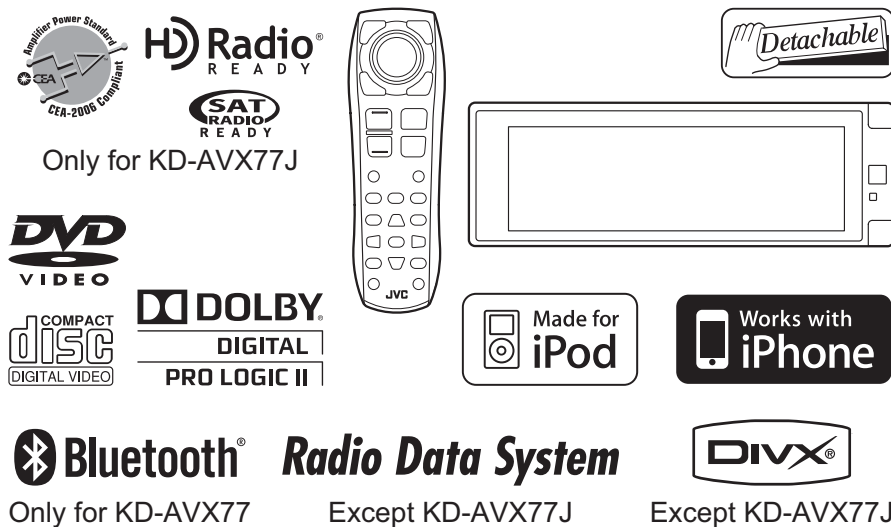


# JVC

## SERVICE MANUAL

### DVD/CD RECEIVER

**KD-AVX55E, KD-AVX55EU, KD-AVX55EE,  
KD-AVX55A, KD-AVX77J, KD-AVX77E,  
KD-AVX77EU, KD-AVX77EE, KD-AVX77A**



Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)  
Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade)

### TABLE OF CONTENTS

1	PRECAUTION.....	1-5
2	SPECIFIC SERVICE INSTRUCTIONS.....	1-8
3	DISASSEMBLY.....	1-9
4	ADJUSTMENT.....	1-16
5	TROUBLESHOOTING.....	1-28

# SPECIFICATION

## KD-AVX77J

<b>AMPLIFIER</b>			
Power Output		20 W RMS × 4 Channels at 4 Ω and < or = 1% THD+N	
Signal-to-Noise Ratio		80 dBA (reference: 1 W into 4 Ω)	
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)	
Equalizer Control Range	Frequencies	60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 15 kHz	
	Level	±10 dB	
Audio Output Level LINE OUT (FRONT, REAR), CENTER OUT, SUBWOOFER OUT		Line-Out Level/Impedance	5 V/20 kΩ load (full scale)
		Output Impedance	1 kΩ
Color System		NTSC	
Video Output (composite)		1 V <sub>p-p</sub> /75 Ω	
Other Terminals	Input	LINE IN, VIDEO IN, USB input, Antenna input	
	Output	2nd AUDIO OUT	
	Others	CD changer, OE REMOTE, MIC IN	
<b>FM/AM TUNER</b>			
Frequency Range	FM	with channel interval set to 100 kHz or 200 kHz	87.5 MHz to 107.9 MHz
		with channel interval set to 50 kHz	87.5 MHz to 108.0 MHz
	AM	with channel interval set to 10 kHz	530 kHz to 1 710 kHz
		with channel interval set to 9 kHz	531 kHz to 1 602 kHz
FM Tuner	Usable Sensitivity		9.3 dBf (0.8 μV/75 Ω)
	50 dB Quieting Sensitivity		16.3 dBf (1.8 μV/75 Ω)
	Alternate Channel Selectivity (400 kHz)		65 dB
	Frequency Response		40 Hz to 15 000 Hz
	Stereo Separation		40 dB
AM Tuner	Sensitivity/Selectivity		20 μV/40 dB
<b>DVD/CD</b>			
Signal Detection System		Non-contact optical pickup (semiconductor laser)	
Frequency Response	DVD, fs=48 kHz	16 Hz to 22 000 Hz	
	DVD, fs=96 kHz	16 Hz to 44 000 Hz	
	VCD/CD	16 Hz to 20 000 Hz	
Dynamic Range		93 dB	
Signal-to-Noise Ratio		95 dB	
Wow and Flutter		Less than measurable limit	
<b>USB</b>			
USB Standards		USB 2.0 Full Speed	
Data Transfer Rate	Full Speed	Maximum 12 Mbps	
	Low Speed	Maximum 1.5 Mbps	
Compatible Device		Mass storage class	
Compatible File System		FAT 32/16/12	
Max. Current		DC 5 V 500 mA	
<b>BLUETOOTH</b>			
Version	Bluetooth 1.2 certified		
Output Power	+4 dBm Max. (Power class 2)		
Service Area	Within 10 m (10.9 yd)		

Profile	HFP (Hands-Free Profile) 1.5	
	OPP (Object Push Profile) 1.1	
	A2DP (Advanced Audio Distribution Profile) 1.2	
	AVRCP (Audio/Video Remote Control Profile) 1.3	
<b>MONITOR</b>		
Screen Size	5.4 inch wide liquid crystal display	
Number of Pixel	576 000 pixels: 800 (horizontal) × 3 (RGB) × 240 (vertical)	
Drive Method	TFT (Thin Film Transistor) active matrix format	
Color System	PAL/NTSC	
Aspect Ratio	3.32:1 (Super wide)	
<b>GENERAL</b>		
Power Requirement	Operating Voltage	DC 14.4 V (11 V to 16 V allowance)
Grounding System		Negative ground
Allowable Storage Temperature		-10°C to +60°C (14°F to 140°F)
Allowable Operating Temperature		0°C to +40°C (32°F to 104°F)
Dimensions (W × H × D)	Installation Size (approx.)	182 mm × 52 mm × 160 mm (7-3/16" × 2-1/16" × 6-5/16")
	Panel Size (approx.)	188 mm × 58 mm × 12 mm (7-7/16" × 2-5/16" × 1/2")
Mass (approx.)		2.2 kg (4.9 lbs) (excluding the accessories)

Design and specifications are subject to change without notice.

#### KD-AVX77/KD-AVX55 (Except KD-AVX77J)

<b>AMPLIFIER</b>		
Maximum Power Output	Front/Rear	50 W per channel
Continuous Power Output (RMS)	Front/Rear	20 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)
Equalizer Control Range	Frequencies	60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 15 kHz
	Level	±10 dB
Signal-to-Noise Ratio		70 dB
Audio Output Level LINE OUT (FRONT, REAR), CENTER OUT, SUBWOOFER OUT	Line-Out Level/Impedance	5 V/20 kΩ load (full scale)
	Output Impedance	1 kΩ
Color System		NTSC/PAL*
Video Output (composite)		1 V <sub>p-p</sub> /75 Ω
Other Terminals	Input	LINE IN, VIDEO IN, USB input, Aerial input
	Output	2nd AUDIO OUT
	Others	CD changer, OE REMOTE, MIC IN
<b>FM/AM TUNER</b>		
Frequency Range	FM	87.5 MHz to 108.0 MHz
	AM	(MW) 522 kHz to 1 620 kHz (LW) 144 kHz to 279 kHz
FM Tuner	Usable Sensitivity	9.3 dBf (0.8 μV/75 Ω)
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)
	Alternate Channel Selectivity (400 kHz)	65 dB
	Frequency Response	40 Hz to 15 000 Hz
	Stereo Separation	40 dB
MW Tuner	Sensitivity/Selectivity	20 μV/40 dB

LW Tuner	Sensitivity	50 $\mu$ V
<b>DVD/CD</b>		
Signal Detection System		Non-contact optical pickup (semiconductor laser)
Frequency Response	DVD, fs=48 kHz	16 Hz to 22 000 Hz
	DVD, fs=96 kHz	16 Hz to 44 000 Hz
	VCD/CD	16 Hz to 20 000 Hz
Dynamic Range		93 dB
Signal-to-Noise Ratio		95 dB
Wow and Flutter		Less than measurable limit
<b>USB</b>		
USB Standards		USB 2.0 Full Speed
Data Transfer Rate	Full Speed	Maximum 12 Mbps
	Low Speed	Maximum 1.5 Mbps
Compatible Device		Mass storage class
Compatible File System		FAT 32/16/12
Max. Current		DC 5 V 500 mA
<b>BLUETOOTH (KD-AVX77 only)</b>		
Version	Bluetooth 1.2 certified	
Output Power	+4 dBm Max. (Power class 2)	
Service Area	Within 10 m	
Profile	HFP (Hands-Free Profile) 1.5	
	OPP (Object Push Profile) 1.1	
	A2DP (Advanced Audio Distribution Profile) 1.2	
	AVRCP (Audio/Video Remote Control Profile) 1.3	
<b>MONITOR</b>		
Screen Size	5.4 inch wide liquid crystal display	
Number of Pixel	576 000 pixels: 800 (horizontal) $\times$ 3 (RGB) $\times$ 240 (vertical)	
Drive Method	TFT (Thin Film Transistor) active matrix format	
Color System	PAL/NTSC	
Aspect Ratio	3.32:1 (Super wide)	
<b>GENERAL</b>		
Power Requirement	Operating Voltage	DC 14.4 V (11 V to 16 V allowance)
Grounding System		Negative ground
Allowable Storage Temperature		-10°C to +60°C
Allowable Operating Temperature		0°C to +40°C
Dimensions (W $\times$ H $\times$ D)	Installation Size (approx.)	182 mm $\times$ 52 mm $\times$ 160 mm
	Panel Size (approx.)	188 mm $\times$ 58 mm $\times$ 12 mm
Mass (approx.)		2.2 kg (excluding the accessories)

Design and specifications are subject to change without notice.

# SECTION 1 PRECAUTION

## 1.1 Safety Precautions

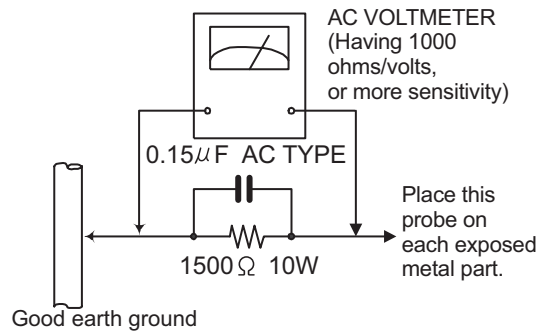
- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by ( $\Delta$ ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
- (5) Leakage shock hazard testing

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method  
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 $\Omega$  per volt or more sensitivity in the following manner. Connect a 1,500 $\Omega$  10W resistor paralleled by a 0.15 $\mu$ F AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC

voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



## 1.2 Warning

- (1) This equipment has been designed and manufactured to meet international safety standards.
- (2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (3) Repairs must be made in accordance with the relevant safety standards.
- (4) It is essential that safety critical components are replaced by approved parts.
- (5) If mains voltage selector is provided, check setting for local voltage.

## 1.3 Caution

**Burrs formed during molding may be left over on some parts of the chassis.**

**Therefore, pay attention to such burrs in the case of pre-forming repair of this system.**

## 1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (  $\blacksquare$  ), diode (  $\blacksquare$  ) and ICP (  $\bullet$  ) or identified by the " $\Delta$ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (This regulation does not Except the J and C version)

## 1.5 Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

### 1.5.1 Grounding to prevent damage by static electricity

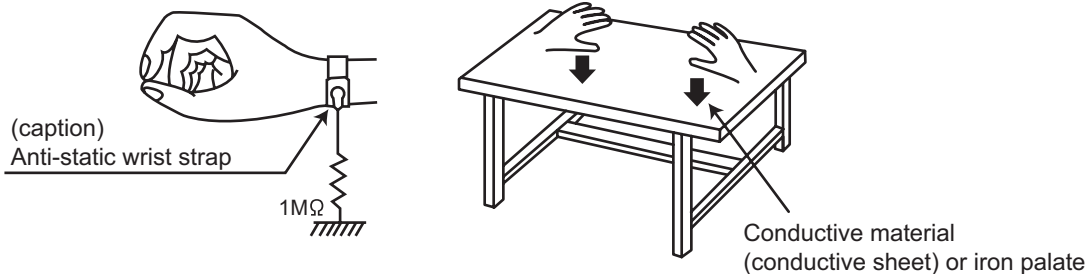
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as laser products. Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup

- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

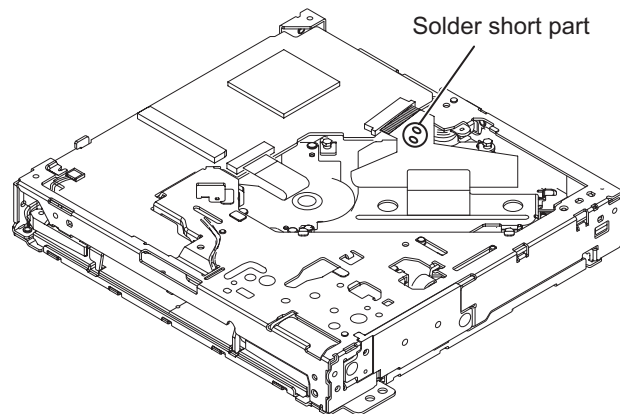
## 1.6 Handling the traverse unit (optical pickup)

- (1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- (2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
- (3) Handle the flexible cable carefully as it may break when subjected to strong force.
- (4) It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

## 1.7 Attention when traverse unit is decomposed

**\*Please refer to "Disassembly method" in the text for the pickup unit.**

- Apply solder to the short land sections before the card wire is disconnected from the connecto on the servo board. (If the card wire is disconnected without applying solder, the pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land sections after connecting the card wire.



## 1.8 Important for laser products

### 1.CLASS 1 LASER PRODUCT

#### 2.CAUTION :

(For U.S.A.) Visible and/or invisible class II laser radiation when open. Do not stare into beam.

(Others) Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments.

**3.CAUTION :** Visible and/or invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

**4.CAUTION :** This laser product uses visible and/or invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

(For U.S.A.)

**CAUTION :** Visible and/or invisible class II laser radiation when open. Do not stare into beam.

(Others)

**CAUTION :** Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments

**ACHTUNG:** Sichtbare und/oder unsichtbare Laserstrahlung der Klasse 1M bei offenen Abdeckungen. Nicht direkt mit optischen Instrumenten betrachten.

**ATTENTION:** Rayonnement laser visible et/ou invisible de classe 1M une fois ouvert. Ne pas regarder directement avec des instruments optiques.

**VOORZICHTIG:** Zichtbare en/of onzichtbare klasse 1M laserstralen indien geopend. Bekijk niet direct met optische instrumenten.

**ATTENZIONE:** Radiazione laser in classe 1M visibile e/o invisibile quando aperto. Non osservare direttamente con strumenti ottici.

**WARNING:** Synlig och/eller osynlig laserstrålning, klass 1M, när denna del är öppnad. Betrakta ej strålen med optiska instrument.

**VARO!** Avattaessa olet alttiina nakymälälle luokan 1M lasersateilylle. Älä tarkastele sitä optisen laitteen läpi.

**ADVARSEL:** Synlig og/eller usynlig klasse 1M-laserstråling ved åbning. Se ikke direkte med optiske instrumenter.

**AVISO:** Radiación láser de clase 1M visible y/o invisible cuando está abierto. No mirar directamente con instrumental óptico.

**PRECAUÇÃO:** Radiação laser de classe 1M visível e/ou invisível quando aberto. Não olhe diretamente com instrumentos ópticos.

**5.CAUTION :** If safety switches malfunction, the laser is able to function.

**6.CAUTION :** Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.

**⚠ CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

**PRECAUÇÃO:** Radiação laser de classe 1M visível e/ou invisível quando aberto. Não olhe diretamente com instrumentos ópticos.

**ПРЕДУПРЕЖДЕНИЕ:** В открытом состоянии происходит видимое и/или невидимое излучение лазера класса 1M. Не смотрите непосредственно в оптические инструменты.

**UWAGA:** Otwarcie spowoduje narażenie na widzialne i/lub niewidzialne promieniowanie lasera klasy 1M. Nie patrzeć bezpośrednio w przyrządy optyczne.

**UPOZORNĚNÍ:** Při otevření vydává viditelné popř. neviditelné laserové ozáření třídy 1M. Nedívejte se do otvoru přímo s optickými nástroji.

**FIGYELMEZTETÉS:** Látható és/vagy láthatatlan 1M osztályú sugárzás nyitott állapotban. Ne nézze közvetlenül optikai műszerekkel.

**注意 :** 打開蓋板可能會產生可見或不可見的 1M 級輻射。不要使用光學儀器直接進行窺視。

**注意 :** 打开盖板可能会产生可见或不可见的 1M 级辐射。不要使用光学仪器直接进行窥视。

**تنبيه:** يوجد إشعاع ليزري مرئي و/أو غير مرئي من الفئة 1M عندما يكون الجهاز مفتوحاً. تجنب النظر مباشرة داخل الجهاز باستخدام أدوات بصرية.

**احتياطات:** هنگامی که باز گردد، تشعشع مرئی و یا نامرئی کلاس 1M لیزر وجود دارد. با لوازم چشمی مستقیماً به آن نگاه نکنید.

**주의:** 개방하면 가지 및/또는 비가지 클래스 1M 레이저 방사선이 나옵니다. 광학 기구로 직접 들여다보지 마십시오.

## REPRODUCTION AND POSITION OF LABELS and PRINT WARNING LABEL and PRINT



<b>CAUTION</b> VISIBLE AND/OR INVISIBLE CLASS 1M LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC98025-1:2001 (ENG)	<b>ATTENTION</b> RAYONNEMENT LASER VISIBLE ET/OU INVISIBLE DE CLASSE 1M UNE FOIS OUVERT. NE PAS REGARDER DIRECTEMENT AVEC DES INSTRUMENTS OPTIQUES. (FRA)	<b>AVISO</b> RADIACION LASER DE CLASE 1M VISIBLE Y/O INVISIBLE CUANDO ESTA ABIERTO. NO MIRAR DIRECTAMENTE CON INSTRUMENTAL OPTICO. (ESP)	<b>VARNING</b> SYNLIG OCH/ELLER OSYNLIG LASERSTRÅLNING, KLASS 1M, NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT. (SWE)	<b>注意</b> ここに書くところ 及び/または不可視 のクラス1M レーザー放射が 出ます。 光学検査で検査 見ないでください。 (JPN)	<b>CAUTION</b> VISIBLE AND/OR INVISIBLE CLASS II LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR (ENG) LV44603-003A
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**SECTION 2**  
**SPECIFIC SERVICE INSTRUCTIONS**

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.



## SECTION 3 DISASSEMBLY

### 3.1 Main body (Used figure are KD-AVX77E)

#### 3.1.1 Removing the Top chassis with DVD mechanism (See Fig.1 to 4)

- (1) Remove the two screws **A** and two screws **B** attaching the Heat sink. (See Fig.1)
- (2) Remove the one screw **C** attaching the Top chassis. (See Fig.1)

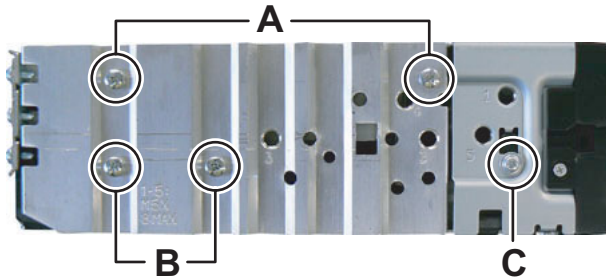


Fig.1

- (3) Remove the one screw **D** attaching the Top chassis. (See Fig.2)

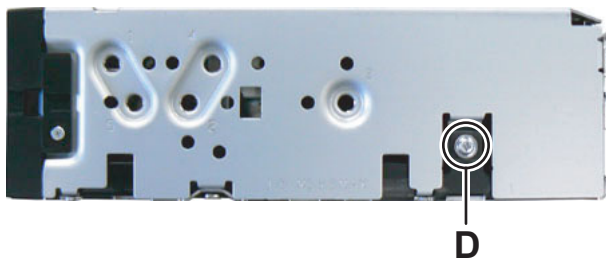


Fig.2

- (4) Remove the three screws **E** attaching the Top chassis. (See Fig.3)

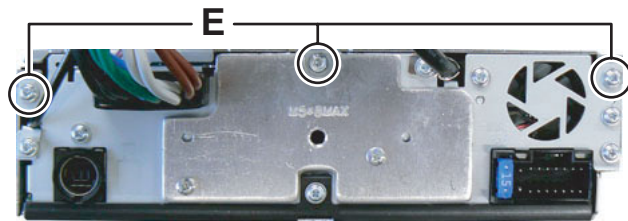


Fig.3

- (5) Remove the two screws **F** attaching the Top chassis. (See Fig.4)



Fig.4

#### 3.1.2 Removing the Main board (See Fig.5 to 10)

- (1) Disconnect the card wire from Front chassis connected to connector [CN962](#) of the Main board. (See Fig.5)
- (2) Disconnect the connector wire from Gear bracket unit connected to connector [CN881](#) and [CN891](#) of the Main board. (See Fig.5)
- (3) Remove the two screws **G** attaching the Main board. (See Fig.5)

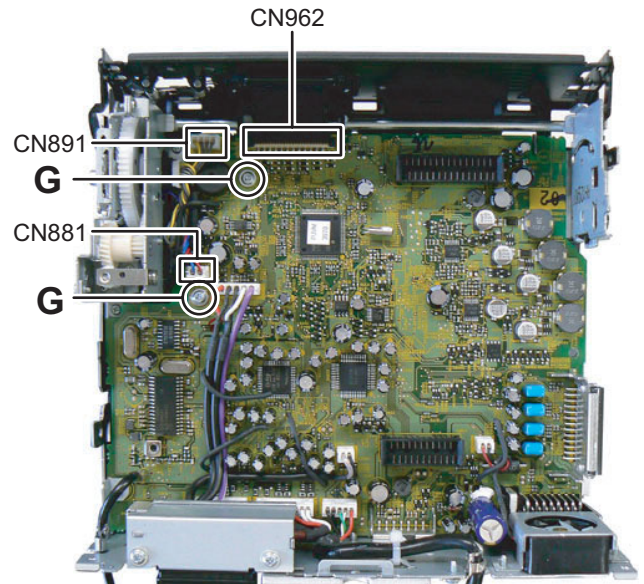


Fig.5

- (4) Remove the two screws **H** attaching the Bottom chassis. (See Fig.6)

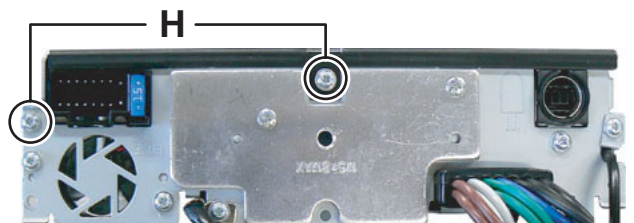


Fig.6

(5) Remove the two screws **J** attaching the Wire bracket. (See Fig.7)

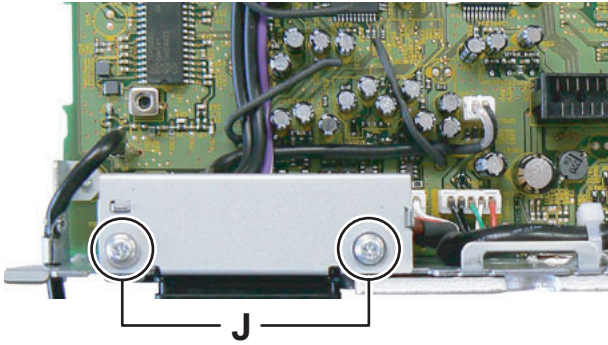


Fig.7

(6) Disconnect connector wire from Rear bracket connected to connectors [CN861](#), [CN871](#), [CN921](#), [CN922](#), [CN923](#) and [CN981](#) of the Main board. (See Fig.8)

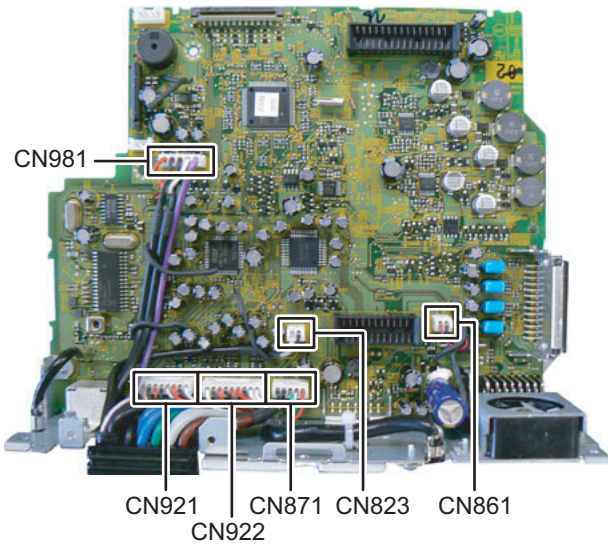


Fig.8

(7) Remove the two screws **K** attaching the Heat sink. (See Fig.9)

(8) Remove the one screw **L** attaching the Antenna wire. (See Fig.9)

(9) Remove the one screw **M** attaching the USB cable. (See Fig.9)

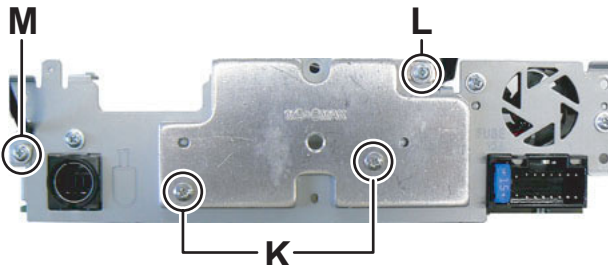


Fig.9

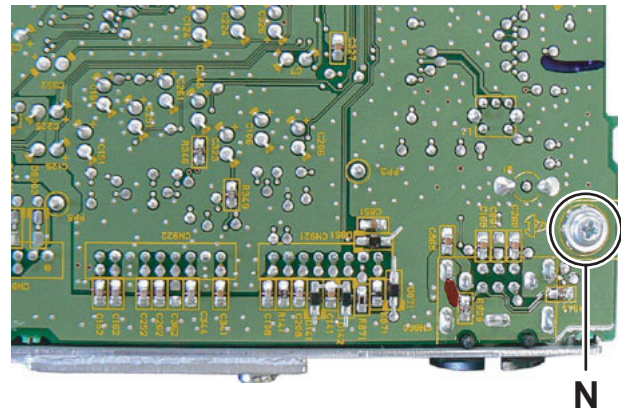


Fig.10

### 3.1.3 Removing the DVD mechanism (See Fig.11)

(1) Remove the three screws **P** attaching the DVD mechanism.

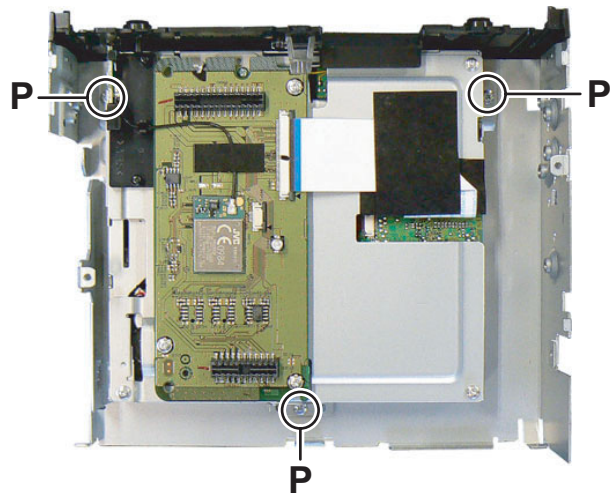


Fig.11

(10) Remove the one screw **N** attaching the Main board. (See Fig.10)

### 3.1.4 Removing the Connection board (See Fig.12)

- (1) Disconnect the card wire from DVD mechanism connected to connector **CN395** of the Connection board.
- (2) Disconnect the connector wire from BT antenna connected to connector of RF module.
- (3) Remove the three screws **Q** attaching the Connection board.

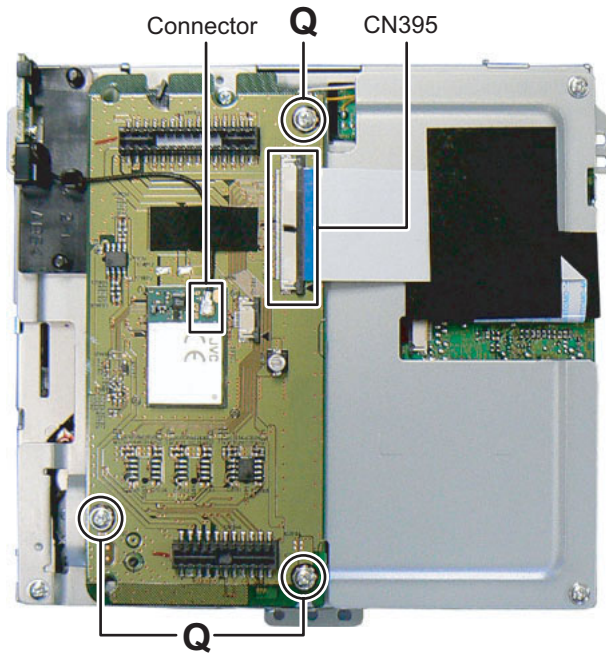


Fig.12

### 3.1.5 Removing the Panel A control board (See Fig.13)

- (1) Remove the six screws **R** attaching the Rear cover.

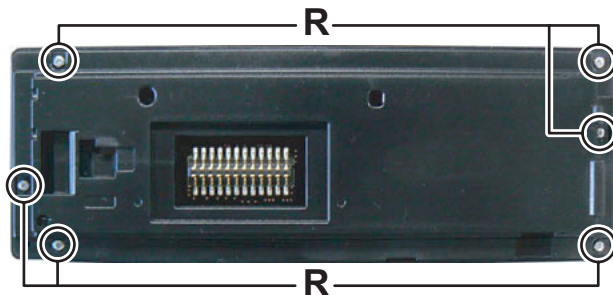


Fig.13

### 3.2 DVD mechanism assembly section

#### 3.2.1 Removing the Traverse mechanism assembly (See Fig.1 to 6)

- (1) Solder the short land section on the flexible wire of pickup. (See Fig.1)

**Caution:**

\* Solder the short land section on the flexible wire of pickup before disconnecting the flexible wire from the connector **CN101** on the Front end board.

If the flexible wire is disconnected without attaching the solder, the pickup may be destroyed by static electricity.

\* When attaching the Traverse mechanism assembly, remove the solder from the short land section after connection the flexible wire to the connector **CN101** on the Front end board.

