

TOSHIBA

FILE NO. 813-9906
SUPPLEMENT

SERVICE MANUAL



DVD VIDEO PLAYER

SD-9100

– SUMMARY –

This service manual covers only the different points from the service manual, file no. 810-9807, for model SD-9000 since SD-9100 are basically the same designing as SD-9000. Please refer to the file no. 810-9807 for other information.

LASER BEAM CAUTION LABEL



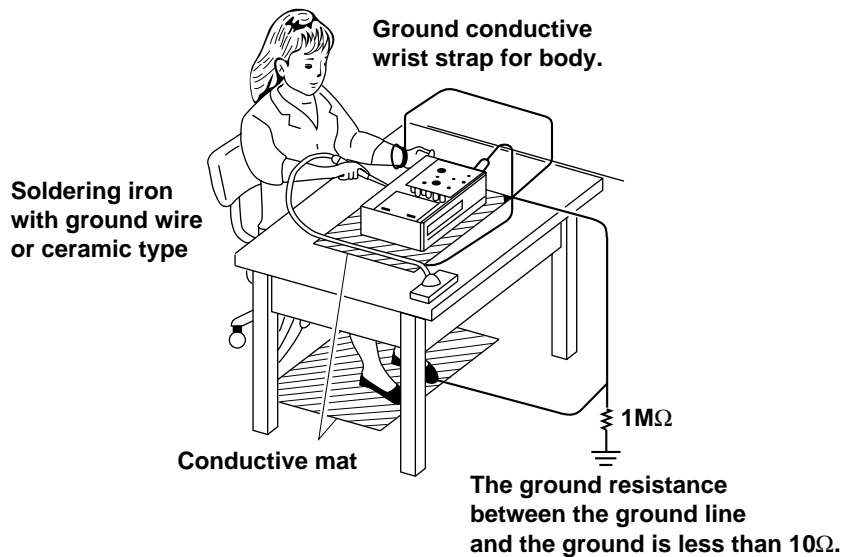
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of a laser may be received.

PREPARATION OF SERVICING

Pickup Head consists of a laser diode that is very susceptible to external static electricity.

Although it operates properly after replacement, if it was subject to electrostatic discharge during replacement, its life might be shortened. When replacing, use a conductive mat, soldering iron with ground wire, etc. to protect the laser diode from damage by static electricity.

And also, the LSI and IC are same as above.



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1. OPERATING INSTRUCTIONS 1-1

General descriptions such as location of mechanical parts and troubleshooting are the same as SD-9000.
Please refer to the service manual for SD-9000 (File No. 810-9807).

SECTION 2 PART REPLACEMENT AND ADJUSTMENT PROCEDURES

Part replacement and adjustment procedures are the same as SD-9000.
Please refer to the service manual for SD-9000 (File No. 810-9807).

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SECTION 3

SERVICING DIAGRAMS

1. CIRCUIT SYMBOLS AND SUPPLEMENTARY EXPLANATION

1-1. Precautions for Part Replacement

- In the schematic diagram, parts marked \triangle (ex. \triangle F801) are critical part to meet the safety regulations, so always use the parts bearing specified part codes (SN) when replacing them.
- Using the parts other than those specified shall violate the regulations, and may cause troubles such as operation failures, fire etc.

1-2. Solid Resistor Indication

Unit	None Ω K k Ω M M Ω
Tolerance	None $\pm 5\%$ B $\pm 0.1\%$ C $\pm 0.25\%$ D $\pm 0.5\%$ F $\pm 1\%$ G $\pm 2\%$ K $\pm 10\%$ M $\pm 20\%$
Rated Wattage	(1) Chip Parts None 1/16W (2) Other Parts None 1/6W Other than above, described in the Circuit Diagram.
Type	None Carbon film S Solid R Oxide metal film W Metal film W Cement FR Fusible

Eg. 1

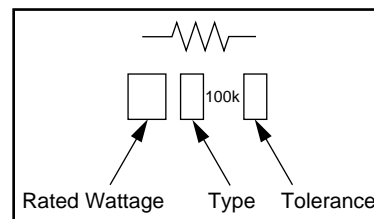


Fig. 3-1-1

1-3. Capacitance Indication

Symbol	$\begin{matrix} \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \end{matrix}$ Electrolytic, Special electrolytic $\begin{matrix} \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \end{matrix}$ Non polarity electrolytic $\begin{matrix} \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \end{matrix}$ Ceramic, plastic $\begin{matrix} \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \end{matrix}$ Film $\begin{matrix} \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \\ \text{---} \text{ } \text{---} \end{matrix}$ Trimmer
Unit	None F μ μ F p pF
Rated voltage	None 50V For other than 50V and electrolytic capacitors, described in the Circuit Diagram.
Tolerance	(1) Ceramic, plastic, and film capacitors of which capacitance are more than 10 pF. None $\pm 5\%$ or more B $\pm 0.1\%$ C $\pm 0.25\%$ D $\pm 0.5\%$ F $\pm 1\%$ G $\pm 2\%$ (2) Ceramic, plastic, and film capacitors of which capacitance are 10 pF or less. None more than $\pm 5\%$ pF B ± 0.1 pF C ± 0.25 pF (3) Electrolytic, Trimmer Tolerance is not described.
Temperature characteristic (Ceramic capacitor)	None SL For others, temperature characteristics are described. (For capacitors of 0.01 μ F and no indications are described as F.)
Static electricity capacity (Ceramic capacitor)	Sometimes described with abbreviated letters as shown in Eg. 3.

Eg. 2

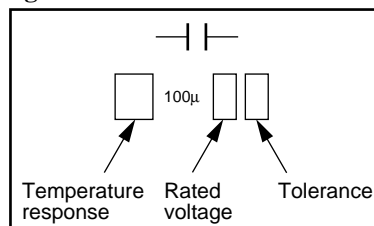


Fig. 3-1-2

Eg. 3

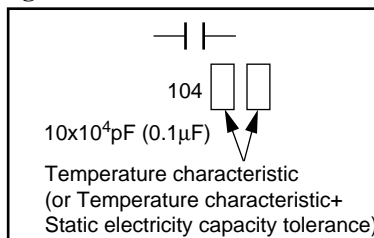


Fig. 3-1-3

1-4. Inductor Indication

Unit	None H μ μH m mH
Tolerance	None ±5% B ±0.1% C ±0.25% D ±0.5% F ±1% G ±2% K ±10% M ±20%

Eg. 4

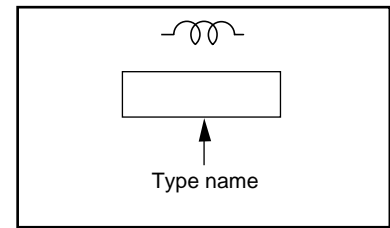


Fig. 3-1-4

1-5. Waveform and Voltage Measurement

- The waveforms for CD/DVD and RF shown in the circuit diagrams are obtained when a test disc is played back.
- All voltage values except the waveforms are expressed in DC and measured by a digital voltmeter.

Eg. 5

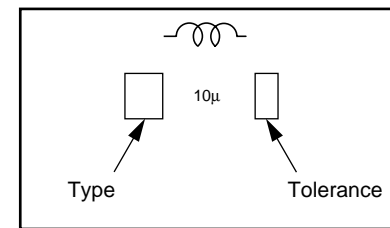


Fig. 3-1-5

1-6. Others

- The parts marked with “NC” or “KETU” in the circuit diagrams are not used for this model.

1-7. When Replaced ROM ICs or Upgraded Firmware

1. When replaced the following ROM ICs, it is necessary to write the data into the new ICs.
 - 1) IC615 (firmware)
 - 2) IC613 (Setup default data and other information)
2. When the firmware is upgraded, rewriting the new firmware into IC615 may be requested for servicing.
3. Connect a computer to the main PC board of the DVD video player with using DATA UPDATE KIT (P/No. 79080074). (Fig. 3-2-6)
4. Writing operation
Refer to the instruction attached to the data floppy disc.

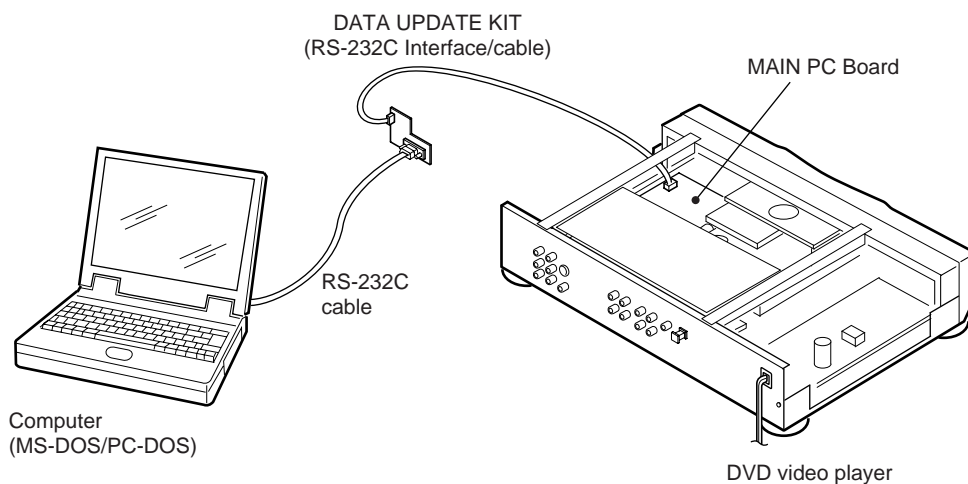


Fig. 3-1-6

Note:

- The firmware and setup data floppy discs are not available as service parts. For more information, consult TOSHIBA service office in your area.

2. PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

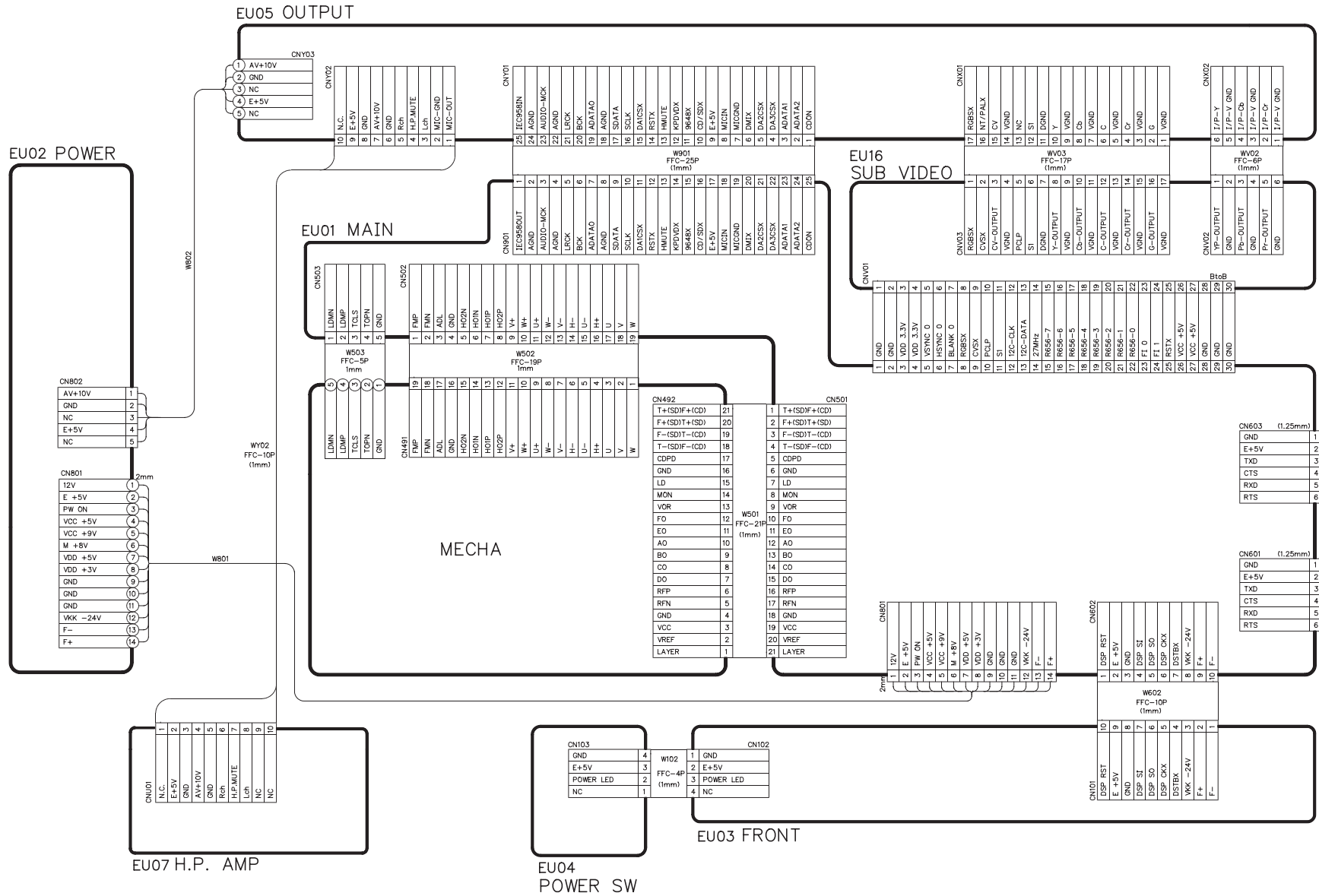


Fig. 3-2-1

3. BLOCK DIAGRAMS

3-1. Overall Block Diagram

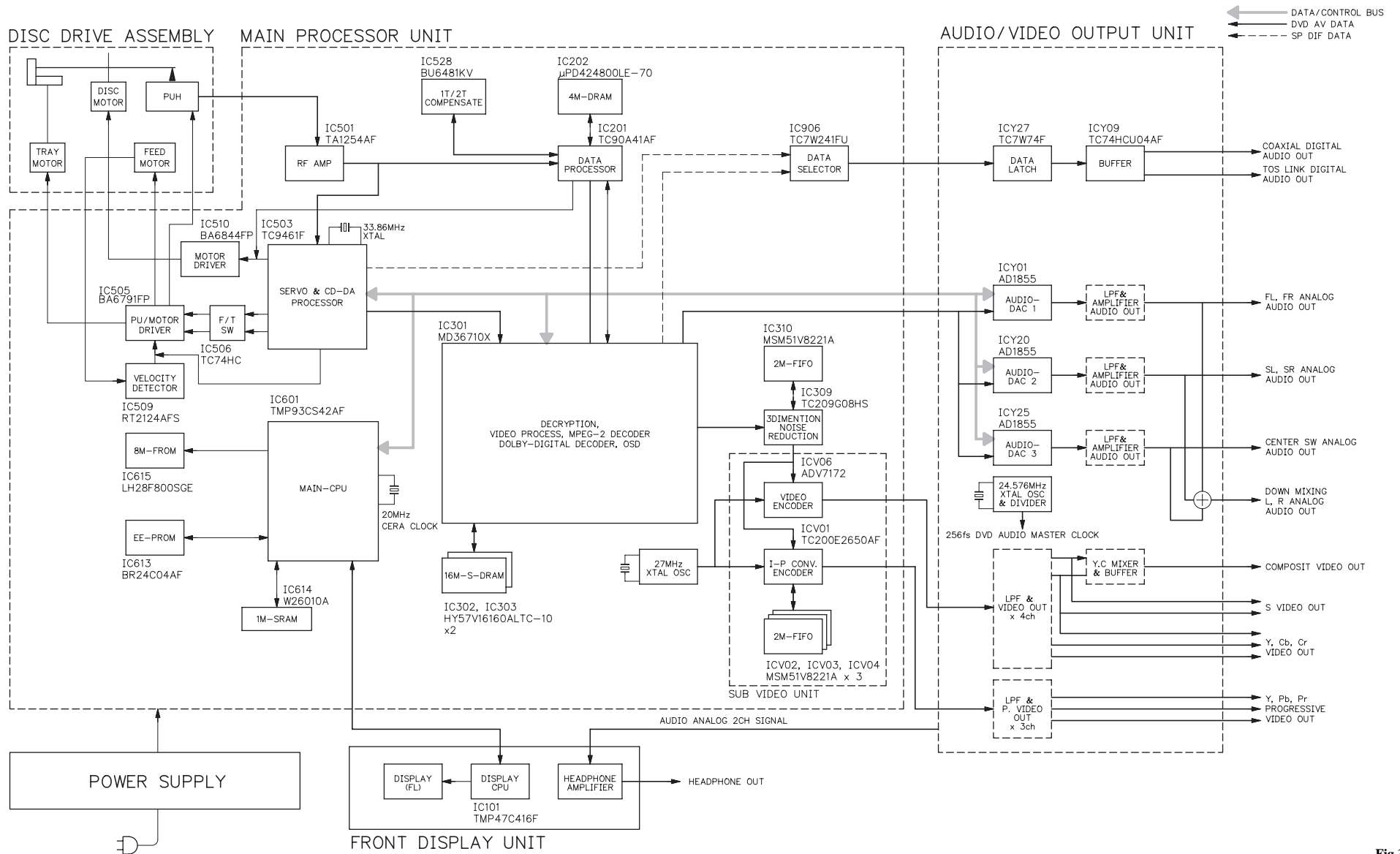


Fig.3-3-1

3-2. Main Block Diagram

3-2-1. Logical System Block Diagram

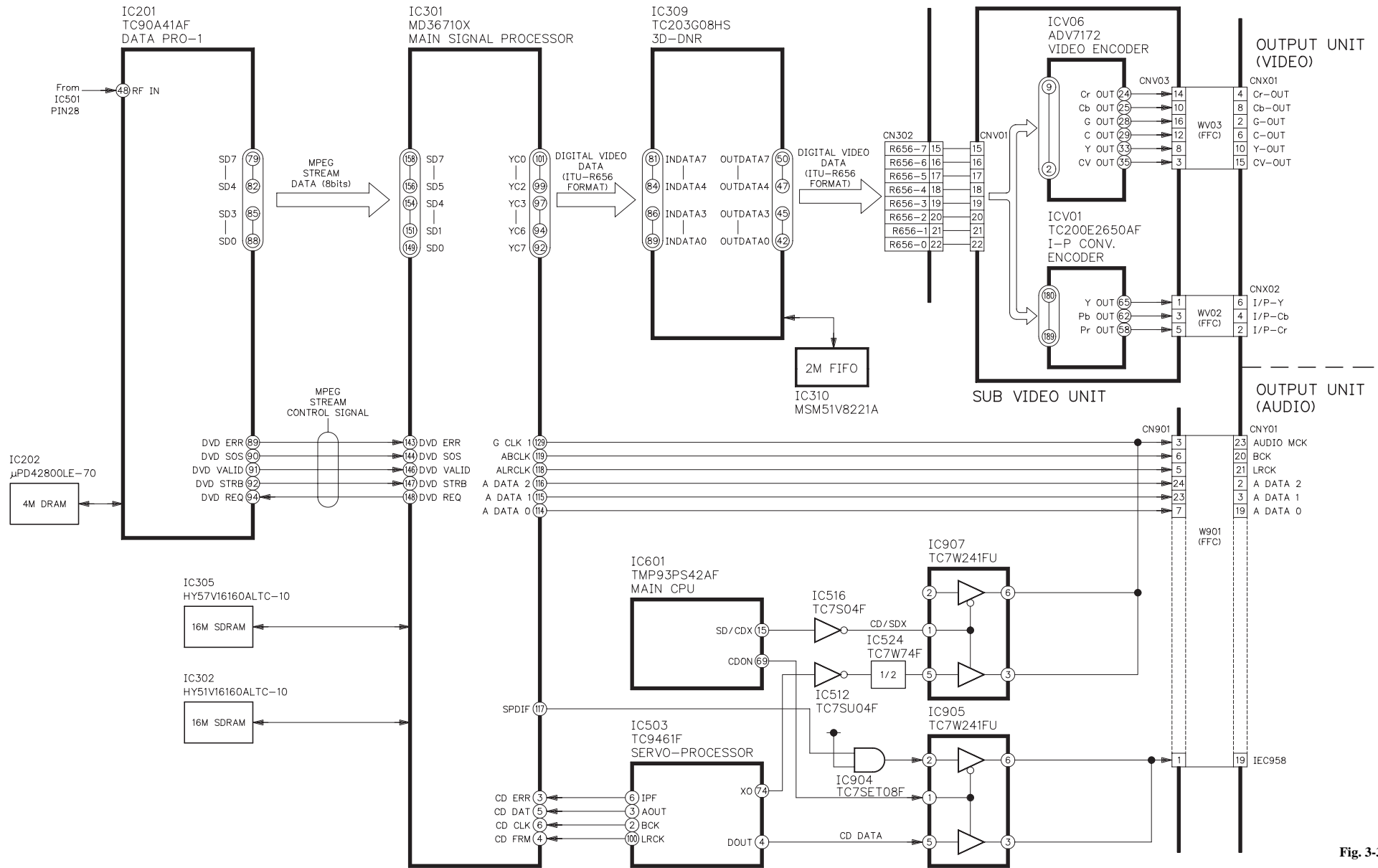


Fig. 3-3-2

3-3. Output Block Diagram

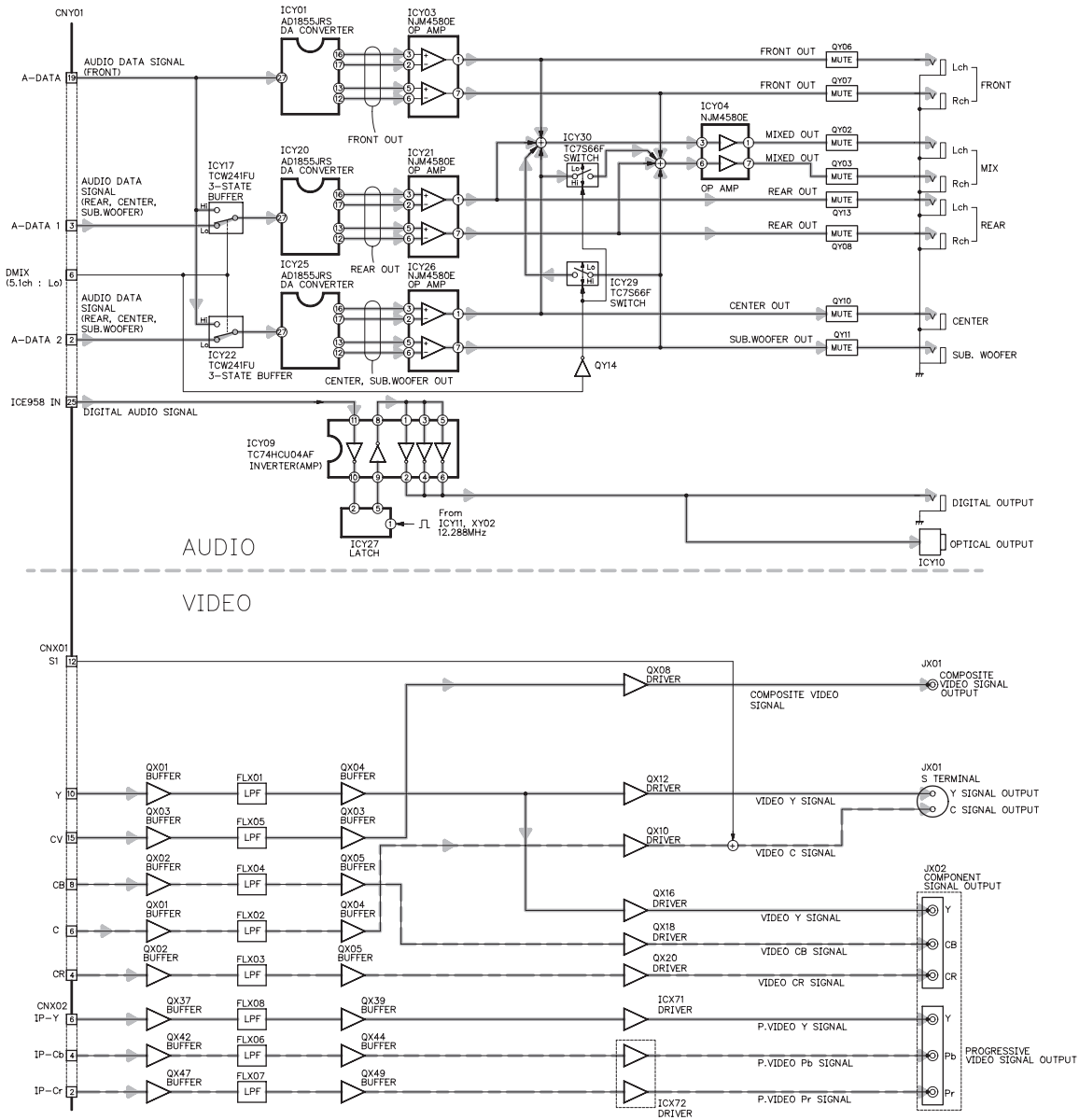


