3524	F1H1A225A051	C.CAPACITOR CH 10V 2.2U	1	
C3525	F1G1H220A541	CERAMIC 22P J 50V	1	
C3526	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3527	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3528	F1G1H560A565	C.CAPACITOR CH 50V 56P	1	
C3529-31	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3532	F1H1H153A219	C.CAPACITOR CH 50V 0.015U	1	
C3533	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3534	F1H1H151A792	C.CAPACITOR CH 50V 150P	1	
C3535-55	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	21	
C3557-67	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3568	F1H1H1010005	C.CAPACITOR CH 50V 100P	1	
C3569-79	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C3580	F1G1H4700003	CERAMIC 47P J 50V	1	
C3581	F1G1H102A808	CAPACITOR	1	
C3582	F1G1H220A541	CERAMIC 22P J 50V	1	
C3583	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3584	F1G1H820A659	CAPACITOR	1	
C3585	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3586	F1G1H220A541	CERAMIC 22P J 50V	1	
C3587	F1G1H330A541	CAPACITOR	1	
C3588-99	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	12	
C3601	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3604,05	F1G1A105A047	CERAMIC 1U K 10V	2	
C3606-08	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3609	F1G1A105A047	CERAMIC 1U K 10V	1	
C3610-06	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	97	
C3708-10	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3711	F1G1H4700003	CERAMIC 47P J 50V	1	
C3712-14	F1J1A106A043	C.CAPACITOR CH 10V 10U	3	
C3715,16	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	2	
C3717	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3722	F1G1H220A541	CERAMIC 22P J 50V	1	
C3723	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C3724	F1G1H220A541	CERAMIC 22P J 50V	1	
C3725-33	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	9	
C3734-36	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	3	
C3737-39	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	3	
C3740-42	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3743-45	F1G1H471A541	CAPACITOR	3	
C3746	F1G1C103A082	CAPACITOR	1	
C3749	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3750	F1G1H100A565	C.CAPACITOR CH 50V 10P	1	
C3751	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3753	F1G1H221A571	C.CAPACITOR CH 50V 220P	1	
C3755	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3757,58	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3759,60	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3761,62	F1J1A106A043	C.CAPACITOR CH 10V 10U	2	
C3763-69	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	7	
C3772	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3774	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3776	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C3778	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C3779	F2G1E4R70007	E.CAPACITOR CH 25V 4.7U	1	
C3782	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C3785-87	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C3788	EEFCX0D221R	E.CAPACITOR CH 2.5V 220U	1	
C3789	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C3790	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3791	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C3793	F1G0J1050007	CAPACITOR	1	
C3794,95	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3796	F1H1H332A219	C.CAPACITOR CH 50V 3300P	1	
C3798	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3799	F2G1C1000013	E.CAPACITOR CH 16V 10U	1	
C3800	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
C3801	F1H1C104A008	C.CAPACITOR CH 16V 0.1U	1	
C3802,03	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C3804,05	F1H0J4750004	CAPACITOR	2	
C3808-11	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	4	
C3812	F1G1H101A541	CAPACITOR	1	
C3813	F1G1H220A541	CERAMIC 22P J 50V	1	
C3814	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3819	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C3820	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3822	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C3823	F1G1A105A047	CERAMIC 1U K 10V	1	
D2001-04	DA3X101F0L	DIODE	4	
D3001-03	D4ED1270A008	VARISTOR	3	
D3004,05	D4ED11200005	VARISTOR	2	
D3006	D4ED1270A008	VARISTOR	1	
D3007,08	D4ED11200005	VARISTOR	2	
D3009	B0BC5R600003	DIODE	1	
D3010-12	D4ED1270A008	VARISTOR	3	
D3013	B0ZBZ0000156	DIODE	1	
D3014,15	B0BC5R600003	DIODE	2	
D3016,17	DA3X101F0L	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D3018	B0JCGD000002	DIODE	1	
D3020-24	B0JCAE000001	DIODE	5	
D3025,26	DA3X101F0L	DIODE	2	
D3027,28	B0JCAE000001	DIODE	2	
D3029,30	B0BC6R100010	DIODE	2	
D3031-34	B0JCAE000001	DIODE	4	
D3035,36	B0BC6R100010	DIODE	2	
D3039,40	B0JCAE000001	DIODE	2	
D3041-45	B0ZBZ0000158	DIODE	5	
D3046	B0JCGD000002	DIODE	1	
D3047-49	B0ZBZ0000158	DIODE	3	
D3050	B0JCAE000001	DIODE	1	
D3051,52	B0ZBZ0000158	DIODE	2	
D3053,54	B0BC5R600003	DIODE	2	
D3055-64	B0ZBZ0000158	DIODE	10	
D3065	B0BC5R600003	DIODE	1	
D3400	B0JCPD000026	DIODE	1	
D3501-03	DA3X101F0L	DIODE	3	
FL3001	J0HABC000009	EMI FILTER	1	
FL3002-04	J0HABC000011	EMI FILTER	3	
FL3005	J0HAYY000046	EMI FILTER	1	
FL3006-09	J0HABC000009	EMI FILTER	4	
IC2001	C1CB00003085	IC	1	
IC2004	C0EBE0000348	IC	1	
IC2005	C0JBAU000084	IC	1	
IC3010	C1AB00003048	IC	1	
IC3020	C1AB00003048	IC	1	
IC3058	C1ZBZ0004744	IC	1	
IC3059	C0DBGYY01395	IC	1	
IC3061	C3EBCC000052	IC	1	
IC3062	C1AB00003211	IC	1	
IC3063	C0JBAR000582	IC	1	
IC3064,65	C0JBAU000087	IC	2	
IC3066	C0DBGYY01359	IC	1	
IC3067	C3EBDC000067	IC	1	
IC3068	C0JBAR000582	IC	1	
IC3069	C0CBCBF00009	IC	1	
IC3070	C0CBCAF00007	IC	1	
IC3072	C1AB00003750	IC	1	
IC3073	C0DBGYY01359	IC	1	
IC3074	C0CBCAF00007	IC	1	
IC3400	C0DBAYY00699	IC	1	
IC3401	C0DBGYY01551	IC	1	
IC3402	C0DBFYY00239	IC	1	
IC3403	C0JBZZ000425	IC	1	
IC3501	C1AB00003639	IC	1	
IC3502-05	C3ABTY000043	IC	4	
IC3506,07	C0JBAR000556	IC	2	
IC3508	TVRT305AA	IC	1	
IC3510	C0DBAYY00893	IC	1	
IC3511	C0DBAYY01148	IC	1	
IC3512	C0DBAYY00893	IC	1	
IC3513	C3ABPG000163	IC	1	
IC3514	C1DB00001208	IC	1	
IC3515,16	C0JBAA000549	IC	2	
IC3517	C1ZBZ0004173	IC	1	
IC3518	C3EBMY000006	IC	1	
IC3519	C0EBE0000348	IC	1	
IC3520	C0DBZFH00004	IC	1	
IC3521	C0JBAU000082	IC	1	
IC3522	C0JBAU000148	IC	1	
JK2001	K2LC108B0097	CONNECTOR	1	
JK3001	K1QBB2YB0001	CONNECTOR	1	
JK3002	K1QBB1YB0001	CONNECTOR	1	
JK3003	K1QBB2YB0001	CONNECTOR	1	
JK3004	K1QBB1CB0005	CONNECTOR	1	
JK3005	K1FY239B0001	CONNECTOR	1	
JK3006	K1FY119E0013	CONNECTOR	1	
JK3008	K1QYY1YB0090	CONNECTOR	1	
L2001,02	J0JHC0000107	EMI FILTER	2	
L2004	J0JHC0000107	EMI FILTER	1	
L2008	J0JJC0000022	EMI FILTER	1	
L2009	J0JHC0000107	EMI FILTER	1	
L3001	J0JJC0000022	EMI FILTER	1	
L3002-04	J0JHC0000078	EMI FILTER	3	
L3005	J0JJC0000022	EMI FILTER	1	
L3006	J0JHC0000078	EMI FILTER	1	
L3007	G1C100K00031	INDUCTOR	1	