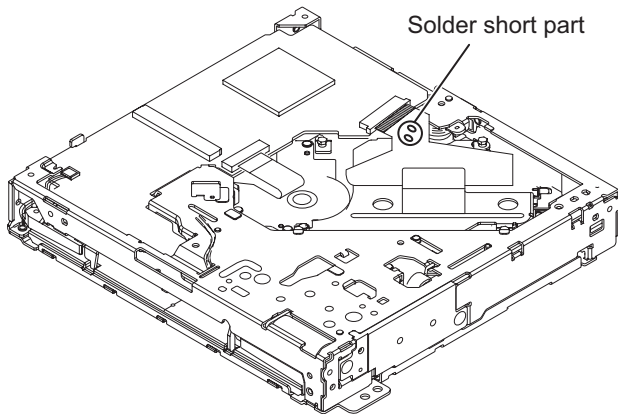


Fig.1

- (2) Voltage supply to **TP79** and **TP81** approx DC 3.0V until Clamper is shift to loading complete position. (See Fig.2)
- (3) Disconnect the flexible wires from Traverse mechanism assembly connected to connector **CN101** and **CN164** of the Front end board. (See Fig.2)

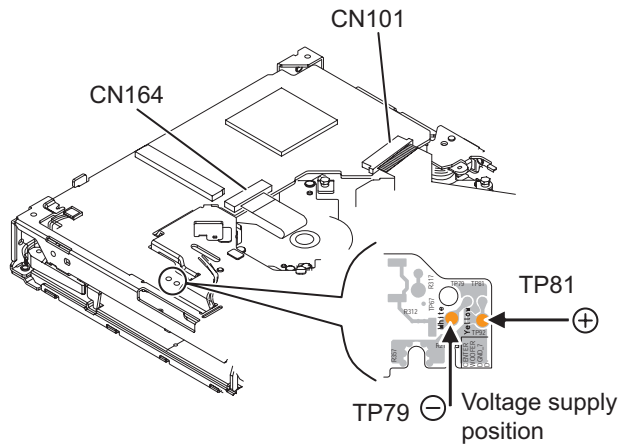


Fig.2

- (4) Remove the five screws **A** attaching the Top cover assembly. (See Fig.3)

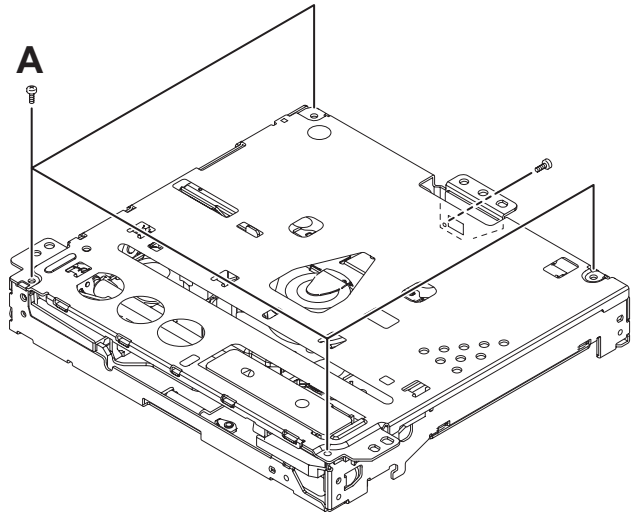


Fig.3

- (5) From the bottom side, disconnect the connector wire from Top cover assembly connected to connector **CN2** of the Front end board. (See Fig.4)

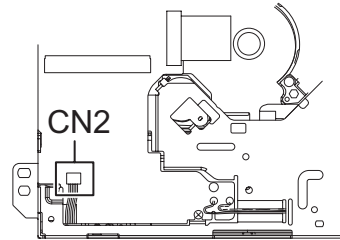


Fig.4

- (6) From the bottom side, remove the spring from Traverse mechanism assembly. (See Fig.5)

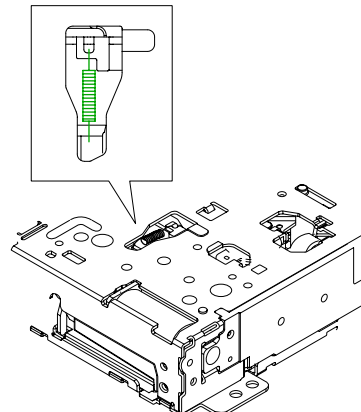


Fig.5

(7) From the top side, pull up the traverse mechanism and disengage three dumper positions. (See Fig.6)

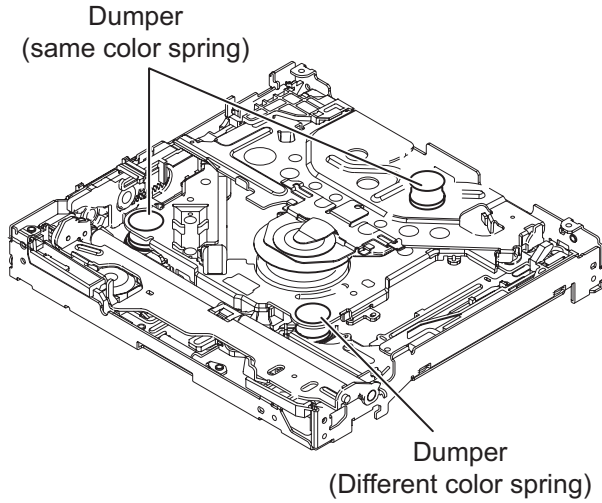


Fig.6

**3.2.2 Removing the Front end board (See Fig.7)**

- (1) Remove the Motor wires from loading motor soldered to [TP79](#) and [TP81](#) of the Front end board.
- (2) Remove the two screws **B** attaching the Front end board.

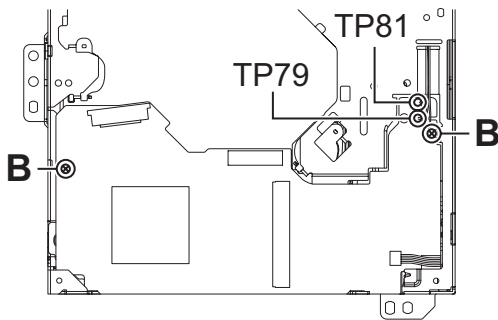


Fig.7

**3.2.3 Removing the Loading arm assembly (See Fig.8)**

- (1) Remove the Loading arm spring L from Loading arm assembly.
- (2) Slide to left side and then disengage hook **a** then hook **b**.

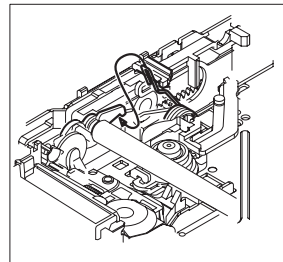
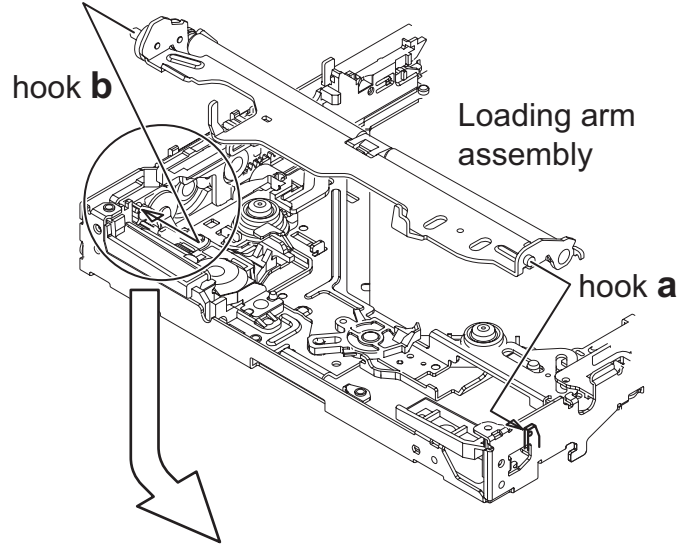


Fig.8

**3.2.4 Removing the Gear base assembly (See Fig.9, 10)**

- (1) Remove the Loading arm spring L. (See Fig.9)

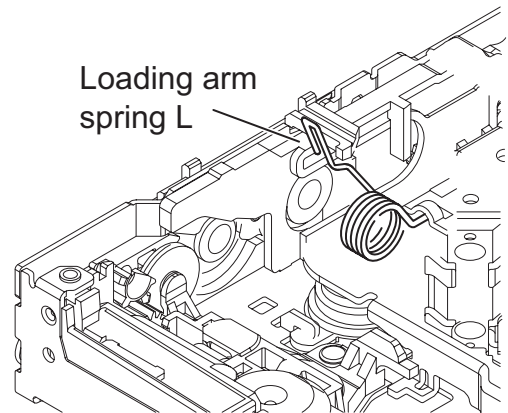


Fig.9

- (2) Remove the two screws **C** attaching the Gear base assembly.  
(See Fig.10)

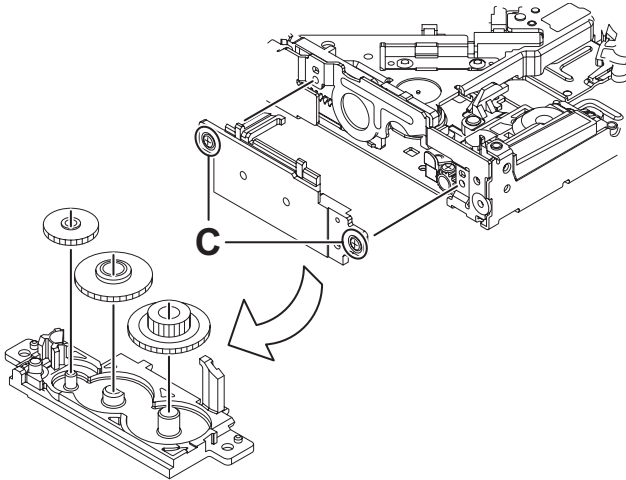


Fig.10

**3.2.5 Removing the Loading arm holder. (See Fig.)**

- (1) Remove the two screws **D** attaching the Loading arm holder.  
(2) Remove the Loading arm spring **R**.

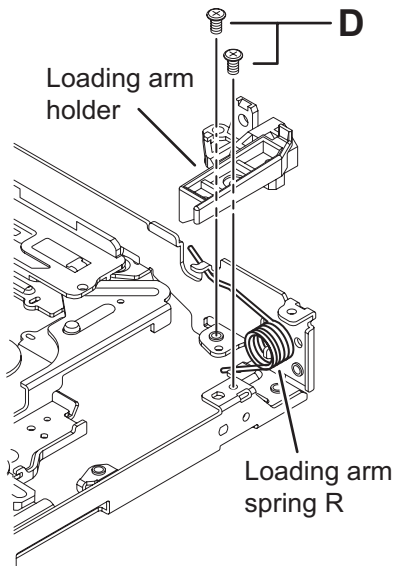


Fig.11

**3.2.6 Removing the Loading motor assembly (See Fig.12)**

- (1) Remove the three screws **E** attaching the Loading motor assembly.

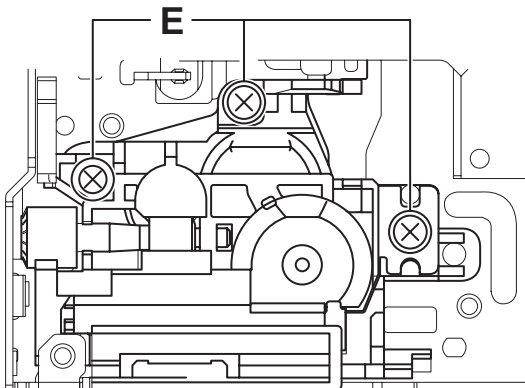


Fig.12

**3.2.7 Removing the Slide cam assembly (See Fig.13)**

- (1) Slide to backward the Slide cam assembly and the remove the Slide cam spring.  
(2) Slide to forward the slide cam assembly, and then take out it.

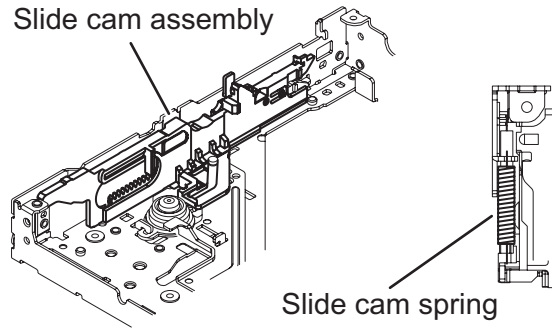


Fig.13

**3.2.8 Removing the Photo board (See Fig.14)**

- (1) Pressing the hook **c** and then slide to backward (slide to the arrow side) the Disc plate.  
(2) Remove the one screw **F** attaching the Photo board.

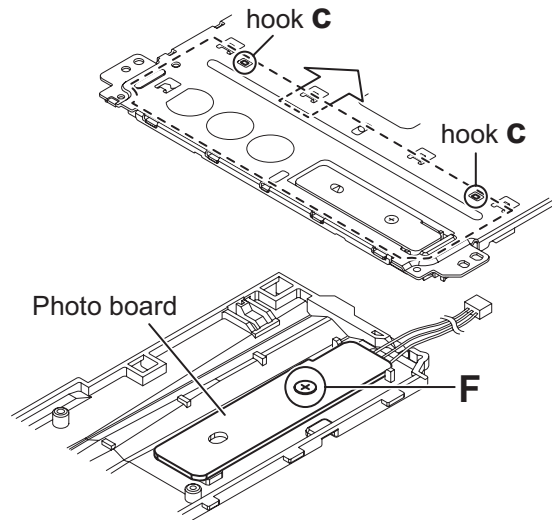


Fig.14

**3.2.9 Removing the Loading motor (See Fig.15 to 18)**

- (1) Remove the A wheel gear. (See Fig.15)

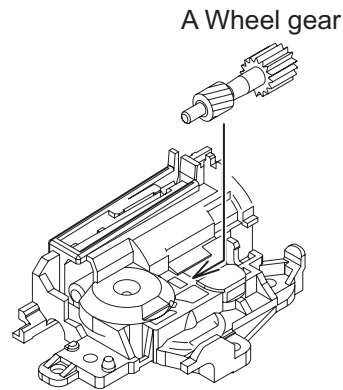


Fig.15

- (2) Remove the A worm gear, M connect gear and M wheel gear by sequentially. (See Fig.16)

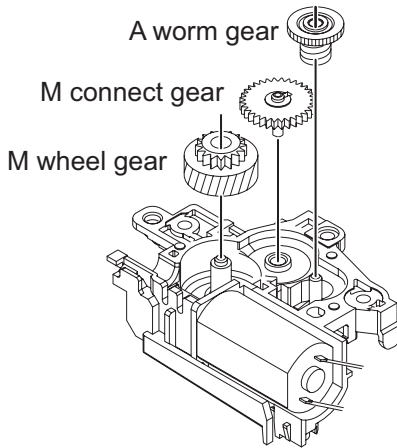


Fig.16

- (3) Remove the two screws **G** attaching the Loading motor. (See Fig.17)

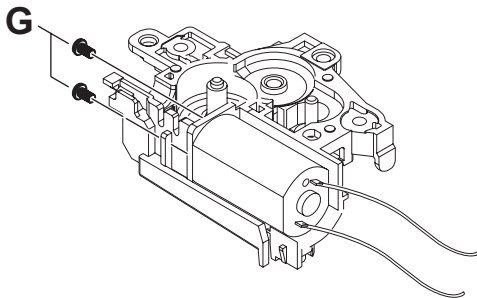


Fig.17

- (4) When attaching the Loading motor, motor wire should arrange to figure. (See Fig18.)

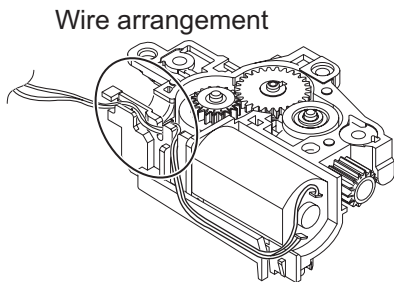


Fig.18

### 3.2.10 Removing the Roller assembly (See Fig.19)

- (1) Remove the Slit washer.
- (2) Remove the R middle gear.
- (3) Remove the R connect gear.
- (4) Snap off the part **a** of the Roller assembly.
- (5) Lift up the part **b** of the Roller assembly, and then release part **c** (When release part **c**, R collar R is easy to come off, does not lose it).

#### CAUTION:

When reattach the Roller assembly, Middle gear should keep direction and Slit washer should be change new part.

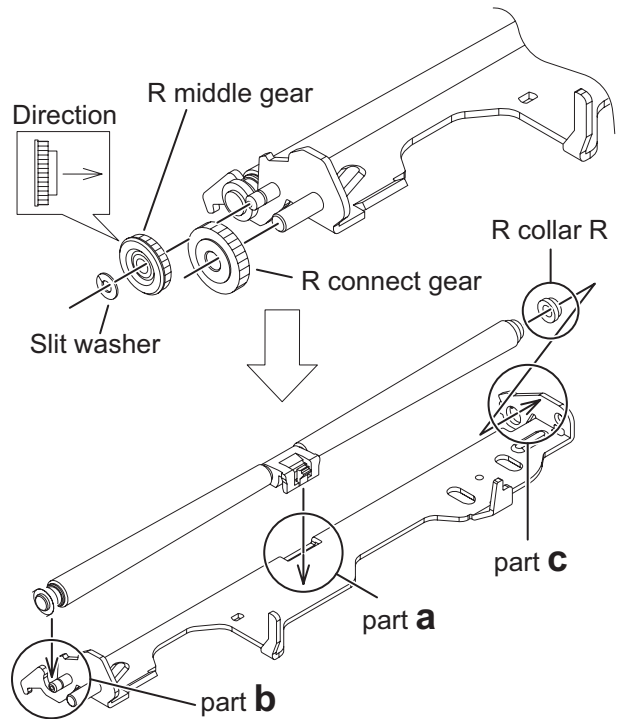


Fig.19

### 3.2.11 Removing the Roller (See Fig.20)

- (1) Remove the Slit washer.
- (2) Pull out the Roller shaft.

#### CAUTION:

When reattach the Roller shaft, Slit washer should be change new part.

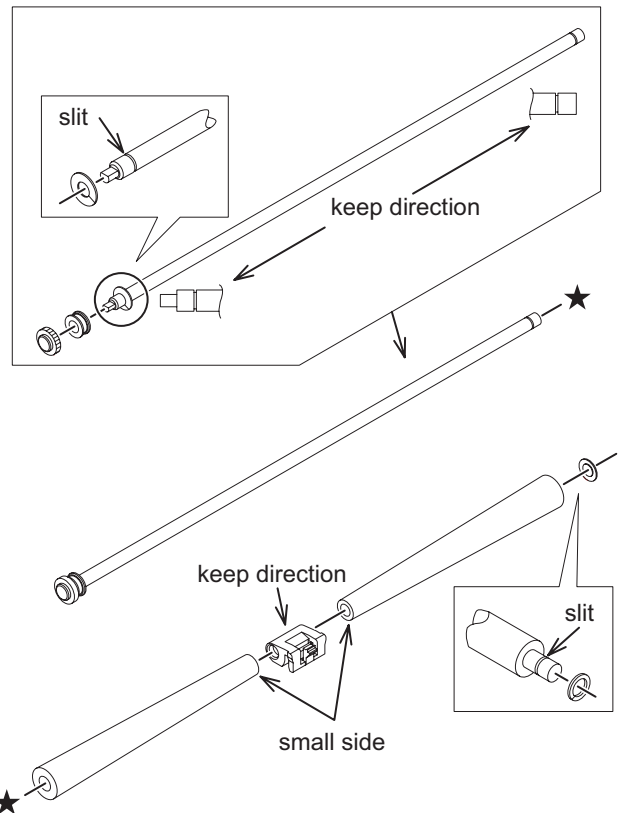


Fig.20

## SECTION 4 ADJUSTMENT

### 4.1 Test instruments required for adjustment

- (1) Digital oscilloscope (100MHz)
- (2) Digital tester
- (3) Test Disc
- (4) Extension cable : EXTDV002-30P  
EXTSH002-22P  
EXTAV70X-50PF
- (5) Extension stud : STDV001-3P

### 4.2 Standard measuring conditions

- Power supply voltage DC14.4V(10.5 to 16V)
- Load impedance 20K ohm (2 Speakers connection)
- Output Level Line out 2.5V (Vol. MAX)

### 4.3 Standard volume position

- Balance and Bass & Treble volume : Indication "0"
- Loudness : OFF

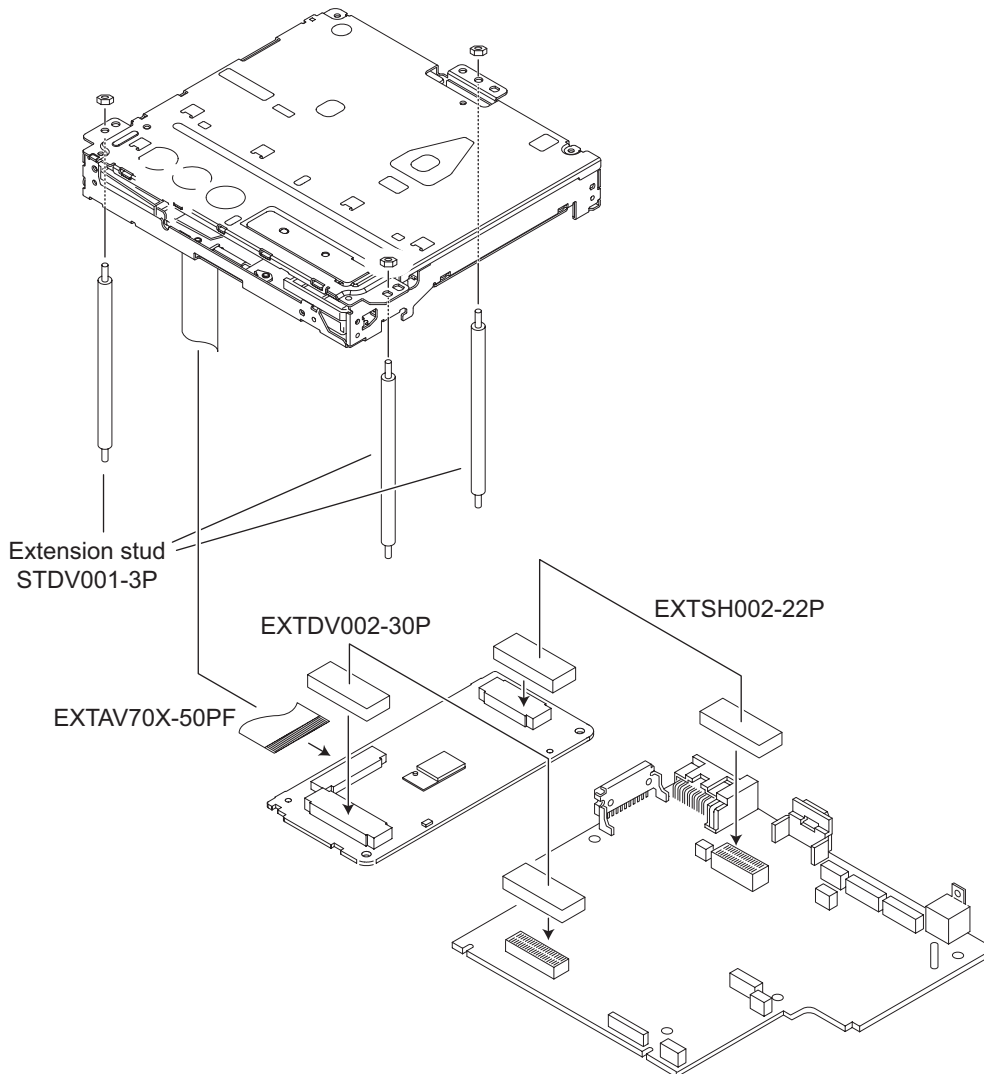
### 4.4 Dummy load

- Exclusive dummy load should be used for AM, and FM.
- For FM dummy load, there is a loss of 6dB between SSG output and antenna input.
- The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

### 4.5 How to connect the extension cable for adjusting

#### Caution:

- Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power.
- If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.





## 4.6 Service mode

### 4.6.1 Service mode 1 (Indication of a service mode 1 is nothing.)

Keep this state more 2 seconds while continuing pressing the [STANDBY/ON ATTENUATOR] button and [TOUCH PANEL EJECT] button sequentially.

Screen indication

NO EJECT?	*1
EMERGENCY EJECT?	*2

Exchanging it operate a menu of a service mode with the [▲] button and [▼] button. Operate choice of a menu with a [ENTER] button.

\*1 : When an [ENTER] button is pushed in NO EJECT indication, it is set by an EJECT prohibition mode.

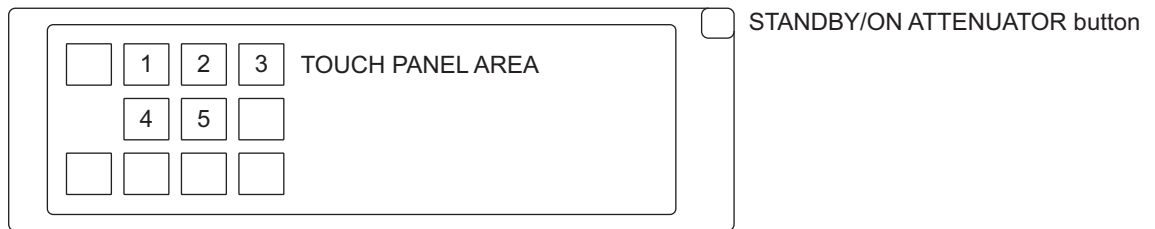
When an [ENTER] button is pushed in EJECT OK indication, it is set by a normal mode.

\*2 : Forced EJECT movement

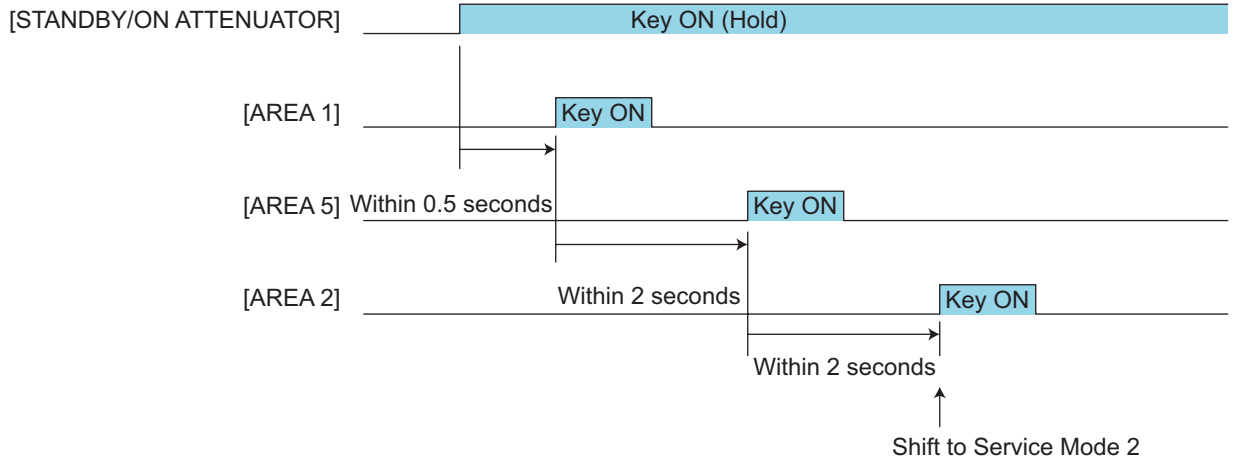
A screen becomes normal indication after an [ENTER] button was pushed.

Set an area number in touch panel temporarily.

When an icon is not displayed by a screen, the key input is effective.



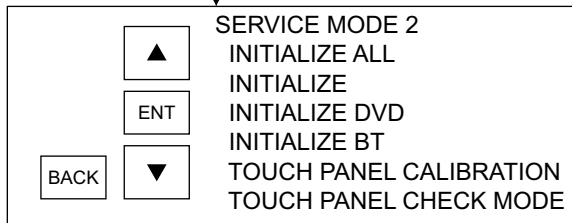
Multiplex push timing chart (Example: Service mode 2)



#### 4.6.2 Service mode 2

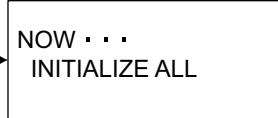
Set to service mode 2: [STANDBY/ON ATTENUATOR]→[AREA 1]→[AREA 5]→[AREA 2]

Screen indication



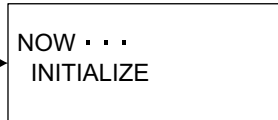
Exchanging it operate a menu of a service mode with the [▲] button and [▼] button.  
 Operate choice of a menu with a [ENT] button.

INITIALIZE ALL



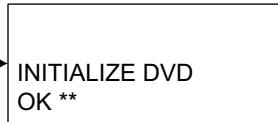
INITIALIZE ALL (Each EEPROM is initialized by a factory shipment state.)  
 \* Main micron EEPROM initialization (user entry domain, error history, speaker setting, subarea of J-version, data to pre-set )  
 \* Panel micron EEPROM initialization (picture adjustment data)  
 \* DVD unit EEPROM initialization (except a permanent domain)  
 \* Bluetooth module EEPROM initialization  
 \* After clear completion, a screen returns to normal indication after OK indication was displayed for three seconds.

INITIALIZE



INITIALIZE (Initialization of a user area of each EEPROM)  
 \* Main micron EEPROM initialization (a user entry domain ) (a user entry domain, speaker setting, subarea of J-version, data to pre-set )  
 \* Panel micron EEPROM initialization (picture adjustment data )  
 \* DVD unit EEPROM initialization (except a permanent domain)  
 \* After clear completion, a screen returns to normal indication after OK indication was displayed for three seconds.

INITIALIZE DVD



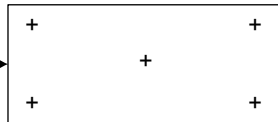
Full initialization of EEPROM of a DVD unit (It is included a permanent domain).  
 After clear completion, this indication is continued till an effective key is input.

INITIALIZE BT



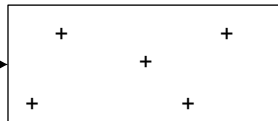
Full initialization of EEPROM of Bluetooth.  
 After clear completion, this indication is continued till an effective key is input.

TOUCH PANEL CALIBRATION



Push the center of a + character displayed in turn.

TOUCH PANEL CHECK MODE



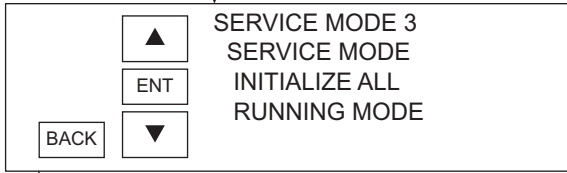
The confirmation mode that the calibration of the touch panel was performed definitely.

\*Return to previous menu with a [STANDBY/ON ATTENUATOR] button.

### 4.6.3 Service mode 3

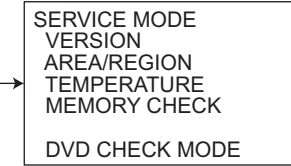
Set to service mode 3: [STANDBY/ON ATTENUATOR]→[AREA 1]→[AREA 5]→[AREA 3]

Screen indication ↓

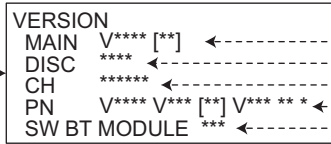
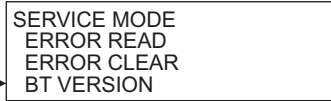


Exchanging it operate a menu of a service mode with the [▲] button and [▼] button.  
Operate choice of a menu with a [ENT] button.

SERVICE MODE



- \* Exchanging it operate a menu of a service mode with the [▲] button and [▼] button.
- \* Operate choice of a menu with a [ENT] button.
- \* Return to previous menu with a [BACK] button.



- Micon version indication
- Main micon version and ROM correction version
- DVD module version
- CH version
- Panel micon version and ROM correction version
- Software version of BT Module

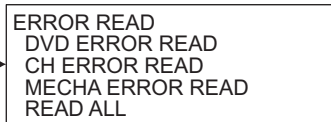


- Area and region indication
- Main micon area
- DVD area
- Region
- PANEL area

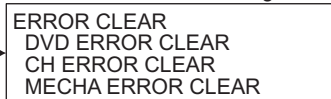
→ TEMPERATURE Temperature data reading  
\* Temperature data by the temperature sensor in the main micon and DVD-PCB is read every 5 seconds and displayed in hex numbers.