Fig. 3-3-3

4. CIRCUIT DIAGRAMS

4-1. Output Circuit Diagram

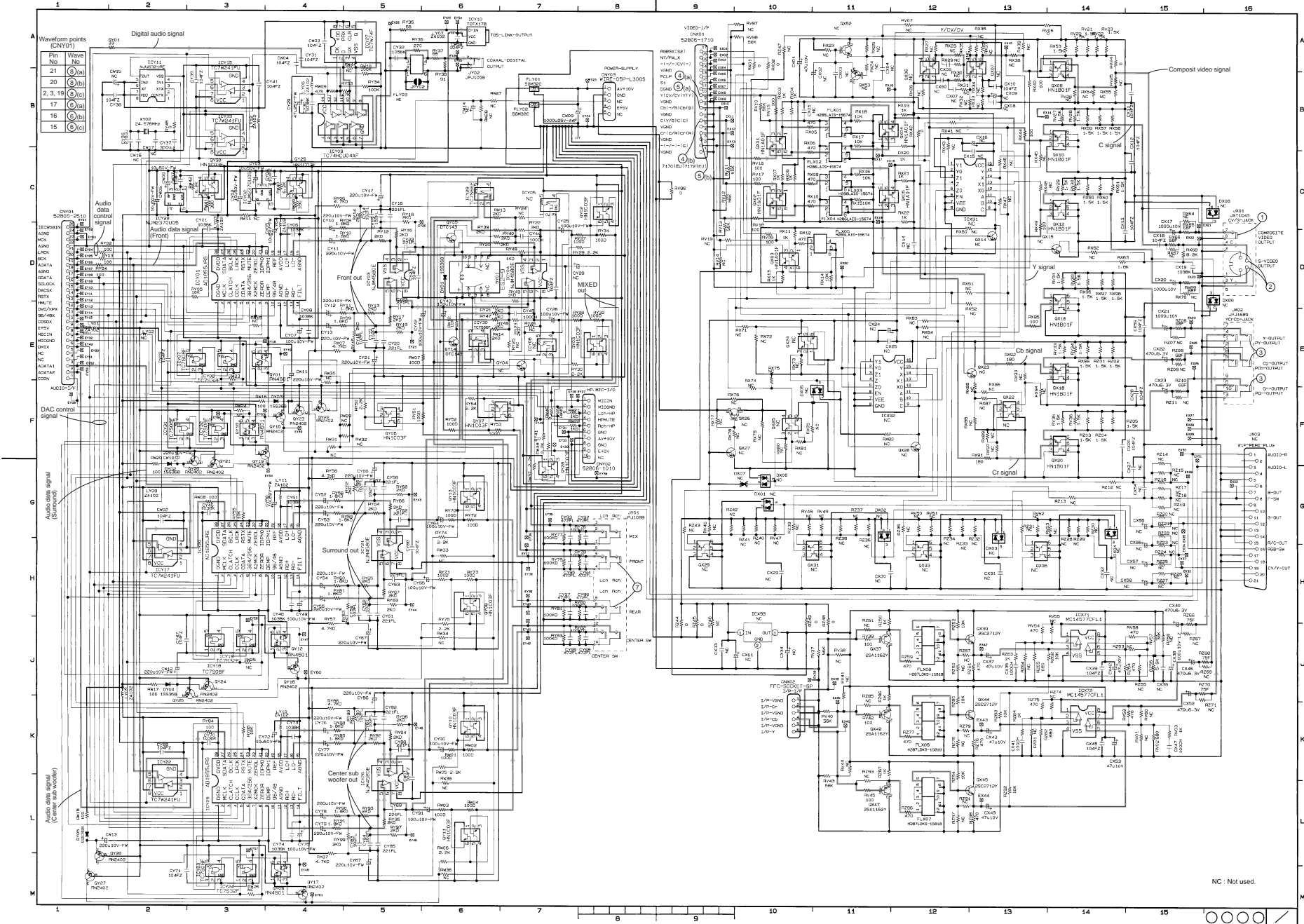
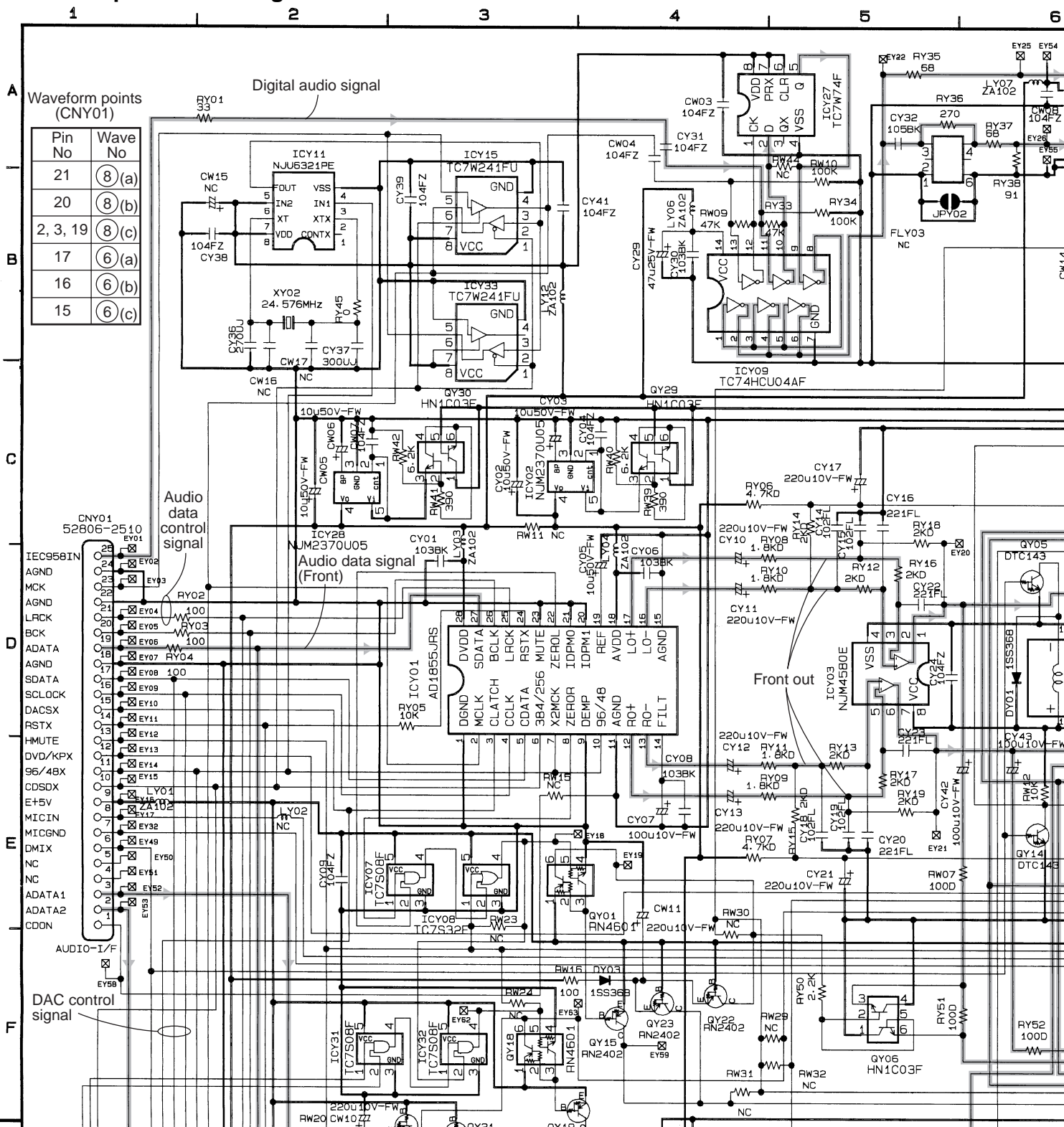
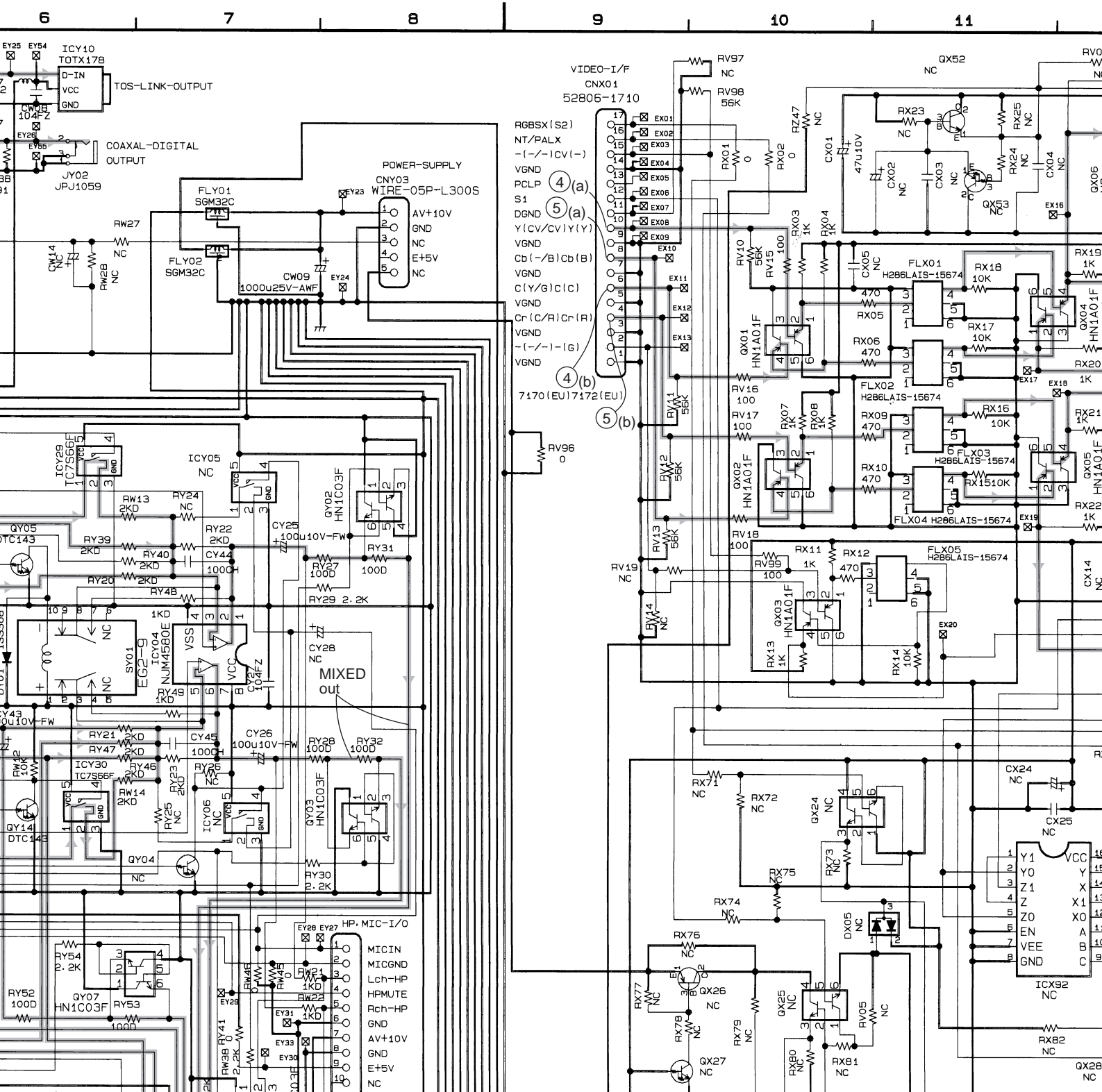


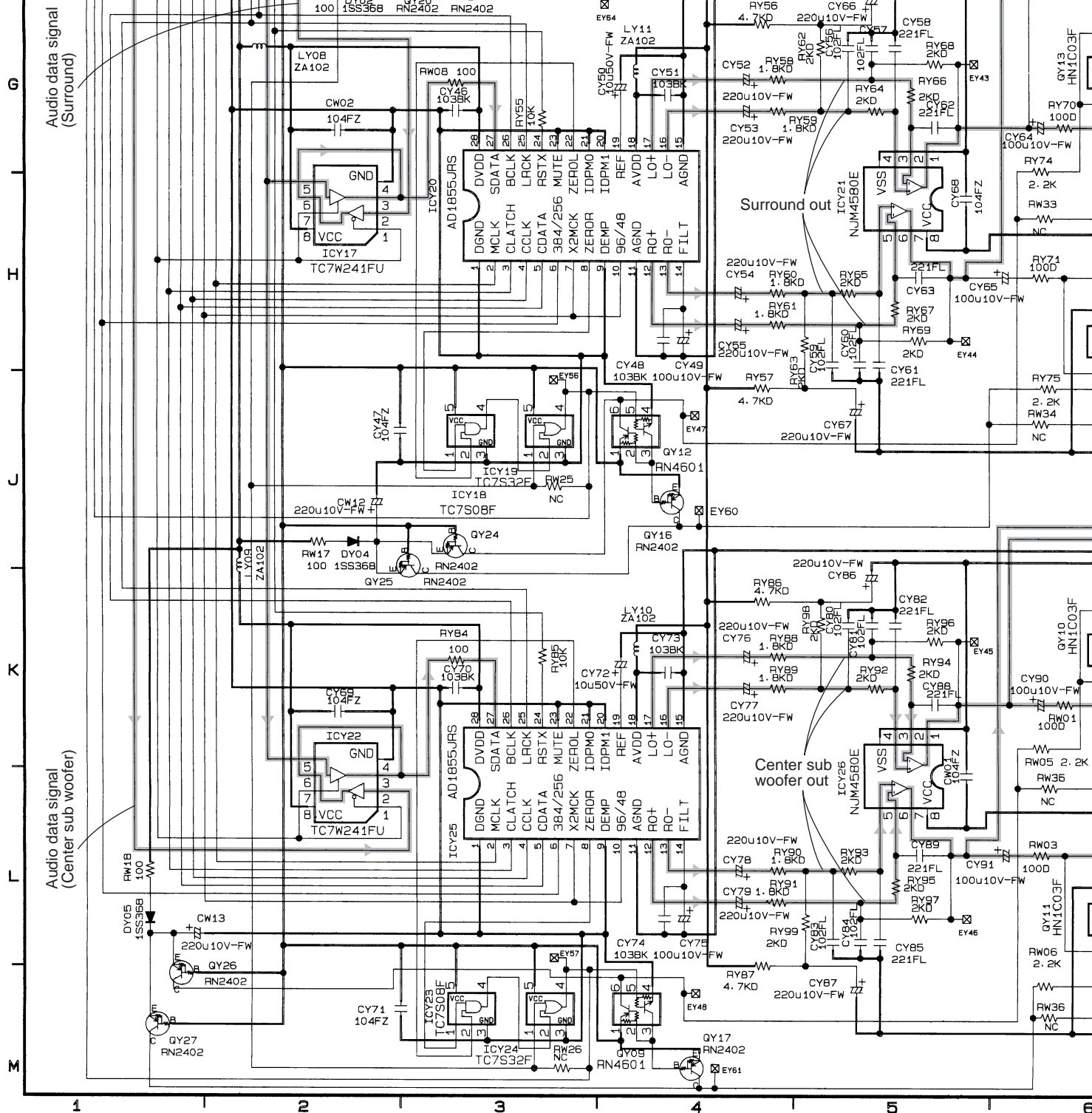
Fig. 3-4-1

4. CIRCUIT DIAGRAMS

4-1. Output Circuit Diagram







Audio data signal
(Surround)

Audio data signal
(Center sub woofer)