L3008,09	J0JHC0000078	EMI FILTER	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L3010	J0JCC0000168	EMI FILTER	1	
L3011	J0JYC0000024	EMI FILTER	1	
L3012	J0JHC0000078	EMI FILTER	1	
L3013	J0JYC0000024	EMI FILTER	1	
L3014	J0JCC0000168	EMI FILTER	1	
L3015-19	J0JYC0000024	EMI FILTER	5	
L3020	J0JBC0000099	EMI FILTER	1	
L3022	G1C5N6Z00019	INDUCTOR	1	
L3023	J0JJC0000022	EMI FILTER	1	
L3025	J0JJC0000022	EMI FILTER	1	
L3027-33	J0JYC0000024	EMI FILTER	7	
L3034	J0JBC0000099	EMI FILTER	1	
L3037,38	J0JYC0000066	EMI FILTER	2	
L3400	J0JJC0000022	EMI FILTER	1	
L3401	G1C2R2ZA0240	INDUCTOR	1	
L3402	J0JHC0000078	INDUCTOR	1	
L3403,04	J0JJC0000022	EMI FILTER	2	
L3405	J0JHC0000078	EMI FILTER	1	
L3407	J0JJC0000022	EMI FILTER	1	
L3408,09	J0JYC0000024	EMI FILTER	2	
L3503	J0JYC0000023	EMI FILTER	1	
L3504-06	J0JJC0000022	EMI FILTER	3	
L3507	J0JBC0000116	EMI FILTER	1	
L3508	J0JYC0000023	EMI FILTER	1	
L3509	J0JJC0000022	EMI FILTER	1	
L3510,11	J0JYC0000023	EMI FILTER	2	
L3512	J0JJC0000022	EMI FILTER	1	
L3513	J0JBC0000080	EMI FILTER	1	
L3514	J0JDC0000081	EMI FILTER	1	
L3515	J0JBC0000080	EMI FILTER	1	
L3516	J0JJC0000022	EMI FILTER	1	
L3517,18	J0JYC0000024	EMI FILTER	2	
L3519,20	J0JJC0000022	EMI FILTER	2	
L3523	J0JJC0000022	EMI FILTER	1	
L3524	J0JBC0000099	EMI FILTER	1	
L3525-27	J0JYC0000024	EMI FILTER	3	
L3529	G1C4R5ZA0156	COIL 4.5uH	1	
L3530	G1C4R7ZA0119	COIL	1	
L3531	G1C4R5ZA0156	COIL 4.5uH	1	
L3592-95	J0JYC0000023	EMI FILTER	4	
L3596,97	J0JHC0000078	EMI FILTER	2	
L3598	J0JYC0000023	EMI FILTER	1	
L3599	J0JBC0000080	EMI FILTER	1	
L3600	J0JYC0000056	EMI FILTER	1	
L3601,02	J0JBC0000080	EMI FILTER	2	
Q2001	B1CHRC000024	TRANSISTOR	1	
Q2002	B1GBCFLL0039	TRANSISTOR	1	
Q3001-04	B1GBCFJJ0007	TRANSISTOR	4	
Q3005-10	B1ABDF000018	TRANSISTOR	6	
Q3011	B1GBCFJJ0007	TRANSISTOR	1	
Q3012	B1GDCFJJ0008	TRANSISTOR	1	
Q3013	B1GBCFJJ0007	TRANSISTOR	1	
Q3014-17	B1ABDF000018	TRANSISTOR	4	
Q3018,19	B1ABBC000027	TRANSISTOR	2	
Q3020-23	B1GBCFJJ0007	TRANSISTOR	4	
Q3025	B1GDCFJJ0008	TRANSISTOR	1	
Q3027,28	B1GBCFJJ0007	TRANSISTOR	2	
Q3029,30	B1CBHD000002	TRANSISTOR	2	
Q3031	B1ABDF000018	TRANSISTOR	1	
Q3032	B1GBCFJJ0007	TRANSISTOR	1	
Q3501,02	B1GBCFLM0003	TRANSISTOR	2	
R2007,08	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R2009-12	ERJ3EKF49R9	MT-GLAZE 49.9 FA 1/10W	4	
R2020	ERJ3EKF6491	RESISTOR	1	
R2060	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R2061	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R2066	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	1	
R2070-72	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R2078,79	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R2081,82	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R2083	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R2085	EXB28V103J	RESISTOR ARRAY	1	
R2086	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2090	ERJ3GEYJ103	RESISTOR	1	
R2091	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2093	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R2094	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R2095,96	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	2	
R2204	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R2213	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R2251,52	ERJ2GEJ102	M 1K OHM, 0.063W	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R2253	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3001,02	ERJ3GEYJ102	RESISTOR	2	
R3003-10	ERJ6ENF36R0	M 36 OHM, 1/10W	8	
R3011	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3012,13	ERJ6ENF1130	RESISTOR	2	
R3014,15	ERJ3GEYJ102	RESISTOR	2	
R3018-23	ERJ6ENF36R0	M 36 OHM, 1/10W	6	
R3024-29	ERJ6ENF1130	RESISTOR	6	
R3032	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3033	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R3034	ERJ3GEYJ621	MT-GLAZE 620 JA 1/10W	1	
R3035	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3036,37	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3038	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3039,40	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3041	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3044-47	ERJ6ENF1130	RESISTOR	4	
R3048	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3050	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R3051	ERJ3GEYJ621	MT-GLAZE 620 JA 1/10W	1	
R3053	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3054-56	ERJ3GEYJ180	M 18 OHM,J,1/16W	3	
R3057	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3058	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3059-61	ERJ3GEYJ750	RESISTOR	3	
R3062,63	ERJ3GEYJ105	M 1M OHM,J,1/16W	2	
R3064	ERJ3GEYJ103	RESISTOR	1	
R3065	ERJ3GEYJ102	RESISTOR	1	
R3066	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R3067	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	1	
R3068	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R3069	ERJ3GEYJ103	RESISTOR	1	
R3070,71	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3072,73	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	2	
R3074,75	ERJ3GEYJ105	M 1M OHM,J,1/16W	2	
R3076	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R3077	ERJ3EKF3300	RESISTOR	1	
R3078	ERJ3GEYJ102	RESISTOR	1	
R3079	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R3080	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	1	
R3081	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R3082	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R3083	ERJ3EKF3300	RESISTOR	1	
R3084,85	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3086,87	ERJ3GEYJ271	M 270 OHM,J,1/16W	2	
R3088,89	ERJ3GEYJ682	M 6.8K OHM,J,1/16W	2	
R3090,91	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R3092,93	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R3094,95	ERJ3GEYJ102	RESISTOR	2	
R3096	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R3097	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3098	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3100	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3101	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3102	ERJ3GEYJ102	RESISTOR	1	
R3103	ERJ3GEYJ393	RESISTOR	1	
R3104	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3105	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3106,07	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3108	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3109,10	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3111	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3113	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3114	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3116	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3117-24	ERJ2GEJ3R0	RESISTOR	8	
R3125	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3127	ERJ3GEYJ102	RESISTOR	1	
R3128	ERJ3GEYJ393	RESISTOR	1	
R3129	ERJ3GEYJ103	RESISTOR	1	