→ MEMORY CHECK ( It is displayed only at the time of the disc insertion )  
Memory residual quantity indication mode  
\* Data residual quantity of a disc is displayed by LCD.  
\* About the playback control-related key ([FSKIP], [BSKIP], [UP], [DOWN], [VOL]), only movement is effective.  
Indication does not change as memory residual quantity indication.  
\* About cancellation of this mode, press the [STANDBY/ON ATTENUATOR] button.

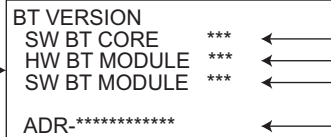
→ DVD CHECK MODE  
\* See "DVD CHECK MODE" for details.



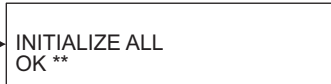
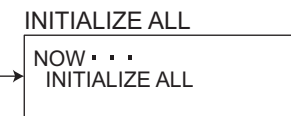
- DVD ERROR READ  
Reading of a DVD unit error history
- CH ERROR READ  
Reading of a CD changer error history
- MECHA ERROR READ  
Reading of a door mechanism error history
- READ ALL \*Only the engineer use  
Reading of a main micon EEPROM (All contents)



Clear of each error history  
A screen returns to following indication after clear completion.



- Bluetooth version indication
- Software version of BT core
- Hardware version of BT Module
- Software version of BT Module
- BT Address



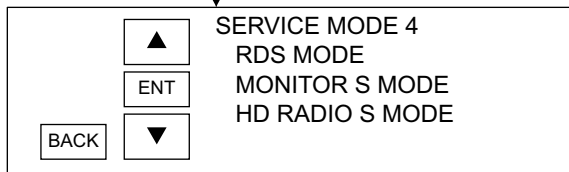
- INITIALIZE ALL (Each EEPROM is initialized by a factory shipment state.)
- \* Main micon EEPROM initialization (user entry domain, error history, speaker setting, subarea of J-version, data to pre-set)
- \* Panel micon EEPROM initialization (picture adjustment data)
- \* DVD unit EEPROM initialization (except a permanent domain)
- \* Bluetooth module EEPROM initialization
- \* After clear completion, a screen returns to normal indication after OK indication was displayed for three seconds.

→ RUNNING MODE  
\* See "Running mode" for details.

#### 4.6.4 Service mode 4

Set to service mode 4: [STANDBY/ON ATTENUATOR]→[AREA 1]→[AREA 5]→[AREA 4]

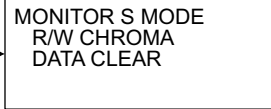
Screen indication



Exchanging it operate a menu of a service mode with the [▲] button and [▼] button.  
Operate choice of a menu with a [ENT] button.

→ RDS MODE

\* RDS service mode (Only RDS model)



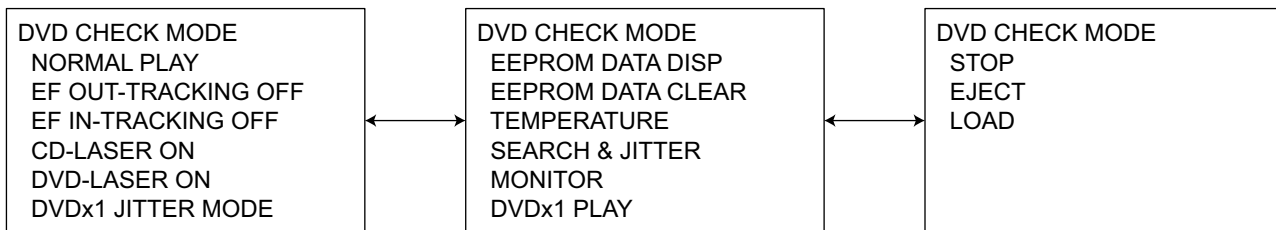
\*See "Monitor adjustment" for details.

CHROMA DATA read/write of NTSC/PAL signal processing IC  
Clear of CHROMA DATA (return to an initial value)

→ HD RADIO S MODE

\* It is displayed in HD Radio unit connection.

#### 4.7 DVD check mode



Exchanging it operate a menu of a service mode with the [▲] button and [▼] button.  
Operate choice of a menu with a [ENT] button.

Command	Mechanism unit operation	Indication contents
NORMAL PLAY	Start at normal speed (After start, jitter is measured by an inner position)	Laser current value, jitter value
EF OUT-TRACKING OFF	Tracking off the outermost position of CD	For EF phase error
EF IN-TRACKING OFF	Tracking off the innermost position of CD	For EF phase error
CD-LASER ON	CD_LD lights and laser current is displayed	Laser current value, jitter value
DVD-LASER ON	DVD_LD lights and laser current is displayed	Laser current value, jitter value
DVDx1 JITTER MODE	DVD ×1 jitter measuring mode (for use in mechanism adjustment)	Laser current value, jitter value
EEPROM DATA DISP	Contents of EEPROM is displayed	EEPROM address EEPROM contents
EEPROM DATA CLEAR	Contents of EEPROM is initialized	EEPROM address EEPROM contents
TEMPERATURE	Temperature indication	Temperature is displayed in hex numbers
SEARCH & JITTER	The search and jitter measurement to an appointed position of DVD	Position measured with VT-501 jitter value
MONITOR	Monitor terminal setting	
DVDx1 PLAY	DVD ×1 stopped start (After start, jitter is measured by an inner position)	Not displayed
STOP	Disc stopped, LD-OFF	Not displayed
EJECT	EJECT	Not displayed
LOAD	LOADING	Not displayed

## 4.8 Error code tables

### 4.8.1 Mechanism error code

Error contents	Details	Error code	Detailed error code
Disc loading error (3) D1 time out		09	0013
Eject error (3) B1 time out (4) C1 time out		01 01	0023 0024
Error in loading wait	Loading of a running mode Disc was pulled out in a wait.	09	0031

### 4.8.2 Disc error code

Error contents	Details	Error code	Detailed error code
TOC read error	TOC lead movement of a CD is not completed.	84	0059
First track access error	Even if TOC reading passes after the end with CD running mode for 30 seconds, the first track access is not finished.	80	0060
Last track access error	Even if first track passes after the end with CD running mode for 30 seconds, the last track access is not finished.	80	0061
T1 access error	Even if T1 access passes in a DVD running mode for 30 seconds, it is not finished.	80	0069
T12 access error	Even if T12 access passes in a DVD running mode for 30 seconds, it is not finished.	80	0070
T24 access error	Even if T24 access passes in a DVD running mode for 30 seconds, it is not finished.	80	0071
Read-in area read error	Read-in area read operation of DVD is not completed.	84	0072
DVD L1 layer adjustment error	Adjustment of L1 layer of DVD is not finished normally. (including focus jump failure)	80	0074
DVD L0 layer adjustment error	Adjustment of L0 layer of DVD is not finished normally. (including focus jump failure)	80	0075
NO DISC judgment	Judgment without disc	80	0090
It is NO DISC by start failure	Start is impossible	80	0091
It is stopped by playback inability.	Stop in running mode playback	80	0093
Logic format NG	Logic format analysis inability or non-correspondence logic format	80	0094
Seek access error	It cannot arrive at an aim address even if it passes for 15 seconds.	80	0095

### 4.8.3 Error codes of panel mechanism

PANEL ANGLE		
1	Panel	Close Main body
2		10 degrees
3		20 degrees
4		30 degrees
OPEN		Open

Detail	Error code (Service mode)
Open error 1. Time out error by OPEN position cannot detect.	0A0001
Close error (ANGLE 1 error) 1. Time out error by ANGLE 1 position cannot detect.	0B0006
Angle positioning error Moving to 10 degrees (ANGLE 2 error) 1. Time out error by ANGLE 2 position cannot detect at moving to open position. 2. Missing to ANGLE 1 and detected ANGLE 2 position at moving to open position. 3. Time out error by ANGLE 2 cannot detect at moving close position.	0D0021 0D0022 0D0023
Moving to 20 degrees (ANGLE 3 error) 1. Time out error by ANGLE 3 position cannot detect at moving to open position. 2. Missing to ANGLE 2 and detected ANGLE 3 position at moving to open position. 3. Time out error by ANGLE 3 cannot detect at moving close position.	0E0031 0E0032 0E0033
Moving to 30 degrees (ANGLE 4 error) 1. Time out error by ANGLE 4 position cannot detect at moving to open position. 2. Missing to ANGLE 3 and detected ANGLE 4 position at moving to open position. 3. Time out error by ANGLE 4 cannot detect at moving close position.	0F0041 0F0042 0F0043
Abnormal switch position at moving panel The Panel move to open and close position, detected abnormal switch position.	0A0000

#### 4.9 Running mode

Indication	Explanation	Operation contents of 1 cycle	In mecha error	In disc error	
RUNNING1 MECHA	Door mecha running 1	Panel close → Panel open	-	-	
RUNNING2 MECHA	Door mecha running 2	Panel close → Panel open → Panel detach position → Panel angle 3 position → Panel angle 1 position → Panel angle 2 position	RETRY	Retry	-
			NO RETRY	Stop	-
RUNNING4 DVD	DVD+Door mecha running1	Loading → Eject → Wait for 5 seconds+Door open/close		Stop	-
RUNNING5 DVD	DVD+Door mecha running2	Loading → Eject → Wait for 5 seconds+Door open/close		Retry	-
RUNNING6 DVD	DVD+Door mecha running3	Loading → Playback → Eject → Wait for 5 seconds+Door open/close		Stop	Stop
RUNNING7 DVD	DVD+Door mecha running4	Loading → Playback → Eject → Wait for 5 seconds+Door open/close		Retry	Stop
RUNNING8 DVD	DVD+Door mecha running5	Loading → Playback → Eject → Wait for 5 seconds+Door open/close		Stop	Retry
RUNNING9 DVD	DVD+Door mecha running6	Loading → Playback → Eject → Wait for 5 seconds+Door open/close		Retry	Retry

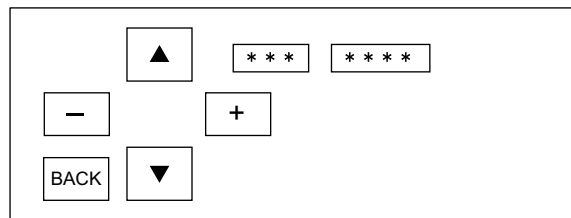
- \* Cancellation of running1,2 : Press the [EJECT] key
- \* In running 1,2 cancellation, a door does not stop at the position and moves to a panel position.
- \* Cancellation of running3 to 8 : Press the [POWER] key
- \* The number of count and an error cord are displayed in running.

Playback contents in a running mode

- CD  
The first track is played for 30 seconds. → The last track is played for 30 seconds.  
(The last track is played in the case of less than till the last for 30 seconds.)
- DVD  
2layer disc (Pit disc)  
Title 1 (the L0 layer internal circumference) is played for 30 seconds. → Title 12 (L0 layer circumference) is played for 30 seconds.  
→ Title 24 (L1layer internal circumference) is played for 30 seconds.  
  
2layer disc (Recordable disc)  
Title 1 (the L0 layer internal circumference) is played for 30 seconds. → Title 13 (L0 layer circumference) is played for 30 seconds.  
→ Title 24 (L1layer internal circumference) is played for 30 seconds.  
  
1layer disc  
First chapter of title 1 is played for 30 seconds. → The last chapter of title 1 is played for 30 seconds.

#### 4.10 Monitor adjustment

- \* When adjusting, switch on the main unit and insert a test disc (VT-501). And play the test disc and pause it.
- \* Only an item number and value are shows a screen when the choose Monitor S Mode, but can operate it by pushing the following area.



1. Set the service mode 4.
2. Exchanging it operate a menu of a service mode with the [▲] area and [▼] area.
3. Change data with the [ + ]/[ - ] area.
4. Write data with a [ENT] area.

## R/W CHROMA

Indication	Minimum value	Maximum value	Initial value		Detail
001	Fix	Fix	00000	Fix	Color amplitude revision ON/OFF
002	Fix	Fix	00001	Fix	Color amplitude revision CAS
003	Fix	Fix	00016	Fix	Color amplitude revision APC
004	Fix	Fix	00001	Fix	Color amplitude revision CUS
005	Fix	Fix	00010	Fix	Color amplitude revision APU
006	00000	00001	00001	Adjust	Black level extension ON/OFF
007	00000	00001	00001	Adjust	Black level extension FUNCTION
008	00000	00511	00008	Adjust	Black level extension START POINT
009	00000	00511	00160	Adjust	Black level extension OFFSET
010	00000	00003	00000	Adjust	Filter choice of the horizontal enhancer (NTSC)
011	00000	00003	00001	Adjust	Filter choice of the horizontal enhancer (PAL)
012	00000	00127	00000	Adjust	Adjustment of the quantity of horizontal enhancer core ring (NTSC)
013	00000	00127	00000	Adjust	Adjustment of the quantity of horizontal enhancer core ring (PAL)
014	00000	00127	00000	Adjust	Limiter of the horizontal enhancer (NTSC)
015	00000	00127	00001	Adjust	Limiter of the horizontal enhancer (PAL)
016	00000	00511	00016	Adjust	Horizontal enhancer gain adjustment (NTSC)
017	00000	00511	00010	Adjust	Horizontal enhancer gain adjustment (PAL)
018	00000	00003	00000	Adjust	Filter choice of the horizontal brightness outline revision (NTSC)
019	00000	00003	00000	Adjust	Filter choice of the horizontal brightness outline revision (PAL)
020	00000	00127	00000	Adjust	Adjustment of the horizontal brightness outline revision core ring (NTSC)
021	00000	00127	00000	Adjust	Adjustment of the horizontal brightness outline revision core ring (PAL)
022	00000	00006	00032	Adjust	Adjustment of the horizontal brightness outline revision gain (NTSC)
023	00000	00006	00005	Adjust	Adjustment of the horizontal brightness outline revision gain (PAL)
024	00000	00031	00000	Adjust	Tap change of the horizontal brightness outline revision (NTSC)
025	00000	00031	00000	Adjust	Tap change of the horizontal brightness outline revision (PAL)
026	00000	00001	00001	Adjust	Vertical enhancer ON/OFF (NTSC)
027	00000	00001	00001	Adjust	Vertical enhancer ON/OFF (PAL)
028	00000	00127	00010	Adjust	Limiter of the vertical enhancer (NTSC)
029	00000	00127	00010	Adjust	Limiter of the vertical enhancer (PAL)
030	00000	00127	00002	Adjust	Adjustment of the quantity of vertical enhancer core ring (NTSC)
031	00000	00127	00001	Adjust	Adjustment of the quantity of vertical enhancer core ring (PAL)
032	00000	00511	00128	Adjust	Vertical enhancer gain adjustment (NTSC)
033	00000	00511	00128	Adjust	Vertical enhancer gain adjustment (PAL)
034	Fix	Fix	00128	Fix	Change in TINT of the whole picture (NTSC)
035	Fix	Fix	00131	Fix	Change in TINT of the whole picture (PAL)
036	Fix	Fix	00140	Fix	Change with the deepness of the color of the whole picture (NTSC)
037	Fix	Fix	00114	Fix	Change with the deepness of the color of the whole picture (PAL)
038	00000	00255	00125	Adjust	Tint adjustment (NTSC)
039	00000	00255	00124	Adjust	Tint adjustment (PAL)
040	00000	00255	00040	Adjust	Color adjustment (NTSC)
041	00000	00255	00123	Adjust	Color adjustment (PAL)
042	00000	00511	00000	Adjust	Set the offset DC of the input video signal (NTSC)
043	00000	00511	00000	Adjust	Set the offset DC of the input video signal (PAL)
044	00000	00001	00000	Adjust	Quantity of transmission revision of the YUV DC
045	00000	00255	00016	Adjust	Quantity of transmission revision of the YUV DC



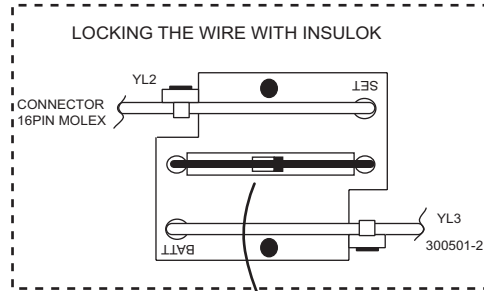
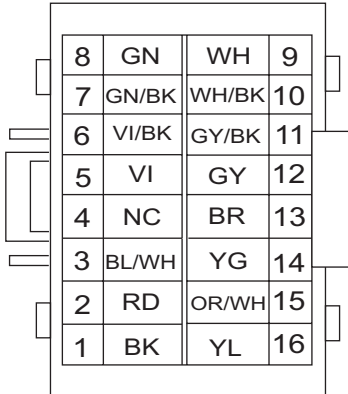
Indication	Minimum value	Maximum value	Initial value		Detail
046	00000	01023	00520	Adjust	Contrast adjustment between the black - white (NTSC)
047	00000	01023	00520	Adjust	Contrast adjustment between the black - white (PAL)
048	00000	00511	00359	Adjust	Conversion coefficients from YUV to RGB (PRCL)
049	00000	00255	00227	Adjust	Conversion coefficients from YUV to RGB (PBCL)
050	00000	00255	00218	Adjust	Conversion coefficients from YUV to RGB (YCL)
051	00000	00255	00199	Adjust	Conversion coefficients from YUV to RGB (BCL)
052	00000	00511	00261	Adjust	Conversion coefficients from YUV to RGB (RCL)
053	Fix	Fix	00001	Fix	Noise shaving (NTSC)
054	Fix	Fix	00001	Fix	Noise shaving (PAL)
055	00000	00127	00037	Adjust	Black level adjustment (NTSC)
056	00000	00127	00037	Adjust	Black level adjustment (PAL)
057	00000	00063	00052	Adjust	Gain setting of Red signal (NTSC)
058	00000	00063	00052	Adjust	Gain setting of Red signal (PAL)
059	00000	00063	00050	Adjust	Gain setting of Green signal (NTSC)
060	00000	00063	00050	Adjust	Gain setting of Green signal (PAL)
061	00000	00063	00050	Adjust	Gain setting of Blue signal (NTSC)
062	00000	00063	00050	Adjust	Gain setting of Blue signal (PAL)
063	00000	00127	00057	Adjust	Set the cut-off of the Red signal (NTSC)
064	00000	00127	00057	Adjust	Set the cut-off of the Red signal (PAL)
065	00000	00127	00057	Adjust	Set the cut-off of the Green signal (NTSC)
066	00000	00127	00057	Adjust	Set the cut-off of the Green signal (PAL)
067	00000	00127	00057	Adjust	Set the cut-off of the Blue signal (NTSC)
068	00000	00127	00057	Adjust	Set the cut-off of the Blue signal (PAL)
069	00000	00001	00001	Adjust	ON/OFF change of the gamma revision 1
070	00000	00255	00005	Adjust	Appoint a position of gamma revision 1 point 1 for RGB signal
071	00000	00255	00020	Adjust	Appoint a position of gamma revision 1 point 2 for RGB signal
072	00000	00255	00035	Adjust	Appoint a position of gamma revision 1 point 3 for RGB signal
073	00000	00255	00048	Adjust	Appoint a position of gamma revision 1 point 4 for RGB signal
074	00000	00255	00057	Adjust	Appoint a position of gamma revision 1 point 5 for RGB signal
075	00000	00255	00061	Adjust	Appoint a position of gamma revision 1 point 6 for RGB signal
076	00000	00255	00063	Adjust	Appoint a position of gamma revision 1 point 7 for RGB signal
077	00000	00255	00035	Adjust	Appoint gain 1 of gamma revision 1 for RGB signal
078	00000	00255	00035	Adjust	Appoint gain 2 of gamma revision 1 for RGB signal
079	00000	00255	00035	Adjust	Appoint gain 3 of gamma revision 1 for RGB signal
080	00000	00255	00035	Adjust	Appoint gain 4 of gamma revision 1 for RGB signal
081	00000	00255	00035	Adjust	Appoint gain 5 of gamma revision 1 for RGB signal
082	00000	00255	00035	Adjust	Appoint gain 6 of gamma revision 1 for RGB signal
083	00000	00255	00035	Adjust	Appoint gain 7 of gamma revision 1 for RGB signal
084	00000	00255	00035	Adjust	Appoint gain 8 of gamma revision 1 for RGB signal
085	00000	00001	00000	Adjust	ON/OFF change of the gamma revision 2
086	00000	00063	00004	Adjust	Adjustment gamma revision 2 point position of a Red signal
087	00000	00127	00035	Adjust	Appoint gamma revision 2 gain A of the Red signal
088	00000	00127	00035	Adjust	Appoint gamma revision 2 gain B of the Red signal
089	00000	00063	00004	Adjust	Adjustment gamma revision 2 point position of a Green signal
090	00000	00127	00035	Adjust	Appoint gamma revision 2 gain A of the Green signal

Indication	Minimum value	Maximum value	Initial value		Detail
091	00000	00127	00035	Adjust	Appoint gamma revision 2 gain B of the Green signal
092	00000	00063	00004	Adjust	Adjustment gamma revision 2 point position of a Blue signal
093	00000	00127	00035	Adjust	Appoint gamma revision 2 gain A of the Blue signal
094	00000	00127	00035	Adjust	Appoint gamma revision 2 gain B of the Blue signal
095	Fix	Fix	00000	Fix	ON/OFF of the gamma revision limiter
096	Fix	Fix	00063	Fix	Appoint of gamma revision limiter position for Red signal
097	Fix	Fix	00032	Fix	Appoint of gamma revision limiter gain for Red signal
098	Fix	Fix	00063	Fix	Appoint of gamma revision limiter position for Green signal
099	Fix	Fix	00032	Fix	Appoint of gamma revision limiter gain for Green signal
100	Fix	Fix	00063	Fix	Appoint of gamma revision limiter position for Blue signal
101	Fix	Fix	00032	Fix	Appoint of gamma revision limiter gain for Blue signal
102	Fix	Fix	00048	Fix	Adjustment the horizontal indication point of the picture (NTSC)
103	Fix	Fix	00048	Fix	Adjustment the horizontal indication point of the picture (PAL)
104	Fix	Fix	00010	Fix	Adjustment the vertical indication point of the picture (NTSC)
105	Fix	Fix	00010	Fix	Adjustment the vertical indication point of the picture (PAL)
106	Fix	Fix	00427	Fix	Burst lock center frequency setting register 0 (High lank) (NTSC)
107	Fix	Fix	24368	Fix	Burst lock center frequency setting register 0 (Low lank) (NTSC)
108	Fix	Fix	00422	Fix	Burst lock center frequency setting register 0 (High lank) (PAL)
109	Fix	Fix	20056	Fix	Burst lock center frequency setting register 0 (Low lank) (PAL)
110	Fix	Fix	00000	Fix	Burst lock center frequency setting register 1 (High lank) (NTSC)
111	Fix	Fix	00000	Fix	Burst lock center frequency setting register 1 (Low lank) (NTSC)
112	Fix	Fix	00000	Fix	Burst lock center frequency setting register 1 (High lank) (PAL)
113	Fix	Fix	00000	Fix	Burst lock center frequency setting register 1 (Low lank) (PAL)
114	Fix	Fix	17919	Fix	Burst lock phase adjustment upper limit setting register (High lank) (NTSC)
115	Fix	Fix	65535	Fix	Burst lock phase adjustment upper limit setting register (Low lank) (NTSC)
116	Fix	Fix	17919	Fix	Burst lock phase adjustment upper limit setting register (High lank) (PAL)
117	Fix	Fix	65535	Fix	Burst lock phase adjustment upper limit setting register (Low lank) (PAL)
118	Fix	Fix	17408	Fix	Burst lock phase adjustment lower limit setting register (High lank) (NTSC)
119	Fix	Fix	00000	Fix	Burst lock phase adjustment lower limit setting register (Low lank) (NTSC)
120	Fix	Fix	17408	Fix	Burst lock phase adjustment lower limit setting register (High lank) (PAL)
121	Fix	Fix	00000	Fix	Burst lock phase adjustment lower limit setting register (Low lank) (PAL)
122	Fix	Fix	40960	Fix	Burst lock gain setting register (High lank) (NTSC)
123	Fix	Fix	00085	Fix	Burst lock gain setting register (Low lank) (NTSC)
124	Fix	Fix	32768	Fix	Burst lock gain setting register (High lank) (PAL)
125	Fix	Fix	00077	Fix	Burst lock gain setting register (Low lank) (PAL)
126	00000	00007	00001	Adjust	Noise reduction of the Y signal (NTSC)
127	00000	00007	00001	Adjust	Noise reduction of the Y signal (PAL)
128	Fix	Fix	00051	Fix	Choose a YC separation filter (NTSC)
129	Fix	Fix	00035	Fix	Choose a YC separation filter (PAL)
130	00000	00007	00000	Adjust	Color pulling out filter setting (NTSC)
131	00000	00007	00000	Adjust	Color pulling out filter setting (PAL)
132	Fix	Fix	00017	Adjust	Choose com movement mode and color BPF (NTSC)
133	Fix	Fix	00001	Adjust	Choose com movement mode and color BPF (PAL)
134	Fix	Fix	00180	Adjust	Vertical dot cancellation setting (NTSC)
135	Fix	Fix	00180	Adjust	Vertical dot cancellation setting (PAL)

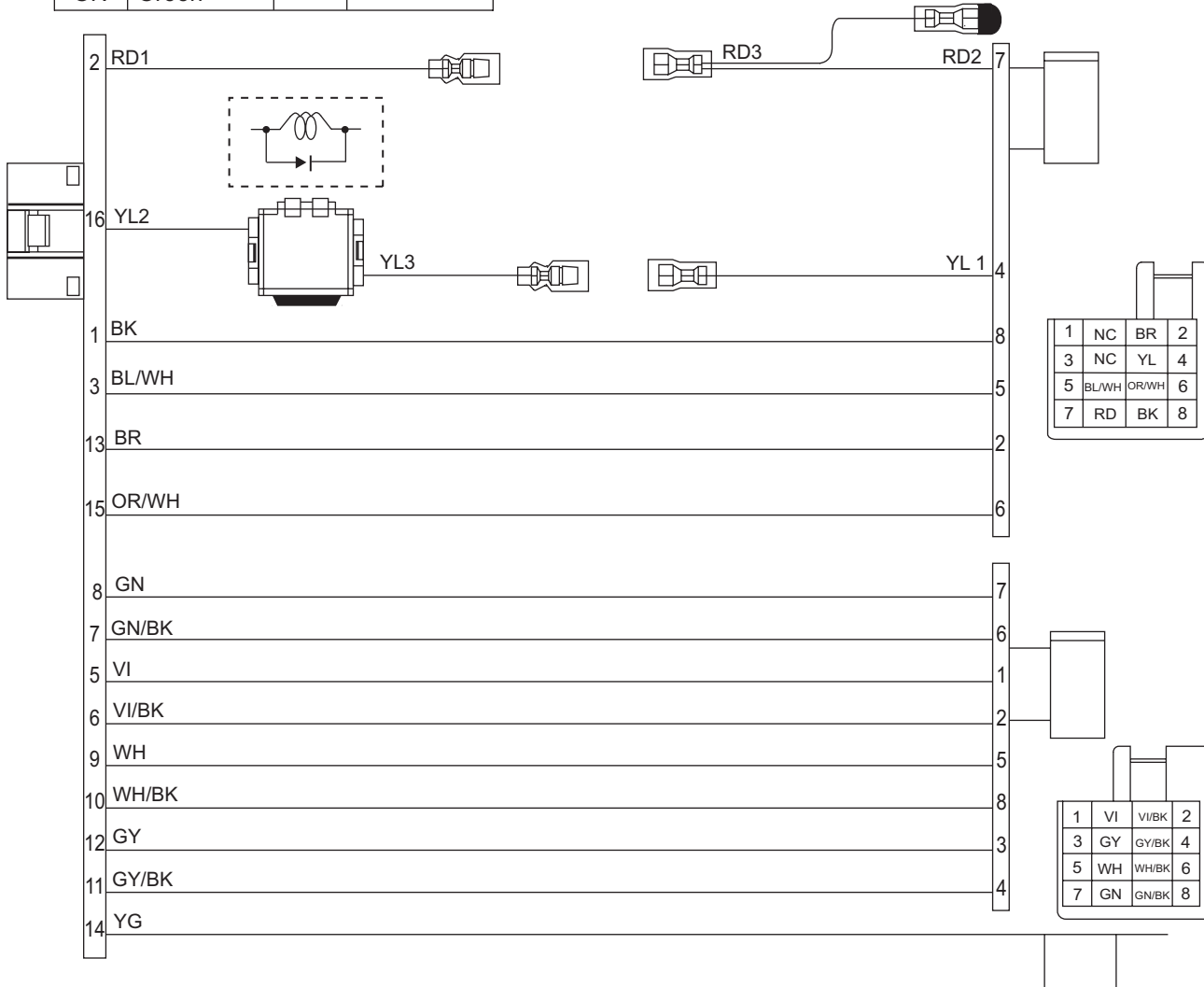
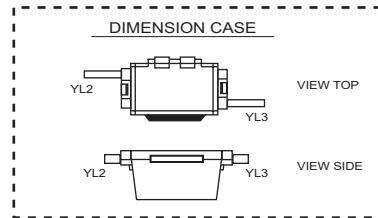
Indication	Minimum value	Maximum value	Initial value		Detail
136	00000	00063	00001	Adjust	Noise reduction setting (NTSC)
137	00000	00063	00001	Adjust	Noise reduction setting (PAL)
138	00000	01023	00264	Adjust	Quantity of brightness adjustment setting (NTSC)
139	00000	01023	00272	Adjust	Quantity of brightness adjustment setting (PAL)
140	00000	00255	00178	Adjust	Brightness gain adjustment (NTSC)
141	00000	00255	00181	Adjust	Brightness gain adjustment (PAL)
142	00000	00511	00128	Adjust	Color signal output level setting (NTSC)
143	00000	00511	00128	Adjust	Color signal output level setting (PAL)
144	00000	00006	00004	Adjust	ACC movement mode setting
145	00000	00255	00160	Adjust	C signal filter characteristic setting of the Y/C separation part (NTSC)
146	00000	00255	00160	Adjust	C signal filter characteristic setting of the Y/C separation part (PAL)
147	00000	16383	02472	Adjust	Amplitude killer off level setting
148	00000	16383	02472	Adjust	Amplitude killer on level setting
149	Fix	Fix	00071	Fix	Clamp DC level adjustment setting
150	Fix	Fix	00015	Fix	Clamp speed adjustment setting
151	00000	00007	00000	Adjust	Unused
152	00000	00007	00000	Adjust	Unused
153	00000	00063	00015	Adjust	Noise filter band setting of horizontal synchronization signal and vertical synchronization signal (NTSC)
154	00000	00063	00015	Adjust	Noise filter band setting of horizontal synchronization signal and vertical synchronization signal (PAL)
155	Fix	Fix	14976	Fix	Horizontal phase comparison gain setting (NTSC)
156	Fix	Fix	14976	Fix	Horizontal phase comparison gain setting (PAL)
157	Fix	Fix	00055	Fix	Horizontal loop filter setting 1
158	Fix	Fix	00003	Fix	Horizontal loop filter setting 2
159	Fix	Fix	00003	Fix	Horizontal loop filter setting 3
160	Fix	Fix	00000	Fix	Unused
161	Fix	Fix	00000	Fix	Unused
162	Fix	Fix	00252	Fix	Free run center value setting of horizontal synchronization signal (NTSC)
163	Fix	Fix	00252	Fix	Free run center value setting of horizontal synchronization signal (PAL)
164	00000	00255	00018	Adjust	Coordinate the delay of the C signal with a Y signal (NTSC)
165	00000	00255	00020	Adjust	Coordinate the delay of the C signal with a Y signal (PAL)
166	00000	00255	00141	Adjust	Coordinate VCOM center value of the LCD (NTSC)
167	00000	00255	00141	Adjust	Coordinate VCOM center value of the LCD (PAL)
201	00000	00254	00127	Adjust	Brightness level adjustment
202	00000	00007	00000	Adjust	Sharpness, outline adjustment
203	00000	00061	00030	Adjust	Contrast adjustment
204	00000	00126	00063	Adjust	Brightness offset adjustment
205	00000	00254	00127	Adjust	Chroma level adjustment
206	00000	00254	00127	Adjust	Tint adjustment