Surround out

Center sub
woofer out

G

H

C

K

L

M

1

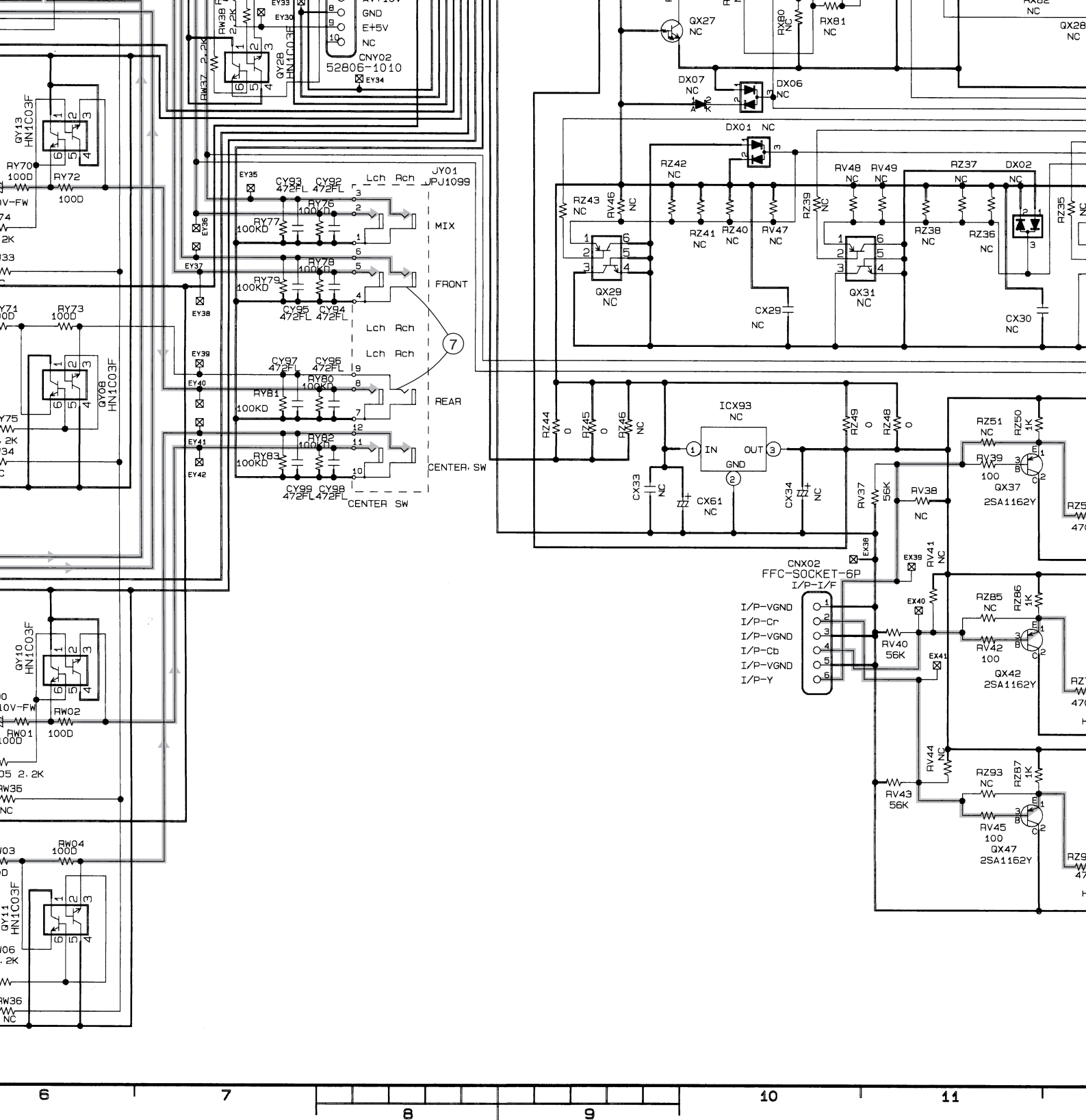
2

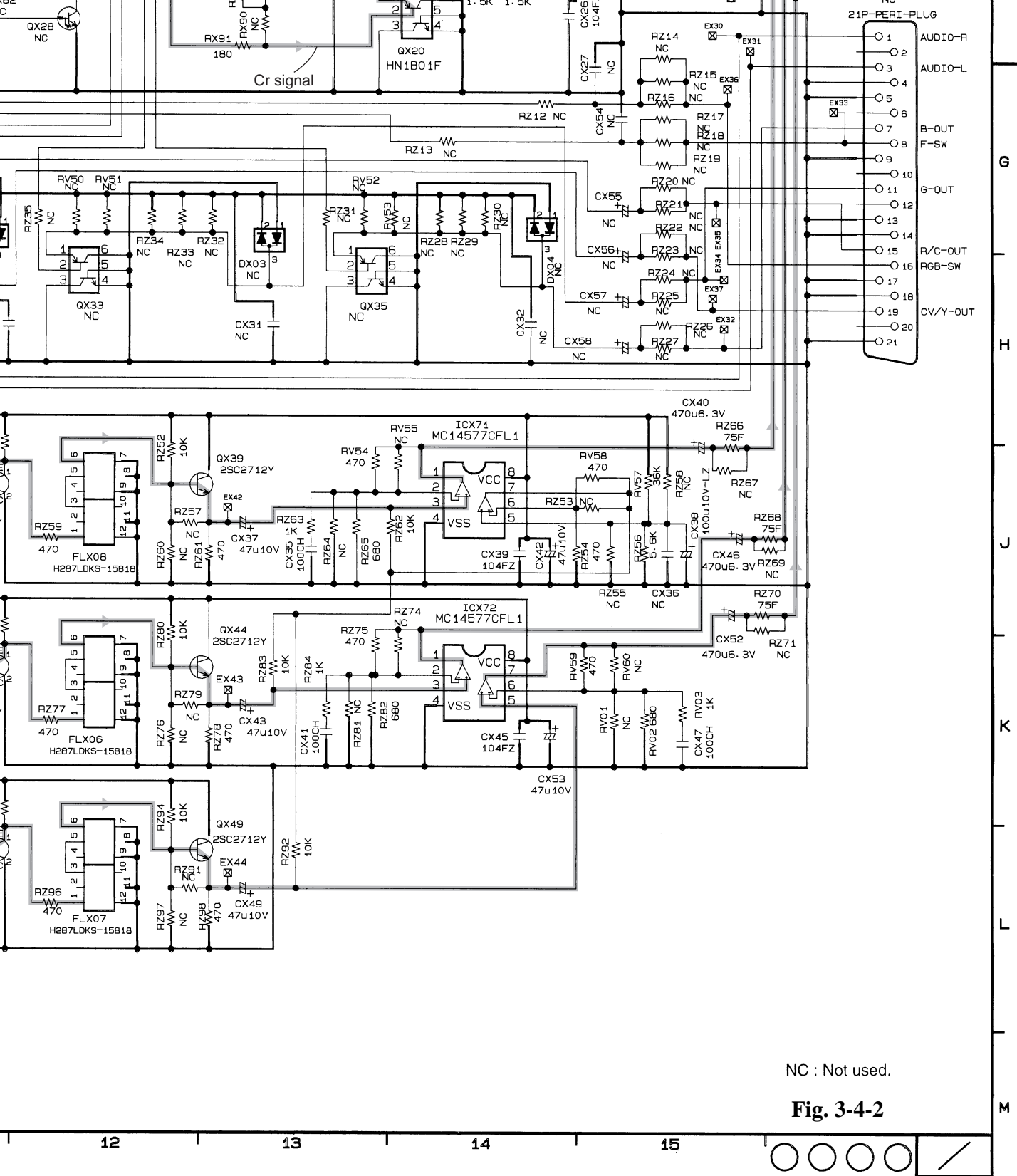
3

4

5

6





NC : Not used.

Fig. 3-4-2

12

13

14

15



G

H

J

K

L

M

Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location								
CNX01	A9	CX06	A12	CX33	J9	CY03	C3	CY30	B4	CY61	H5	CY88	K5	EX02	A9	EX29	F15	EY12	D1	EY39	H7	FLX02	C11	ICY17	H2	LY06	B4	QX27	F10
CNX02	J10	CX07	B12	CX34	J10	CY04	C4	CY31	A4	CY62	G5	CY89	L5	EX03	A9	EX30	F15	EY13	E1	EY40	H7	FLX03	C11	ICY18	J3	LY07	A6	QX28	F12
CNY01	C1	CX08	B13	CX35	J13	CY05	D4	CY32	A5	CY63	H5	CY90	K6	EX04	A9	EX31	F15	EY14	E1	EY41	J7	FLX04	C11	ICY19	J3	LY08	G2	QX29	H9
CNY02	G8	CX09	B13	CX36	J15	CY06	D4	CY36	B2	CY64	G6	CY91	L5	EX05	B9	EX32	H15	EY15	E1	EY42	J7	FLX05	D11	ICY20	H3	LY09	J2	QX31	H11
CNY03	B8	CX10	B13	CX37	J13	CY07	E4	CY37	B2	CY65	H15	CY92	G8	EX06	B9	EX33	G16	EY16	E1	EY43	G5	FLX06	K12	ICY21	H5	LY10	K4	QX33	H12
CW01	L5	CX11	B15	CX38	J15	CY08	E4	CY38	B2	CY66	G5	CY93	G7	EX07	B9	EX34	H15	EY17	E1	EY44	H5	FLX07	L12	ICY22	K2	LY11	G4	QX35	H13
CW02	G2	CX12	B15	CX39	J14	CY09	E2	CY39	B3	CY67	J5	CY94	H8	EX08	B9	EX35	G15	EY18	E4	EY45	K5	FLX08	J12	ICY23	M3	LY12	B3	QX37	J11
CW03	A4	CX13	C14	CX40	H15	CY10	D4	CY41	B4	CY68	H15	CY95	H7	EX09	B9	EX36	G15	EY19	E4	EY46	L5	FLY01	B7	ICY24	M3	QX01	B10	QX39	J13
CW04	A4	CX14	D12	CX41	K13	CY11	D4	CY42	E5	CY69	K2	CY96	H8	EX10	B9	EX37	H15	EY20	D6	EY47	J4	FLY02	B7	ICY25	L3	QX02	C10	QX42	K11
CW05	C2	CX15	C13	CX42	J14	CY12	E4	CY43	D6	CY70	K3	CY97	H7	EX11	B9	EX38	J11	EY21	E5	EY48	M4	FLY03	B5	ICY26	L5	QX03	D10	QX44	K13
CW06	C2	CX16	B13	CX43	K13	CY13	E4	CY44	D7	CY71	M2	CY98	J8	EX12	B9	EX39	J11	EY22	A5	EY49	E1	ICX71	H14	ICY27	A5	QX04	B12	QX47	L11
CW07	C2	CX17	C15	CX45	K14	CY14	C5	CY45	E7	CY72	K4	CY99	J7	EX13	B9	EX40	K11	EY23	B8	EY50	E1	ICX72	J14	ICY28	C2	QX05	C12	QX49	L13
CW08	A6	CX18	D15	CX46	J15	CY15	C5	CY46	G3	CY73	K4	DX01	G10	EX14	B13	EX41	K11	EY24	B8	EY51	E1	ICX91	C13	ICY29	C6	QX06	B12	QX52	A11
CW09	B7	CX19	D15	CX47	K15	CY16	C5	CY47	J2	CY74	L4	DX02	G11	EX15	A13	EX42	J13	EY25	A6	EY52	E1	ICX92	F11	ICY30	E6	QX07	B13	QX53	B11
CW10	F2	CX20	D15	CX49	L13	CY17	C5	CY48	H4	CY75	L4	DX03	H13	EX16	B12	EX43	K13	EY26	A6	EY53	E1	ICX93	H10	ICY31	F2	QX08	B14	QY01	E4
CW11	E4	CX21	E15	CX52	K15	CY18	E5	CY49	H4	CY76	K4	DX04	H14	EX17	C11	EX44	L13	EY27	F8	EY54	A6	ICY01	D3	ICY32	F3	QX10	C14	QY02	C8
CW12	J2	CX22	E15	CX53	K14	CY19	E5	CY50	G4	CY77	K4	DX05	F10	EX18	C12	EY01	C1	EY28	F7	EY55	A6	ICY02	C3	ICY33	B3	QX12	C14	QY03	E7
CW13	L2	CX23	E15	CX54	G15	CY20	E5	CY51	G4	CY78	L4	DX06	G10	EX19	C11	EY02	D1	EY29	F7	EY56	J3	ICY03	D5	JPY02	B5	QX14	D13	QY04	E7
CW14	B6	CX24	E11	CX55	G15	CY21	E5	CY52	G4	CY79	L4	DX07	G10	EX20	D11	EY03	D1	EY30	F7	EY57	L3	ICY04	D7	JX01	C16	QX15	D13	QY05	C6
CW15	B2	CX25	E11	CX56	H15	CY22	D5	CY53	G4	CY80	K5	DX08	C16	EX21	C16	EY04	D1	EY31	F7	EY58	F1	ICY05	C7	JX02	E16	QX16	E14	QY06	F5
CW16	C2	CX26	F15	CX57	H15	CY23	D5	CY54	H4	CY81	K5	DX09	D16	EX22	D15	EY05	D1	EY32	E1	EY59	F4	ICY06	E7	JX03	F16	QX18	F14	QY07	F6
CW17	C2	CX27	G15	CX58	H15	CY24	D5	CY55	H4	CY82	K5	DY01	D6	EX23	D15	EY06	D1	EY33	F7	EY60	J4	ICY07	E2	JY01	G8	QX20	F14	QY08	H6
CX01	A10	CX28	F15	CX59	E15	CY25	D7	CY56	G5	CY83	L5	DY02	G2	EX24	E15	EY07	D1	EY34	G8	EY61	M4	ICY08	E3	JY02	B6	QX22	F13	QY09	M4
CX02	B11	CX29	H10	CX60	B12	CY26	E7	CY57	G5	CY84	L5	DY03	F4	EX25	E15	EY08	D1	EY35	G7	EY62	F3	ICY09	C4	LY01	E1	QX23	E13	QY10	K6
CX03	B11	CX30	H11	CX61	J10	CY27	D7	CY58	G5	CY85	L5	DY04	J2	EX26	E15	EY09	D1	EY36	G7	EY63	F3	ICY10	A6	LY02	E2	QX24	E10	QY11	L6
CX04	A12	CX31	H13	CY01	C3	CY28	D7	CY59	H5	CY86	K5	DY05	L1	EX27	F15	EY10	D1	EY37	H7	EY64	G4	ICY11	A2	LY03	C3	QX25	F10	QY12	J4
CX05	B11	CX32	H14	CY02	C3	CY29	B4	CY60	H5	CY87	M5	EX01	A9	EX28	F15	EY11	D1	EY38	H7	FLX01	B11	ICY15	A3	LY04	D4	QX26	F10	QY13	G6

Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location	Part No.	Location
QY14	E6	RV14	D9	RV41	J11	RW05	K6	RW33	H6	RX15	C11	RX42	B12	RX69	D15	RX96	D14	RY24	C7	RY54	F6	RY82	J8	RZ11	F15	RZ39	G10	RZ67	J15				
QY15	F4	RV15	B10	RV42	K11	RW06	L6	RW34	J6	RX16	C11	RX43	B12	RX70	D15	RX97	D14	RY25	E7	RY55	G3	RY83	J7	RZ12	G14	RZ40	G10	RZ68	J16				
QY16	J4	RV16	C10	RV43	L11	RW07	E5	RW35	L6	RX17	B11	RX44	B13	RX71	E10	RX98	D14	RY26	E7	RY56	G4	RY84	K3	RZ13	G14	RZ41	G10	RZ69	J16				
QY17	M4	RV17	C10	RV44	K11	RW08	G3	RW36	M6	RX18	B11	RX45	C13	RX72	E10	RX99	E14	RY27	D8	RY57	J4	RY85	K3	RZ14	F15	RZ42	G9	RZ70	J15				
QY18	F3	RV18	D10	RV45	L11	RW09	B4	RW37	G7	RX19	B12	RX46	C13	RX73	E10	RY01	A2	RY28	E7	RY58	G4	RY86	K4	RZ15	G15	RZ43	G9	RZ71	K16				
QY19	G3	RV19	D9	RV46	G9	RW10	A5	RW38	F7	RX20	C12	RX47	C13	RX74	E10	RY02	D1	RY29	D8	RY59	G5	RY87	M4	RZ16	G15	RZ44	J9	RZ74	J14				
QY20	G3	RV20	A14	RV47	G10	RW11	C3	RW39	C4	RX21	C12	RX48	C14	RX75	E10	RY03	D1	RY30	E7	RY60	H4	RY88	K4	RZ17	G15	RZ45	J9	RZ75	K13				
QY21	G3	RV21	A14	RV48	G10	RW12	E6	RW40	C4	RX22	C12	RX49	D13	RX76	F10	RY04	D1	RY31	D8	RY61	H4	RY89	K4	RZ18	G15	RZ46	J9	RZ76	K12				
QY22	F4	RV22	A14	RV49	G11	RW13	C6	RW41	C3	RX23	A11	RX50	D12	RX77	F9	RY05	D3	RY32	E8	RY62	G5	RY90	L4	RZ19	G15	RZ47	A10	RZ77	K12				
QY23	F4	RV23	A14	RV50	G12	RW14	E6	RW42	C3	RX24	A11	RX51	D12	RX78	F9	RY06	C4	RY33	B5	RY63	H5	RY91	L4	RZ20	G15	RZ48	J11	RZ78	K13				
QY24	J3	RV24	A14	RV51	G12	RW15	E3	RW44	A5	RX25	A11	RX52	E13	RX79	F10	RY07	E4	RY34	B5	RY64	G5	RY92	K5	RZ21	G15	RZ49	J10	RZ79	K12				
QY25	K2	RV25	B14	RV52	G13	RW16	F3	RW45	F7	RX26	B12	RX53	A14	RX80	F10	RY08	D5	RY35	A5	RY65	H5	RY93	L5	RZ22	G15	RZ50	J11	RZ80	K12				
QY26	L2	RV26	B14	RV53	G14	RW17	J2	RW46	F7	RX27	A12	RX54	B14	RX81	F10	RY09	E5	RY36	A5	RY66	G5	RY94	K5	RZ23	H15	RZ51	J11	RZ81	K13				
QY27	M1	RV27	B14	RV54	J13	RW18	L1	RX01	A10	RX28	A12	RX55	B14	RX82	F11	RY10	D5	RY37	A6	RY67	H5	RY95	L5	RZ24	H15	RZ52	J12	RZ82	K13				
QY28	G7	RV28	B14	RV55	H14	RW20	F2	RX02	A10	RX29	A12	RX56	B14	RX83	E12	RY11	E5	RY38	B6	RY68	G5	RY96	K5	RZ25	H15	RZ53	J14	RZ83	K13				
QY29	C4	RV29	C14	RV57	J15	RW21	F7	RX03	B10	RX30	B12	RX57	B14	RX84	E12	RY12	D5	RY39	D6	RY69	H5	RY97	L5	RZ26	H15	RZ54	J15	RZ84	K13				
QY30	C3	RV30	C14	RV58	J15	RW22	F7	RX04	B10	RX31	B12	RX58	B14	RX85	E13	RY13	E5	RY40	D7	RY70	G6	RY98	K5	RZ27	H15	RZ55	J15	RZ85	K11				
RV01	K15	RV31	D14	RV59	K15	RW23	E3	RX05	B10	RX32	B10	RX59	C14	RX86	E13	RY14	C5	RY41	F7	RY71	H6	RY99	L4	RZ28	G14	RZ56	J15	RZ86	K11				
RV02	K15	RV32	D14	RV60	K15	RW24	F3	RX06	B10	RX33	B13	RX60	C14	RX87	F13	RY15	E5	RY42	B2	RY72	G6	RZ01	E14	RZ29	G14	RZ57	J12	RZ87	K11				
RV03	K15	RV33	E14	RV96	C9	RW25	J3	RX07	C10	RX34	B13	RX61	C14	RX88	F13	RY16	D5	RY46	E7	RY73	H6	RZ02	E14	RZ30	G14	RZ58	J15	RZ91	L12				
RV05	F10	RV34	E14	RV97	A10	RW26	M3	RX08	C10	RX35	A12	RX62	D14	RX89	F13	RY17	E5	RY47	E6	RY74	G6	RZ03	F14	RZ31	G13	RZ59	J12	RZ92	L13				
RV06	A14	RV35	F14	RV98	A10	RW27	B6	RX09	C10	RX36	A13	RX63	D14	RX90	F13	RY18	C5	RY48	D7	RY75	J6	RZ04	F14	RZ32	G13	RZ60	J12	RZ93	K11				
RV07	A12	RV36	F14	RV99	D10	RW28	B6	RX10	C10	RX37	A13	RX64	C15	RX91	F13	RY19	E5	RY49	D7	RY76	G8	RZ05	F15	RZ33	H12	RZ61	J13	RZ94	K12				
RV10	B10	RV37	J11	RW01	K6	RW29	F5	RX11	D10	RX38	A13	RX65	C19	RX92	E13	RY20	D6	RY50	F7	RY77	G7	RZ06	E15	RZ34	G12	RZ62	J14	RZ96	L12				
RV11	C9	RV38	J11	RW02	K6	RW30	E4	RX12	D10	RX39	A13	RX66	D15	RX93	E13	RY21	E6	RY51	F5	RY78	H8	RZ07	E15	RZ35	G12	RZ63	J13	RZ97	L12				
RV12	C9	RV39	J11	RW03	L6	RW31	F4	RX13	D10	RX40	B13	RX67	D15	RX94	F13	RY22	D7	RY52	F6	RY79	H7	RZ08	E15	RZ36	G11	RZ64	J13	RZ98	L13				
RV13	D9	RV40	K11	RW04	L6	RW32	F5																										

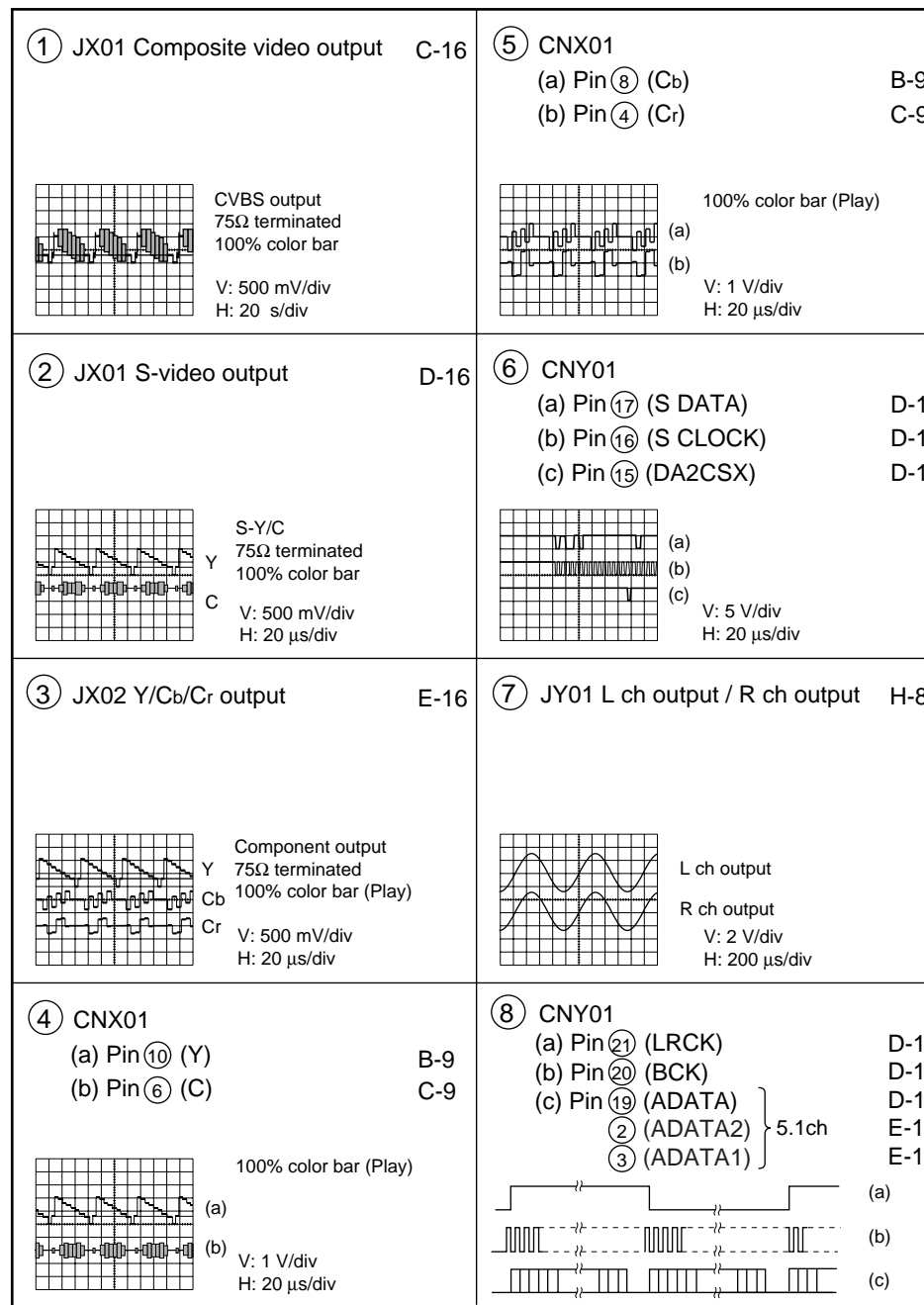


Fig. 3-4-2

IC

ICY01
DA CONVERTER

1	0
2	2.5
3	4.9
4	3.2
5	3.5
6	0
7	0
8	0
9	0
10	0
11	0
12	2.3
13	2.4
14	2.4
15	0
16	2.4
17	2.3
18	4.9
19	3.3
20	0
21	0
22	0
23	0
24	4.9
25	2.4
26	2.4
27	1.3
28	4.9

ICY02
REGULATOR

1	6.5
2	0
3	1.2
4	4.9
5	6.5

ICY03
OP AMP

1	4.9
2	0
3	4.9
4	4.9
5	4.9
6	4.9
7	4.9
8	9.2

ICY04
OP AMP

1	4.9
2	4.9
3	4.9
4	0
5	4.9
6	4.9
7	4.9
8	9.2

ICY07
AND GATE

1	0
2	0
3	0
4	0
5	4.9

ICY08
OR GATE

1	0
2	0
3	0
4	0
5	4.9

ICY09
INVERTER

1	2.5
2	2.5
3	2.5
4	2.5
5	2.5
6	2.5
8	2.5
9	2.5
10	2.5
11	2.0
12	2.6
13	2.0
14	4.9

ICY10

D-IN	2.5
VCC	4.9
GND	0

ICY11
OSCILLATOR

1	4.9
2	0
3	0
4	0
5	0
6	4.9
7	2.5
8	4.9

ICY15
3-STATE
BUFFER

1	0
2	0
3	0
4	0
5	0
6	2.5
7	4.9
8	4.9

ICY17
3-STATE
BUFFER

1	4.7
2	0
3	1.3
4	0
5	1.3
6	1.3
7	4.7
8	4.9

ICY18
AND GATE

1	0
2	0
3	0
4	0
5	4.9

ICY19
OR GATE

1	0
2	0
3	0
4	0
5	4.9

ICY20
DA CONVERTER

1	0
2	2.5
3	4.9
4	3.2
5	3.5
6	0
7	0
8	0
9	0
10	0
11	0
12	2.3
13	2.4
14	2.4
15	0
16	2.4
17	2.3
18	4.9
19	3.3
20	0
21	0
22	0
23	0
24	4.9
25	2.4
26	2.4
27	1.3
28	4.9

ICY21
OP AMP

1	4.9
2	4.9
3	4.9
4	0
5	4.9
6	4.9
7	4.9
8	9.2

ICY22
3-STATE
BUFFER

1	4.7
2	0
3	1.3
4	0
5	1.3
6	1.3
7	4.7
8	4.9

ICY23
AND GATE

1	0
2	0
3	0
4	0
5	4.9

ICY24
OR GATE

1	0
2	2.5
3	4.9
4	3.2
5	3.5
6	0
7	0
8	0
9	0
10	0
11	0
12	2.3
13	2.4
14	2.4
15	0
16	2.4
17	2.3
18	4.9
19	3.3
20	0
21	0
22	0
23	0
24	4.9
25	2.4
26	2.4
27	1.3
28	4.9

ICY25
DA CONVERTER

1	0
2	2.5
3	4.9
4	3.2
5	3.5
6	0
7	0
8	0
9	0
10	0
11	0
12	2.3
13	2.4
14	2.4
15	0
16	2.4
17	2.3
18	4.9
19	3.3
20	0
21	0
22	0
23	0
24	4.9
25	2.4
26	2.4
27	1.3
28	4.9

ICY26
OP AMP

1	4.9
2	4.9
3	4.9
4	0
5	4.9
6	4.9
7	4.9
8	9.2

ICY27
D-FLIP-FLOP

1	2.6
2	2.5
3	2.5
4	0
5	2.5
6	4.9
7	4.9
8	4.9

ICY28
REGULATOR

1	6.5
2	0
3	1.2
4	4.9
5	6.5

ICY29
SWITCH

1	4.9
2	4.9
3	0
4	0
5	9.2

ICY30
SWITCH

1	4.9
2	4.9
3	0
4	0
5	4.9

ICY31
AND GATE

1	0
2	0
3	0
4	0
5	4.9

ICY32
OR GATE

1	0
2	0
3	0
4	0
5	4.9

ICY33
3-STATE
BUFFER

1	0
2	0
3	0
4	0
5	0
6	2.5
7	4.9
8	4.9

ICX71
OP AMP

1	6.4
2	3.8
3	3.8
4	0
5	1.9
6	3.8
7	3.8
8	9.3

ICX72
OP AMP

1	6.4
2	3.8
3	3.8
4	0
5	3.8
6	3.8
7	6.4
8	9.3

Transistor

QY01
SWITCH

1	4.9
2	4.9
3	4.9
4	0
5	0
6	0

QY02
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY03
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY06
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY07
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY08
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY09
SWITCH

1	4.9
2	4.9
3	4.9
4	0
5	0
6	0

QY10
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY11
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY12
SWITCH