R3130	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3131	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3132	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3133	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3134-36	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R3137	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3138	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3139	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3140	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3141-48	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3149,50	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3151,52	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3153-56	ERJ2GE0R00	M 0 OHM, 0.063W	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3159,60	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3161,62	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3163	ERJ3EKF4990	M 499 OHM, 1/16W	1	
R3164-72	EXB28V220J	RESISTOR ARRAY 22 OHM	9	
R3173	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R3174	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3175,76	ERJ2GEJ473	M 47K OHM, 0.063W	2	
R3177	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3178,79	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3180	EXB28V330J	RESISTOR ARRAY 33 OHM	1	
R3181	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3182	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3183-88	ERJ2GEJ331	M 330 OHM, 0.063W	6	
R3189	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3192	ERJ3EKF2002	RESISTOR	1	
R3193,94	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3195	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R3201	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3202	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3203-10	ERJ2GEJ3R0	RESISTOR	8	
R3211,12	ERJ6ENF1130	RESISTOR	2	
R3213	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3216	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3217,18	ERJ3GEYJ103	RESISTOR	2	
R3220	ERJ2RKF56R0	MT-GLAZE 56 FA 1/16W	1	
R3222	ERJ2RKF75R0	RESISTOR	1	
R3224	ERJ2RKF37R4	RESISTOR	1	
R3227	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3229-36	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3237,38	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3239,40	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3241-44	ERJ2GE0R00	M 0 OHM, 0.063W	4	
R3247,48	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3249,50	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3251	ERJ3EKF4990	M 499 OHM, 1/16W	1	
R3252-58	EXB28V220J	RESISTOR ARRAY 22 OHM	7	
R3259	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R3260	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3261,62	ERJ2GEJ473	M 47K OHM, 0.063W	2	
R3263	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3264,65	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3266	EXB28V330J	RESISTOR ARRAY 33 OHM	1	
R3267	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3268	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3269-74	ERJ2GEJ331	M 330 OHM, 0.063W	6	
R3275	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3278	ERJ3EKF2002	RESISTOR	1	
R3279,80	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3281	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R3287	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3288	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3289,90	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R3293	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3295	ERJ2GEJ562	M 5.6K OHM, 0.063W	1	
R3304	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3305	ERJ2GEJ562	M 5.6K OHM, 0.063W	1	
R3418	ERJ3EKF49R9	MT-GLAZE 49.9 FA 1/10W	1	
R3419	EXB28V472J	RESISTOR ARRAY	1	
R3421	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R3422	EXB38V680J	RESISTOR ARRAY	1	
R3423	ERJ3GEYJ153	RESISTOR	1	
R3424	ERJ3EKF1002	M 10K OHM, 1/16W	1	
R3425	ERJ3EKF3301	M 3.3K OHM, 1/16W	1	
R3428	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3437	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3438,39	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R3440,41	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3442	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R3443	ERJ3EKF2491	RESISTOR	1	
R3444	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3445	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3446	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3447	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3448	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3449	ERJ2GEJ102	M 1K OHM, 0.063W	1	
R3455,56	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3459	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3460	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3461	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3464	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3468	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3471,72	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3476-84	EXB28V270J	RESISTOR ARRAY	9	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3485-93	EXB28V330J	RESISTOR ARRAY 33 OHM	9	
R3501-04	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R3505,06	ERJ2GEJ103	M 10K OHM, 0.063W	2	
R3507	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3509,10	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3511	ERJ3GEYJ103	RESISTOR	1	
R3512	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3513	ERJ3GEYJ184	M 180K OHM,J,1/16W	1	
R3514	ERJ3GEYJ105	M 1M OHM,J,1/16W	1	
R3515,16	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3517,18	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3519	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3520	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3521	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3522	ERJ3GEYJ102	RESISTOR	1	
R3523	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R3524	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3525	ERJ3GEYJ102	RESISTOR	1	
R3527	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3529-31	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3533	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3535	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3536	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3537,38	ERJ2GEJ102	M 1K OHM, 0.063W	2	
R3539	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3541	ERJ3EKF3300	RESISTOR	1	
R3542,43	ERJ3EKF2000	MT-GLAZE 200 FA 1/10W	2	
R3544	ERJ3EKF3300	RESISTOR	1	
R3545	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3546,47	ERJ3EKF3300	RESISTOR	2	
R3548	ERJ2GEJ561	RESISTOR	1	
R3549-51	ERJ2GEJ153	RESISTOR	3	
R3552,53	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3554,55	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3556,57	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R3560	EXB28V472J	RESISTOR ARRAY	1	