# SECTION 5 TROUBLESHOOTING

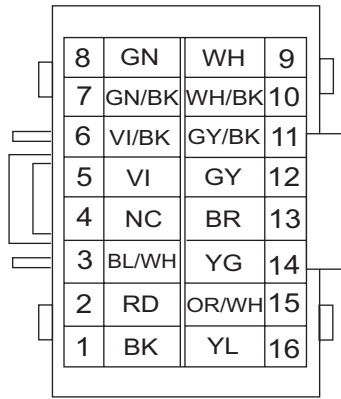
## 5.1 16 PIN CORD DIAGRAM (For KD-AVX55E,EU,EE,KD-AVX77E,EU,EE)



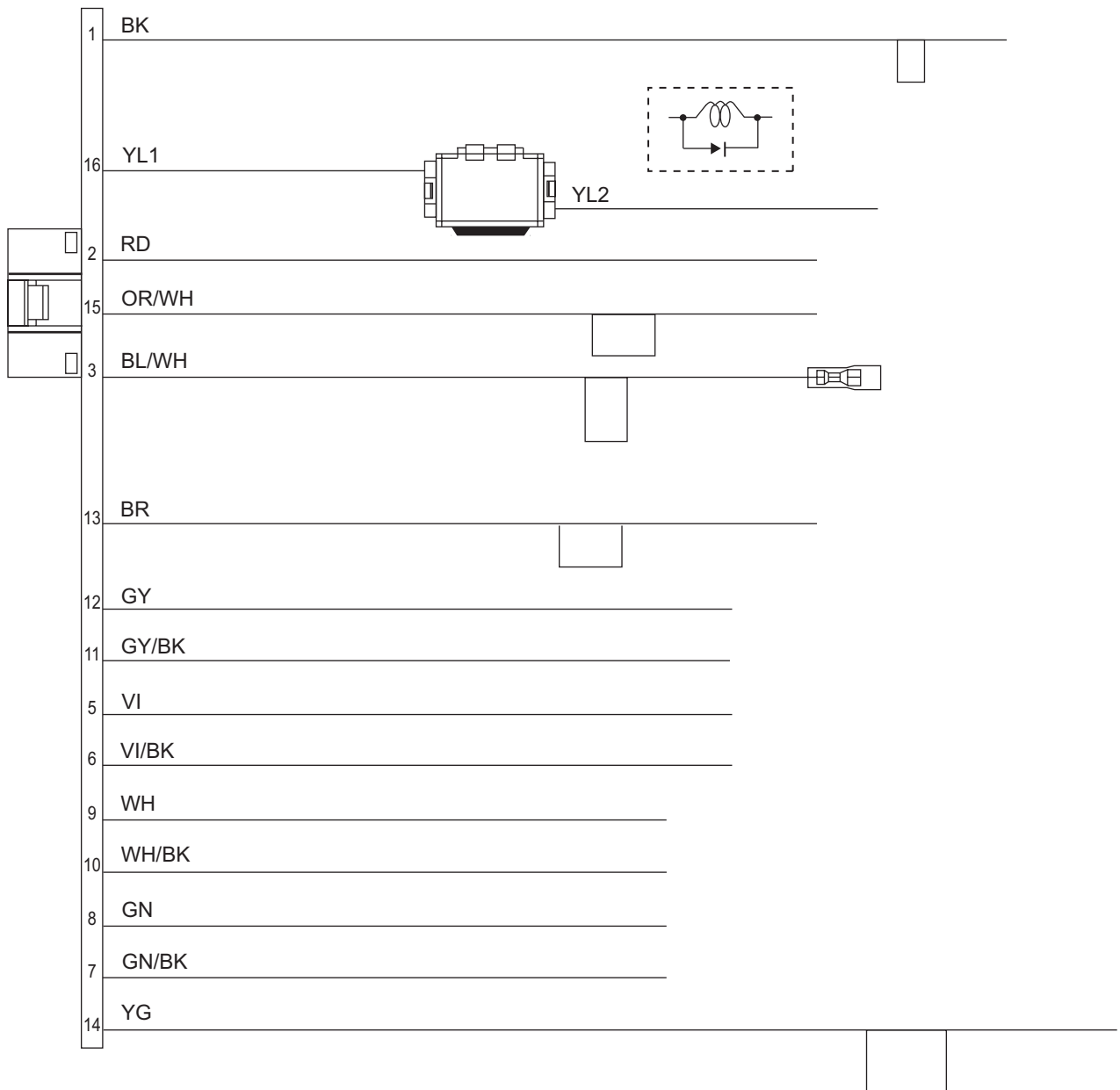
BK	Black	GY	Gray
RD	Red	BR	Brown
BL	Blue	YG	YellowGreen
WH	White	OR	Orange
VI	Violet	YL	Yellow
GN	Green		



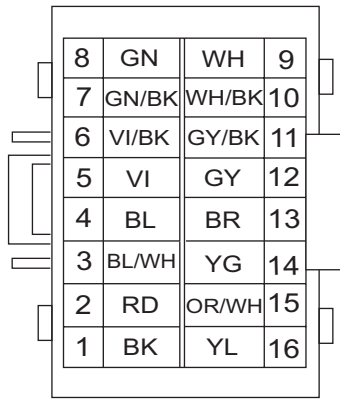
5.2 16 PIN CORD DIAGRAM (For KD-AVX55A, KD-AVX77A)



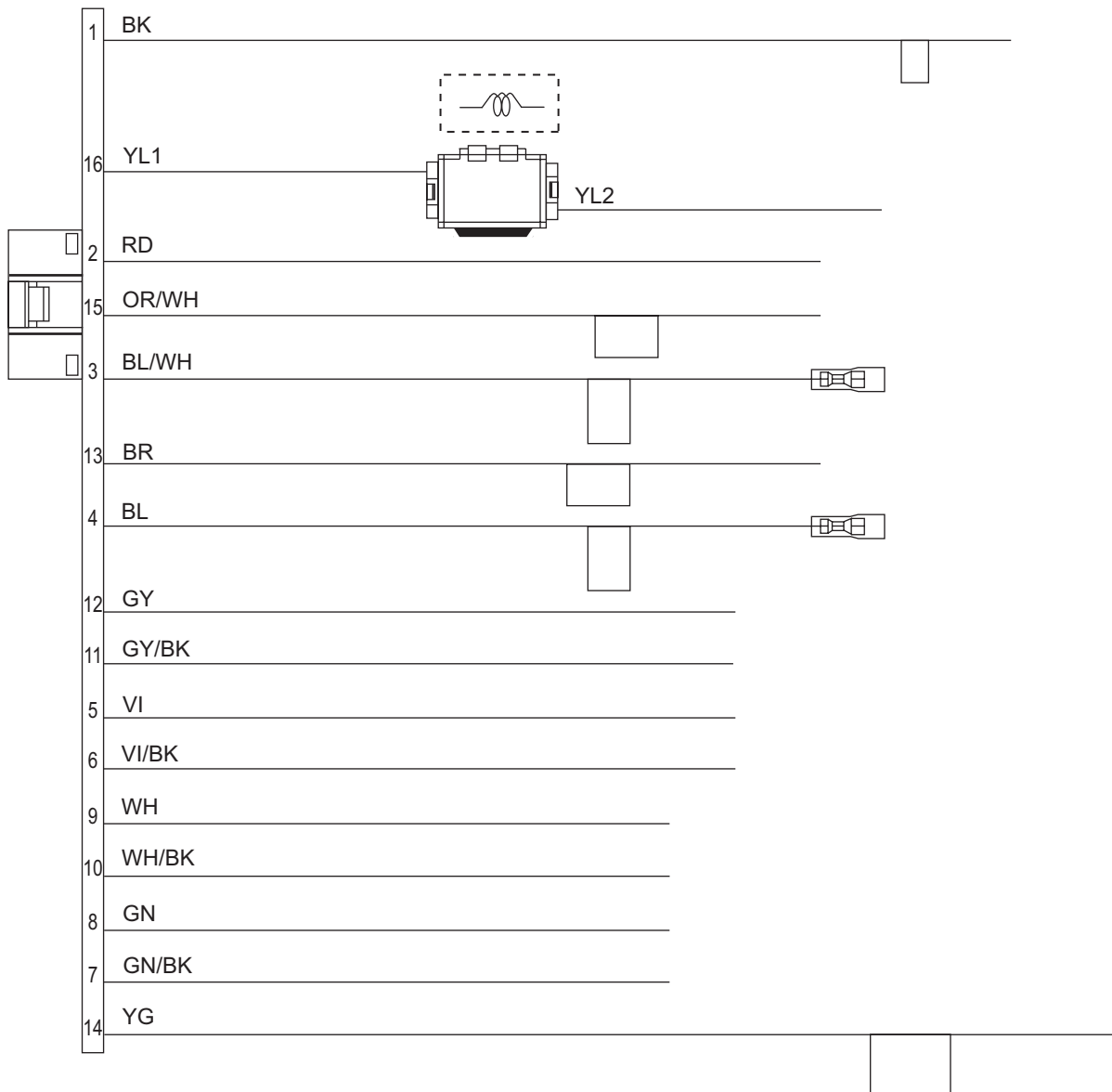
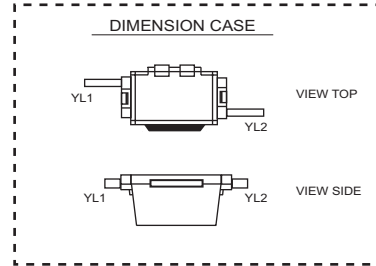
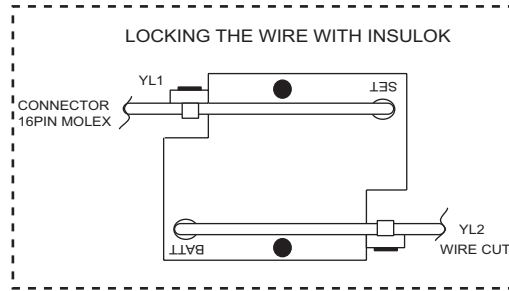
BK	Black	GY	Gray
RD	Red	BR	Brown
BL	Blue	YG	YellowGreen
WH	White	OR	Orange
VI	Violet	YL	Yellow
GN	Green		



### 5.3 16 PIN CORD DIAGRAM (For KD-AVX77J)



BK	Black	GY	Gray
RD	Red	BR	Brown
BL	Blue	YG	YellowGreen
WH	White	OR	Orange
VI	Violet	YL	Yellow
GN	Green		







**JVC**

Victor Company of Japan, Limited  
Mobile Entertainment Division 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

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(No.MA454<Rev.001>)

Printed in Japan  
VSE



# PARTS LIST

KD-AVX55E, KD-AVX55EU, KD-AVX55EE  
 KD-AVX55A, KD-AVX77J, KD-AVX77E  
 KD-AVX77EU, KD-AVX77EE, KD-AVX77A

MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-AVX55E	A	KD-AVX55EU	B	KD-AVX55EE	C
KD-AVX55A	D	KD-AVX77J	E	KD-AVX77E	F
KD-AVX77EU	G	KD-AVX77EE	H	KD-AVX77A	I

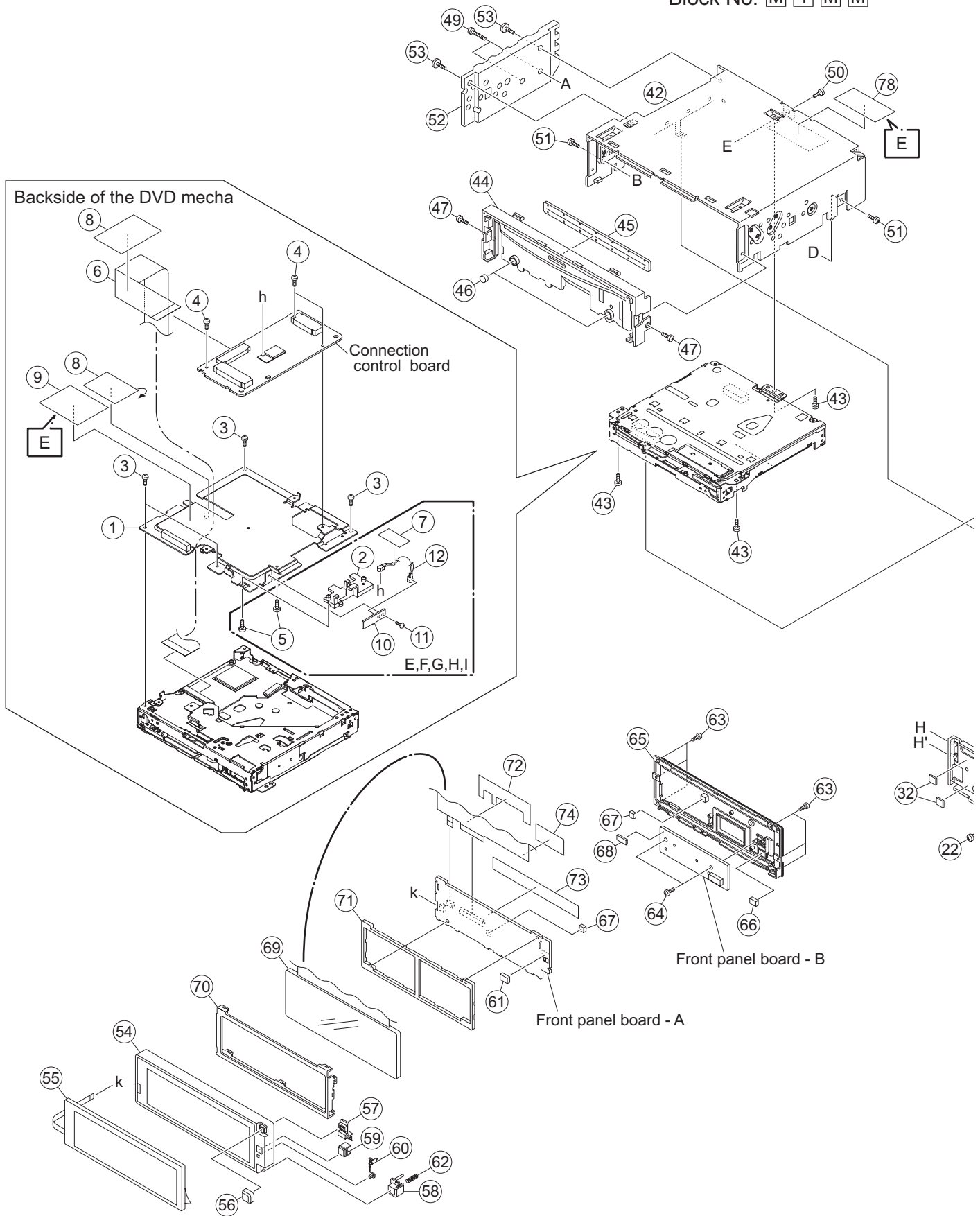
\* All printed circuit boards and its assemblies are not available as service parts.

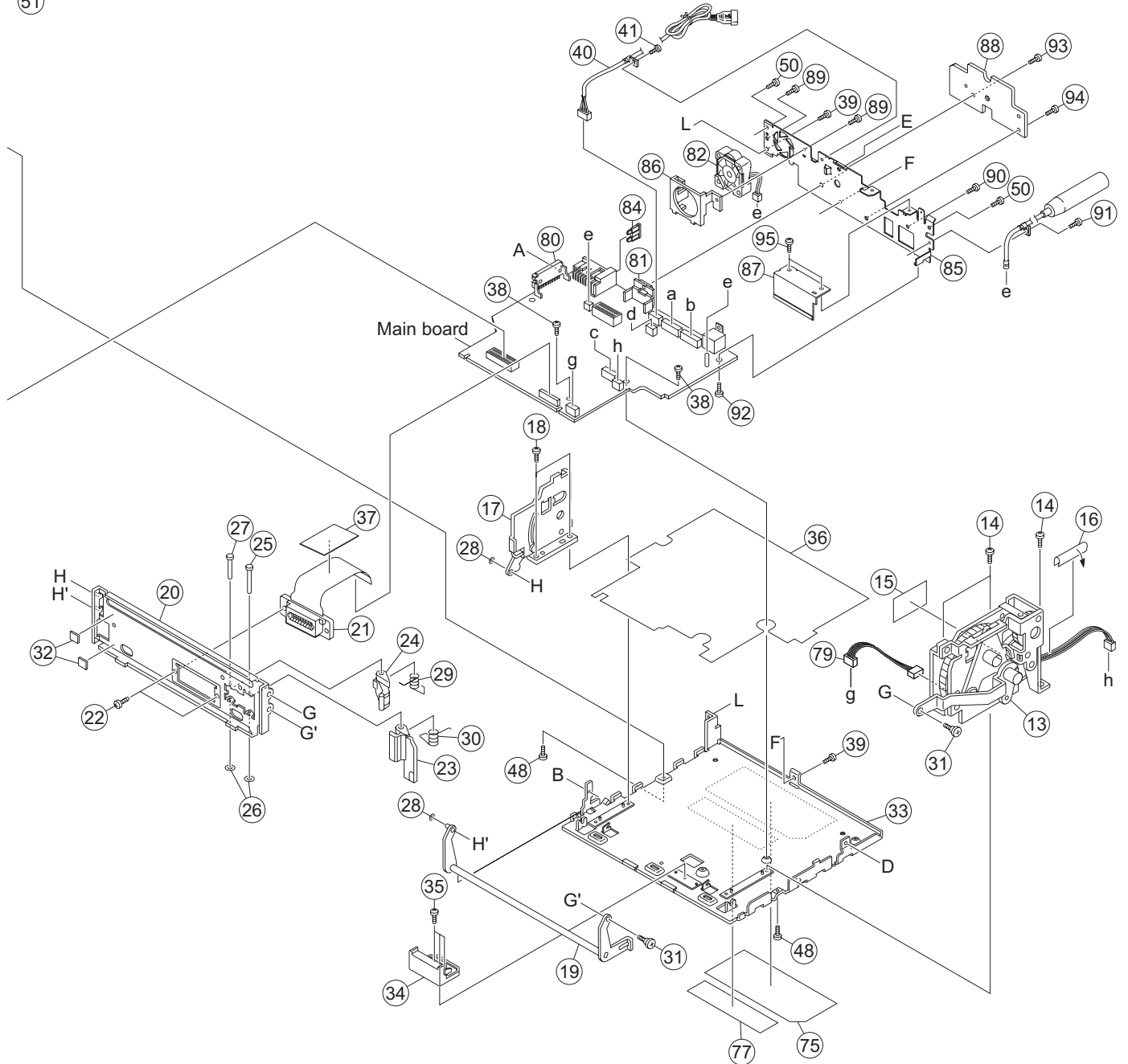
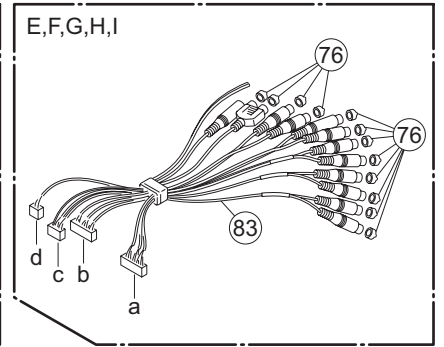
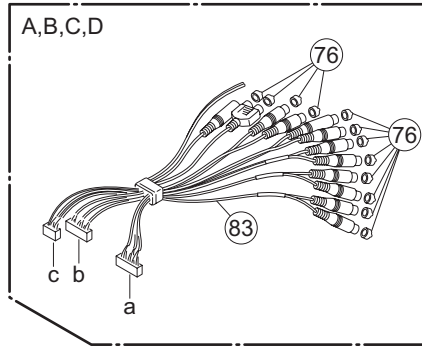
## - Contents -

Exploded view of general assembly and parts list (Block No.M1) .....	3- 2
DVD mechanism assembly and parts list (Block No.MJ) .....	3- 6
Electrical parts list (Block No.01~04) .....	3- 8
Packing materials and accessories parts list (Block No.M3) .....	3-20

# Exploded view of general assembly and parts list

Block No. M 1 M M





The parts without symbol number are not service.

# General Assembly

Block No. [M][1][M][M]

△	Symbol No.	Part No.	Part Name	Description	Local
	1	LV22622-002A	PWB BRACKET		
	2	LV38545-001A	WIRE GUIDE		E,F,G,H,I
	3	LV44615-001A	SPECIAL SCREW	(x4)	
	4	LV44615-001A	SPECIAL SCREW	(x3)	
	5	VKZ4777-011	SCREW	(x2)	E,F,G,H,I
	6	QUQU05-5009AC-E	FFC WIRE	50pin 9cm	
	7	LV40847-006A	SPACER		E,F,G,H,I
	8	LV40847-049A	SPACER(H)	(x2)	
	9	LV45164-001A	SPACER (EMC)		E
	10	LVA10808-01AD	BT ANT		E,F,G,H,I
	11	LV44615-001A	SPECIAL SCREW		E,F,G,H,I
	12	QAM1059-001	COAXIAL CABLE		E,F,G,H,I
	13	GE20156-001A	GEAR BKT UNIT		
	14	LV40865-002A	SCREW	(x3)	
	15	LV40847-002A	SPACER		
	16	FSYH4036-100	SHEET		
	17	GE30968-002A	LEVER BKT UNIT		
	18	LV40865-002A	SCREW	(x2)	
	19	GE30964-003A	LOWER LEVER ASS		
	20	LV36626-006A	F.BRACKET ASSY		
	21	QNZ0836-002	RUBBER CONNECT.		
	22	QYSPSGU2040ZA	TAP SCREW	M2 x 4mm(x2)	
	23	LV35484-002A	DETACH LEVER		
	24	GE30973-001A	KICK LEVER		
	25	GE40192-002A	SHAFT		
	26	QYWDL123525	SLIT WASHER	3.5mm/1.2mm x 0.25mm(x2)	
	27	GE40193-002A	SHAFT		
	28	QYWDL215025	SLIT WASHER	5mm/2.1mm x 0.25mm(x2)	
	29	GE40194-001A	T SPRING		
	30	GE40195-002A	T SPRING		
	31	LV42181-002A	SPECIAL SCREW	(x2)	
	32	LV43971-001A	ABSORBER	(x2)	
	33	LV11219-003A	BOTTOM CHASSIS		
	34	LV36625-002A	FPC GUIDE		
	35	LV40865-002A	SCREW	(x3)	
	36	LV36627-002A	INSULATOR		
	37	LV40847-050A	SPACER(H)		
	38	LV41200-004A	SPECIAL SCREW	(x2)	
	39	LV41200-004A	SPECIAL SCREW	(x2)	
	40	QAM1077-001	USB CABLE		
	41	LV41200-004A	SPECIAL SCREW		
	42	LV11495-001A	TOP CHASSIS		
	43	LV44800-004A	SPECIAL SCREW	(x3)	
	44	LV38529-001A	F.CHASSIS ASSY		
	45	LV37873-003A	BLIND		
	46	GE40196-002A	ABSORBER	(x2)	
	47	LV44159-007A	MINI SCREW	(x2)	
	48	LV44800-001A	SPECIAL SCREW	(x2)	
	49	LV44800-003A	SPECIAL SCREW	(x2)	
	50	LV41200-004A	SPECIAL SCREW	(x3)	
	51	LV41200-004A	SPECIAL SCREW	(x2)	
	52	LV35331-003A	HEAT SINK		
	53	LV44800-001A	SPECIAL SCREW	(x2)	
	54	LV11615-003A	PANEL		A,B,C,D
	54	LV11615-001A	PANEL		E
	54	LV11615-002A	PANEL		F,G,H,I
	55	QAL1189-001	TOUCH PANEL		
	56	LV38549-001A	CAP(POWER)		
	57	LV38547-001A	BUTTON(POWER)		
	58	LV38548-001A	BUTTON(DETACH)		
	59	LV38550-001A	LENS(REMOTE)		
	60	LV38546-001A	BUTTON(RESET)		
	61	LV45367-001A	SPACER(LENS)		
	62	LV44055-001A	COMPRESSION SPRING		
	63	VKZ4777-010	MINI SCREW	(x6)	
	64	VKZ4777-011	SCREW	(x2)	
	65	LV11616-002A	REAR COVER		
	66	LV45318-001A	SPACER(B)		
	67	LV45265-001A	SPACER	(x2)	
	68	LV45358-001A	SPACER(AB)		
	69	QLD0590-001	LCD MODULE	LCD1	
	70	LV11617-001A	TFT CASE		
	71	LV11618-001A	TFT HOLDER		
	72	LV45317-001A	SHEET(FPC)		

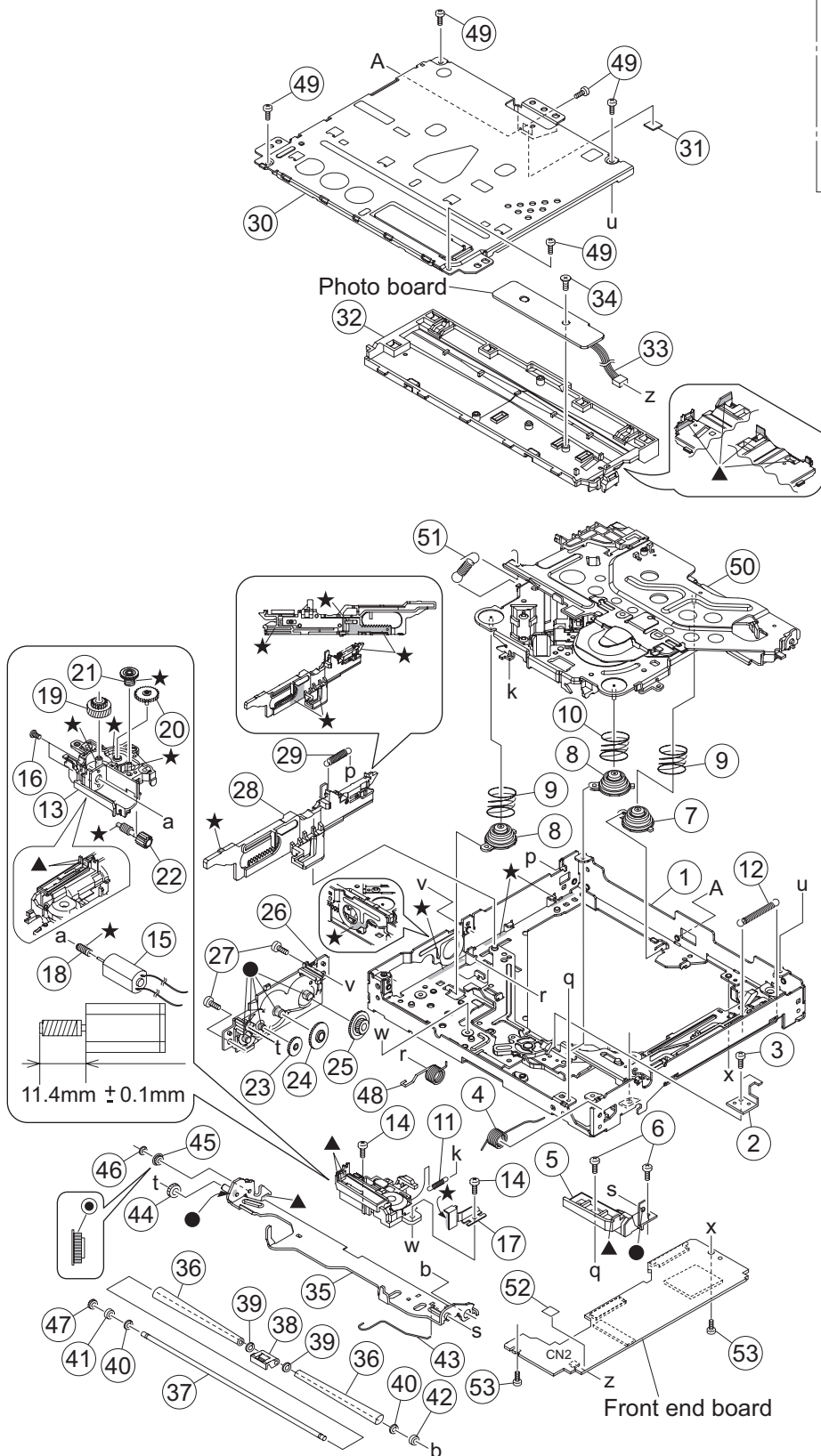
△	Symbol No.	Part No.	Part Name	Description	Local
	73	LV45264-001A	PWB SHEET		
	74	LV40847-046A	SPACER(H)		
	75	LV38564-002A	NAME PLATE		A,B
	75	LV38565-001A	NAME PLATE		C
	75	LV38657-002A	NAME PLATE		D
	75	LV38561-001A	NAME PLATE		E
	75	LV38562-002A	NAME PLATE		F,G
	75	LV38563-001A	NAME PLATE		H
	75	LV38656-002A	NAME PLATE		I
	76	GE40101-001A	PIN CAP	(x12)	
	77	LV44603-003A	LASER CAUTION		
	78	LV45288-001A	FCC ID LABEL		E
	79	QJJ010-040904-E	SIN CR C-C WIR		
	80	LV43967-001A	IC BRACKET		
	81	LV41993-003A	REG IC BKT		
	82	QAR0353-001	FAN	M861	
	83	QAM1192-002	CAR CABLE		A,B,C,D
	83	QAM1193-002	CAR CABLE		E,F,G,H,I
△	84	QMFZ039-150-T	FUSE	15A F901	
	85	LV37874-002A	REAR BRACKET		
	86	LV43966-001A	FAN BRACKET		
	87	LV37876-001A	WIRE BRACKET		
	88	LV37875-001A	REAR HEAT SINK		
	89	LV41200-004A	SPECIAL SCREW	(x2)	
	90	LV41200-004A	SPECIAL SCREW		
	91	LV41200-004A	SPECIAL SCREW		
	92	LV41200-004A	SPECIAL SCREW		
	93	LV44800-001A	SPECIAL SCREW		
	94	LV44800-001A	SPECIAL SCREW		
	95	LV41200-004A	SPECIAL SCREW	(x2)	

# DVD mechanism assembly and parts list

FMU-XD4-21D

Block No. M J M M

Grease	
★	=JVG-31N
◎	=JVS-1003
▲	=CFD-006ZR
●	=JC-803B
■	=1401C
△	=G332



The parts without symbol number are not service.