1	4.9
2	4.9
3	4.9
4	0
5	0
6	0

QY13
SWITCH

1	0
2	0
3	0
4	0
5	0
6	0

QY18
SWITCH

1	4.9
2	4.9
3	4.9
4	0
5	0
6	0

QY29
REGULATOR

1	9.2
2	7.4
3	6.5
4	8.2
5	9.2
6	8.2

QY30
REGULATOR

1	9.2
2	7.4
3	6.5
4	8.2
5	9.2
6	8.2

QX01
BUFFER

1	1.8
2	1.1
3	0
4	2.1
5	1.4
6	0

QX02
BUFFER

1	2.1
2	1.4
3	0
4	2.1
5	1.4
6	0

QX04
BUFFER

1	2.7
2	2.0
3	0
4	2.4
5	1.7
6	0

QX05
BUFFER

1	2.7
2	2.0
3	0
4	2.7
5	2.0
6	0

QX06
BUFFER

1	9.2
2	2.7
3	2.1
4	9.2
5	2.4
6	1.8

QX07
MIX AMP
BUFFER

1	9.2
2	1.6
3	1.0
4	6.0
5	6.0
6	5.5

QX10
DRIVER

1	3.4
2	2.7
3	0
4	0
5	0
6	0

QX12
DRIVER

1	3.1
2	2.4
3	0
4	0
5	0
6	0

QX16
SWITCH

1	3.1
2	2.4
3	0
4	0
5	0
6	0

QX18
DRIVER

1	2.6
2	2.6
3	0
4	0
5	0
6	0

QX20
DRIVER

1	2.6
2	2.0
3	0
4	0
5	0
6	0

QX22
SWITCH

1	0
2	0.7
3	0
4	0
5	0.7
6	0

QX08
DRIVER

1	—
2	5.4
3	9.2
4	4.7
5	5.4
6	0

QX05
SWITCH

E	0
C	0
B	4.7

QY14
SWITCH

E	0
C	0
B	4.7

QY15
SWITCH

E	4.9
C	0
B	4.9

QY16
SWITCH

E	4.9
C	0
B	4.9

QY17
SWITCH

E	4.9
C	0
B	4.9

QY19
SWITCH

E	4.9
C	0
B	4.9

QY20
SWITCH

E	4.9
C	0
B	4.9

QY21
SWITCH

E	4.9
C	0
B	4.9

QY23
SWITCH

E	4.9
C	0
B	4.9

QY24
SWITCH

E	4.9
C	0
B	4.9

QY25
SWITCH

E	4.9
C	0
B	4.9

QY26
SWITCH

E	4.9
C	0
B	4.9

QY27
SWITCH

E	4.9
C	0
B	4.9

QY15
SWITCH

E	0
C	—
B	0/3.3

QY23
SWITCH

E	3.6
C	0
B	4.9

QY37
BUFFER

E	2.4
C	0
B	1.7

QX39
BUFFER

E	2.1
C	9.3
B	2.7

QX42
BUFFER

E	2.6
C	0
B	1.9

QX44
BUFFER

E	2.2
C	9.3
B	2.9

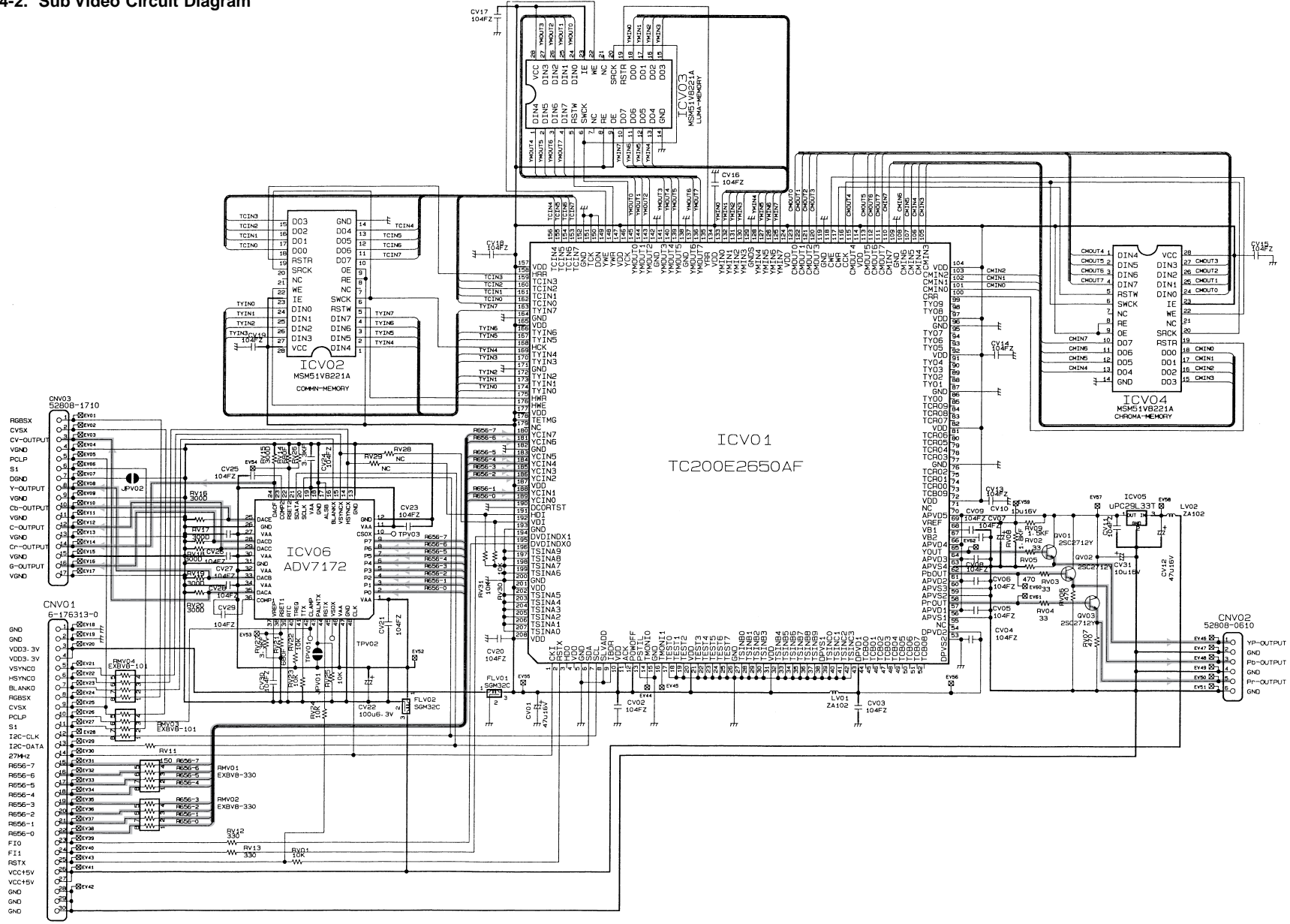
QX47
BUFFER

E	2.6
C	0
B	1.9

QX49
BUFFER

E	2.2
C	9.3
B	2.9

4-2. Sub Video Circuit Diagram



Part No.	Location	Part No.	Location
CNV01	E1	EV41	G1
CNV02	E9	EV42	G1
CNV03	D1	EV43	G1
CV01	F4	EV44	F5
CV02	F5	EV45	F5
CV03	F6	EV46	F9
CV04	E7	EV47	F9
CV05	E7	EV48	F9
CV06	E7	EV49	F9
CV07	E7	EV50	F9
CV08	E7	EV51	F9
CV09	E7	EV52	F3
CV10	E7	EV53	E2
CV11	E8	EV54	D2
CV12	E8	EV55	F4
CV13	D7	EV56	F7
CV14	C7	EV57	D8
CV15	C9	EV58	D8
CV16	B6	EV59	E7
CV17	A4	EV60	E8
CV18	C4	EV61	E8
CV19	C2	EV62	E7
CV20	F4	FLV01	F4
CV21	E3	FLV02	F3
CV22	F3	JPV01	F3
CV23	E3	ICV02	C3
CV24	D3	ICV03	A5
CV25	D2	ICV04	D8
CV26	E2	ICV05	D8
CV27	E2	ICV06	E3
CV28	E2	JPV02	F3
CV29	E2	JPV02	D1
CV30	F1	LV01	F6
CV31	E8	LV02	E9
EV01	D1	QV01	E8
EV02	D1	QV02	E8
EV03	D1	QV03	E8
EV04	D1	RMV01	F1
EV05	D1	RMV02	G2
EV06	D1	RMV03	F1
EV07	D1	RMV04	F1
EV08	D1	RV01	G3
EV09	D1	RV02	E8
EV10	D1	RV03	E8
EV11	E1	RV04	E8
EV12	E1	RV05	E8
EV13	E1	RV06	E8
EV14	E1	RV07	E8
EV15	E1	RV08	E7
EV16	E1	RV09	E8
EV17	E1	RV11	F1
EV18	E1	RV12	G2
EV19	E1	RV13	G2
EV20	F1	RV14	D2
EV21	F1	RV15	D2
EV22	F1	RV16	D2
EV23	F1	RV17	E2
EV24	F1	RV18	E2
EV25	F1	RV19	E2
EV26	F1	RV20	E2
EV27	F1	RV21	F1
EV28	F1	RV22	E3
EV29	F1	RV23	F3
EV30	F1	RV24	F3
EV31	F1	RV25	F3
EV32	F1	RV26	D3
EV33	G1	RV27	F1
EV34	G1	RV28	D3
EV35	G1	RV29	D3
EV36	G1	RV30	E4
EV37	G1	RV31	E4
EV38	G1	TPV01	F3
EV39	G1	TPV02	F3
EV40	G1	TPV03	E3

NC: Not used.

Fig. 3-4-3

SECTION 4 PARTS LIST

SAFETY PRECAUTION

The parts identified by !(△) mark are critical for safety. Replace only with part number specified.

The mounting position of replacement is to be identical with originals.

The substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

NOTICE

The part number must be used when ordering parts in order to assist in processing, be sure to include the model number and description.

ABBREVIATIONS

1. Integrated Circuit (IC)

2. Capacitor (Cap)

- Capacitance Tolerance (for Nominal Capacitance more than 10pF)

Table 4-2-1

Symbol	B	C	D	F	G	J	K	M	N
Tolerance %	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10	± 20	± 30

Symbol	P	Q	T	U	V	W	X	Y	Z
Tolerance %	+ 100 0	+ 30 - 10	+ 50 - 10	+ 75 - 10	+ 20 - 10	+ 100 - 10	+ 40 - 20	+ 150 - 10	+ 80 - 20

Ex. 10MF J = 10μF ± 5%

- Capacitance Tolerance (for Nominal Capacitance 10pF or less)