R3561	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3562	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R3565	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3568	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3570	ERJ3GEYJ102	RESISTOR	1	
R3571	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	1	
R3572	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R3573	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R3574	ERJ3GEYJ331	M 330 OHM,J,1/16W	1	
R3575	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3576	ERJ3GEYJ392	M 3.9K OHM,J,1/16W	1	
R3577	ERJ3GEYJ330	M 33 OHM,J,1/16W	1	
R3578	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3579	ERJ3GEYJ680	M 68 OHM,J,1/16W	1	
R3580	EXB28V103J	RESISTOR ARRAY	1	
R3581,82	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3583	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3584,85	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R3586-92	EXB28V100J	RESISTOR ARRAY	7	
R3593	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	1	
R3599	ERJ2GEJ560	M 56 OHM, 0.063W	1	
R3601-04	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3605-14	EXB28VR000	RESISTOR ARRAY	10	
R3615-22	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3623,24	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	2	
R3625-28	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3629	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3635	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3637	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3638-41	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3642-51	EXB28VR000	RESISTOR ARRAY	10	
R3652-59	ERJ2GE0R00	M 0 OHM, 0.063W	8	
R3660,61	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	2	
R3662-65	ERJ3EKF1000	M 100 OHM, 1/16W	4	
R3666	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3669	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3671,72	ERJ6GEY0R00	M 0 OHM, 1/10W	2	
R3673	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R3674	ERJ3EKF10R0	MT-GLAZE 10 FA 1/10W	1	
R3675	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R3679	ERJ3EKF2403	RESISTOR	1	
R3680	ERJ3EKF6801	M 6.8K OHM, 1/16W	1	
R3681	ERJ3EKF2403	RESISTOR	1	
R3682-84	ERJ2GE0R00	M 0 OHM, 0.063W	3	
R3688	ERJ3EKF1873	RESISTOR	1	
R3689	ERJ3EKF2003	RESISTOR	1	
R3690	ERJ3EKF5102	RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3691	ERJ3EKF1003	M 100KOHM, 1/16W	1	
R3692	ERJ3EKF1303	RESISTOR	1	
R3693	ERJ3EKF2403	RESISTOR	1	
R3694	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3695	ERJ6GEY0R00	M 0 OHM, 1/10W	1	
R3696	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3697	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3698	ERJ2GEJ473	M 47K OHM, 0.063W	1	
R3700-02	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3703-05	ERJ2GE0R00	M 0 OHM, 0.063W	3	
R3708	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3709-11	ERJ2GEJ100	M 10 OHM, 0.063W	3	
R3712	ERJ2GEJ223	M 22K OHM, 0.063W	1	
R3713,14	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3715-22	ERJ2GEJ100	M 10 OHM, 0.063W	8	
R3723	EXB28V103J	RESISTOR ARRAY	1	
R3725	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3726,27	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3728,29	ERJ3GEY0R00	M 0 OHM, 1/16W	2	
R3731	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3732	ERJ2GEJ222	MT-GLAZE 2.2K JA 1/16W	1	
R3733-36	ERJ2GEJ100	M 10 OHM, 0.063W	4	
R3737	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3738,39	ERJ2GEJ100	M 10 OHM, 0.063W	2	
R3740-42	ERJ2GEJ103	M 10K OHM, 0.063W	3	
R3743	ERJ2GEJ100	M 10 OHM, 0.063W	1	
R3745-47	ERJ2GEJ220	M 22 OHM, 0.063W	3	
R3748	ERJ3EKF2400	MT-GLAZE 240 FA 1/10W	1	
R3749,50	ERJ3EKF1000	M 100 OHM, 1/16W	2	
R3751,52	ERJ2GEJ472	M 4.7K OHM, 0.063W	2	
R3759	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R3760	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3761,62	ERJ3GEYJ331	M 330 OHM,J,1/16W	2	
R3763	ERJ2GEJ472	M 4.7K OHM, 0.063W	1	
R3766	ERJ2GE0R00	M 0 OHM, 0.063W	1	
R3767	ERJ2GEJ103	M 10K OHM, 0.063W	1	
R3768	ERJ3GEYJ103	RESISTOR	1	
R3769-72	EXB28V390J	RESISTOR ARRAY	4	
R3773	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	1	
R3774	EXB28V390J	RESISTOR ARRAY	1	
R3775,76	ERJ2GEJ390	MT-GLAZE 39 JA 1/16W	2	
R3777,78	ERJ2GE0R00	M 0 OHM, 0.063W	2	
R3780	ERJ2GEJ220	M 22 OHM, 0.063W	1	
X3003	H1A7425B0001	CRYSTAL	1	
X3501	H1C2705B0037	CRYSTAL	1	
X3502	H0J355500001	CRYSTAL	1	
X3503	H0J327200114	CRYSTAL	1	
		MISCELLANEOUS		
⚠	TMMX263	BUTTON BATTERY CAP	1	
	XYN26+C6FJ	SCREW	1	
■ G	**TXN/G1VLF9**	**CIRCUIT BOARD (G)**		
C6001,02	F1H1C105A008	C.CAPACITOR CH 16V 1U	2	
C6003,04	F1G1H120A565	C.CAPACITOR CH 50V 12P	2	
C6005	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6006	F1H1H102A219	C.CAPACITOR CH 50V 0.001U	1	
C6007	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6008,09	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	2	
C6010	F1H1C105A008	C.CAPACITOR CH 16V 1U	1	
C6011	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6012	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	1	
C6014-16	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C6018	F1H1C105A008	C.CAPACITOR CH 16V 1U	1	
C6020	F1H1E105A126	C.CAPACITOR CH 25V 1U	1	
C6021	F1H1H8210002	C.CAPACITOR CH 50V 820P	1	
C6022	F1H1H472A219	C.CAPACITOR CH 50V 4700P	1	
C6023	F1G1H152A571	C.CAPACITOR CH 50V 1500P	1	
C6024	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C6025	F2H1C8200001	CAPACITOR	1	
C6026	F1H1C474A008	C.CAPACITOR CH 16V 0.47U	1	
C6027,28	F1H1E105A126	C.CAPACITOR CH 25V 1U	2	
C6029	F1H1C2240011	CERAMIC 0.22U K 16V	1	
C6030	F1H1C474A008	C.CAPACITOR CH 16V 0.47U	1	
C6031-34	F1H1E105A126	C.CAPACITOR CH 25V 1U	4	
C6035	F1H1C2240011	CERAMIC 0.22U K 16V	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6036	F1G1H221A571	C.CAPACITOR CH 50V 220P	1	
C6037-41	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	5	
C6042	F2G0J4700010	E.CAPACITOR CH 6.3V 47U	1	
C6043,44	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6054	F1H1H103A219	C.CAPACITOR CH 50V 0.01U	1	
C6056-66	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	11	
C6068	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C6069	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6070	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C6071	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C6072	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6073	F2G0J3300014	E.CAPACITOR CH 6.3V 33U	1	
C6074	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6075	F1H1A105A036	C.CAPACITOR CH 10V 1U	1	
C6076	F2G0J4700010	E.CAPACITOR CH 6.3V 47U	1	
C6077	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6078	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C6079	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6084	F2G0J4700010	E.CAPACITOR CH 6.3V 47U	1	