# DVD mechanism

Block No. [M][J][M][M]

△	Symbol No.	Part No.	Part Name	Description	Local
	1	LV11434-007A	FRAME UNIT		
	2	LV45021-001A	STOPPER		
	3	LV44959-002A	SPECIAL SCREW		
	4	LV45249-002A	L A SPRING(R) 2		
	5	LV37639-002A	L ARM HOLDER		
	6	VKZ4539-054	MINI SCREW	(x2)	
	7	LV37640-001A	DAMPER(R)		
	8	LV37641-001A	DAMPER(F)	(x2)	
	9	LV45074-001A	DAMPER SPRING B	(x2)	
	10	LV45073-001A	DAMPER SPRING A		
	11	LV44897-002A	FLOATING SPRING		
	12	LV44894-001A	LOCK SLIDER SP.		
	13	LV11436-001A	MOTOR HOLDER		
	14	LV45135-001A	MINI TAP SCREW	(x2)	
	15	QAR0465-001	LOAD MOTOR		
	16	QYSPSPU1425MA	SCREW	M1.4 x 2.5mm(x2)	
	17	LV37642-001A	MOTOR TH SPRING		
	18	LV37643-001A	MOTOR WORM GEAR		
	19	LV37644-002A	M WHEEL GEAR		
	20	LV37645-002A	M CONNECT GEAR		
	21	LV37646-001A	A WORM GEAR		
	22	LV37647-001A	A WHEEL GEAR		
	23	LV37648-001A	ACT GEAR		
	24	LV37649-001A	A CONNECT GEAR		
	25	LV37650-001A	LOADING GEAR		
	26	LV22553-003A	GEAR BASE		
	27	VKZ4539-054	MINI SCREW	(x2)	
	28	LV37688-002A	SLIDE CAM ASSY		
	29	LV45090-001A	S.CAM SPRING		
	30	LV11437-003A	TOP COVER		
	31	LV45157-001A	SPACER		
	32	LV11600-001A	DISC PLATE 2		
	33	WJM0515-001A-E	E-SI C WIRE C-F		
	34	LV44586-001A	SPECIAL SCREW		
	35	LV22735-001A	LOADING ARM A2		
	36	LV44902-002A	ROLLER	(x2)	
	37	LV45244-001A	ROLLER SHAFT 2		
	38	LV37652-002A	SHAFT GUIDE		
	39	LV45252-001A	WASHER	(x2)	
	40	LV44960-001A	SLIT WASHER	(x2)	
	41	LV44904-001A	R COLLAR L		
	42	LV45221-001A	R COLLAR R2		
	43	LV45235-001A	L.ARM ROD		
	44	LV37653-001A	R CONNECT GEAR		
	45	LV37654-001A	R MIDDLE GEAR		
	46	QYWDL1735250	SLIT WASHER	3.5mm/1.7mm x 0.25mm	
	47	LV37655-001A	ROLLER GEAR		
	48	LV45248-001A	L.A.SPRING L2		
	49	VKZ4539-054	MINI SCREW	(x5)	
	50	CM-FMUXD3D	TRAMECHA UNIT		
	51	LV44910-002A	CLAMPER SPRING		
	52	LV45289-002A	SPACER(P)		
	53	VKZ4539-054	MINI SCREW	(x2)	

# Electrical parts list

## Main board

Block No. [0][1]

△ Symbol No.	Part No.	Part Name	Description	Local
IC11	TEF6606T/V3-X	IC1		
IC31	LC72725KM-X	IC		A,B,C,D, F,G,H,I
IC321	TDA7416	IC		
IC332	TC74HCT4053AFTX	IC		
IC350	BD3433K	IC		
IC371	TB2926CHQ	IC		
IC701	JVM3971	IC		
IC721	M24C32-RMN6-X	IC(EEPROM)		
IC721	or BR24S32FJ-W-X	IC(DIGITAL)		
IC731	S-80824CNNB-G-W	IC		
IC801	R2S25400DS-E	IC		
IC803	BA9743AFV-X	IC		
IC804	BA9743AFV-X	IC		
IC822	NJM2878F3-33-X	IC		
IC881	BA6956AN	IC		
IC933	NJM2561F1-X	IC		
IC934	NJM2505AF-X	IC		
IC935	NJM2535V-X	IC		
IC941	TC74VHCT126AFTX	IC		
Q101	IMX9-W	PAIR TRANSISTOR		
Q151	IMX9-W	PAIR TRANSISTOR		
Q251	IMX9-W	PAIR TRANSISTOR		
Q341	2SD2704K-X	TRANSISTOR		
Q342	2SD2114K/VW/-X	TRANSISTOR		
Q350	2SA812A/5-6/-X	TRANSISTOR		
Q350	or ISA1530AC1/QR/X	TRANSISTOR		
Q351	2SA812A/5-6/-X	TRANSISTOR		
Q351	or ISA1530AC1/QR/X	TRANSISTOR		
Q352	2SA812A/5-6/-X	TRANSISTOR		
Q352	or ISA1530AC1/QR/X	TRANSISTOR		
Q371	RT1N441C-X	TRANSISTOR		
Q371	or UN2213-X	DIGI TRANSISTOR		
Q372	RT1P441C-X	DIGI TRANSISTOR		
Q372	or UN2113-X	TRANSISTOR		
Q373	RT1N441C-X	TRANSISTOR		
Q373	or UN2213-X	DIGI TRANSISTOR		
Q374	2SC1623A/5-6/-X	TRANSISTOR		
Q374	or 2SC3928A/QR/-X	TRANSISTOR		
Q701	RT1N141C-X	DIGI TRANSISTOR		
Q701	or UN2211-X	TRANSISTOR		
Q806	RT1N441C-X	TRANSISTOR		
Q806	or UN2213-X	DIGI TRANSISTOR		
Q807	RT1P441C-X	DIGI TRANSISTOR		
Q807	or UN2113-X	TRANSISTOR		
Q842	RT1P141C-X	DIGI TRANSISTOR		
Q842	or UN2111-X	TRANSISTOR		
Q843	RT1P141C-X	DIGI TRANSISTOR		
Q843	or UN2111-X	TRANSISTOR		
Q844	RT1P141C-X	DIGI TRANSISTOR		
Q844	or UN2111-X	TRANSISTOR		
Q845	RT1N141C-X	DIGI TRANSISTOR		
Q845	or UN2211-X	TRANSISTOR		
Q847	2SC1623A/5-6/-X	TRANSISTOR		
Q847	or 2SC3928A/QR/-X	TRANSISTOR		
Q848	RT1N141C-X	DIGI TRANSISTOR		
Q848	or UN2211-X	TRANSISTOR		
Q849	RT1N141C-X	DIGI TRANSISTOR		
Q849	or UN2211-X	TRANSISTOR		
Q861	RSQ030P03-W	MOS FET		
Q862	RT1P141C-X	DIGI TRANSISTOR		
Q862	or UN2111-X	TRANSISTOR		
Q863	RT1P141C-X	DIGI TRANSISTOR		
Q863	or UN2111-X	TRANSISTOR		
Q864	RT1P141C-X	DIGI TRANSISTOR		
Q864	or UN2111-X	TRANSISTOR		
Q865	RT1N441C-X	TRANSISTOR		
Q865	or UN2213-X	DIGI TRANSISTOR		
Q881	RT1N141C-X	DIGI TRANSISTOR		
Q881	or UN2211-X	TRANSISTOR		
Q951	2SC1623A/5-6/-X	TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local
Q951	or 2SC3928A/QR/-X	TRANSISTOR		
Q952	2SA812A/5-6/-X	TRANSISTOR		
Q952	or ISA1530AC1/QR/X	TRANSISTOR		
Q953	RT1N441C-X	TRANSISTOR		
Q953	or UN2213-X	DIGI TRANSISTOR		
Q955	2SC1623A/5-6/-X	TRANSISTOR		
Q955	or 2SC3928A/QR/-X	TRANSISTOR		
Q8001	RT1N441C-X	TRANSISTOR		
Q8001	or UN2213-X	DIGI TRANSISTOR		
Q8003	RT1P141C-X	DIGI TRANSISTOR		
Q8003	or UN2111-X	TRANSISTOR		
Q8004	2SC1623A/5-6/-X	TRANSISTOR		
Q8004	or 2SC3928A/QR/-X	TRANSISTOR		
Q8005	2SC1623A/5-6/-X	TRANSISTOR		
Q8005	or 2SC3928A/QR/-X	TRANSISTOR		
Q8006	RT1N441C-X	TRANSISTOR		
Q8006	or UN2213-X	DIGI TRANSISTOR		
Q8007	RT1N441C-X	TRANSISTOR		
Q8007	or UN2213-X	DIGI TRANSISTOR		
Q8011	RSQ030P03-W	MOS FET		
Q8012	2SC1623A/5-6/-X	TRANSISTOR		
Q8012	or 2SC3928A/QR/-X	TRANSISTOR		
Q8013	2SA812A/5-6/-X	TRANSISTOR		
Q8013	or ISA1530AC1/QR/X	TRANSISTOR		
Q8021	RSQ030P03-W	MOS FET		
Q8022	2SC1623A/5-6/-X	TRANSISTOR		
Q8022	or 2SC3928A/QR/-X	TRANSISTOR		
Q8023	2SA812A/5-6/-X	TRANSISTOR		
Q8023	or ISA1530AC1/QR/X	TRANSISTOR		
Q8041	RTQ035N03-W	MOS FET		
Q8042	2SA812A/5-6/-X	TRANSISTOR		
Q8042	or ISA1530AC1/QR/X	TRANSISTOR		
Q8043	2SC1623A/5-6/-X	TRANSISTOR		
Q8043	or 2SC3928A/QR/-X	TRANSISTOR		
Q8051	RSQ030P03-W	MOS FET		
Q8052	2SC1623A/5-6/-X	TRANSISTOR		
Q8052	or 2SC3928A/QR/-X	TRANSISTOR		
Q8053	2SA812A/5-6/-X	TRANSISTOR		
Q8053	or ISA1530AC1/QR/X	TRANSISTOR		
Q8091	RT1N141C-X	DIGI TRANSISTOR		
Q8091	or UN2211-X	TRANSISTOR		
Q8092	RT1N141C-X	DIGI TRANSISTOR		
Q8092	or UN2211-X	TRANSISTOR		
Q8093	RT1N141C-X	DIGI TRANSISTOR		
Q8093	or UN2211-X	TRANSISTOR		
Q8094	MTM98140-X	TRANSISTOR		
Q8095	RT1N441C-X	TRANSISTOR		
Q8095	or UN2213-X	DIGI TRANSISTOR		
Q8096	RT1N141C-X	DIGI TRANSISTOR		
Q8096	or UN2211-X	TRANSISTOR		
Q8097	RT1P141C-X	DIGI TRANSISTOR		
Q8097	or UN2111-X	TRANSISTOR		
Q8098	RT1P141C-X	DIGI TRANSISTOR		
Q8098	or UN2111-X	TRANSISTOR		
D13	MA22D23-X	SB DIODE		
D141	MA111-X	SI DIODE		
D141	or 1SS355W-X	DIODE		
D142	MA111-X	SI DIODE		
D142	or 1SS355W-X	DIODE		
D151	MC2836-X	DIODE		
D151	or MA152WA-X	DIODE		
D251	MC2836-X	DIODE		
D251	or MA152WA-X	DIODE		
D301	MC2836-X	DIODE		
D301	or MA152WA-X	DIODE		
D340	MA111-X	SI DIODE		
D340	or 1SS355W-X	DIODE		
D342	MA111-X	SI DIODE		
D342	or 1SS355W-X	DIODE		
D371	MA8110/M/-X	Z DIODE		
D371	or UDZW11B-X	Z DIODE		
D372	MA111-X	SI DIODE		
D372	or 1SS355W-X	DIODE		
D731	MA111-X	SI DIODE		
D731	or 1SS355W-X	DIODE		



△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
D808	MA2SD32-X	DIODE			D8061	MA2SD32-X	DIODE		
D809	MA22D23-X	SB DIODE			D8062	MA2SD32-X	DIODE		
D811	MA111-X	SI DIODE			D8063	MA8180/M/-X	Z DIODE		
D811	or 1SS355W-X	DIODE			D8063	or UDZW18B-X	Z DIODE		
D841	MA8110/M/-X	Z DIODE			D8067	MA8062/M/-X	Z DIODE		
D841	or UDZW11B-X	Z DIODE			D8067	or UDZW6.2B-X	Z DIODE		
D844	MC2838-X	DIODE			D8068	MA8062/M/-X	Z DIODE		
D844	or MA152WK-X	SI DIODE			D8068	or UDZW6.2B-X	Z DIODE		
D845	MA111-X	SI DIODE			D8069	MA8062/M/-X	Z DIODE		
D845	or 1SS355W-X	DIODE			D8069	or UDZW6.2B-X	Z DIODE		
D846	MC2836-X	DIODE			C5	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D846	or MA152WA-X	DIODE			C7	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D847	MA111-X	SI DIODE			C8	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
D847	or 1SS355W-X	DIODE			C9	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
D851	MA8180/M/-X	Z DIODE			C10	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D851	or UDZW18B-X	Z DIODE			C12	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D861	MA22D23-X	SB DIODE			C13	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D871	MA8062/M/-X	Z DIODE			C14	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D871	or UDZW6.2B-X	Z DIODE			C16	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D881	MA8039-X	Z DIODE			C17	QEJ1CM-107Z	E CAPACITOR	100uF 16V M	
D881	or UDZW3.9B-X	Z DIODE			C18	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D901	1N5401-04	SI DIODE			C19	NCB31AK-105X	C CAPACITOR	1uF 10V K	
D921	MA2SD32-X	DIODE			C20	NDC31HJ-6R0X	C CAPACITOR	6pF 50V J	
D922	MA2SD32-X	DIODE			C21	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D931	MA8062/M/-X	Z DIODE			C22	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D931	or UDZW6.2B-X	Z DIODE			C23	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
D932	MA8062/M/-X	Z DIODE			C24	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
D932	or UDZW6.2B-X	Z DIODE			C25	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D933	MA8062/M/-X	Z DIODE			C26	NCB31AK-105X	C CAPACITOR	1uF 10V K	
D933	or UDZW6.2B-X	Z DIODE			C27	NDC31HJ-150X	C CAPACITOR	15pF 50V J	
D934	MA8062/M/-X	Z DIODE			C29	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D934	or UDZW6.2B-X	Z DIODE			C30	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
D951	MA8110/M/-X	Z DIODE		E, F, G, H, I	C31	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	A, B, C, D, F, G, H, I
D951	or UDZW11B-X	Z DIODE		E, F, G, H, I	C32	QEJ1CM-226Z	E CAPACITOR	22uF 16V M	A, B, C, D, F, G, H, I
D952	MA8110/M/-X	Z DIODE		E, F, G, H, I	C33	NDC31HJ-330X	C CAPACITOR	33pF 50V J	A, B, C, D, F, G, H, I
D952	or UDZW11B-X	Z DIODE		E, F, G, H, I	C34	NDC31HJ-330X	C CAPACITOR	33pF 50V J	A, B, C, D, F, G, H, I
D960	MA8062/M/-X	Z DIODE			C35	NDC31HJ-561X	C CAPACITOR	560pF 50V J	A, B, C, D, F, G, H, I
D960	or UDZW6.2B-X	Z DIODE			C36	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	A, B, C, D, F, G, H, I
D961	MA8062/M/-X	Z DIODE			C37	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	A, B, C, D, F, G, H, I
D961	or UDZW6.2B-X	Z DIODE			C38	NDC31HJ-331X	C CAPACITOR	330pF 50V J	A, B, C, D, F, G, H, I
D962	MA8062/M/-X	Z DIODE			C42	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D962	or UDZW6.2B-X	Z DIODE			C45	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	
D963	MA8062/M/-X	Z DIODE			C46	NDC31HJ-2R0X	C CAPACITOR	2pF 50V J	
D963	or UDZW6.2B-X	Z DIODE			C106	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D964	MA8062/M/-X	Z DIODE			C108	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D964	or UDZW6.2B-X	Z DIODE			C115	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D965	MA8062/M/-X	Z DIODE			C121	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D965	or UDZW6.2B-X	Z DIODE			C122	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D966	MA8062/M/-X	Z DIODE			C124	QEJ1HM-105Z	E CAPACITOR	1uF 50V M	
D966	or UDZW6.2B-X	Z DIODE			C125	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	E, F, G, H, I
D967	MA8062/M/-X	Z DIODE			C129	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D967	or UDZW6.2B-X	Z DIODE			C141	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
D968	MA8062/M/-X	Z DIODE			C151	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D968	or UDZW6.2B-X	Z DIODE			C152	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D969	MA8062/M/-X	Z DIODE			C161	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D969	or UDZW6.2B-X	Z DIODE			C162	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D970	MA8062/M/-X	Z DIODE			C165	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D970	or UDZW6.2B-X	Z DIODE			C172	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
D971	MA8062/M/-X	Z DIODE			C173	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D971	or UDZW6.2B-X	Z DIODE			C174	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D972	MA8062/M/-X	Z DIODE			C175	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D972	or UDZW6.2B-X	Z DIODE			C182	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
D976	MA8062/M/-X	Z DIODE			C183	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D976	or UDZW6.2B-X	Z DIODE			C184	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D981	MA22D23-X	SB DIODE			C185	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D982	MA22D23-X	SB DIODE		E	C191	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D983	MA22D23-X	SB DIODE		E	C192	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D984	MA22D23-X	SB DIODE			C206	QEJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
D991	LSQ971/KL-X	LED	GREEN/RED		C208	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D8004	MA111-X	SI DIODE			C215	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D8004	or 1SS355W-X	DIODE							
D8011	MA24D51-X	SB DIODE							
D8021	MA24D51-X	SB DIODE							
D8031	MA111-X	SI DIODE							
D8031	or 1SS355W-X	DIODE							
D8041	MA22D23-X	SB DIODE							
D8051	MA24D51-X	SB DIODE							
D8060	MA2SD32-X	DIODE							

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C221	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C865	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
C222	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C866	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C224	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C881	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C225	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	E,F,G,H,I	C882	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C229	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C901	QEZ0723-338	E CAPACITOR	3300uF 160V M	
C251	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C252	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C923	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C261	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C926	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C262	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C927	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C265	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C931	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C272	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C935	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C273	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C944	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C274	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C951	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C275	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C952	NCB31CK-683X	C CAPACITOR	0.068uF 16V K	
C282	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C981	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	E
C283	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C982	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C284	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C8003	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C285	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C8005	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C291	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8006	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C292	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8012	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	
C301	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C8013	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C303	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C8014	NEL91EM-107X	E CAPACITOR	100uF 25V M	
C304	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8015	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C305	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8017	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C306	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C8021	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C321	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M		C8022	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	
C323	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C8024	NEL91EM-107X	E CAPACITOR	100uF 25V M	
C324	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C8025	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C325	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		C8027	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C326	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8030	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C327	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C341	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C8032	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C344	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C8033	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C345	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C352	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8035	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C371	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C8042	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C372	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C8043	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	
C373	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8044	NEL91EM-107X	E CAPACITOR	100uF 25V M	
C374	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C8046	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C375	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		C8047	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C376	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		C8048	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C377	NCB31AK-105X	C CAPACITOR	1uF 10V K		C8052	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	
C378	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8054	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C379	NDC31HJ-820X	C CAPACITOR	82pF 50V J		C8057	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C380	NDC31HJ-820X	C CAPACITOR	82pF 50V J		C8058	NEL91EM-107X	E CAPACITOR	100uF 25V M	
C391	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C8061	NEL91EM-107X	E CAPACITOR	100uF 25V M	
C705	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C8062	NCB21EK-105X	C CAPACITOR	1uF 25V K	
C709	NDC31HJ-270X	C CAPACITOR	27pF 50V J		C8063	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C710	NDC31HJ-220X	C CAPACITOR	22pF 50V J		C8071	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C713	NDC31HJ-471X	C CAPACITOR	470pF 50V J		C8072	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C715	NCB31HK-102X	C CAPACITOR	1000pF 50V K		C8073	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C717	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C8074	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C721	NDC31HJ-471X	C CAPACITOR	470pF 50V J		C8075	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C731	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C9061	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C732	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		C9062	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C800	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		C9905	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C801	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C9906	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C802	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C9925	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C803	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		C9926	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C804	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C9927	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C806	QERF1AM-227Z	E CAPACITOR	220uF 10V M		C9930	QERF0JM-337Z	E CAPACITOR	330uF 6.3V M	
C808	NCB31AK-105X	C CAPACITOR	1uF 10V K		C9932	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C809	NCB31CK-104X	C CAPACITOR	0.1uF 16V K						
C810	NCJ11EK-106X-R	C CAPACITOR	10uF 25V		R9	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	A,B,C,D, F,G,H,I
C811	NCB31CK-105X	C CAPACITOR	1uF 16V K						
C812	NCB31AK-105X	C CAPACITOR	1uF 10V K		R14	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C822	QERF0JM-337Z	E CAPACITOR	330uF 6.3V M		R16	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
C827	QERF0JM-337Z	E CAPACITOR	330uF 6.3V M		R19	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C828	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		R21	NRS181J-220X	MG RESISTOR	22Ω 1/8W J	
C831	QERF0JM-337Z	E CAPACITOR	330uF 6.3V M		R22	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
C841	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		R23	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C844	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		R34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	A,B,C,D, F,G,H,I E
C845	NCB31EK-104X	C CAPACITOR	0.1uF 25V K						
C847	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M		R34	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
C848	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		R35	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	A,B,C,D, F,G,H,I E
C849	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M						
C852	NCB31HK-102X	C CAPACITOR	1000pF 50V K		R35	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
C863	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R36	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	A,B,C,D, F,G,H,I

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R38	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	A,B,C,D, F,G,H,I	R374	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R39	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	A,B,C,D, F,G,H,I	R375	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R107	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R376	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R108	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R700	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R109	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R702	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R110	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R703	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R113	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R704	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R115	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R705	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R116	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R706	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R119	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	E,F,G,H,I	R709	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R130	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R710	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R140	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R713	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R141	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R714	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R151	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R723	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R153	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R724	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	A,B,C,D, F,G,H,I
R154	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R728	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	A,B,C,D, F,G,H,I
R161	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R729	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	A,B,C,D, F,G,H,I
R163	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J						
R164	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R730	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R165	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J		R731	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R170	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R732	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R171	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R735	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R173	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R180	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R737	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R181	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R738	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R183	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R739	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R741	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R208	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R742	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R209	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R743	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R210	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R744	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R213	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R755	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R215	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R764	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R216	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R766	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R219	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	E,F,G,H,I	R767	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R230	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R769	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R240	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R773	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R251	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R774	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R253	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R775	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R254	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R779	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R261	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R781	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R263	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R783	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R264	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R784	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R265	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J		R790	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R270	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R795	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R271	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R798	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R273	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R803	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R280	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R841	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R281	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R842	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R283	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R843	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R301	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		R844	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R302	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R845	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R303	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		R847	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R304	NRSA63J-163X	MG RESISTOR	16kΩ 1/16W J		R848	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R309	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R849	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R321	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R850	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R322	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R852	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R323	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R853	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R325	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R856	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R326	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R859	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R329	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R861	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R331	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R863	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R334	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R871	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R335	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R881	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R337	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R901	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R340	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R902	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R342	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R903	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R343	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R906	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R345	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R910	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R346	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R911	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R347	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J		R912	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R348	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R925	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R349	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R932	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R352	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R936	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R370	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R939	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R372	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R940	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R373	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R942	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
					R943	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R944	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R8064	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R946	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R8071	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R947	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R8072	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R949	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R8073	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	
R955	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		R8074	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R956	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J		R8075	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R960	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R8076	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R961	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R8077	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R962	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D		R8078	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R963	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R8087	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R965	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R8101	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R971	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J		R8102	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R972	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J		R8103	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R973	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R8105	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R975	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R8107	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R976	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D		R8113	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R977	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R8114	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R978	NRSA63D-181X	MG RESISTOR	180Ω 1/16W D		R8115	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R981	NRS181J-332X	MG RESISTOR	3.3kΩ 1/8W J		R8214	NRSA63J-5R6X	MG RESISTOR	5.6Ω 1/16W J	
R983	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	E	R8217	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R986	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R9923	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R987	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R9924	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R993	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J		R9925	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R7001	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	A,B,D	R9926	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R7001	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	C	R9927	NRSA63J-390X	MG RESISTOR	39Ω 1/16W J	
R7001	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	E	RA721	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7001	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	F,G,I	RA722	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7001	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	H	RA723	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7003	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	A,B,D	RA724	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7003	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	C	RA725	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7003	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	E	RA726	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7003	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	F,G,I	RA727	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R7003	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	H	RA728	NRZ0065-102X	NET RESISTOR	1kΩ 1/16W J	
R8010	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		RA729	NRZ0065-472X	MG RESISTOR	4.7kΩ	
R8011	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		RA951	NRZ0065-392X	RESISTOR ARRAY	3.9kΩ	
R8012	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L1	QQR1813-001	COIL		
R8013	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L2	NQL114K-561X	P COIL	560uH K	
R8015	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		L3	NQL093K-R22X	COIL	0.22uH K	
R8016	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		L5	NQL114K-561X	P COIL	560uH K	
R8017	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L6	NQL79GM-4R7X	COIL	4.7uH M	
R8018	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		L8	NQL093K-R47X	COIL	0.47uH K	
R8019	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		L9	NQL093K-4R7X	COIL	4.7uH K	
R8021	NRSA63J-5R6X	MG RESISTOR	5.6Ω 1/16W J		L10	NQL093K-R47X	COIL	0.47uH K	
R8022	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L11	NQL093K-1R8X	COIL	1.8uH K	
R8023	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L702	NQL382M-220X	COIL	22uH M	
R8025	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		L827	NQL52EM-220X	COIL	22uH M	
R8026	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		L841	NQL79GM-100X	COIL	10uH M	
R8027	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L842	NQL79GM-100X	COIL	10uH M	
R8028	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		L931	NQL382M-220X	COIL	22uH M	
R8029	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		L961	NQL52EM-220X	COIL	22uH M	
R8030	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		L8011	NQLC8CM-220X	COIL	22uH M	
R8031	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		L8021	NQLC8CM-220X	COIL	22uH M	
R8032	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		L8041	NQLC8CM-220X	COIL	22uH M	
R8033	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J		L8051	NQLC8CM-220X	COIL	22uH M	
R8034	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		L9004	NQR0536-001X	CHOKO COIL		
R8035	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		BZ951	QAN0023-001Z	BUZZER		
R8036	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		CN860	QNZ0095-001	CONNECTOR		
R8037	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		CN861	QGA2001C1-02	CONNECTOR	W-B (1-2)	
R8038	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J		CN871	QGA2001C1-05	CONNECTOR	W-B (1-5)	
R8041	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		CN881	QGA2501C1-05	CONNECTOR	W-B (1-2)	
R8042	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		CN891	QGA2001C1-04	CONNECTOR	W-B (1-4)	
R8043	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		CN901	QNZ0067-001	CAR CONNECTOR		
R8044	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		CN921	QGA2001C1-08	CONNECTOR	W-B (1-8)	
R8045	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		CN922	QGA2001C1-09	CONNECTOR	W-B (1-9)	
R8046	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		CN923	QGA2001C1-02	CONNECTOR	W-B (1-2)	E,F,G,H,I
R8047	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		CN931	QGA2501C1-05	CONNECTOR	W-B (1-5)	
R8048	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		CN961	QGB2027MD-22	CONNECTOR	B-B (1-22)	
R8049	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN962	QGF1041C4-24W	CONNECTOR	FFC/FFC (1-24)	
R8050	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J		CN963	QGB2027M4-30S	CONNECTOR	B-B (1-30)	
R8051	NRSA63J-5R6X	MG RESISTOR	5.6Ω 1/16W J		△ F801	NMFZ026-1R0X-J1	FUSE	1A	
R8052	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		△ F804	NMFZ026-2R0X-J1	FUSE	2A	
R8053	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		△ F805	NMFZ026-5R0X-J1	FUSE	5A	
R8055	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		△ F806	NMFZ026-2R0X-J1	FUSE	2A	
R8056	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J		PP1	QZW0010-001	STYLE PIN		
R8057	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J		PP2	QZW0010-001	STYLE PIN		
R8059	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J		PP3	QZW0010-001	STYLE PIN		
R8062	NRSA02J-100X	MG RESISTOR	10Ω 1/10W J						
R8063	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J						

△ Symbol No.	Part No.	Part Name	Description	Local
PP4	QZW0010-001	STYLE PIN		
PP5	QZW0010-001	STYLE PIN		E,F,G,H,I
TH700	NAD0028-103X	N THERMISTOR	10kΩ	
TH721	NAD0028-103X	N THERMISTOR	10kΩ	
W1	QAM1232-001	CAR CABLE		
X1	QAX0928-001Z	CRYSTAL		
X31	QAX0263-001Z	CRYSTAL	4.332MHz	A,B,C,D, F,G,H,I
X701	NAX0917-001X	CRYSTAL		
X702	QAX0401-001	CRYSTAL	32.768KHz	

△ Symbol No.	Part No.	Part Name	Description	Local
C3025	NDC31HJ-331X	C CAPACITOR	330pF 50V J	E,F,G,H,I
C3026	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C3027	NDC31HJ-101X	C CAPACITOR	100pF 50V J	E,F,G,H,I
C3028	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	E,F,G,H,I
C3029	NDC31HJ-561X	C CAPACITOR	560pF 50V J	E,F,G,H,I
C3031	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	E,F,G,H,I
C3032	NDC31HJ-220X	C CAPACITOR	22pF 50V J	E,F,G,H,I
C3033	NDC31HJ-561X	C CAPACITOR	560pF 50V J	E,F,G,H,I
C3034	NCB31CK-105X	C CAPACITOR	1uF 16V K	E,F,G,H,I
C3107	NEAF1CM-106X	E CAPACITOR	10uF 16V M	
C3108	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C3111	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C3114	NDC31HJ-561X	C CAPACITOR	560pF 50V J	
C3116	NDC31HJ-561X	C CAPACITOR	560pF 50V J	
C3117	NDC31HJ-561X	C CAPACITOR	560pF 50V J	
C3120	NDC31HJ-561X	C CAPACITOR	560pF 50V J	
C3132	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C3133	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C3153	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C3154	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C3155	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C3156	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C5003	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	

## Connection control board

Block No. [0][2]