Table 4-2-2

Symbol	B	C	D	F	G
Tolerance pF	± 0.1	± 0.25	± 0.5	± 1	± 2

Ex. 10pF G = 10pF ± 2pF

3. Resistor (Res)

- Resistance tolerance

Table 4-3-1

Symbol	B	C	D	F	G	J	K	M
Tolerance %	± 0.1	± 0.25	± 0.5	± 1	± 2	± 5	± 10	± 20

Ex. 470 ohm J = 470 ohm ± 5%

4. EXPLODED VIEWS

4-1. Packing Assembly

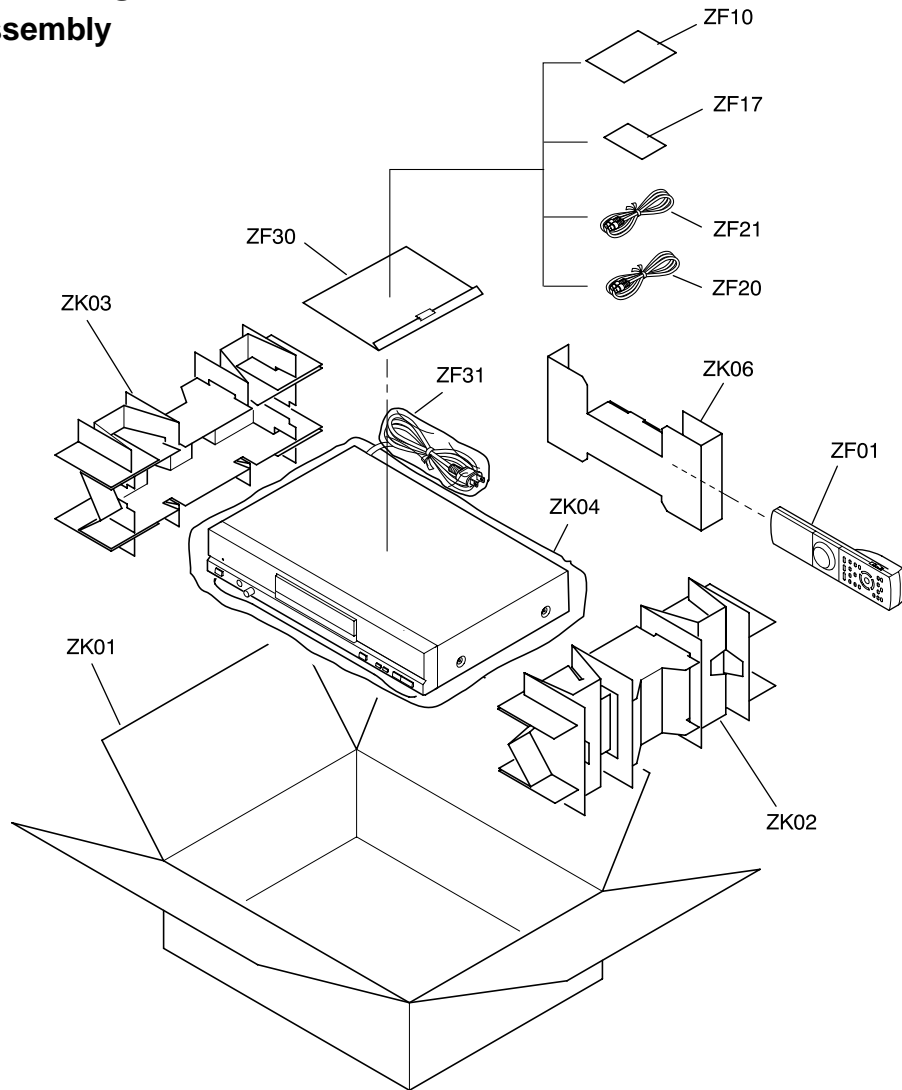


Fig. 4-4-1

4-2. Remote Control Unit

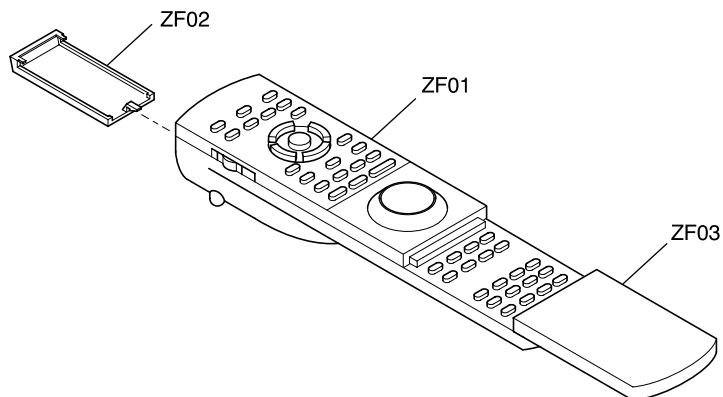


Fig. 4-4-2

4-3. Chassis Assembly

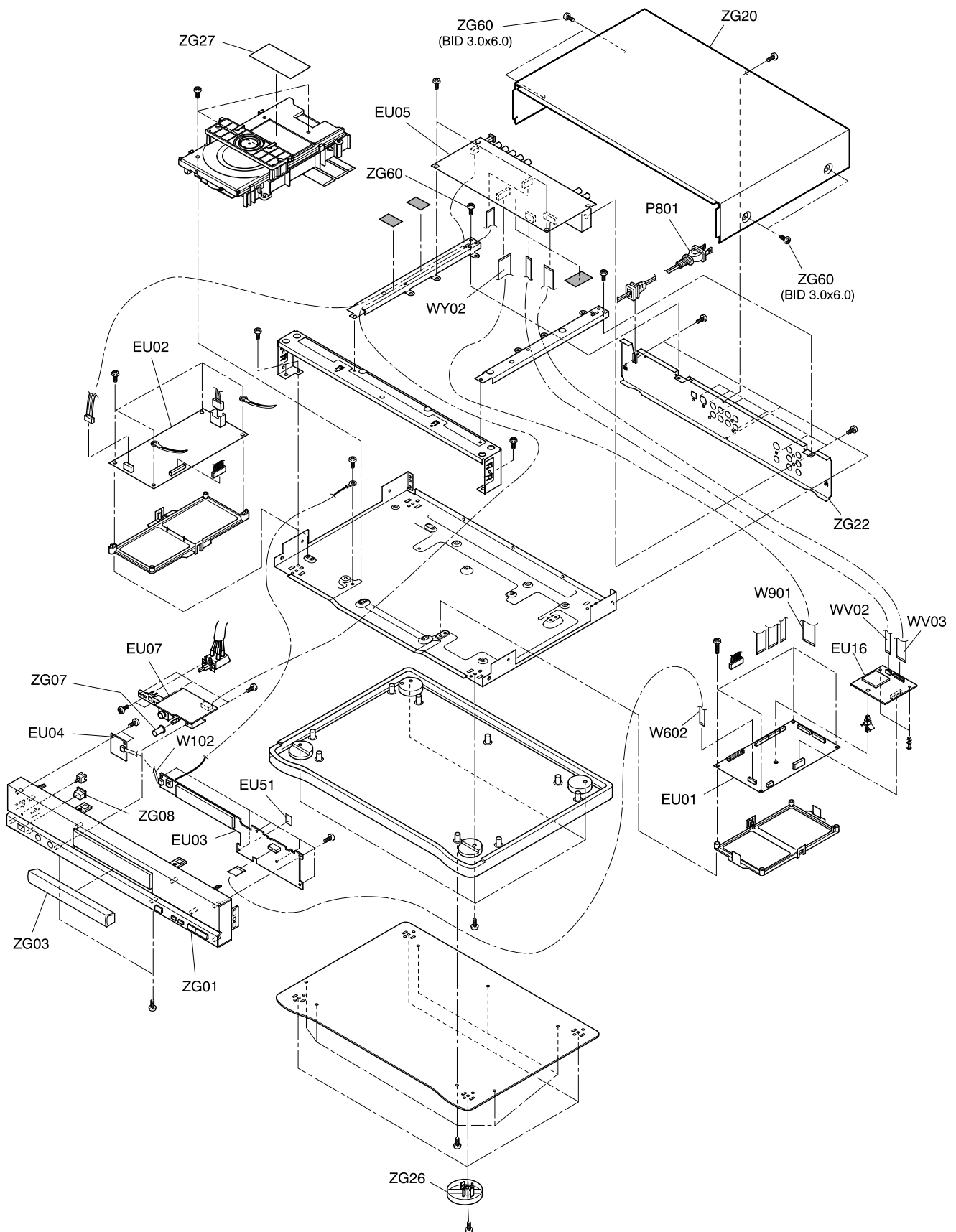


Fig. 4-4-3

4-4. Mechanism Assembly

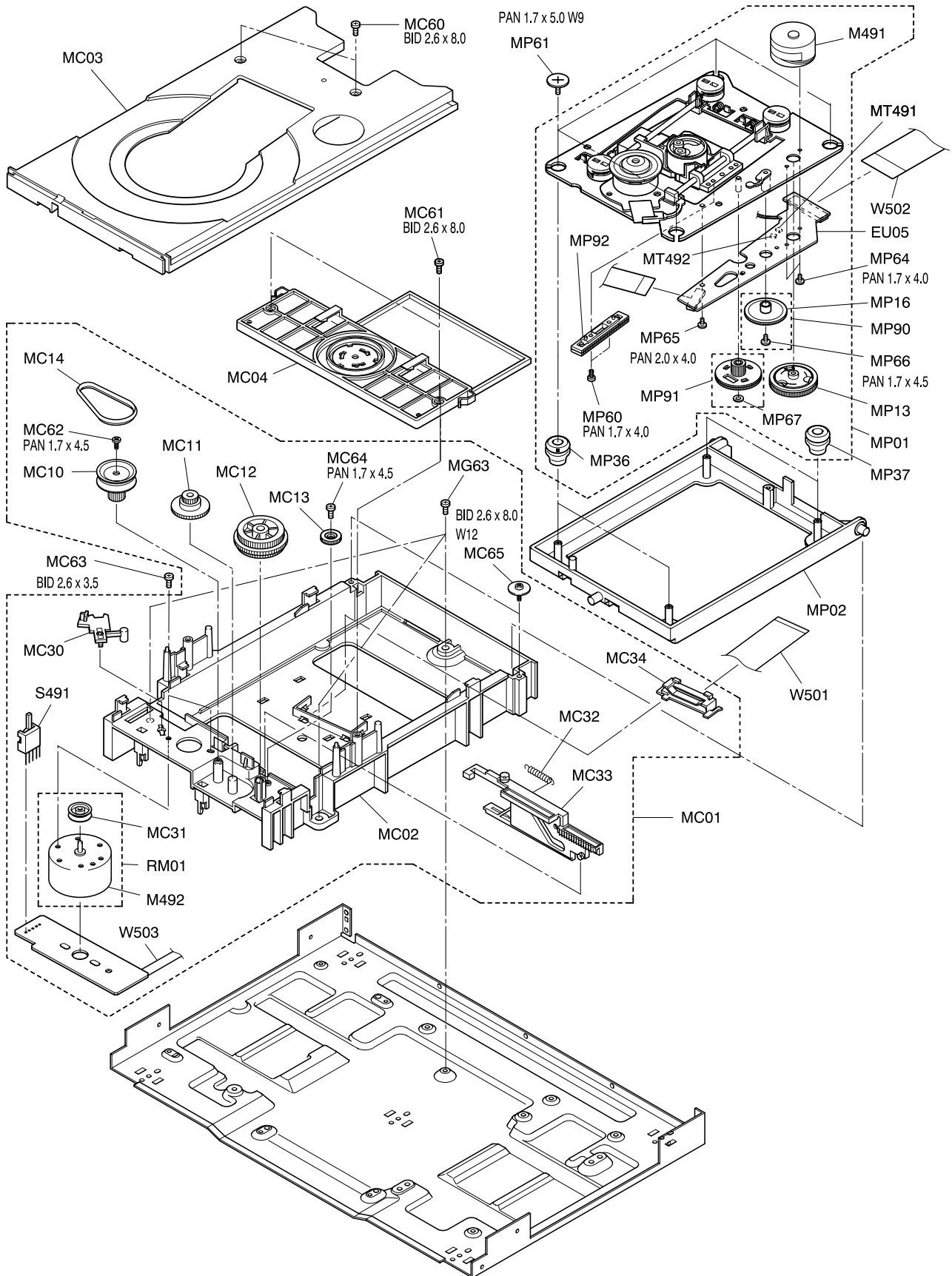


Fig. 4-4-4

LOCATION	PART		
NUMBER	NUMBER	DESCRIPTION	

- MECHANICAL PARTS -

M491	79070015	Motor, Feed	RF-300PA
MC01	79070158	Chassis Assy, Mechanism	
MC03	79070022	Tray	
MC04	79070139	Clamper Assy	
MC14	79070024	Belt, Loading	
MC63	79070028	Screw	2.6x3.5mm
MC65	79070064	Screw	2.6x8W12mm
MP01	79070339	Mechanism Assy	Pick Up
MP02	79070023	Chassis, Sub	
MP13	79070011	Gear Assy	Feed Motor
MP36	79070016	Dumper, Rubber	Front
MP37	79070082	Dumper, Rubber	Rear
MP61	79070019	Screw	1.7x0.5W9mm
MP64	79070020	Screw	1.7x4.0mm
MP66	79070018	Screw	1.7x4.5mm
MP67	79070017	Washer	W-5-1.65
MP90	79070012	Gear A Kit	
MP91	79070013	Gear B Kit	
MP92	79070014	Gear, Rack	
MT491	79040001	Hole Element	HW-101A-E
MT492	79040001	Hole Element	HW-101A-E
RM01	79070025	Motor Assy, Loading	
S491	79070026	Switch	SW-SSCF
W102	79080145	Cable, Flexible	FFC, 4P, L120
W501	79080020	Cable, Flexible	FFC, 21P, L292
W502	79080021	Cable, Flexible	FFC, 19P, L185
W503	79080059	Cable, Flexible	FFC, 5P, L288
W602	79080142	Cable, Flexible	FFC-10P-L150
W901	79080178	Cable, Flexible	FFC-25P-L180
WV02	79080182	Cable, Flexible	FFC, 6P, L120
WV03	79080177	Cable, Flexible	FFC-17P-L120
WY02	79080183	Cable, Flexible	FFC, 10P, L440
ZF01	79078001	Remote Control Unit, SE-R0002	
ZF02	79078002	Cover, Battery	
ZF03	79078003	Cover, Remote Control Unit	
! ZF10	79077028	Owners Manual	English/SPANISH
ZF17	79070272	Warranty Card	USA
ZF20	79070037	Cable, AV	
ZF21	79070049	Cable, S	
ZF30	79070042	Bag, Polyethylene	
ZF31	79080026	Bag, Polyethylene	(Power Cord)
ZG01	79071060	Front Panel	
ZG03	79071033	Panel, Tray	
ZG07	79071034	Knob, HP VR	
ZG08	79071035	Button, Power	
ZG20	79073014	Cover, Top	
! ZG21	79070371	Label, Rating	USA
ZG26	79073033	Foot Assy, Front	
! ZG27	79070162	Label, PU Caution	
ZG33	79079011	Base	Main PCB
ZG60	79070165	Screw	3.0x6.0mm
ZK01	79075034	Case	
ZK02	79075024	Packing, R	
ZK03	79075023	Packing, L	
ZK04	79070033	Bag, Polyethylene	
ZK06	79075025	Separator	
ZZ01	79070274	Test Disc	DVDZ-9044
	79080074	Kit, Data Update	