C6085	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6086	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
C6087	F1H1H3300005	CAPACITOR	1	
C6201,02	F1H1H1010005	C.CAPACITOR CH 50V 100P	2	
C6501	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6502-04	F1K1E1060004	CAPACITOR	3	
C6505	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C6506,07	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6508	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C6510,11	F1G1H222A571	C.CAPACITOR CH 50V 2200P	2	
C6512-14	F1G1H220A565	C.CAPACITOR CH 50V 22P	3	
C6517-19	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	3	
C6520,21	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	2	
C6522-24	F1G1H221A571	C.CAPACITOR CH 50V 220P	3	
C6525,26	F1K1E1060004	CAPACITOR	2	
C6527	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C6528,29	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6530	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C6532	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C6533,34	F1G1H220A565	C.CAPACITOR CH 50V 22P	2	
C6538	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C6539,40	F1G1H221A571	C.CAPACITOR CH 50V 220P	2	
C6541	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6542	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6544	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6545,46	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6547	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6548,49	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6550	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6551,52	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6553	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6554,55	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6556	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6557	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6559	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6560	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6562	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6563	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6565	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6566	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6567	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6581	F1H1H104A220	C.CAPACITOR CH 50V 0.1U	1	
C6582	F1H1C105A008	C.CAPACITOR CH 16V 1U	1	
C6584	F1H1H104A220	C.CAPACITOR CH 50V 0.1U	1	
C6587	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6599	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6601	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C6602,03	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	2	
C6604,05	F2G1E3300010	E.CAPACITOR CH 25V 33U	2	
C6606	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6607	F1J1E105A197	C.CAPACITOR CH 25V 1U	1	
C6608	F1H1H151A792	C.CAPACITOR CH 50V 150P	1	
C6609	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6610	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	1	
C6611	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6612	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C6614	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	1	
C6615,16	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	2	
C6617-24	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	8	
C6626	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6628	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6629,30	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	2	
C6631-35	F4D276650001	CAPACITOR	5	
C6636-44	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	9	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6645	F2G1E3300010	E.CAPACITOR CH 25V 33U	1	
C6647	F2G1E4R70007	E.CAPACITOR CH 25V 4.7U	1	
C6649-56	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	8	
C6658	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C6660	F2G1C1010040	E.CAPACITOR CH 16V 100U	1	
C6661	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C6662	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C6663	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6665	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C6666	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C6668	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C6670	F2G0J1010013	E.CAPACITOR CH 6.3V 100U	1	
C6672	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6673	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C6674,75	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6676	F1K1E4750002	C.CAPACITOR CH 25V 4.7U	1	
C6677	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6678	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	1	
C6679,80	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	2	
C6681	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	1	
C6682	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6683	F1K1E1060004	CAPACITOR	1	
C6684	F1H1H1010005	C.CAPACITOR CH 50V 100P	1	
C6685	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6686	F1K1E1060004	CAPACITOR	1	
C6687	F1H1E104A030	C.CAPACITOR CH 25V 0.1U	1	
C6688	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6689	F1H1H1010005	C.CAPACITOR CH 50V 100P	1	
C6690	F1K1E1060004	CAPACITOR	1	
C6691	F1H1H1010005	C.CAPACITOR CH 50V 100P	1	
C6695	F1K1E1060004	CAPACITOR	1	
C6696	F1G1C1030008	C.CAPACITOR CH 16V 0.01U	1	
C6697	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C6698	F1G1H222A571	C.CAPACITOR CH 50V 2200P	1	
C6700	F1G1H220A565	C.CAPACITOR CH 50V 22P	1	
C6701	F1G1H221A571	C.CAPACITOR CH 50V 220P	1	
C6702	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
D6001	DA3X101F0L	DIODE	1	
D6003	DA3X101F0L	DIODE	1	
D6004,05	B0JCPE000015	DIODE	2	
D6006,07	DA3X101F0L	DIODE	2	
D6020	DA3X101F0L	DIODE	1	
D6022-29	B0BC5R600003	DIODE	8	
D6030-33	D4ED1270A008	VARISTOR	4	
D6034-37	D4ED11200005	VARISTOR	4	
D6046	D4ED1270A008	VARISTOR	1	
D6501-03	B0JCPE000015	DIODE	3	
D6504-06	B0ACCK000005	DIODE	3	
D6507,08	B0JCPE000015	DIODE	2	
D6509,10	B0ACCK000005	DIODE	2	
D6512,13	B0JCPD000026	DIODE	2	
D6516,17	DA3X101F0L	DIODE	2	
D6522-25	DA3X101F0L	DIODE	4	
D6526	B0HCMM000013	DIODE	1	
D6528,29	B0JCPD000026	DIODE	2	
D6530	B0JCPE000015	DIODE	1	
D6531	B0ACCK000005	DIODE	1	
FL6001	F1J1E104A148	CAPACITOR	1	
FL6006	J0JHC0000078	EMI FILTER	1	
FL6501-05	F1J1E104A148	CAPACITOR	5	
FL6513,14	F1J1E104A148	CAPACITOR	2	
FL6517,18	F1J1E104A148	CAPACITOR	2	
FL6523,24	J0HAAB000036	EMI FILTER	2	
G1	K1KAA0A00157	CONNECTOR	1	
G2	K1KA06A00508	CONNECTOR	1	
G4	K1KA03AA0104	CONNECTOR	1	
G5	K1KA04AA0104	CONNECTOR	1	
G6	K1KA04A00667	CONNECTOR	1	
G7	K1KA03A00632	CONNECTOR	1	
G9	K1KA14A00248	CONNECTOR	1	
G10	K1KA15AA0153	CONNECTOR	1	
G11	K1KA02AA0150	CONNECTOR	1	
G12	K1KA30AA0009	CONNECTOR	1	
G13	K1KA40AA0009	CONNECTOR	1	
G14	K1KA02AA0150	CONNECTOR	1	
G16	K1KA10A00416	CONNECTOR	1	