△ Symbol No.	Part No.	Part Name	Description	Local
IC393	NJM4565E-X	IC		
IC396	NJM4565E-X	IC		E,F,G,H,I
IC397	NJM4565E-X	IC		E,F,G,H,I
IC399	NAU0004-005	RF MODULE		E,F,G,H,I
D3005	MA8033-X	Z DIODE		E,F,G,H,I
D3005	or UDZW3.3B-X	Z DIODE		E,F,G,H,I
D5001	MA8062/M-X	Z DIODE		
D5001	or UDZW6.2B-X	Z DIODE		
D5002	MA8062/M-X	Z DIODE		
D5002	or UDZW6.2B-X	Z DIODE		
D5003	MA8062/M-X	Z DIODE		
D5003	or UDZW6.2B-X	Z DIODE		
D5004	MA8200/M-X	Z DIODE		
D5004	or UDZW20B-X	Z DIODE		
D5005	MA8062/M-X	Z DIODE		
D5005	or UDZW6.2B-X	Z DIODE		
D5006	MA8062/M-X	Z DIODE		
D5006	or UDZW6.2B-X	Z DIODE		
D5007	MA8062/M-X	Z DIODE		
D5007	or UDZW6.2B-X	Z DIODE		
D5008	MA8062/M-X	Z DIODE		
D5008	or UDZW6.2B-X	Z DIODE		
D5009	MA8062/M-X	Z DIODE		
D5009	or UDZW6.2B-X	Z DIODE		
D5010	MA8062/M-X	Z DIODE		
D5010	or UDZW6.2B-X	Z DIODE		
D5011	MA8062/M-X	Z DIODE		
D5011	or UDZW6.2B-X	Z DIODE		
D5012	MA8062/M-X	Z DIODE		
D5012	or UDZW6.2B-X	Z DIODE		
D5013	MA8062/M-X	Z DIODE		
D5013	or UDZW6.2B-X	Z DIODE		
D5014	MA8062/M-X	Z DIODE		
D5014	or UDZW6.2B-X	Z DIODE		
D5015	MA8062/M-X	Z DIODE		
D5015	or UDZW6.2B-X	Z DIODE		
D5016	MA8200/M-X	Z DIODE		
D5016	or UDZW20B-X	Z DIODE		
D5017	MA8200/M-X	Z DIODE		
D5017	or UDZW20B-X	Z DIODE		
D5018	MA8062/M-X	Z DIODE		
D5018	or UDZW6.2B-X	Z DIODE		
D5019	MA8062/M-X	Z DIODE		
D5019	or UDZW6.2B-X	Z DIODE		
C3001	NCB31CK-105X	C CAPACITOR	1uF 16V K	E,F,G,H,I
C3003	NCB31CK-105X	C CAPACITOR	1uF 16V K	E,F,G,H,I
C3004	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	E,F,G,H,I
C3006	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	E,F,G,H,I
C3007	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	E,F,G,H,I
C3008	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	E,F,G,H,I
C3009	NCB31CK-105X	C CAPACITOR	1uF 16V K	E,F,G,H,I
C3013	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	E,F,G,H,I
C3015	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	E,F,G,H,I
C3022	NDC31HJ-101X	C CAPACITOR	100pF 50V J	E,F,G,H,I
C3023	NDC31HJ-101X	C CAPACITOR	100pF 50V J	E,F,G,H,I
C3024	NDC31HJ-331X	C CAPACITOR	330pF 50V J	E,F,G,H,I

R3001	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	E,F,G,H,I
R3002	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	E,F,G,H,I
R3012	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	E,F,G,H,I
R3013	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	E,F,G,H,I
R3028	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3033	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	E,F,G,H,I
R3034	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	E,F,G,H,I
R3035	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3036	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3037	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3038	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3039	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3040	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	E,F,G,H,I
R3041	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R3043	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	E,F,G,H,I
R3044	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	E,F,G,H,I
R3045	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	E,F,G,H,I
R3046	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	E,F,G,H,I
R3047	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	E,F,G,H,I
R3048	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	E,F,G,H,I
R3049	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	E,F,G,H,I
R3050	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	E,F,G,H,I
R3110	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3111	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3112	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3114	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3115	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3116	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3117	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3119	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3123	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3127	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3129	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R3130	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3143	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3147	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3152	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R3171	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
CN395	QGF0523F2-50W	CONNECTOR	FFC/FPC (1-50)	
CN501	QGZ2204M1-24X	CONNECTOR	(1-24)	
CN502	QGB0525L1-30X	CONNECTOR	B-B (1-30)	
CN964	QGB2027LA-22X	CONNECTOR	B-B (1-22)	
CN966	QGB2027L9-30X	CONNECTOR	B-B (1-30)	

# Panel board

Block No. [0][3]

Symbol No.	Part No.	Part Name	Description	Local
IC401	MN103SH13	IC(MCU)		
IC402	VDG3668-D005PBS	IC(PROGRAMED)		A
IC402	VDG3668-D043PBS	IC(PROGRAMED)		B
IC402	VDG3668-D027PBS	IC(PROGRAMED)		C
IC402	VDG3668-D003PBS	IC(PROGRAMED)		D
IC402	VDG3667-D006PBS	IC(PROGRAMED)		E
IC402	VDG3667-D005PBS	IC(PROGRAMED)		F
IC402	VDG3667-D043PBS	IC(PROGRAMED)		G
IC402	VDG3667-D027PBS	IC(PROGRAMED)		H
IC402	VDG3667-D003PBS	IC(PROGRAMED)		I
IC403	NJM2847F3-12-X	IC		
IC404	TC7SZ17FE-X	IC(DIGITAL)		
IC451	NJM4565E-X	IC		
IC453	NJM2830U1-06-X	IC		
IC455	TC74VHC04AFT-X	IC		
IC501	ML86V7668ATBZ03	IC		
IC502	TC7SU04FU-X	IC		
IC503	TC7W14FK-X	IC		
IC504	NJM2878F3-25-X	IC		
IC551	TC74HCT4053AFTX	IC		
IC601	JVM3991	IC(PROGRAMED)		
IC602	TC74VHC4053AFTX	IC		
IC671	S-80824CNNB-G-W	IC		
IC691	RS-771-X	RM.RECEIVER		
Q452	2SC1623A/5-6/-X	TRANSISTOR		
Q452	or 2SC3928A/QR/-X	TRANSISTOR		
Q453	2SC1623A/5-6/-X	TRANSISTOR		
Q453	or 2SC3928A/QR/-X	TRANSISTOR		
Q551	2SA812A/5-6/-X	TRANSISTOR		
Q551	or ISA1530AC1/QR/X	TRANSISTOR		
Q552	2SA812A/5-6/-X	TRANSISTOR		
Q552	or ISA1530AC1/QR/X	TRANSISTOR		
Q553	2SA812A/5-6/-X	TRANSISTOR		
Q553	or ISA1530AC1/QR/X	TRANSISTOR		
Q554	2SA812A/5-6/-X	TRANSISTOR		
Q554	or ISA1530AC1/QR/X	TRANSISTOR		
Q555	2SA812A/5-6/-X	TRANSISTOR		
Q555	or ISA1530AC1/QR/X	TRANSISTOR		
Q556	RT1P141C-X	DIGI TRANSISTOR		
Q556	or UN2111-X	TRANSISTOR		
Q557	RT1N141C-X	DIGI TRANSISTOR		
Q557	or UN2211-X	TRANSISTOR		
Q558	RT1N141C-X	DIGI TRANSISTOR		
Q558	or UN2211-X	TRANSISTOR		
Q559	RT1N141C-X	DIGI TRANSISTOR		
Q559	or UN2211-X	TRANSISTOR		
Q603	2SA2119K-X	TRANSISTOR		
Q604	2SA2119K-X	TRANSISTOR		
Q605	2SC5938A/B/-X	TRANSISTOR		
Q606	2SC5938A/B/-X	TRANSISTOR		
Q671	2SC1623A/5-6/-X	TRANSISTOR		
Q671	or 2SC3928A/QR/-X	TRANSISTOR		
Q672	RT1P141C-X	DIGI TRANSISTOR		
Q672	or UN2111-X	TRANSISTOR		
Q673	RT1N141C-X	DIGI TRANSISTOR		
Q673	or UN2211-X	TRANSISTOR		
Q4702	2SA812A/5-6/-X	TRANSISTOR		
Q4702	or ISA1530AC1/QR/X	TRANSISTOR		
Q4703	2SA812A/5-6/-X	TRANSISTOR		
Q4703	or ISA1530AC1/QR/X	TRANSISTOR		
Q4704	2SC1623A/5-6/-X	TRANSISTOR		
Q4704	or 2SC3928A/QR/-X	TRANSISTOR		
Q4706	2SA812A/5-6/-X	TRANSISTOR		
Q4706	or ISA1530AC1/QR/X	TRANSISTOR		
Q4707	RT1N441C-X	TRANSISTOR		
Q4707	or UN2213-X	DIGI TRANSISTOR		
Q4712	2SC1623A/5-6/-X	TRANSISTOR		
Q4712	or 2SC3928A/QR/-X	TRANSISTOR		
D454	MA111-X	SI DIODE		
D454	or 1SS355W-X	DIODE		
D542	NECBB205/WPQR/X	LED		
D601	MA8062/M/-X	Z DIODE		

Symbol No.	Part No.	Part Name	Description	Local
D601	or UDZW6.2B-X	Z DIODE		
D602	MA8062/M/-X	Z DIODE		
D602	or UDZW6.2B-X	Z DIODE		
D603	MA8062/M/-X	Z DIODE		
D603	or UDZW6.2B-X	Z DIODE		
D604	MA8062/M/-X	Z DIODE		
D604	or UDZW6.2B-X	Z DIODE		
D675	MA111-X	SI DIODE		
D675	or 1SS355W-X	DIODE		
D676	MA2SD32-X	DIODE		
D4701	MA8100/M/-X	Z DIODE		
D4701	or UDZW10B-X	Z DIODE		
D4702	MA111-X	SI DIODE		
D4702	or 1SS355W-X	DIODE		
D4703	MA111-X	SI DIODE		
D4703	or 1SS355W-X	DIODE		
D4704	MA111-X	SI DIODE		
D4704	or 1SS355W-X	DIODE		
C401	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C404	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C405	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C406	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C407	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C408	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C409	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C410	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C411	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C412	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C413	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C414	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C415	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C416	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C417	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C418	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C419	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C420	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C421	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C422	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C423	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C424	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C425	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C426	NCB20JK-106X	C CAPACITOR	10uF 6.3V K	
C427	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C428	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C429	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C430	NDCA1HJ-7R0W	C CAPACITOR	7pF 50V J	
C431	NDCA1HJ-7R0W	C CAPACITOR	7pF 50V J	
C432	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C433	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C434	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C435	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C436	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C437	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C438	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C439	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C441	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C442	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C443	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C444	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C445	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C447	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C448	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C449	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C450	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C451	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C452	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C457	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C459	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C460	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C482	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C483	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C484	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	
C486	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C489	NCB11AK-106X	C CAPACITOR	10uF 10V K	
C501	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C502	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C506	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C508	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		R492	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
C511	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R503	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
C512	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		R504	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
C515	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R516	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
C519	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R530	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
C520	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R532	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
C521	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R533	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C522	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R534	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C523	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R535	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C524	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R536	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
C525	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R539	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C526	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R540	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C527	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R541	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C528	NCB20JK-106X	C CAPACITOR	10uF 6.3V K		R544	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C531	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R545	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
C532	NDCA1HJ-4R0W	C CAPACITOR	4pF 50V J		R547	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
C533	NDCA1HJ-4R0W	C CAPACITOR	4pF 50V J		R556	NRSA6AJ-122W	MG RESISTOR	1.2kΩ 1/16W J	
C534	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R558	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
C535	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R559	NRSA6AJ-391W	MG RESISTOR	390Ω 1/16W J	
C537	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M		R563	NRSA6AJ-122W	MG RESISTOR	1.2kΩ 1/16W J	
C538	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R565	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
C541	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M		R566	NRSA6AJ-391W	MG RESISTOR	390Ω 1/16W J	
C551	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R570	NRSA6AJ-122W	MG RESISTOR	1.2kΩ 1/16W J	
C562	NCB20JK-106X	C CAPACITOR	10uF 6.3V K		R571	NRSA6AJ-391W	MG RESISTOR	390Ω 1/16W J	
C603	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K		R572	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
C604	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K		R574	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
C606	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K		R575	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C607	NBE21AM-226X	TA E CAPACITOR	22uF 10V M		R577	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
C608	NCB20JK-106X	C CAPACITOR	10uF 6.3V K		R578	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C609	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K		R580	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
C611	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R581	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C671	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		R583	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
C673	NCBA1CK-473W	C CAPACITOR	0.047uF 16V K		R584	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C674	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R586	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
C692	NCB20JK-106X	C CAPACITOR	10uF 6.3V K		R587	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C4701	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R591	NRSA6AJ-221W	MG RESISTOR	220Ω 1/16W J	
C4901	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R594	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
C4902	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K		R601	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
C4903	NCJ21CK-106X-R	C CAPACITOR	10uF 16V K		R602	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
C4904	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R605	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R402	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R606	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R406	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J		R607	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R407	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J		R608	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R408	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R609	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R409	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R611	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R410	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J		R612	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R411	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J		R615	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R412	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R616	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R413	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R622	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R414	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R626	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R415	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R630	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R416	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R631	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R417	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J		R633	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R420	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J		R636	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R421	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J		R637	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R422	NRSA6AJ-681W	MG RESISTOR	680Ω 1/16W J		R646	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R424	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R648	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R425	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J		R649	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R426	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R660	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R433	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R661	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R434	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J		R671	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R436	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J		R676	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J	
R437	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J		R680	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R441	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J		R684	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R442	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R685	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R451	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J		R686	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R460	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R688	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R465	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R691	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R466	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R692	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
R467	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R693	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R468	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R694	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R471	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J		R4700	NRSA6AJ-562W	MG RESISTOR	5.6kΩ 1/16W J	
R472	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R4701	NRSA6AJ-562W	MG RESISTOR	5.6kΩ 1/16W J	
R473	NRSA6AJ-512W	MG RESISTOR	5.1kΩ 1/16W J		R4702	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R474	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J		R4703	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R485	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J		R4704	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R491	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J		R4705	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
					R4706	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	

△ Symbol No. Part No. Part Name Description Local

## Front end board

Block No. [0][4]

△ Symbol No.	Part No.	Part Name	Description	Local
R4707	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R4708	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R4709	NRSA6AJ-153W	MG RESISTOR	15kΩ 1/16W J	
R4710	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4712	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4713	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4714	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4801	NRSA6AD-820W	MG RESISTOR	82Ω 1/16W D	
R4802	NRSA6AD-470W	MG RESISTOR	47Ω 1/16W D	
R4803	NRSA6AD-121W	MG RESISTOR	120Ω 1/16W D	
R4804	NRSA6AD-820W	MG RESISTOR	82Ω 1/16W D	
R4805	NRSA6AD-470W	MG RESISTOR	47Ω 1/16W D	
R4806	NRSA6AD-470W	MG RESISTOR	47Ω 1/16W D	
R4807	NRSA6AD-470W	MG RESISTOR	47Ω 1/16W D	
R4808	NRSA6AD-470W	MG RESISTOR	47Ω 1/16W D	
R4809	NRSA6AD-820W	MG RESISTOR	82Ω 1/16W D	
R4810	NRSA6AD-121W	MG RESISTOR	120Ω 1/16W D	
R4811	NRSA6AD-470W	MG RESISTOR	47Ω 1/16W D	
R4812	NRSA6AD-820W	MG RESISTOR	82Ω 1/16W D	
R4920	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4930	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4933	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4935	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R4936	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4937	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4938	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R5510	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5511	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R5512	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5513	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R5514	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R5515	NRSA6AJ-153W	MG RESISTOR	15kΩ 1/16W J	
RA401	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA402	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA403	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA404	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA405	NRZ0034-330W	NET RESISTOR	33Ω 1/32W J x4	
RA406	NRZ0034-330W	NET RESISTOR	33Ω 1/32W J x4	
RA407	NRZ0034-330W	NET RESISTOR	33Ω 1/32W J x4	
RA408	NRZ0034-330W	NET RESISTOR	33Ω 1/32W J x4	
RA409	NRZ0034-330W	NET RESISTOR	33Ω 1/32W J x4	
RA410	NRZ0034-330W	NET RESISTOR	33Ω 1/32W J x4	
RA411	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA412	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA413	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA414	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA415	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA416	NRZ0034-220W	NET RESISTOR	22Ω 1/32W J x4	
RA501	NRZ0034-470W	NET RESISTOR	47Ω 1/32W J x4	
RA502	NRZ0034-470W	NET RESISTOR	47Ω 1/32W J x4	
RA503	NRZ0034-470W	NET RESISTOR	47Ω 1/32W J x4	
RA504	NRZ0034-470W	NET RESISTOR	47Ω 1/32W J x4	
L401	NQL382M-220X	COIL	22uH M	
L451	NQL382M-220X	COIL	22uH M	
L452	NQL382M-220X	COIL	22uH M	
L501	NQL382M-220X	COIL	22uH M	
L556	NQL382M-220X	COIL	22uH M	
L601	NQL382M-220X	COIL	22uH M	
CN401	QGF0534F2-60X	CONNECTOR	FFC/FPC (1-60)	
CN402	QGF0534F2-10X	CONNECTOR	FFC/FPC (1-10)	
CN551	QGB0525M1-30X	CONNECTOR	B-B (1-30)	
CN602	QGF0534F2-08X	CONNECTOR	FFC/FPC (1-8)	
S601	NSW0246-001X	TACK SW		
S671	NSW0246-001X	TACK SW		
X401	NAX1038-001X	CRYSTAL		
X501	NAX1037-001X	CRYSTAL		

△ Symbol No. Part No. Part Name Description Local

△ Symbol No.	Part No.	Part Name	Description	Local
IC1	BD8215EFV-X	IC		
IC3	MM3233CF-X	IC		
IC4	AK4387ET-X	IC		
IC5	AK4387ET-X	IC		
IC7	TC7PA53FU-X	IC		
IC8	MFI341S2162-X	IC		
IC301	MM2DS0018MA	IC		
IC302	MM1701CH-X	IC		
IC308	NJU6368PF1-X	IC		
IC398	VDG1368-D021AWS	IC(MICRO C ROM)		
IC399	M12L128168A-7TG	IC(DIGITAL)		
IC399	or HY57V281620FTH	IC(DIGITAL)		
IC400	AK4387ET-X	IC		
IC481	BR24S32FVT-W-X	IC(DIGITAL)		
IC501	TC74LCX373FT-X	IC(DIGITAL)		
IC502	TC74LCX373FT-X	IC(DIGITAL)		
Q2	RT1N141U-X	RANSISTOR		
Q4	2SD601A/R/-X	TRANSISTOR		
Q4	or 2SC3928A/R/-X	TRANSISTOR		
Q7	2SD601A/R/-X	TRANSISTOR		
Q7	or 2SC3928A/R/-X	TRANSISTOR		
Q8	2SA1774/R/-X	TRANSISTOR		
Q9	2SC4617/R/-X	TRANSISTOR		
Q101	2SB1424/R/-W	TRANSISTOR		
Q102	2SC4617/R/-X	TRANSISTOR		
Q103	2SB1424/R/-W	TRANSISTOR		
Q104	2SC4617/R/-X	TRANSISTOR		
Q105	2SC4617/R/-X	TRANSISTOR		
Q106	2SK3546J-X	MOS FET		
Q107	2SK3546J-X	MOS FET		
Q301	RT1N441U-X	DIGI TRANSISTOR		
Q302	RT1N441U-X	DIGI TRANSISTOR		
D6	AN1102W-6-X	IR LED		
D7	AN1102W-6-X	IR LED		
D9	PS1192HB-22-X	PHOTO TRANSISTOR		
D11	PS1192HB-22-X	PHOTO TRANSISTOR		
C2	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C3	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C5	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C8	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C9	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C11	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C12	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C13	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C14	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C15	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C16	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C17	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C18	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C19	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C20	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C21	NBE41AM-476X	TA E CAPACITOR	47uF 10V M	
C22	NBE41AM-476X	TA E CAPACITOR	47uF 10V M	
C23	NBE41AM-476X	TA E CAPACITOR	47uF 10V M	
C24	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C25	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C26	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C31	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C32	NCB31HK-561X	C CAPACITOR	560pF 50V K	
C48	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C50	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C51	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J	
C52	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J	
C60	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C63	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C65	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	



△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C66	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C199	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C67	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C200	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C68	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C69	NCB21CK-105X	C CAPACITOR	1uF 16V K		C205	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C70	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C206	NDC31HJ-222X	C CAPACITOR	2200pF 50V J	
C71	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C211	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C72	NCB31CK-105X	C CAPACITOR	1uF 16V K		C215	NDC31HJ-181X	C CAPACITOR	180pF 50V J	
C73	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C216	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C74	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C218	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C75	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C219	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C76	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C220	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C77	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C222	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C78	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C223	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C79	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C224	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C80	NCB21CK-105X	C CAPACITOR	1uF 16V K		C225	NBE61CM-107X	TA E CAPACITOR	100uF 16V M	
C81	NDC31HJ-120X	C CAPACITOR	12pF 50V J		C228	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C82	NDC31HJ-150X	C CAPACITOR	15pF 50V J		C229	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C83	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C232	NBE61CM-107X	TA E CAPACITOR	100uF 16V M	
C84	NCB31CK-333X	C CAPACITOR	0.033uF 16V K		C233	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C85	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C235	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C86	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C237	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C87	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C238	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C88	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C240	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C89	NCB31HK-183X	C CAPACITOR	0.018uF 50V K		C241	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C90	NCB31HK-562X	C CAPACITOR	5600pF 50V K						
C91	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C92	NCB21CK-105X	C CAPACITOR	1uF 16V K		R22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C93	NCB21CK-105X	C CAPACITOR	1uF 16V K		R25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C99	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C100	NCB31CK-684X	C CAPACITOR	0.68uF 16V K		R36	NRSA6AD-153W	MG RESISTOR	15kΩ 1/16W D	
C101	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R37	NRSA6AD-153W	MG RESISTOR	15kΩ 1/16W D	
C102	NCB31CK-684X	C CAPACITOR	0.68uF 16V K		R46	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C109	NCB21CK-105X	C CAPACITOR	1uF 16V K		R47	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C113	NCB21CK-105X	C CAPACITOR	1uF 16V K		R49	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C117	NCB21CK-105X	C CAPACITOR	1uF 16V K		R51	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C118	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R52	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C121	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R53	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C122	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R54	NRSA6AD-910W	MG RESISTOR	91Ω 1/16W D	
C126	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R55	NRSA6AD-910W	MG RESISTOR	91Ω 1/16W D	
C127	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R56	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D	
C128	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R57	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D	
C129	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R58	NRS125J-390X	MG RESISTOR	39Ω 1/2W J	
C130	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R59	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
C131	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R60	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D	
C132	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R61	NRSA6AD-471W	MG RESISTOR	470Ω 1/16W D	
C133	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R62	NRSA6AD-471W	MG RESISTOR	470Ω 1/16W D	
C134	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R64	NRSA63D-432X	MG RESISTOR	4.3kΩ 1/16W D	
C135	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R65	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D	
C136	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R66	NRS125J-120X	MG RESISTOR	12Ω 1/2W J	
C137	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M		R67	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
C139	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M		R68	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D	
C140	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R69	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C141	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R70	NRSA6AD-331W	MG RESISTOR	330Ω 1/16W D	
C142	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R77	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
C143	NBE41AM-476X	TA E CAPACITOR	47uF 10V M		R79	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
C144	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R83	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C145	NBE41AM-476X	TA E CAPACITOR	47uF 10V M		R87	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C146	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R89	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C148	NCB31HK-331X	C CAPACITOR	330pF 50V K		R90	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C149	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R92	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C151	NCB31CK-473X	C CAPACITOR	0.047uF 16V K		R93	NRSA6AD-203W	MG RESISTOR	20kΩ 1/16W D	
C155	NDC31HJ-101X	C CAPACITOR	100pF 50V J		R94	NRSA6AD-223W	MG RESISTOR	22kΩ 1/16W D	
C156	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R98	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C158	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R100	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C159	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C161	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R105	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C162	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R106	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C164	NCB21CK-105X	C CAPACITOR	1uF 16V K		R107	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
C165	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R109	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C167	NDC31HJ-272X	C CAPACITOR	2700pF 50V J		R112	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C170	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R113	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
C173	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R114	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C174	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R117	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
C175	NBE61CM-107X	TA E CAPACITOR	100uF 16V M		R118	NRSA6AD-101W	MG RESISTOR	100Ω 1/16W D	
C176	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R119	NRSA63D-471X	MG RESISTOR	470Ω 1/16W D	
C177	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R120	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
C178	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R125	NRSA63J-120X	MG RESISTOR	12Ω 1/16W J	
C197	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R126	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	

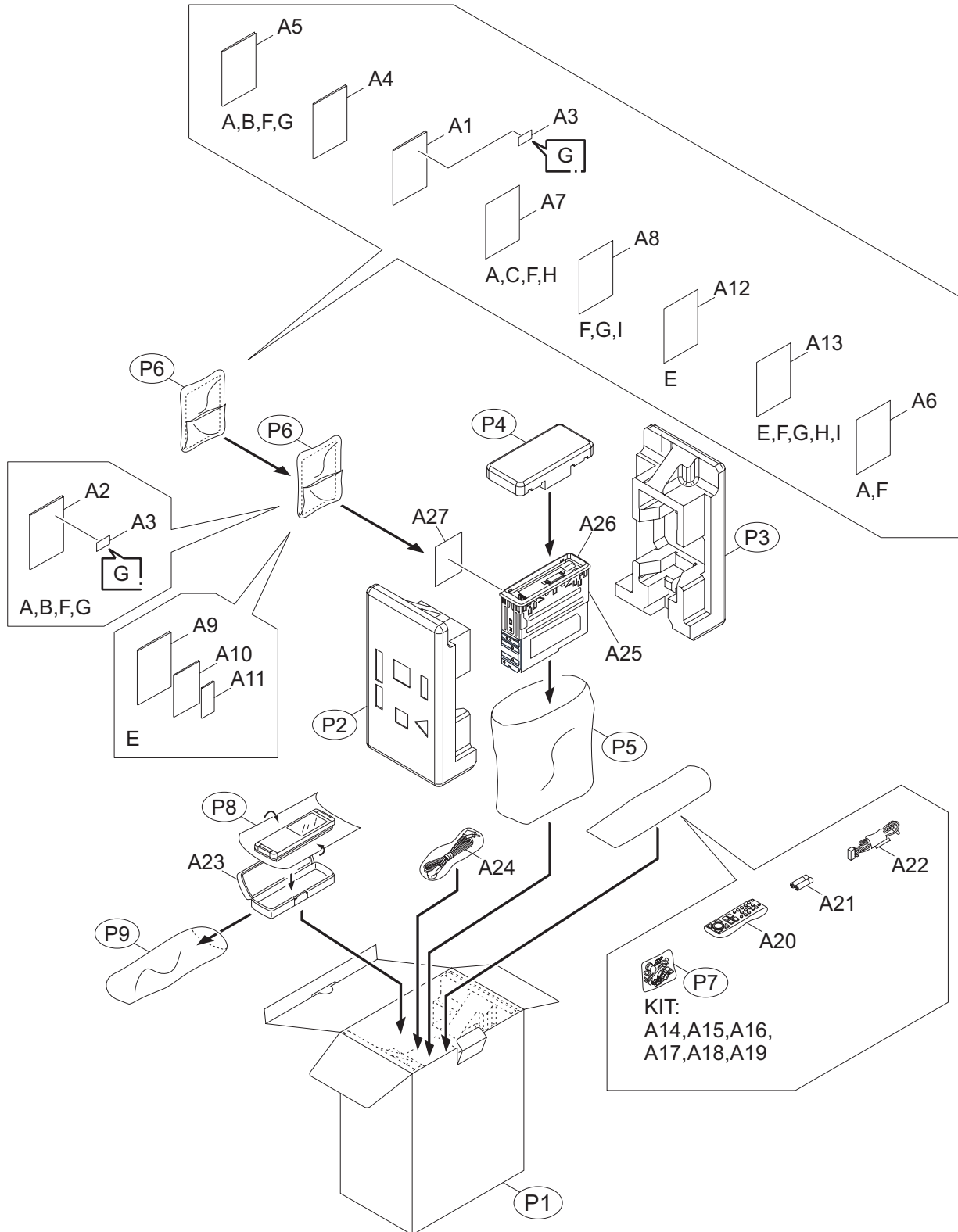
△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R128	NRSA6AD-270W	MG RESISTOR	27Ω 1/16W D		R376	NRSA6AD-822W	MG RESISTOR	8.2kΩ 1/16W D	
R129	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R379	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R131	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D		R380	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R132	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D		R382	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D	
R133	NRSA6AD-223W	MG RESISTOR	22kΩ 1/16W D		R383	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R134	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D		R384	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
R136	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R386	NRSA6AD-184W	MG RESISTOR	180kΩ 1/16W D	
R137	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R387	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R138	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R391	NRSA6AD-822W	MG RESISTOR	8.2kΩ 1/16W D	
R141	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D		R392	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R142	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R393	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
R143	NRSA6AD-101W	MG RESISTOR	100Ω 1/16W D		R394	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R144	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R397	NRSA6AD-101W	MG RESISTOR	100Ω 1/16W D	
R145	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R400	NRSA6AD-153W	MG RESISTOR	15kΩ 1/16W D	
R152	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R402	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R153	NRSA63D-162X	MG RESISTOR	1.6kΩ 1/16W D		R403	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R155	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R406	NRS125J-R22X	MG RESISTOR	0.22Ω 1/2W J	
R156	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		R417	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R160	NRSA63D-303X	MG RESISTOR	30kΩ 1/16W D		R419	NRSA63D-104X	MG RESISTOR	100kΩ 1/16W D	
R163	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		R420	NRSA6AD-184W	MG RESISTOR	180kΩ 1/16W D	
R164	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J		L302	NQLA3GK-100X	COIL	10uH K	
R165	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D		L303	NQLA3GK-100X	COIL	10uH K	
R166	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D		CN1	QGF0523F3-20W	CONNECTOR	FFC/FPC (1-20)	
R168	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D		CN2	QGA1002F1-03X	CONNECTOR	W-B (1-3)	
R170	NRSA6AD-471W	MG RESISTOR	470Ω 1/16W D		CN101	QGF0522F2-26W	CONNECTOR	FFC/FPC (1-26)	
R171	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		CN403	QGF0534F3-50X	CONNECTOR	FFC/FPC (1-50)	
R172	NRSA6AD-101W	MG RESISTOR	100Ω 1/16W D		K7	NQR0022-005X	FERRITE BEADS		
R173	NRSA6AD-101W	MG RESISTOR	100Ω 1/16W D		K8	NQR0022-005X	FERRITE BEADS		
R174	NRSA6AD-101W	MG RESISTOR	100Ω 1/16W D		K9	NQR0022-005X	FERRITE BEADS		
R177	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K10	NQR0022-005X	FERRITE BEADS		
R178	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K101	NQR0007-002X	FERRITE BEADS		
R181	NQR0129-002X	FERRITE BEADS			K102	NQR0007-002X	FERRITE BEADS		
R183	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K103	NQR0502-001X	FERRITE BEADS		
R184	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K104	NQR0502-001X	FERRITE BEADS		
R187	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K105	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R189	NRSA6AD-331W	MG RESISTOR	330Ω 1/16W D		K106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R190	NRSA6AD-331W	MG RESISTOR	330Ω 1/16W D		K107	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R195	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D		K108	NQR0129-002X	FERRITE BEADS		
R211	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D		K110	NQR0129-002X	FERRITE BEADS		
R213	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J		K111	NQR0129-002X	FERRITE BEADS		
R214	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K113	NQR0502-001X	FERRITE BEADS		
R215	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D		K114	NQR0022-005X	FERRITE BEADS		
R216	NRSA63D-122X	MG RESISTOR	1.2kΩ 1/16W D		K115	NQR0022-005X	FERRITE BEADS		
R217	NRSA6AD-100W	MG RESISTOR	10Ω 1/16W D		K117	NQR0022-005X	FERRITE BEADS		
R218	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K118	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R220	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K119	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R226	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D		K120	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R227	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		K121	NQL093K-1R8X	COIL	1.8uH K	
R228	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		K131	NQR0022-005X	FERRITE BEADS		
R229	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K132	NQR0022-005X	FERRITE BEADS		
R233	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		K133	NQR0022-005X	FERRITE BEADS		
R264	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K134	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R265	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D		K135	NQR0022-005X	FERRITE BEADS		
R267	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D		K136	NQR0022-005X	FERRITE BEADS		
R268	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J		K137	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R305	NRS181F-330X	MG RESISTOR	33Ω 1/8W F		K141	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R306	NRS181F-330X	MG RESISTOR	33Ω 1/8W F		K142	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	
R309	NRS125J-R47X	MG RESISTOR	0.47Ω 1/2W J		S1	NSW0313-001X	DETECT SWITCH		
R310	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D		TH491	NAD0025-103X	N THERMISTOR	10kΩ	
R311	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J		X351	NAX0741-001X	CRYSTAL	27.000MHz	
R318	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J		X354	NAX0927-001X	CRYSTAL		
R319	NRSA6AD-622W	MG RESISTOR	6.2kΩ 1/16W D						
R323	NRSA6AD-391W	MG RESISTOR	390Ω 1/16W D						
R324	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D						
R325	NRSA63D-753X	MG RESISTOR	75kΩ 1/16W D						
R329	NRS125J-R47X	MG RESISTOR	0.47Ω 1/2W J						
R352	NRSA6AD-102W	MG RESISTOR	1kΩ 1/16W D						
R357	NRS125J-R22X	MG RESISTOR	0.22Ω 1/2W J						
R358	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J						
R359	NRSA6AD-243W	MG RESISTOR	24kΩ 1/16W D						
R362	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J						
R364	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J						
R365	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D						
R366	NRS125J-R22X	MG RESISTOR	0.22Ω 1/2W J						
R367	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D						
R369	NRS125J-R22X	MG RESISTOR	0.22Ω 1/2W J						
R371	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J						
R375	NRSA6AD-152W	MG RESISTOR	1.5kΩ 1/16W D						

**<MEMO>**

# Packing materials and accessories parts list

Block No. M 3 M M

No additional / supplemental order of WARRANTY CARDS are available.