G17	K1KA12A00317	CONNECTOR	1	
G18	K1KA04B00261	CONNECTOR	1	
IC6001	TVRT306	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC6002	C0EBE0000348	IC	1	
IC6003	C0JBAA000377	IC	1	
IC6004	C0JBAZ000851	IC	1	
IC6005,06	C0JBAB000621	IC	2	
IC6008	C0ABCA000085	IC	1	
IC6009	C1BB00000818	IC	1	
IC6010	C1ZBZ0003985	IC	1	
IC6011	C0JBAZ001467	IC	1	
IC6012	C0JBAB000771	IC	1	
IC6013	C0DBGFD00021	IC	1	
IC6014	C0DBZFG00055	IC	1	
IC6015	C0JBAZ002332	IC	1	
IC6201,02	C0JBAA000377	IC	2	
IC6501-05	C0DBAYY00397	IC	5	
IC6506-14	C0CBCYG00004	IC	9	
IC6518	C0GBG0000066	IC	1	
IC6520	C0CBCYG00004	IC	1	
IC6522	C0ABBA000229	IC	1	
IC6523,24	C0FBBD000183	IC	2	
IC6525	C1ZBZ0003314	IC	1	
IC6526	C0GBL0000010	IC	1	
IC6529	C0CBCYG00004	IC	1	
IC6530,31	C0GBL0000010	IC	2	
IC6532	C0DBAYY00397	IC	1	
JK6001	K2HC103B0204	JACK	1	
JK6002	K2HC103B0203	JACK	1	
JK6003	K1FB109B0083	CONNECTOR	1	
JK6004	K1FY109B0018	CONNECTOR	1	
JK6005	K1FB109B0083	CONNECTOR	1	
L6001-04	J0JCC0000168	EMI FILTER	4	
L6005	J0JHC0000078	EMI FILTER	1	
L6006,07	G1C330M00016	COIL	2	
L6008-14	J0JCC0000168	EMI FILTER	7	
L6016	J0JCC0000168	EMI FILTER	1	
L6018-28	J0JCC0000168	EMI FILTER	11	
L6029	J0JJC0000022	EMI FILTER	1	
L6030	J0JHC0000078	EMI FILTER	1	
L6031	J0JJC0000022	EMI FILTER	1	
L6032	J0JHC0000078	EMI FILTER	1	
L6201-08	J0JCC0000168	EMI FILTER	8	
L6501-03	G1C100MA0291	INDUCTOR	3	
L6504-06	J0JCC0000168	EMI FILTER	3	
L6507,08	G1C100MA0291	INDUCTOR	2	
L6509,10	J0JCC0000168	EMI FILTER	2	
L6511,12	J0JHC0000078	EMI FILTER	2	
L6513	J0JCC0000168	EMI FILTER	1	
L6514	J0JHC0000078	EMI FILTER	1	
L6515	J0JCC0000168	EMI FILTER	1	
L6516	J0JHC0000078	EMI FILTER	1	
L6520	J0JCC0000168	EMI FILTER	1	
L6523	J0JJC0000022	EMI FILTER	1	
L6526	J0JHC0000078	EMI FILTER	1	
L6527-32	J0JCC0000168	EMI FILTER	6	
L6533	J0JHC0000078	EMI FILTER	1	
L6535,36	J0JHC0000078	EMI FILTER	2	
L6540-42	J0JCC0000168	EMI FILTER	3	
L6548-51	J0JHC0000078	EMI FILTER	4	
L6554-62	J0JHC0000078	EMI FILTER	9	
L6564-68	J0JHC0000078	EMI FILTER	5	
L6570-75	J0JHC0000078	EMI FILTER	6	
L6576,77	J0JJC0000022	EMI FILTER	2	
L6578-83	J0JHC0000078	EMI FILTER	6	
L6584,85	J0JJC0000022	EMI FILTER	2	
L6586,87	J0JHC0000078	EMI FILTER	2	
L6588	G1C100MA0291	INDUCTOR	1	
L6589-04	J0JHC0000078	EMI FILTER	16	
Q6001	B1ABDF000036	TRANSISTOR	1	
Q6002	B1ABDF000026	TRANSISTOR	1	
Q6004	B1ABDF000026	TRANSISTOR	1	
Q6005	B1ADCF000063	TRANSISTOR	1	
Q6006	DSC500100L	TRANSISTOR	1	
Q6007	DSA500100L	TRANSISTOR	1	
Q6008	B1ABDF000036	TRANSISTOR	1	
Q6011,12	B1CBHD000002	TRANSISTOR	2	
Q6204-07	DSA500100L	TRANSISTOR	4	
Q6503	B1GBCFJJ0040	TRANSISTOR	1	
Q6504	B1CHQD000010	TRANSISTOR	1	
Q6505	B1GBCFJJ0040	TRANSISTOR	1	
Q6506	B1CFRC000024	TRANSISTOR	1	
Q6507,08	B1GBCFJJ0040	TRANSISTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q6509	B1CHQD000010	TRANSISTOR	1	
Q6510-14	B1ABDF000036	TRANSISTOR	5	
R6001	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6007	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6009	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R6010-14	ERJ3GEYJ220	M 22 OHM,J,1/16W	5	
R6016	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6018-20	ERJ3EKF2201	M 2.2K OHM, 1/16W	3	
R6022,23	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R6025	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6026	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6027	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6028	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6031	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6033	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6034-36	ERJ3GEYJ105	M 1M OHM,J,1/16W	3	
R6037	EXB28V102J	RESISTOR ARRAY	1	
R6039	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6040	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6045	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6046	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6047	ERJ3GEYJ103	RESISTOR	1	
R6048	ERJ3EKF2203	RESISTOR	1	
R6049	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6051	ERJ3GEYJ105	M 1M OHM,J,1/16W	1	
R6053	ERJ3EKF4300	RESISTOR	1	
R6054	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6055	ERJ3EKF1000	M 100 OHM, 1/16W	1	
R6056	ERJ3EKF3300	RESISTOR	1	
R6057-59	ERJ3EKF2002	RESISTOR	3	
R6060	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6061	ERJ3EKF2402	RESISTOR	1	
R6062	ERJ3EKF5903	M 590K OHM, 1/16W	1	
R6063	ERJ6ENF3012	M 30.1K OHM, 1/10W	1	
R6064	ERJ3EKF3923	M 392K OHM, 1/16W	1	
R6065	ERJ3EKF2203	RESISTOR	1	
R6066	ERJ3EKF3923	M 392K OHM, 1/16W	1	
R6067	EXB38V220J	RESISTOR ARRAY 22 OHM	1	
R6068	ERJ3EKF3923	M 392K OHM, 1/16W	1	
R6069	ERJ3EKF2203	RESISTOR	1	
R6070	ERJ3EKF2402	RESISTOR	1	
R6071	ERJ3GEYJ103	RESISTOR	1	
R6072	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6073	ERJ3GEYJ105	M 1M OHM,J,1/16W	1	
R6074,75	ERJ3GEYJ473	M 47KOHM,J,1/16W	2	
R6077	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R6078	ERJ3GEYJ162	RESISTOR	1	
R6079	ERJ3GEYJ102	RESISTOR	1	
R6081	ERJ3EKF1202	MT-GLAZE 12K FA 1/10W	1	
R6082	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6083	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6084	ERJ3GEYJ510	M 51 OHM,J,1/16W	1	
R6085	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6086	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6087	ERJ3EKF1203	M 120K OHM, 1/16W	1	
R6088	ERJ3GEYJ510	M 51 OHM,J,1/16W	1	
R6089	ERJ3GEYJ103	RESISTOR	1	
R6090,91	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R6094	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6098,99	ERJ6GEYJ101	RESISTOR	2	
R6103	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R6104	ERJ6GEYJ101	RESISTOR	1	
R6105	ERJ3GEYJ272	M 2.7K OHMJ,J1/16W	1	
R6106	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6107	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6108	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6109	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6110-17	ERJ6GEYJ101	RESISTOR	8	
R6118	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6119,20	EXB28V472J	RESISTOR ARRAY	2	
R6122	ERJ3GEYJ223	M 22K OHM,J,1/16W	1	
R6123-44	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	22	
R6145,46	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R6147,48	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	2	
R6149	EXB28V472J	RESISTOR ARRAY	1	
R6153	ERJ2GEJ101	M 100 OHM, 0.063W	1	
R6154	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R6155	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R6156,57	EXB28V220J	RESISTOR ARRAY 22 OHM	2	
R6163	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6164,65	EXB28V101J	RESISTOR ARRAY	2	
R6166-72	ERJ2GEJ220	M 22 OHM, 0.063W	7	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6173	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R6174-83	ERJ2GEJ220	M 22 OHM, 0.063W	10	
R6184-92	ERJ3GEY0R00	M 0 OHM, 1/16W	9	
R6201	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R6202	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6203,04	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	2	
R6205	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6206	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6207	ERJ3GEYJ102	RESISTOR	1	
R6208	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	
R6209	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6210,11	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	2	
R6212	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6213	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6214	ERJ3GEYJ222	M 2.2K OHM,J,1/16W	1	
R6215	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6216,17	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	2	
R6218	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6219	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6220	ERJ3GEYJ102	RESISTOR	1	
R6221	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	
R6222	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6223,24	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	2	
R6225	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R6226	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6239	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6241,42	ERJ3GEYJ220	M 22 OHM,J,1/16W	2	
R6501,02	ERJ3EKF1202	MT-GLAZE 12K FA 1/10W	2	
R6503-05	ERJ3EKF6202	RESISTOR	3	
R6506	ERJ3EKF1202	MT-GLAZE 12K FA 1/10W	1	
R6507,08	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	2	
R6509,10	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	2	
R6515,16	ERJ3EKF1203	M 120K OHM, 1/16W	2	
R6517-19	ERJ3GEYJ560	M 56 OHM,J,1/16W	3	
R6520	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	1	
R6521	ERJ3EKF1203	M 120K OHM, 1/16W	1	
R6522	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	1	
R6523-25	ERJ6GEYJ1R0	M 1 OHM,J, 1/10W	3	
R6526	ERJ3EKF1202	MT-GLAZE 12K FA 1/10W	1	
R6527,28	ERJ3EKF6202	RESISTOR	2	
R6529	ERJ3EKF1202	MT-GLAZE 12K FA 1/10W	1	
R6530	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	1	
R6531	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	1	
R6532	ERJ3EKF1203	M 120K OHM, 1/16W	1	
R6535	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	1	
R6536	ERJ3EKF1203	M 120K OHM, 1/16W	1	
R6537	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	1	
R6538,39	ERJ6GEYJ1R0	M 1 OHM,J, 1/10W	2	
R6540	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6541	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6542	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6545	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6546	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6547	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6548	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R6550	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6551	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6552	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6553	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R6555	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6556	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6557	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6558	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R6560	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6561	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6562	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6563	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R6565	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6566	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6567	ERJ3EKF1801	MT-GLAZE 1.8K FA 1/10W	1	
R6570	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6571	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6572	ERJ3EKF1801	MT-GLAZE 1.8K FA 1/10W	1	
R6575	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6576	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6577	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R6580	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6581	ERJ3EKF2001	M 2K OHM, 1/16W	1	
R6582	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R6584-87	ERJ3GEY0R00	M 0 OHM, 1/16W	4	
R6598,99	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R6600	EXB28V103J	RESISTOR ARRAY	1	
R6601	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6602	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6603	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	
R6604	ERJ3GEYJ102	RESISTOR	1	
R6605	ERJ3EKF6801	M 6.8K OHM, 1/16W	1	
R6606	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6607	ERJ3GEYJ271	M 270 OHM,J,1/16W	1	
R6608-10	ERJ3GEYJ103	RESISTOR	3	
R6611	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6612	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6613	ERJ3EKF6801	M 6.8K OHM, 1/16W	1	
R6614	EXB28V472J	RESISTOR ARRAY	1	
R6615	ERJ3GEYJ471	M 470 OHM,J,1/16W	1	
R6616	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6617	EXB28V472J	RESISTOR ARRAY	1	
R6618	EXB28V561J	RESISTOR ARRAY	1	
R6619,20	ERJ3GEYJ471	M 470 OHM,J,1/16W	2	
R6621	ERJ3GEYJ103	RESISTOR	1	
R6622	ERJ3EKF2701	RESISTOR	1	
R6625	ERJ3EKF3900	M 390 OHM, 1/16W	1	
R6626	ERJ3EKF1501	M 1.5K OHM, 1/16W	1	
R6627	D1BZ2700A012	M 270 OHM	1	
R6628,29	ERJ3EKF8201	M 8.2K OHM, 1/16W	2	
R6630,31	ERJ3EKF2701	RESISTOR	2	
R6632,33	ERJ3GEYJ271	M 270 OHM,J,1/16W	2	
R6634,35	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	2	
R6636	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6637	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6638	ERJ3EKF1801	MT-GLAZE 1.8K FA 1/10W	1	
R6639	ERJ3GEYJ103	RESISTOR	1	
R6640	ERJ3GEYJ220	M 22 OHM,J,1/16W	1	
R6641	ERJ3GEYJ103	RESISTOR	1	
R6642	ERJ3EKF2701	RESISTOR	1	
R6643-45	ERJ3GEYJ104	M 100K OHM,J,1/16W	3	
R6646	ERJ3GEYJ102	RESISTOR	1	
R6647	ERJ3EKF6801	M 6.8K OHM, 1/16W	1	
R6648	EXB28V472J	RESISTOR ARRAY	1	
R6649-52	ERJ3GEYJ101	M 100 OHM,J,1/16W	4	
R6653	ERJ3GEYJ102	RESISTOR	1	
R6654	ERJ3EKF2202	MT-GLAZE 22K FA 1/10W	1	
R6655	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6656,57	ERJ3GEYJ563	M 56K OHM,J,1/16W	2	
R6658	ERJ3GEYJ102	RESISTOR	1	
R6659,60	ERJ1TYJ221	M 220 OHM, 1W	2	
R6661	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6662,63	ERJ1TYJ161	RESISTOR	2	
R6664	ERJ3GEYJ224	M 220K OHM,J,1/16W	1	
R6665	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	1	
R6666	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6667,68	ERJ3GEYJ563	M 56K OHM,J,1/16W	2	
R6669-73	ERJ3GEYJ102	RESISTOR	5	
R6674	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6676	ERJ3GEYJ103	RESISTOR	1	
R6677	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R6678	ERJ3GEYJ104	M 100K OHM,J,1/16W	1	
R6679	ERJ3GEYJ224	M 220K OHM,J,1/16W	1	
R6680	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	1	
R6681	ERJ3GEYJ224	M 220K OHM,J,1/16W	1	
R6682,83	ERJ3GEYJ104	M 100K OHM,J,1/16W	2	