The parts without symbol number are not service.

# Packing and Accessories

Block No. [M][3][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	LVT1938-001A	INST BOOK	ENG GER FRE DUT	A,F
A 1	LVT1938-003A	INST BOOK	ENG SPA FRE	B,G
A 1	LVT1938-005A	INST BOOK	ENG RUS UKR	C,H
A 1	LVT1938-006A	INST BOOK	ENG	D,I
A 1	LVT1937-001A	INST BOOK	ENG SPA FRE	E
A 2	LVT1938-002A	INST BOOK	SPA ITA POR SWE	A,F
A 2	LVT1938-004A	INST BOOK	TUR RUS PER	B,G
A 3	LV45225-001A	BT LABEL	(x2)	G
A 4	LVT1938-007A	INSTALL MANUAL	ENG GER FRE DUT	A,F
A 4	LVT1938-009A	INSTALL MANUAL	ENG SPA FRE	B,G
A 4	LVT1938-011A	INSTALL MANUAL	ENG RUS UKR	C,H
A 4	LVT1938-012A	INSTALL MANUAL	ENG	D,I
A 4	LVT1937-002A	INSTALL MANUAL	ENG SPA FRE	E
A 5	LVT1938-008A	INSTALL MANUAL	SPA ITA POR SWE	A,F
A 5	LVT1938-010A	INSTALL MANUAL	TUR RUS PER	B,G
A 6	VND3050-002	IDENTITY CARD		A,F
A 7	-----	WARRANTY CARD	BT-54039-1	A,C,F,H
A 8	LVT1946-001A	ECDOC SHEET		F,G,I
A 9	-----	WARRANTY CARD	BT-52008-1	E
A 10	-----	WARRANTY CARD	BT-51018-6	E
A 11	BT-51044-1	REGISTRATION CARD		E
A 12	LVT1920-002A	CAUTION SHEET		E
A 13	LVT1672-003A	INST SHEET		E,F,G,H,I
A 14	VKZ4027-202	PLUG NUT		
A 15	VKH4871-003	MOUNT BOLT		
A 16	VKZ4328-003	LOCK NUT		
A 17	QYWWS53A008ZA	WASHER	0mm/5.3mm x	
A 18	GE40130-002A	HOOK	(x2)	
A 19	LV41478-001A	CORD CONNECTER		
A 20	RM-RK252	REMOCON UNIT		
A 21	-----	BATTERY	(x2)	
A 22	QAM1081-001	CAR CABLE		A,B,C,F,G,H
A 22	QAM1194-001	CAR CABLE		D,I
A 22	QAM1080-001	CAR CABLE		E
A 23	LV35787-005A	HARD CASE ASSY		
A 24	QAN0096-001	MICROPHONE		E,F,G,H,I
A 25	GE20137-003A	MOUNTING SLEEVE		
A 26	LV22277-009A	TRIM		
A 27	LVT1941-001A	CAUTION SHEET		
KIT	SRW-NX5000E	SCREW PARTS KIT	A14 A15 A16 A17 A18 A19	
P 1	LV38554-001A	CARTON		A,B,D
P 1	LV38555-001A	CARTON		C
P 1	LV38551-001A	CARTON		E
P 1	LV38552-001A	CARTON		F,G,I
P 1	LV38553-001A	CARTON		H
P 2	LV11613-001A	CUSHION(L)		
P 3	LV11614-001A	CUSHION(R)		
P 4	LV22311-002A	CUSHION(M)		
P 5	QPC03004315PB	POLY BAG	30cm x 43cm	
P 6	FSPG4002-001	POLY BAG	(x2)	A,B,E,F,G
P 6	FSPG4002-001	POLY BAG		C,D,H,I
P 7	QPA00801205	POLY BAG	8cm x 12cm	
P 8	GE40467-002A	NON WOVEN SHEET		
P 9	QPA01003003	POLY BAG	10cm x 30cm	

# JVC

## SCHEMATIC DIAGRAMS

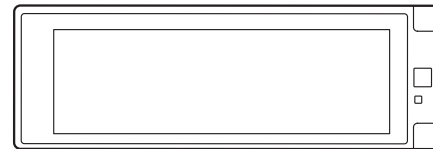
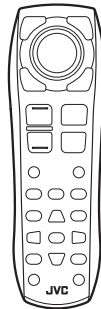
### DVD/CD RECEIVER

**KD-AVX55E, KD-AVX55EU,  
KD-AVX55EE, KD-AVX55A,  
KD-AVX77J, KD-AVX77E,  
KD-AVX77EU, KD-AVX77EE,  
KD-AVX77A**

DVD-ROM No.SML2009Q1



Only for KD-AVX77J



**Bluetooth® Radio Data System**

Only for KD-AVX77

Except KD-AVX77J



Except KD-AVX77J

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)  
Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade)

### Contents

Block diagram .....	2-1
Standard schematic diagrams .....	2-3
Printed circuit boards .....	2-16 to 19

## Safety precaution



**CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.



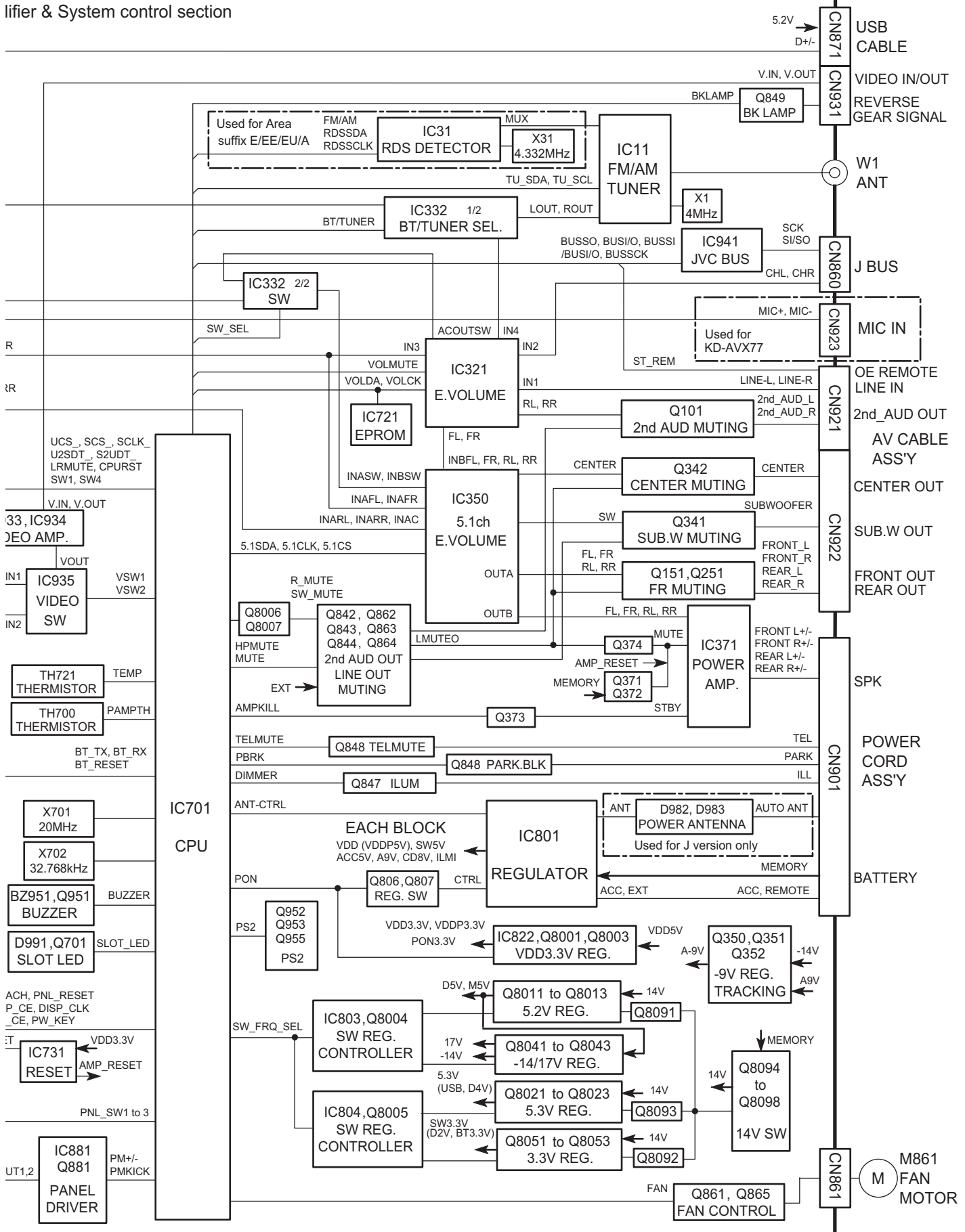
**CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

< MEMO >



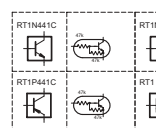
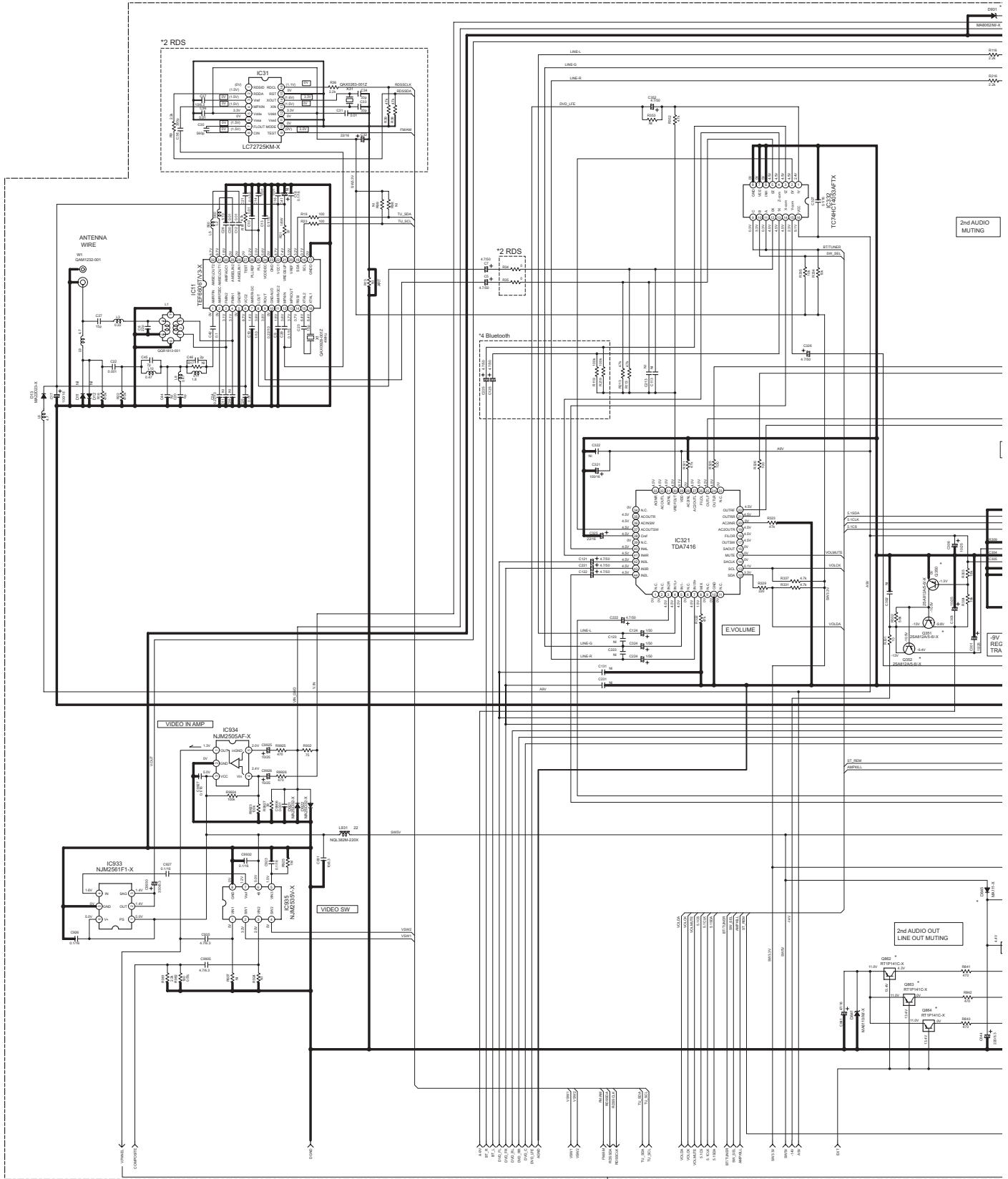


ifier & System control section



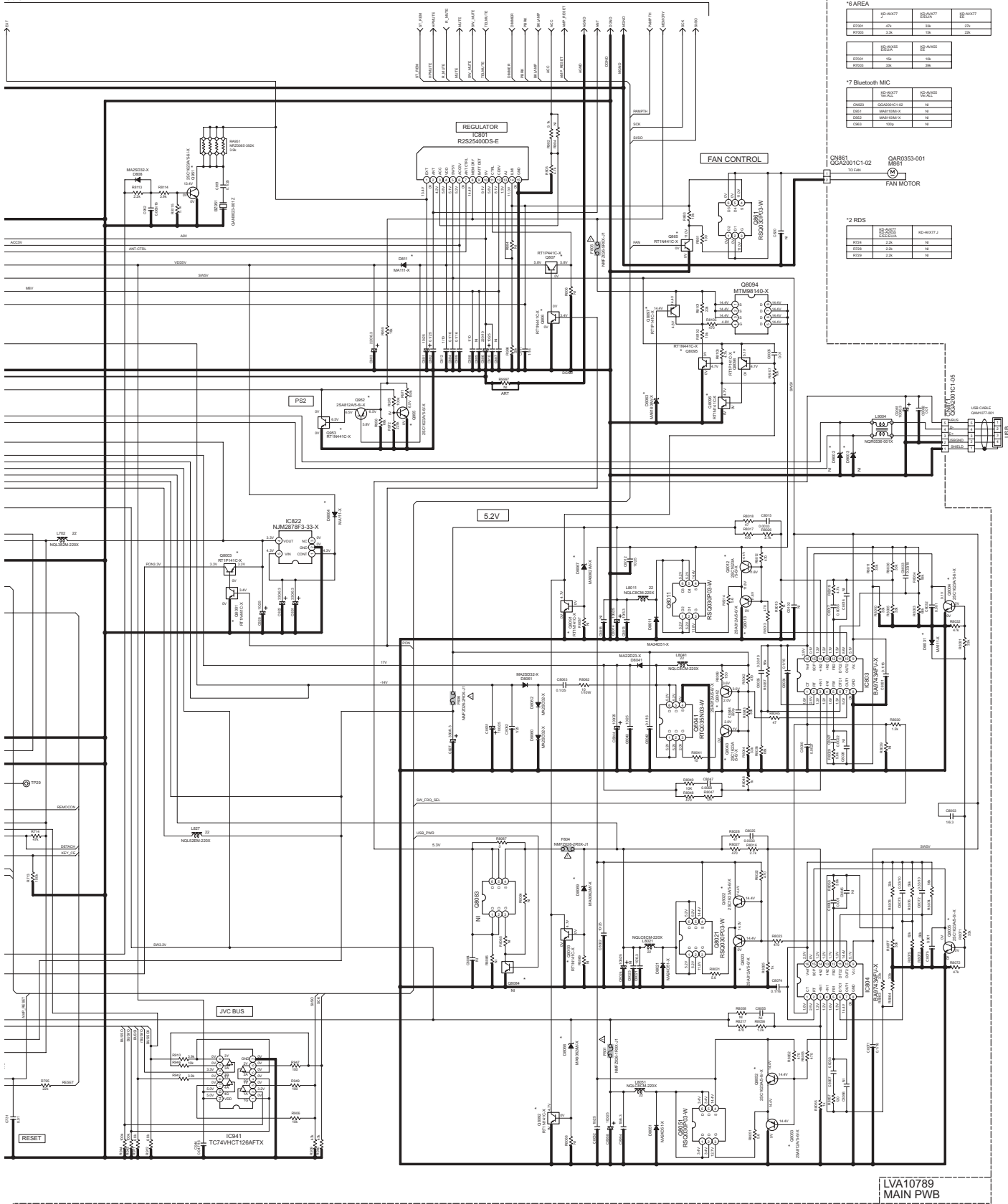
# Standard schematic diagrams

## ■ Main section 1









\*6 AREA

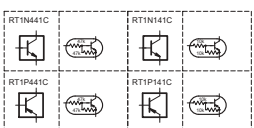
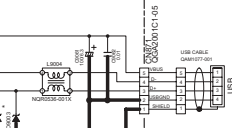
IC801	IC802	IC803	IC804
R25C4003E-E	R25C4003E-E	R25C4003E-E	R25C4003E-E
15V	15V	15V	15V
15V	15V	15V	15V

\*7 Bluetooth MIC

IC805	IC806	IC807	IC808
RECO3033W	RECO3033W	RECO3033W	RECO3033W
15V	15V	15V	15V
15V	15V	15V	15V

\*2 RDS

IC809	IC810	IC811	IC812
RECO3033W	RECO3033W	RECO3033W	RECO3033W
15V	15V	15V	15V
15V	15V	15V	15V

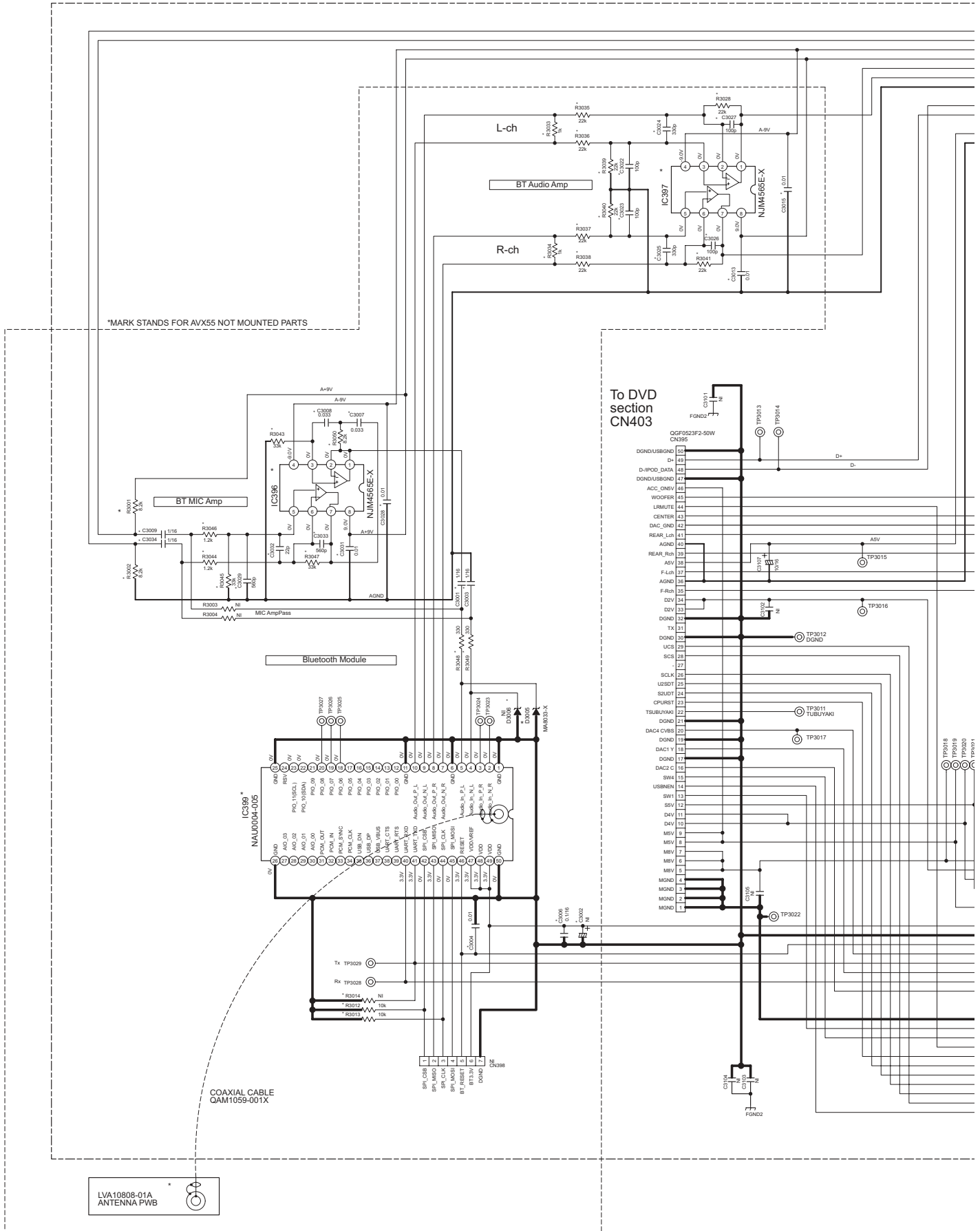


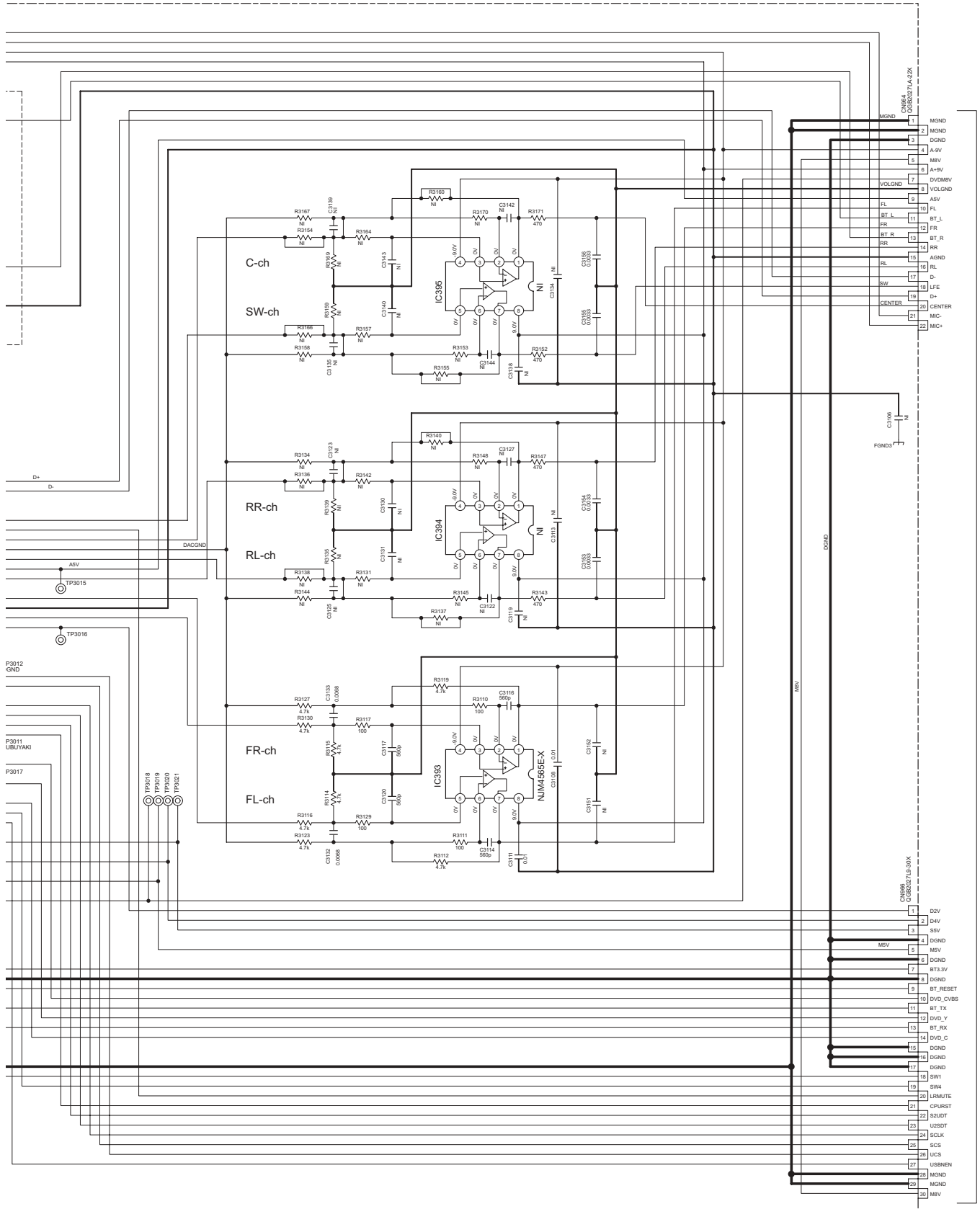
- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION — DVD PLAYBACK MODE WITH DVD TEST DISC LOSE!
  - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/8W-0% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V/20% CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN (P/F/PF). ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/(RATED VOLTAGE).
  - = PEEK CAPACITOR
  - NI STANDS FOR NOT MOUNTED PARTS

Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

LVA10789 MAIN PWB

# Connection section 1





NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.  
CONDITION — DVD PLAYBACK MODE WITH DVD TEST DISC V-907.
2. UNLESS OTHERWISE SPECIFIED,  
ALL RESISTORS ARE 1/16W +5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V/25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM.  
ALL CAPACITANCE VALUES ARE IN pF(P=pF)  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(VF)RATED VOLTAGE(V)  
F — FILM CAPACITOR  
3. NI STANDS FOR NOT MOUNTED PARTS

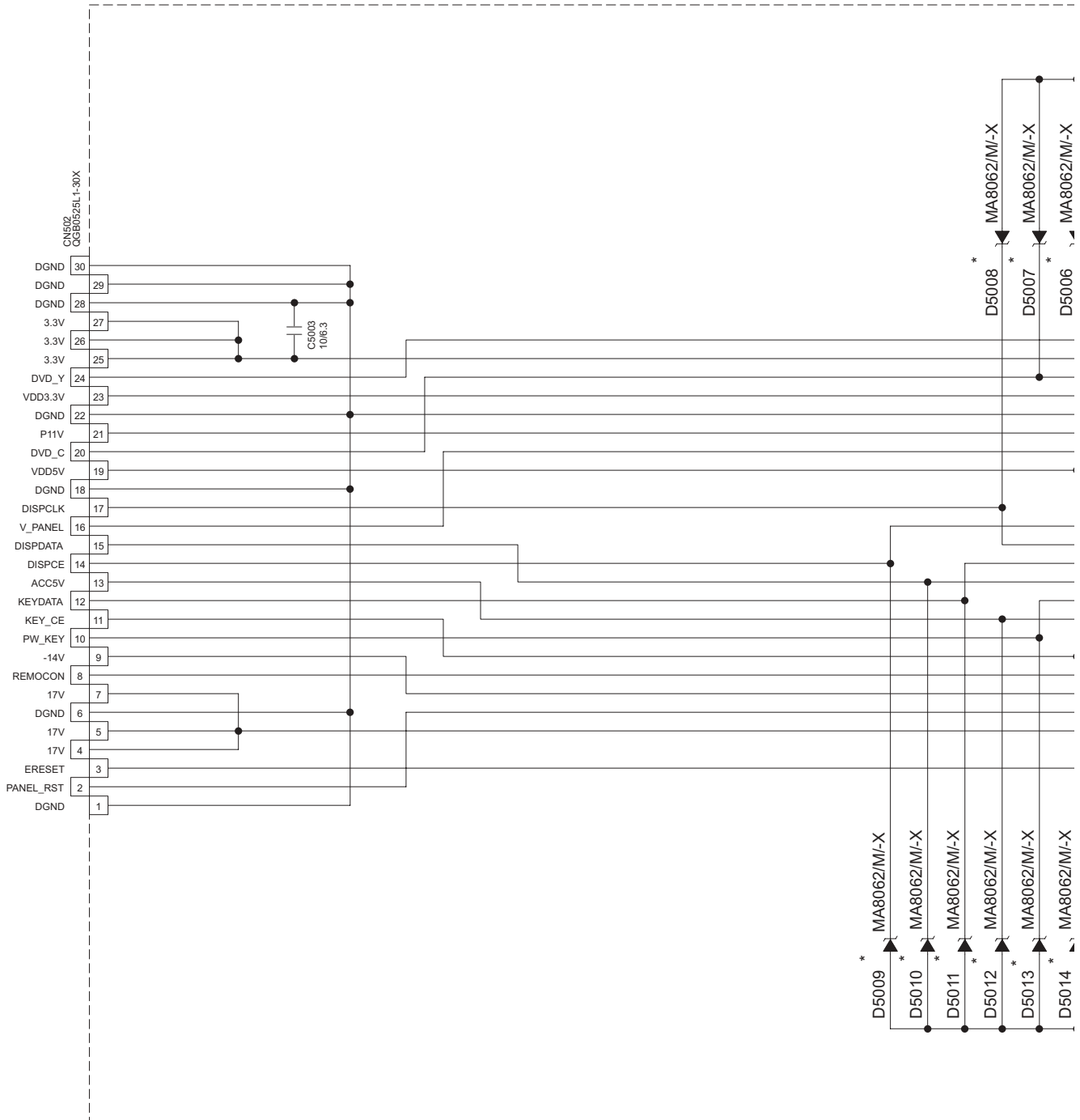
To Main section 2  
CN961

To Main section 2  
CN963



## ■ Connection section 2

To Panel section  
CN551

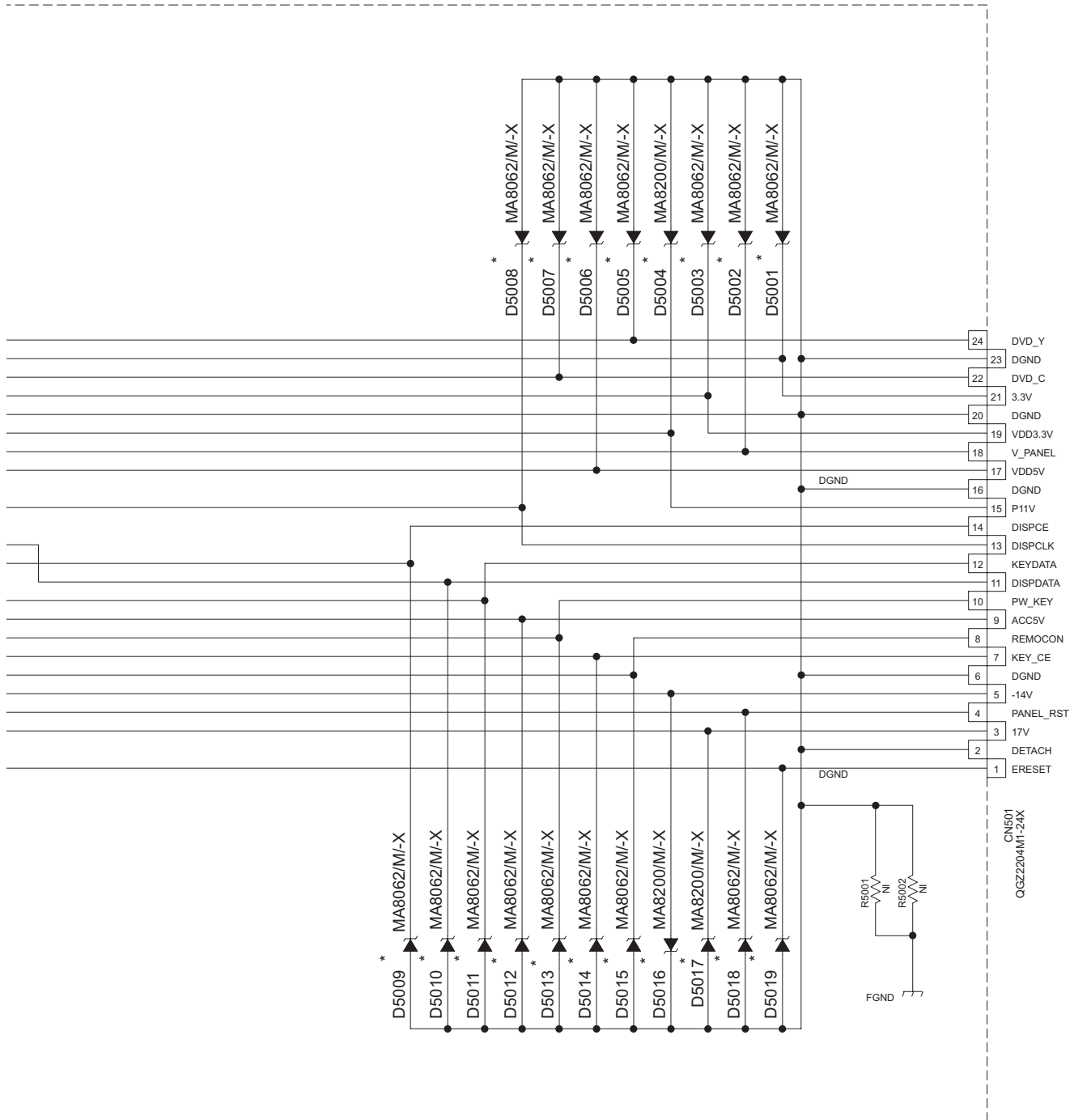


### NOTES

- VOLTAGES ARE DC-MEASURED WITH A DI CONDITION -- DVD PLAYBACK MODE WIT
- UNLESS OTHERWISE SPECIFIED.  
ALL RESISTORS ARE 1/16W +5% METAL C  
ALL CAPACITORS ARE 50V,25V CERAMIC  
ALL RESISTANCE VALUES ARE IN OHM.  
ALL CAPACITANCE VALUES ARE IN µF(P=  
ALL E.CAPACITORS ARE SHOWN IN THE I  
F --- FILM CAPACITOR
- NI STANDS FOR NOT MOUNTED PARTS