R6684	ERJ3GEYJ224	M 220K OHM,J,1/16W	1	
R6686,87	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	2	
R6688,89	ERJ2GEJ220	M 22 OHM, 0.063W	2	
R6690,91	ERJ3GEYJ104	M 100K OHM,J,1/16W	2	
R6692	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R6694	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R6696	EXB28V472J	RESISTOR ARRAY	1	
R6697	ERJ3GEYJ224	M 220K OHM,J,1/16W	1	
R6698	ERJ3EKF4702	MT-GLAZE 47K FA 1/10W	1	
R6699	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R6700	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R6701,02	ERJ3GEYJ203	RESISTOR	2	
R6703-05	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	3	
R6706	ERJ3GEYJ221	M 220 OHM,J,1/16W	1	
R6707	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	1	
R6708	ERJ1TRQFR47	RESISTOR	1	
R6709	EXB28V472J	RESISTOR ARRAY	1	
R6710	ERJ3GEYJ680	M 68 OHM,J,1/16W	1	
R6711	EXB28V560J	RESISTOR ARRAY 56 OHM	1	
R6712	ERJ1TRQFR47	RESISTOR	1	
R6713	ERJ3GEYJ103	RESISTOR	1	
R6715	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	1	
R6716,17	ERJ1TRQFR47	RESISTOR	2	
R6718,19	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	2	
R6720,21	ERJ1TRQFR47	RESISTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6722	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R6723	ERJ3GEYJ103	RESISTOR	1	
R6726	EXB28V220J	RESISTOR ARRAY 22 OHM	1	
R6727	ERJ3GEYJ103	RESISTOR	1	
R6728	EXB28V561J	RESISTOR ARRAY	1	
R6729	ERJ3EKF6202	RESISTOR	1	
R6730	ERJ3EKF1202	MT-GLAZE 12K FA 1/10W	1	
R6731	ERJ3EKF1102	MT-GLAZE 11K FA 1/10W	1	
R6732	ERJ3EKF1203	M 120K OHM, 1/16W	1	
R6733	ERJ6GEYJ1R0	M 1 OHM,J, 1/10W	1	
R6734-38	ERJ3GEYJ561	M 560 OHM,J,1/16W	5	
R6739	ERJ3GEYJ560	M 56 OHM,J,1/16W	1	
R6740	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
R6741	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
X6001	H0J200500048	CRYSTAL	1	
X6002	H1A2705B0040	CRYSTAL	1	
■ R	**TNPA5661**	**CIRCUIT BOARD (R)**		
C1001	F2G0J4700010	E.CAPACITOR CH 6.3V 47U	1	
C1002	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
C1004	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
C1005	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
D1001	B3AGB0000051	LED	1	
D1002	B3AAB0000199	LED	1	
D1003-05	B3AGB0000051	LED	3	
D1006	B0ADCJ000015	DIODE	1	
IC1001	C0GBA0000002	IC	1	
L1001	ELJFA6R8JFB	COIL 6.8UH	1	
L1002-10	J0JHC0000078	EMI FILTER	9	
R1	K1KA12A00317	CONNECTOR	1	
R2	K1KA04A00667	CONNECTOR	1	
R3	K1KA03A00632	CONNECTOR	1	
R1001	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
R1002	ERJ3GEYJ681	M 680 OHM,J,1/16W	1	
R1003	ERJ3GEYJ101	M 100 OHM,J,1/16W	1	
R1004	ERJ3GEYJ821	M 820 OHM,J,1/16W	1	
R1005-07	ERJ3GEYJ681	M 680 OHM,J,1/16W	3	
R1008,09	ERJ3GEYJ101	M 100 OHM,J,1/16W	2	
R1010-12	ERJ3GEYJ103	RESISTOR	3	
R1016-20	ERJ3GEYJ101	M 100 OHM,J,1/16W	5	
RM1001	B3RAD0000126	REMOTE CONTROL RECEIVER	1	
■ RL	**TNPA5662**	**CIRCUIT BOARD (RL)**		
C1071	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
IC1071	C0JBAR000549	IC	1	
L1072,73	J0JHC0000078	EMI FILTER	2	
L1080	J0JHC0000078	EMI FILTER	1	
L1088	J0JHC0000078	EMI FILTER	1	
L1091-14	J0JHC0000078	EMI FILTER	24	
L1117-19	J0JHC0000078	EMI FILTER	3	
R1071-73	ERJ3GEYJ220	M 22 OHM,J,1/16W	3	
R1075	EXB28V473J	RESISTOR ARRAY	1	
R1077,78	ERJ3GEYJ332	M 3.3K OHM,J,1/16W	2	
R1079	EXB28V472J	RESISTOR ARRAY	1	
R1080	ERJ3GEYJ473	M 47KOHM,J,1/16W	1	
R1081	ERJ3GEYJ472	M 4.7K OHM,J,1/16W	1	
RL1	K1KA40AA0009	CONNECTOR	1	
RL3-L5	K1KA03A00632	CONNECTOR	3	
RL6	K1KA03AA0104	CONNECTOR	1	
RL8	K1KA11A00178	CONNECTOR	1	
RL9	K1KA02A00787	CONNECTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
RL10	K1KA02AA0104	CONNECTOR	1	
RL11	K1KA04A00667	CONNECTOR	1	
RL12	K1KA04AA0104	CONNECTOR	1	
RL13	K1KA07A00292	CONNECTOR	1	
RL14	K1KA05A00466	CONNECTOR	1	
■ R2	TNPA5052	CIRCUIT BOARD (R2)		
C1051	F2G0J4700010	E.CAPACITOR CH 6.3V 47U	1	
C1052	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
D1051	B0ADCJ000015	DIODE	1	
L1051	ELJFA6R8JFB	COIL 6.8UH	1	
L1054,55	J0JHC0000078	EMI FILTER	2	
L1063,64	J0JHC0000078	EMI FILTER	2	
L1070,71	J0JHC0000078	EMI FILTER	2	
R21	K1KA14A00248	CONNECTOR	1	
R22	K1KA10A00416	CONNECTOR	1	
R24	K1KA03A00632	CONNECTOR	1	
R1051	ERJ3GEYJ470	M 47 OHM,J,1/16W	1	
RM1051	B3RAD0000142	REMOTE CONTROL RECEIVER	1	
■ F	TNPA5053	CIRCUIT BOARD (F)		
C1502	F1H1C104A041	C.CAPACITOR CH 16V 0.1U	1	
F1	K1KA11A00178	CONNECTOR	1	
F2	K1KA02A00787	CONNECTOR	1	
F3	K1KA03A00632	CONNECTOR	1	
IC1501	C0BBBA000081	IC	1	
L1501-04	J0JHC0000078	EMI FILTER	4	
PC1501	B3NAA0000098	PHOTO INTERRUPTER	1	
R1501	ERJ6ENF3300	M 330 OHM, 1/10W	1	
R1502	ERJ3GEYJ563	M 56K OHM,J,1/16W	1	
R1504,05	ERJ3GEYJ103	RESISTOR	2	
R1506	ERJ2GEJ220	M 22 OHM, 0.063W	1	
R1508	ERJ3GEY0R00	M 0 OHM, 1/16W	1	
R1509,10	ERJ2GEJ220	M 22 OHM, 0.063W	2	
SW1501	K0L2KA000001	SWITCH	1	
■ RM	TNPA5127	CIRCUIT BOARD (RM)		
L1223-30	J0JHC0000078	EMI FILTER	8	
L1232	J0JHC0000078	EMI FILTER	1	
L1234-40	J0JHC0000078	EMI FILTER	7	
L1247-52	J0JHC0000078	EMI FILTER	6	
RM1	K1KA30B00078	CONNECTOR	1	
RM2	K1KA04B00273	CONNECTOR	1	
RM3	K1KA04BA0047	CONNECTOR	1	
RM4	K1KA06B00220	CONNECTOR	1	
RM6	K1KA08B00270	CONNECTOR	1	
RM7	K1KA04B00273	CONNECTOR	1	
■ S	TNPA5188	CIRCUIT BOARD (S)		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C9950	F1H1C104A041	C.CAPACITOR CH 16V 0.1U	1	
FL9950-53	J0HAAB000036	EMI FILTER	4	
L9950	J0JCC0000168	EMI FILTER	1	
R9950	ERJ6ENF5601	M 5.6K OHM, 1/10W	1	
R9951,52	ERJ3EKF1501	M 1.5K OHM, 1/16W	2	
R9953	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R9954	ERJ6ENF3301	M 3.3K OHM, 1/10W	1	
R9955	ERJ6ENF6801	M 6.8K OHM, 1/10W	1	
R9956	ERJ3EKF3302	M 33K OHM, 1/16W	1	
R9957	ERJ6ENF5601	M 5.6K OHM, 1/10W	1	
R9958,59	ERJ3EKF1501	M 1.5K OHM, 1/16W	2	
R9960	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R9961	ERJ6ENF3301	M 3.3K OHM, 1/10W	1	
R9962	ERJ6ENF6801	M 6.8K OHM, 1/10W	1	
R9963	ERJ3EKF3302	M 33K OHM, 1/16W	1	
R9964	ERJ6ENF5601	M 5.6K OHM, 1/10W	1	
R9965,66	ERJ3EKF1501	M 1.5K OHM, 1/16W	2	
R9967	ERJ3EKF2201	M 2.2K OHM, 1/16W	1	
R9968	ERJ6ENF3301	M 3.3K OHM, 1/10W	1	
R9969	ERJ6ENF6801	M 6.8K OHM, 1/10W	1	
R9970	ERJ3EKF3302	M 33K OHM, 1/16W	1	
S1	K1KA06A00508	CONNECTOR	1	
SW9950-66	EVQ11G05R	SWITCH	17	
■ P	TXAUX01TKAZ	POWER UNIT ASSY		U model
		MISCELLANEOUS		
⚠	K0AACE000029	AC SWITCH	1	
⚠	K2AHYB000003	AC INLET	1	
⚠	K5E203BY0001	FUSE	1	
	TMME348	CLAMP	1	
	J0KG00000036	CORE	1	
⚠	TXJ/K1VLF9	K1 - P CABLE	1	
⚠	TXJP11VKN2	P11-BRE CABLE	1	
	TXJP21VKN2	P21-G10 CABLE	1	
	TXJP22VKN2	P22-FMRE CABLE	1	
	TXJP23VKN2	P23-G18 CABLE	1	
	XYN3+F8FJ	SCREW	7	
	XYN4+E8FJ	SCREW	1	
■ P	TXAUX01TKCZ	POWER UNIT ASSY		E / EJ model
		MISCELLANEOUS		
⚠	K0AACE000029	AC SWITCH	1	
⚠	K2AHYB000003	AC INLET	1	
⚠	K5E103BZA004	FUSE	1	
	TMME348	CLAMP	1	
	J0KG00000036	CORE	1	
⚠	TXJ/K1VLF9	K1 - P CABLE	1	
⚠	TXJP11VKN2	P11-BRE CABLE	1	
	TXJP21VKN2	P21-G10 CABLE	1	
	TXJP22VKN2	P22-FMRE CABLE	1	
	TXJP23VKN2	P23-G18 CABLE	1	
	XYN3+F8FJ	SCREW	7	
	XYN4+E8FJ	SCREW	1	