\*1 OR LIST

	O	R
D5001,D5002,D5003 D5004,D5005,D5006 D5007,D5008,D5009 D5010,D5011,D5012 D5013,D5014,D5015 D5018,D5019	MA8062/M-X	UDZW6.2B-X
D5004,D5016,D5017	MA8020/M-X	UDZW20B-X

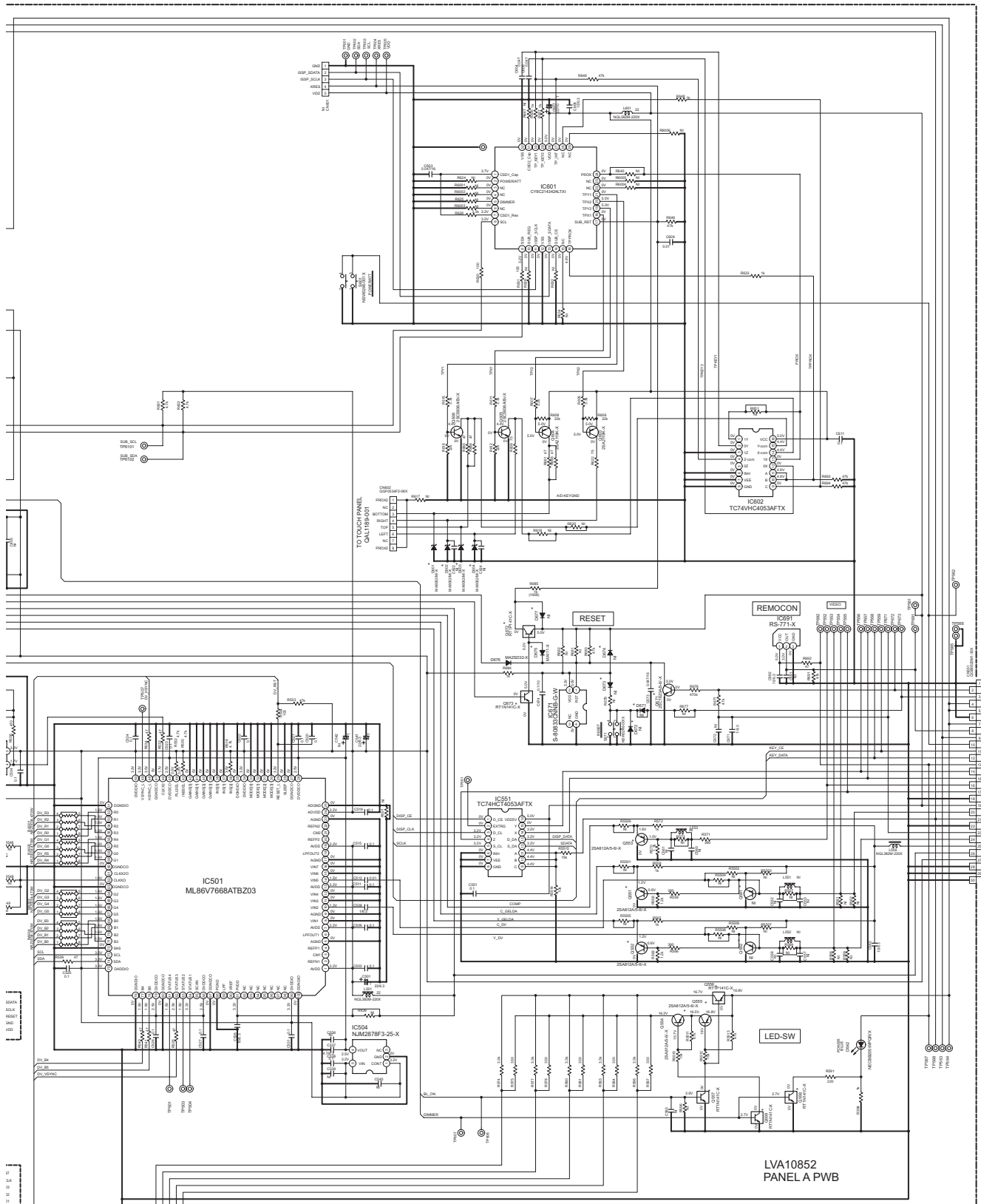


To Main section 2  
CN962

NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION --- DVD PLAYBACK MODE WITH DVD TEST DISC V-507.
- UNLESS OTHERWISE SPECIFIED.  
ALL RESISTORS ARE 1/16W +5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V,25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM.  
ALL CAPACITANCE VALUES ARE IN uF(P=pF)  
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)  
F --- FILM CAPACITOR
- NI STANDS FOR NOT MOUNTED PARTS





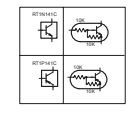
To Connection section 2  
CN502

2 OR LIST

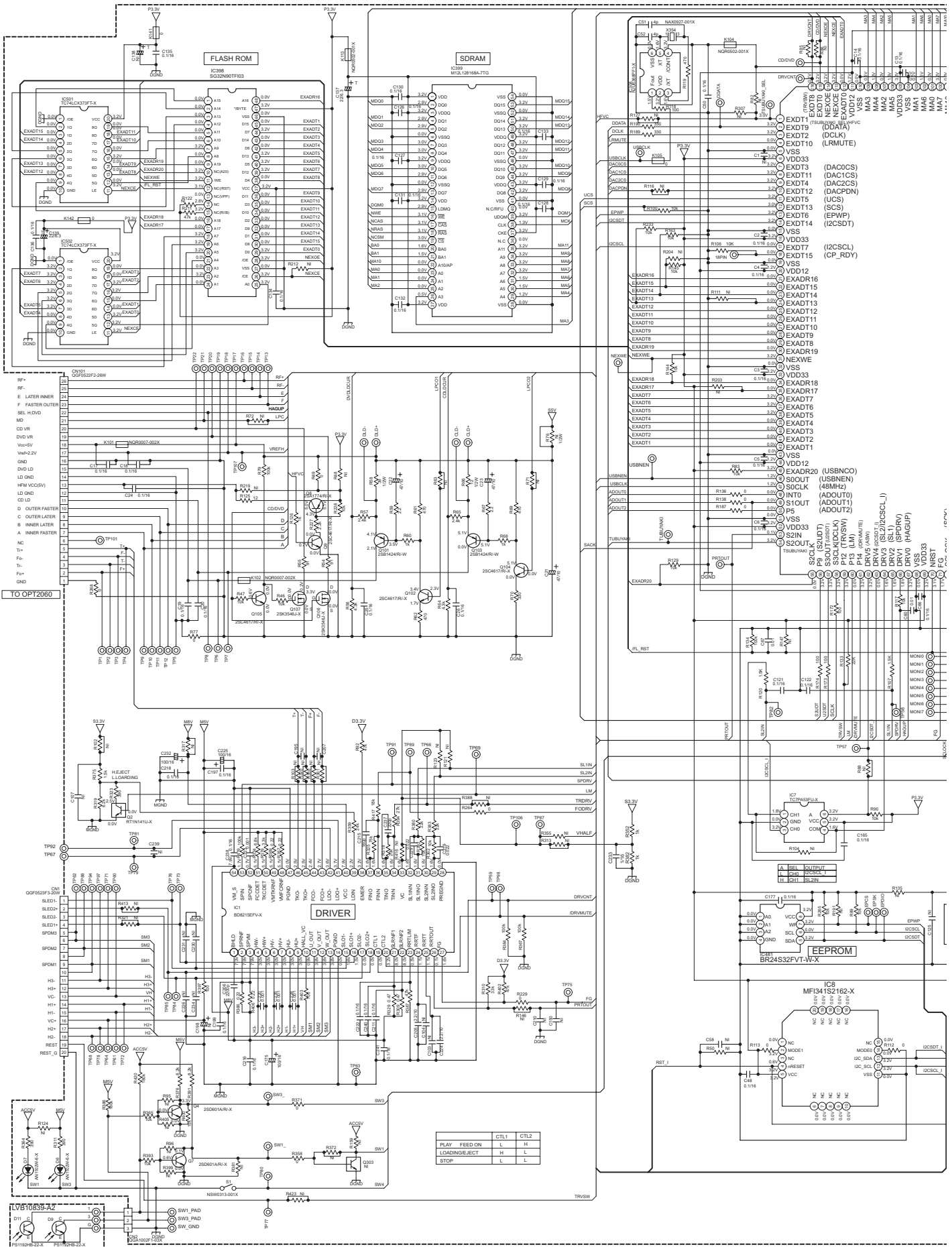
Q	D	R
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Q002	Q002	Q002
Q003	Q003	Q003
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Q007	Q007	Q007
Q008	Q008	Q008
Q009	Q009	Q009
Q010	Q010	Q010
Q011	Q011	Q011
Q012	Q012	Q012
Q013	Q013	Q013
Q014	Q014	Q014
Q015	Q015	Q015
Q016	Q016	Q016
Q017	Q017	Q017
Q018	Q018	Q018
Q019	Q019	Q019
Q020	Q020	Q020
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Q025	Q025	Q025
Q026	Q026	Q026
Q027	Q027	Q027
Q028	Q028	Q028
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Q100	Q100	Q100

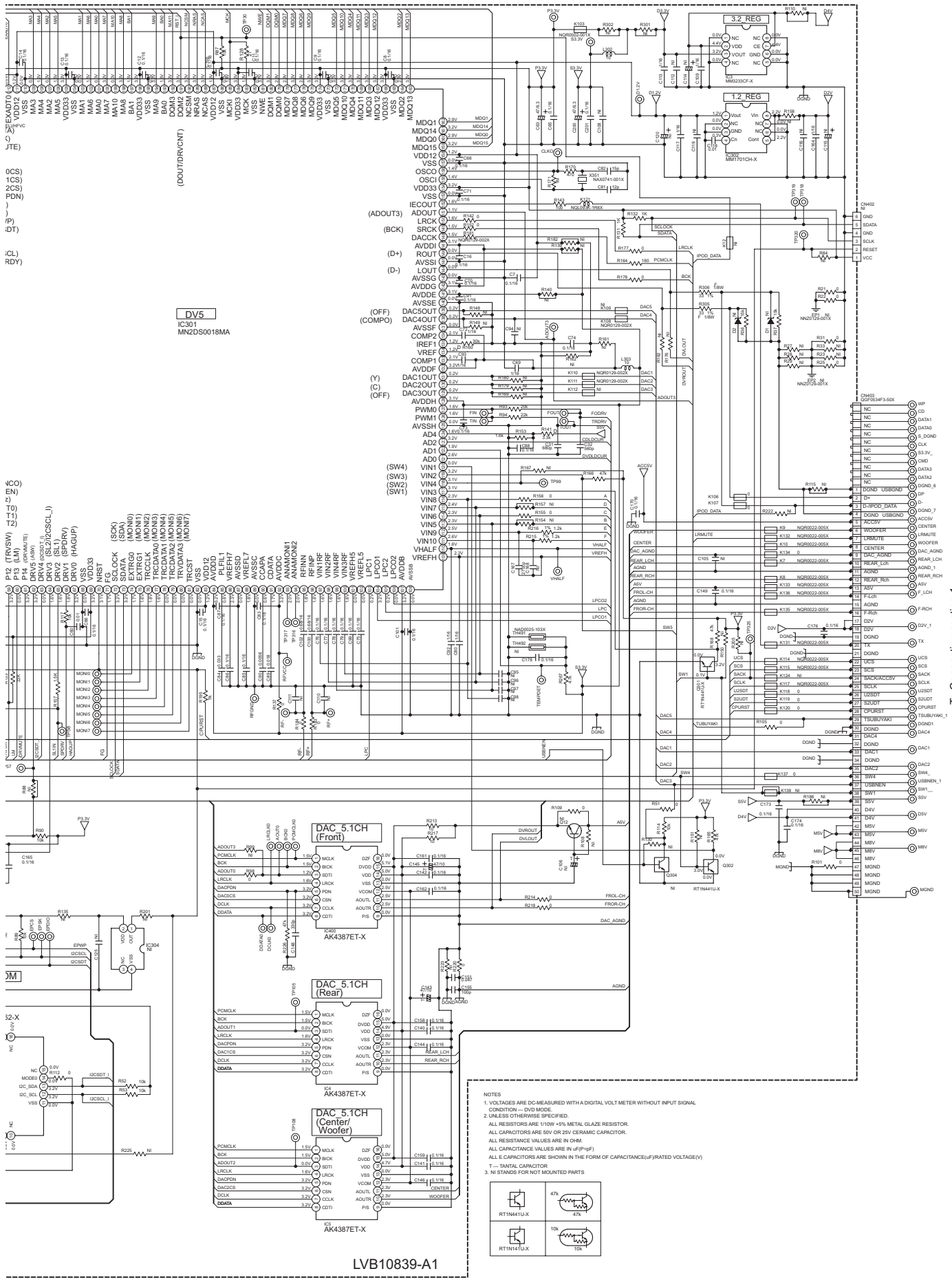
NOTES

- VOLTAGES ARE DC MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION - OVER PLACEMENT ABOVE WITH OVER TEST (DC) VOLT
- UNLESS OTHERWISE SPECIFIED
- ALL RESISTORS ARE 1/8W 1% METAL GLAZE RESISTOR
- ALL CAPACITORS ARE 10V CERAMIC CAPACITOR
- ALL RESISTANCE VALUES ARE IN OHM
- ALL CAPACITANCE VALUES ARE IN (P/P/F)
- F = FILM CAPACITOR
- N STANDS FOR NOT MOUNTED PARTS



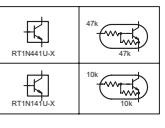
# DVD section





To Connection section 1  
CN395

- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION - DVD MODE.
  2. UNLESS OTHERWISE SPECIFIED.
  3. ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
  4. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
  5. ALL RESISTANCE VALUES ARE IN OHM.
  6. ALL CAPACITANCE VALUES ARE IN nF(±pF)
  7. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V)
  8. T - TANTALUM CAPACITOR
  9. NI STANDS FOR NOT MOUNTED PARTS

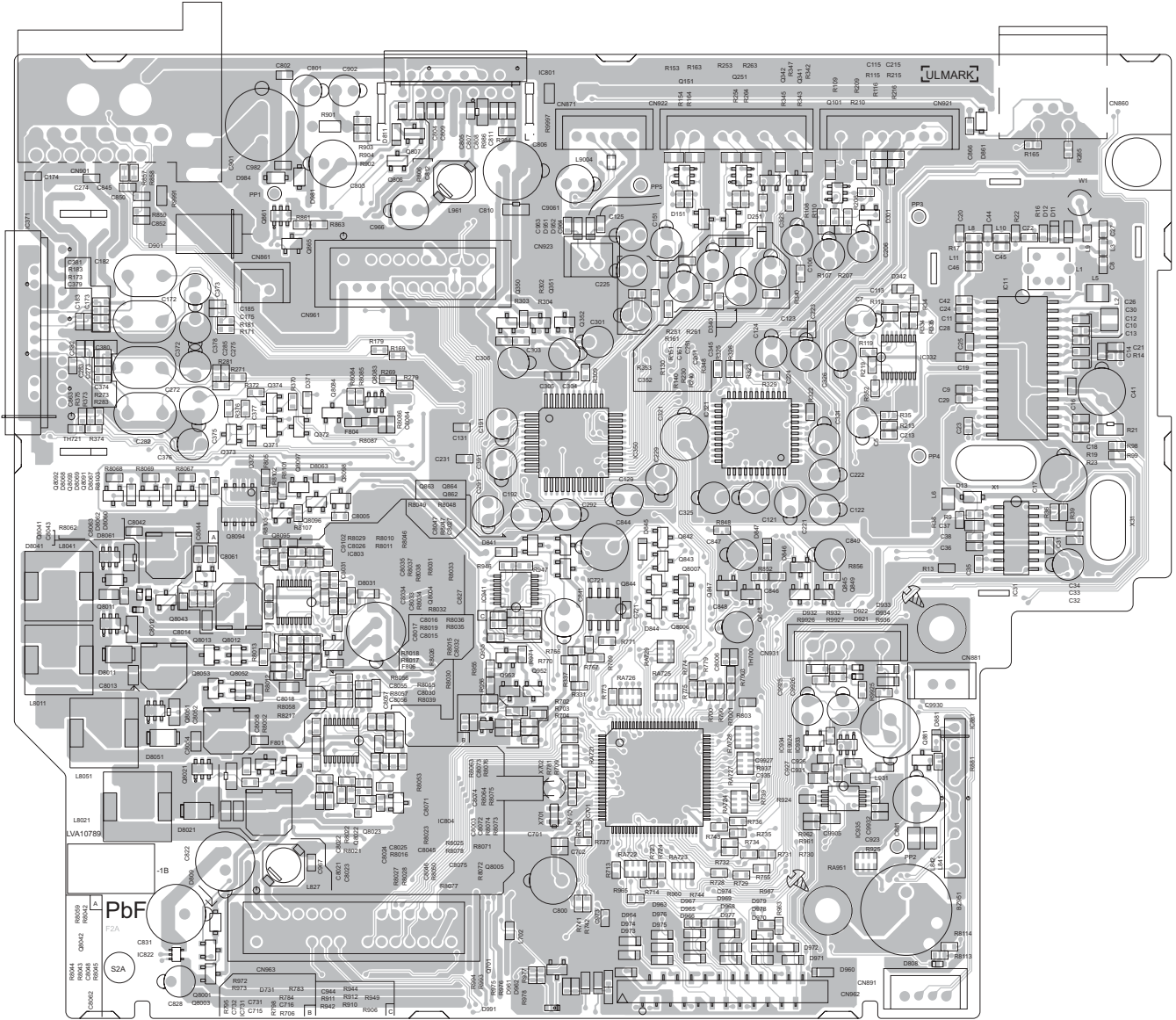


LVB10839-A1

# Printed circuit boards

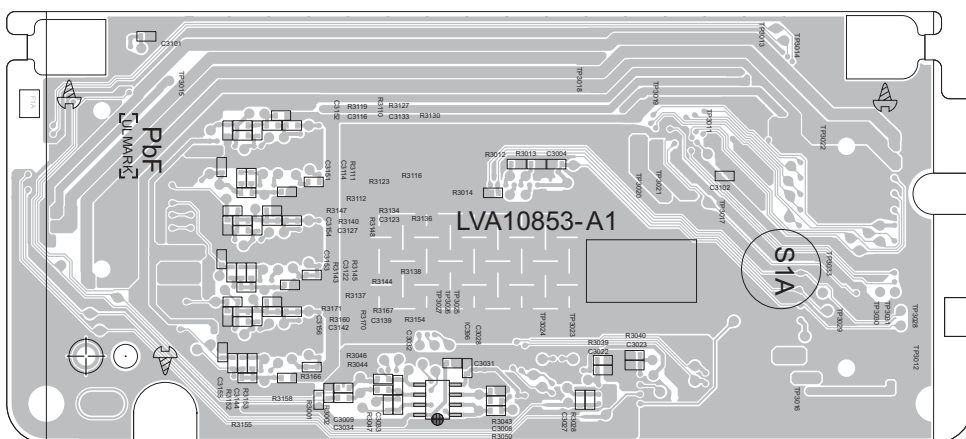
## ■ Main board (forward side)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))  
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



## ■ Connection board 1 (forward side)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))  
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))





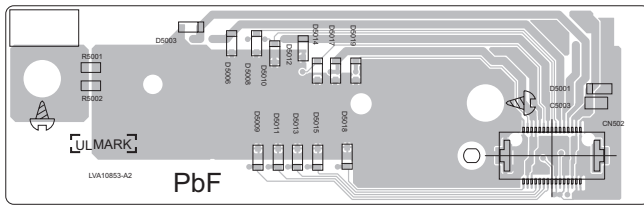


## ■ Connection board 2

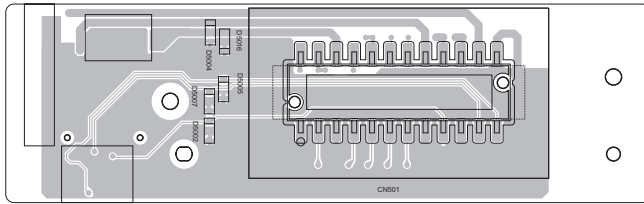
(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))

(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))

forward side



reverse side

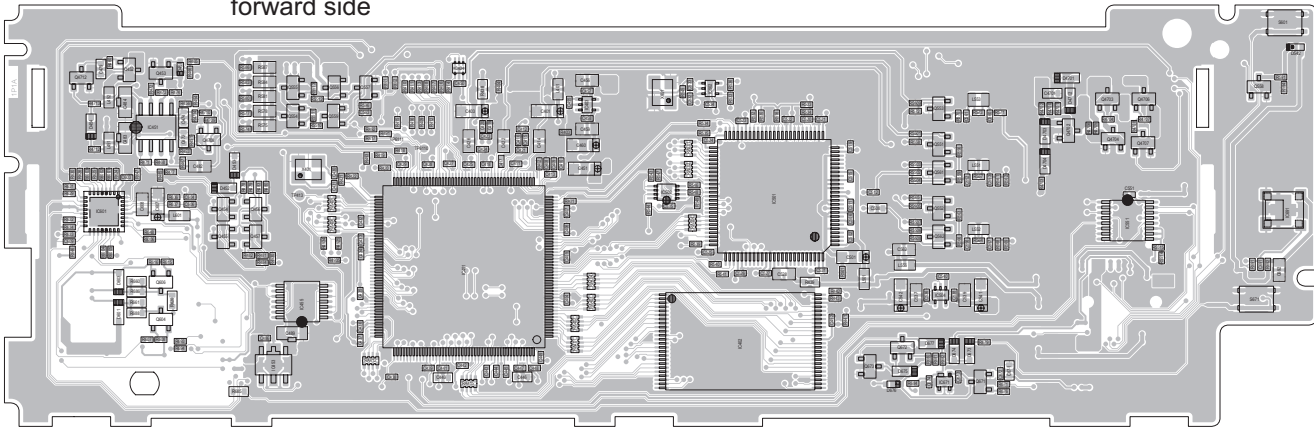


## ■ Panel board

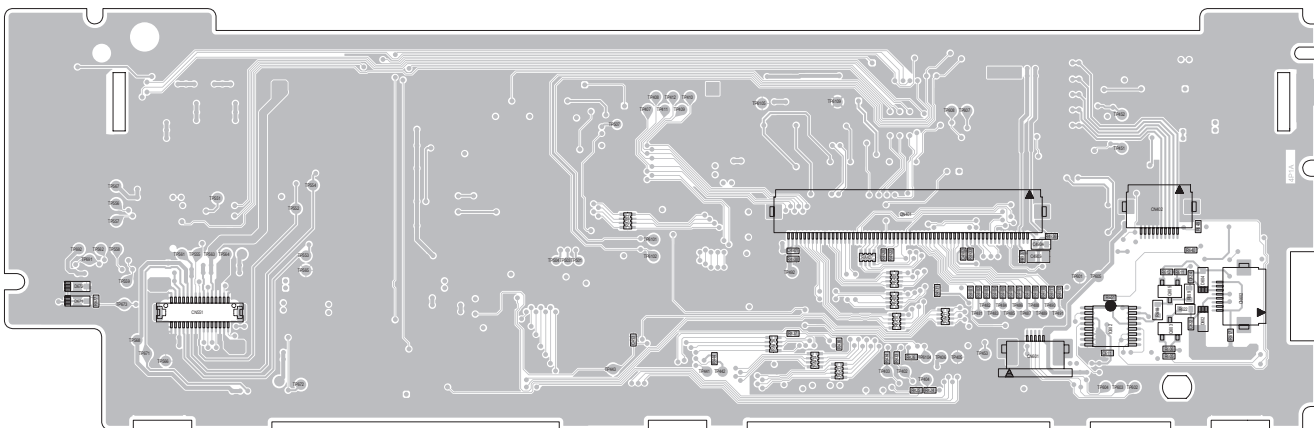
(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))

(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))

forward side



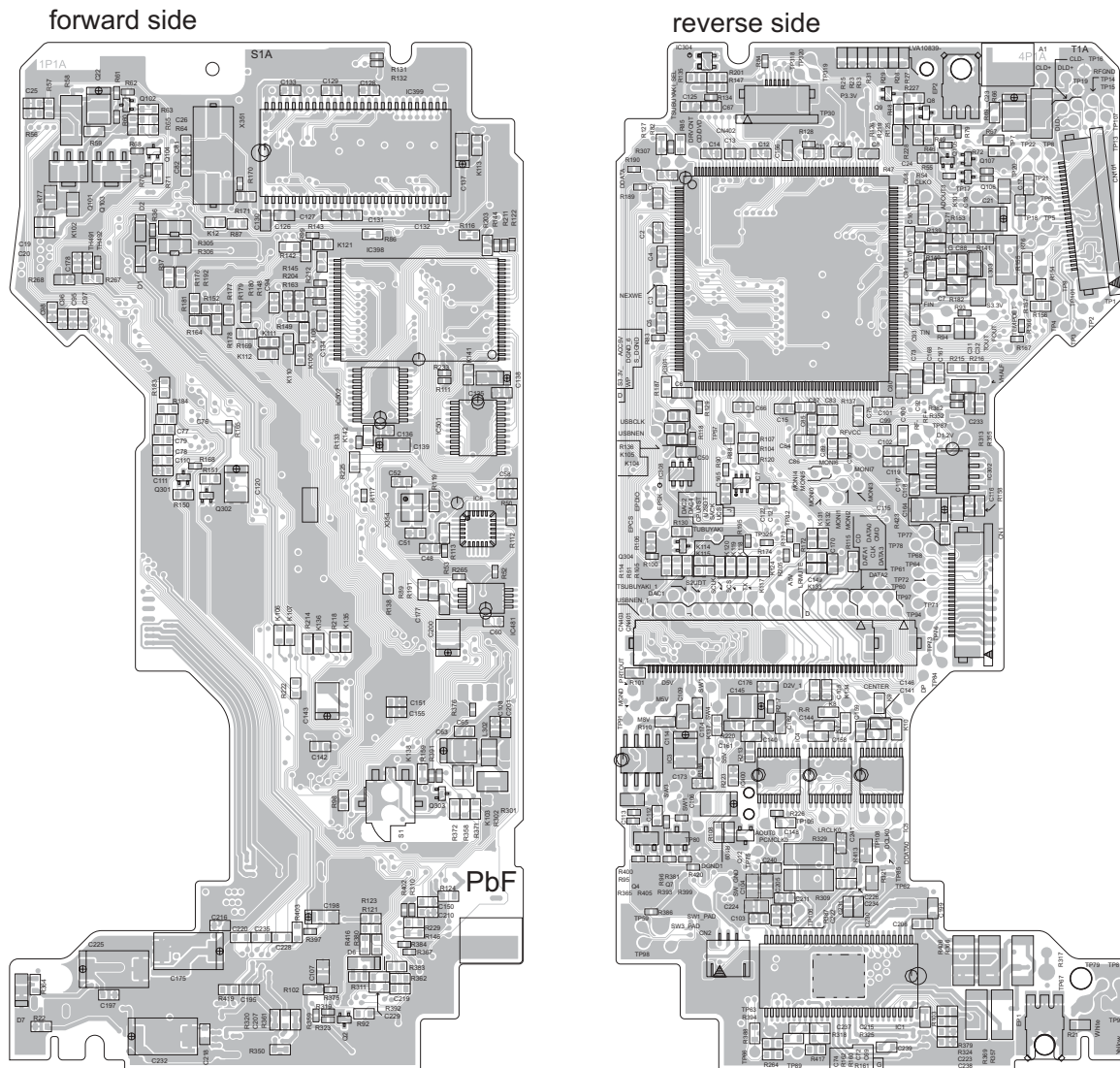
reverse side



## ■ DVD board 1

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))

(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



## ■ DVD board 2

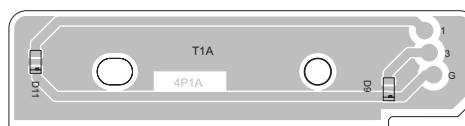
(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))

(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))

forward side



reverse side





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