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION
		- ELECTRICAL PARTS -						
EU02	79085011	PC Board Assy			Power			
		- INTEGRATED CIRCUITS -						
! Q803	79040100	IC			STR-F6535			
Q821	79040104	IC			UPC1093J			
Q830	79040105	IC			BA10324A			
		- TRANSISTORS -						
! Q802	79050026	Photo Coupler			PC123FY2			
! Q804	79050026	Photo Coupler			PC123FY2			
Q822	79050007	Transistor			2SC3852			
Q823	79050007	Transistor			2SC3852			
Q824	79050034	Transistor			2SA1757F			
Q825	79050005	Transistor			2SC2236-Y			
Q827	79050004	Transistor			2SC2458-Y			
Q828	79050004	Transistor			2SC2458-Y			
Q829	79050008	Transistor			RN1201			
		- DIODES -						
! D802	79060016	Diode			ERA15-06			
! D803	79060016	Diode			ERA15-06			
! D804	79060016	Diode			ERA15-06			
! D805	79060016	Diode			ERA15-06			
! D806	79060009	Diode			RU-1P			
D807	79060013	Diode			AG01			
D808	79060015	Diode			1SS133			
D809	79060029	Diode, Zener			6.8V			
D810	79060013	Diode			AG01			
D811	79060013	Diode			AG01			
D812	79060015	Diode			1SS133			
D821	79060008	Diode			RU2YX			
D822	79060017	Diode			RK49LF-L1			
D823	79060032	Diode			AG01			
D824	79060013	Diode			AG01			
D825	79060013	Diode			AG01			
D829	79060015	Diode			1SS133			
D831	79060015	Diode			1SS133			
D832	79060015	Diode			1SS133			
D833	79060015	Diode			1SS133			
D835	79060012	Diode			ERA15-02			
D836	79060007	Diode, Zener			UZ3.0BSB			
D837	79060004	Diode, Zener			UZ5.1BSB			
D838	79060004	Diode, Zener			UZ5.1BSB			
D839	79060004	Diode, Zener			UZ5.1BSB			
D840	79060006	Diode, Zener			UZ5.6BSB			
D841	79060013	Diode			AG01			
D842	79060013	Diode			AG01			
D843	79060027	Diode, Zener			UZ12BSB			
		- COILS -						
! L801	79070051	Coil, Choke			ZBF253D-02			
! L802	79070051	Coil, Choke			ZBF253D-02			
! L821	79010001	Coil			20fEH			
		- CAPACITORS -						
! C801	79020027	Cap, Ceramic			0.22MF	Z 275V		
! C802	79020028	Cap, Ceramic			470pF	Z 250V		
! C803	79020028	Cap, Ceramic			470pF	Z 250V		
! C804	79020013	Cap, Ceramic			0.01MF	Z 250V		
! C805	79020042	Cap, Electrolytic			100MF	D 450V		
! C806	79020016	Cap, Film			0.033MF	J 630V		
! C808	79020015	Cap, Ceramic			150pF	J 1kV		
C809	79020067	Cap, Electrolytic			27MF	M 35V		
C810	79020078	Cap, Ceramic			470pF	K 50V		
! C811	79020029	Cap, Ceramic			220pF	Z 250V		
C812	79020068	Cap, Ceramic			390pF	K 2kV		
C813	79020079	Cap, Ceramic			2200pF	K 50V		
C814	79020069	Cap, Film			0.1MF	J 50V		
C821	79020020	Cap, Electrolytic			820MF	M 16V		
C823	79020019	Cap, Electrolytic			1200MF	M 10V		
C825	79020082	Cap, Electrolytic			1500MF	M 10V		
C826	79020002	Cap, Electrolytic			22MF	M 100V		
C828	79020077	Cap, Electrolytic			220MF	M 25V		
C829	79020022	Cap, Electrolytic			220MF	M 10V		
C830	79020001	Cap, Electrolytic			22MF	M 16V		
C831	79020043	Cap, Electrolytic			470MF	M 16V		
C832	79020035	Cap, Electrolytic			100MF	M 10V		
C833	79020043	Cap, Electrolytic			470MF	M 16V		
C834	79020043	Cap, Electrolytic			470MF	M 16V		
C835	79020007	Cap, Electrolytic			22MF	M 50V		
C836	79020007	Cap, Electrolytic			22MF	M 50V		
C837	79020021	Cap, Film			0.22MF	J 50V		
C840	79020064	Cap, Electrolytic			39MF	M 50V		
C841	79020064	Cap, Electrolytic			39MF	M 50V		
C842	79020007	Cap, Electrolytic			22MF	M 50V		
		- RESISTORS -						
R803	79030045	Res, Oxide Metal			56kohm	J 2W		
! R804	79030025	Res, Oxide Metal			82kohm	J 2W		
R805	79030039	Res, Carbon			4.7kohm	J 1/6W		
R806	79030026	Res, Oxide Metal			330kohm	J 1W		
R807	79030032	Res, Carbon			680ohm	J 1/6W		
! R808	79030011	Res, Oxide Metal			0.47ohm	J 1W		
R809	79030033	Res, Carbon			3.3kohm	J 1/6W		
! R810	79030028	Res, Oxide Metal			22ohm	J 1/2W		
R811	79030034	Res, Carbon			2.4kohm	J 1/6W		
R812	79030035	Res, Carbon			2.7kohm	J 1/6W		
R824	79030046	Res, Oxide Metal			62ohm	J 1/2W		
R825	79030036	Res, Carbon			330ohm	J 1/6W		
R826	79030037	Res, Carbon			7.5kohm	G 1/4W		
R827	79030038	Res, Carbon			1kohm	G 1/4W		
R828	79030039	Res, Carbon			4.7kohm	J 1/6W		
R829	79030004	Res, Carbon			1kohm	J 1/6W		
R830	79030029	Res, Carbon			100kohm	G 1/4W		
R832	79030004	Res, Carbon			1kohm	J 1/6W		
R833	79030047	Res, Oxide Metal			910ohm	J 1/2W		
R834	79030041	Res, Carbon			2kohm	G 1/4W		
R835	79030041	Res, Carbon			2kohm	G 1/4W		
R836	79030041	Res, Carbon			2kohm	G 1/4W		
R837	79030041	Res, Carbon			2kohm	G 1/4W		
R838	79030042	Res, Carbon			680ohm	G 1/4W		
R839	79030041	Res, Carbon			2kohm	G 1/4W		
R840	79030002	Res, Carbon			10kohm	J 1/6W		
R841	79030043	Res, Carbon			180ohm	J 1/6W		
R842	79030042	Res, Carbon			680ohm	G 1/4W		
R843	79030030	Positive Thermister			PTH8L510-T			
R845	79030044	Res, Carbon			2.7kohm	G 1/4W		
R846	79030039	Res, Carbon			4.7kohm	J 1/6W		
R847	79030035	Res, Carbon			2.7kohm	J 1/6W		
R848	79030004	Res, Carbon			1kohm	J 1/6W		
R849	79030043	Res, Carbon			180ohm	J 1/6W		
R850	79030009	Res, Oxide Metal			220ohm	J 1/2W		
		- MISCELLANEOUS -						
! F801	79087001	Fuse			1.6A, 250V			
! F822	79070061	Protector			125V, 3.0A			
! F823	79070061	Protector			125V, 3.0A			
! P801	79088005	Power Cord						
! RF823	79030017	Res, Fusible			560ohm	J 1/2W		
! T801	79080006	Line Filter			253YOR7			
! T802	79010013	Power Transformer			SRW3020ED-204			
EU04	79081011	PC Board Assy			Power Switch			
EU03	79081010	PC Board Assy			Front			
		- INTEGRATED CIRCUITS -						
IC101	79040132	IC			TMP47C416F-RE12			
		- MISCELLANEOUS -						
A101	79080148	Display, FL			7-ST-33GK			
MT101	79080140	Module, RMT			GPU261X			
S101	79080141	Switch			Push			
S102	79080141	Switch			Push			
S103	79080141	Switch			Push			
S104	79080141	Switch			Push			
S105	79080141	Switch			Push			
X101	79070006	Oscillator, Ceramic			8MHz			
EU07	79081012	PC Board Assy			HP AMP			
		- INTEGRATED CIRCUITS -						
ICU01	79040044	IC			NJM4580E			
		- TRANSISTORS -						
QU01	79050029	Transistor, Chip			IMD3A			
QU03	79050038	Transistor, Chip			2SD2114K			
QU31	79050001	Transistor, Chip			RN2402			
QU32	79050001	Transistor, Chip			RN2402			
QU33	79050001	Transistor, Chip			RN2402			
QU34	79050038	Transistor, Chip			2SD2114K			
QU35	79050038	Transistor, Chip			2SD2114K			
		- CAPACITORS -						
CU01	79020093	Cap, Electrolytic			220MF	M 10V		
CU02	79020094	Cap, Electrolytic			0.0001MF	M 6.3V		
CU03	79020094	Cap, Electrolytic			0.0001MF	M 6.3V		
CU04	79020093	Cap, Electrolytic			220MF	M 10V		
CU07	79020092	Cap, Electrolytic			10MF	M 16V		
CU08	79020092	Cap, Electrolytic			10MF	M 16V		
CU11	79020092	Cap, Electrolytic			10MF	M 16V		
CU32	79020093	Cap, Electrolytic			220MF	M 10V		

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION
		- MISCELLANEOUS -			
JU01	79089009	Jack, HP	X301	79089003	Oscillator SMD49, 27MHz
VRU01	79030049	Res, Variable	X501	79080014	Oscillator SMD49, 33.86MHz
			X601	79080015	Oscillator CSACV20.00MX040
EU01	79083006	PC Board Assy Main	EU16	79086001	PC Board Assy Progressive
		- INTEGRATED CIRCUITS -			- INTEGRATED CIRCUITS -
IC201	79040110	IC TC90A41AF	ICV01	79040142	IC TC200E2650AF
IC202	79040061	IC UPD424800LE70	ICV02	79040128	IC MSM51V8221A
IC202	79040145	IC NN514800AJ-60T	ICV03	79040128	IC MSM51V8221A
IC203	79040066	IC UPC29L33T	ICV04	79040128	IC MSM51V8221A
IC204	79040008	IC TC7S32F	ICV05	79040066	IC UPC29L33T
IC205	79040008	IC TC7S32F	ICV06	79040139	IC ADV7172
IC301	79040122	IC MD36710X			- TRANSISTORS -
IC302	79040063	IC HY57V16160ATC-10	QV01	79050016	Transistor, Chip 2SC2712
IC305	79040063	IC HY57V16160ATC-10	QV02	79050016	Transistor, Chip 2SC2712
IC307	79040130	IC NJU6321PE-TE1	QV03	79050016	Transistor, Chip 2SC2712
IC308	79040011	IC TC7W04F			- CAPACITORS -
IC309	79040123	IC TC203G8AF-0101 (Z)	CV01	79020062	Cap, Electrolytic 47MF M 16V
IC310	79040128	IC MSM51V8221A	CV10	79020049	Cap, Electrolytic 10MF M 16V
IC311	79040013	IC TC7W74F	CV12	79020062	Cap, Electrolytic 47MF M 16V
IC312	79040119	IC TC7SH86F	CV22	79020061	Cap, Electrolytic 100MF M 6.3V
IC313	79040119	IC TC7SH86F	CV31	79020049	Cap, Electrolytic 10MF M 16V
IC314	79040119	IC TC7SH86F			
IC501	79040114	IC TA1254AF	EU05	79085019	PC Board Assy Output
IC503	79040109	IC TC9461F			- INTEGRATED CIRCUITS -
IC504	79040006	IC TC7S04F	ICX71	79040138	IC MC14577CFL1
IC505	79040136	IC BA5917FP-E2	ICX72	79040138	IC MC14577CFL1
IC506	79040029	IC TC74HC4053AF	ICY01	79040101	IC AD1855JRS
IC507	79040039	IC NJM3403AMC	ICY02	79040102	IC NJM2370U05
IC508	79040072	IC TC7S66F	ICY03	79040044	IC NJM4580E
IC509	79040129	IC RT2124AFS-T	ICY04	79040044	IC NJM4580E
IC510	79040040	IC BA6844FP	ICY07	79040007	IC TC7S08F
IC512	79040006	IC TC7S04F	ICY08	79040008	IC TC7S32F
IC516	79040006	IC TC7S04F	ICY09	79040074	IC TC74HC04AF
IC517	79040014	IC TA75S01F	ICY10	79080019	Terminal, Optical GPF32T
IC518	79040050	IC NJM2107F	ICY11	79040130	IC NJU6321PE-TE1
IC519	79040009	IC TC7S86F	ICY15	79040087	IC TC7W241FU
IC520	79040008	IC TC7S32F	ICY17	79040087	IC TC7W241FU
IC521	79040009	IC TC7S86F	ICY18	79040007	IC TC7S08F
IC522	79040011	IC TC7W04F	ICY19	79040008	IC TC7S32F
IC523	79040013	IC TC7W74F	ICY20	79040101	IC AD1855JRS
IC524	79040013	IC TC7W74F	ICY21	79040044	IC NJM4580E
IC525	79040121	IC AD8561AR	ICY22	79040087	IC TC7W241FU
IC526	79040050	IC NJM2107F	ICY23	79040007	IC TC7S08F
IC527	79040131	IC TC74HC4066AFT	ICY24	79040008	IC TC7S32F
IC528	79040126	IC BU6481KV	ICY25	79040101	IC AD1855JRS
IC529	79040125	IC TC7W66FU	ICY26	79040044	IC NJM4580E
IC530	79040072	IC TC7S66F	ICY27	79040013	IC TC7W74F
IC601	79040143	IC TMP93CS42AF-9417	ICY28	79040102	IC NJM2370U05
IC602	79040041	IC PST591-IDT	ICY29	79040072	IC TC7S66F
IC603	79040027	IC TC74HC32AF	ICY30	79040072	IC TC7S66F
IC604	79040030	IC TC74AC573F	ICY31	79040007	IC TC7S08F
IC605	79040124	IC TC74HC08AF	ICY32	79040007	IC TC7S08F
IC607	79040007	IC TC7S08F	ICY33	79040087	IC TC7W241FU
IC608	79040006	IC TC7S04F			- TRANSISTORS -
IC609	79040030	IC TC74AC573F	QX01	79050022	Transistor, Chip HN1A01F-Y
IC613	79040135	IC 24C04AFJA	QX02	79050022	Transistor, Chip HN1A01F-Y
IC614	79040144	IC W26010AT-15	QX03	79050022	Transistor, Chip HN1A01F-Y
IC615	79040127	IC LH28F800SGE-70	QX04	79050022	Transistor, Chip HN1A01F-Y
IC616	79040007	IC TC7S08F	QX05	79050022	Transistor, Chip HN1A01F-Y
IC617	79040087	IC TC7W241FU	QX08	79050015	Transistor, Chip HN1B01F
IC902	79040066	IC UPC29L33T	QX10	79050015	Transistor, Chip HN1B01F
IC904	79040108	IC TC7SET08F	QX12	79050015	Transistor, Chip HN1B01F
IC906	79040087	IC TC7W241FU	QX16	79050015	Transistor, Chip HN1B01F
IC907	79040087	IC TC7W241FU	QX18	79050015	Transistor, Chip HN1B01F
		- TRANSISTORS -	QX20	79050015	Transistor, Chip HN1B01F
Q501	79050019	Transistor, Chip 2SA1182	QX22	79050032	Transistor, Chip IMX1
Q502	79050010	Transistor, Chip RN1411	QX23	79050030	Transistor, Chip DTC143EKA
Q503	79050015	Transistor, Chip HN1B01F	QX37	79050018	Transistor, Chip 2SA1162
Q504	79050032	Transistor, Chip IMX1	QX39	79050016	Transistor, Chip 2SC2712
Q505	79050030	Transistor, Chip DTC143EKA	QX42	79050018	Transistor, Chip 2SA1162
Q506	79050015	Transistor, Chip HN1B01F	QX44	79050016	Transistor, Chip 2SC2712
Q507	79050037	Transistor, Chip 2SC4944-GR	QX47	79050018	Transistor, Chip 2SA1162
Q508	79050036	Transistor, Chip 2SA1832-GR	QX49	79050016	Transistor, Chip 2SC2712
Q511	79050010	Transistor, Chip RN1411	QY01	79050012	Transistor, Chip RN4601
Q512	79050010	Transistor, Chip RN1411	QY02	79050014	Transistor, Chip HN1C03F
Q601	79050031	Transistor, Chip DTA114EKA	QY03	79050014	Transistor, Chip HN1C03F
		- DIODES -	QY05	79050030	Transistor, Chip DTC143EKA
D501	79060018	Diode, Chip 1SS193	QY06	79050014	Transistor, Chip HN1C03F
D502	79060018	Diode, Chip 1SS193	QY07	79050014	Transistor, Chip HN1C03F
D503	79060018	Diode, Chip 1SS193	QY08	79050014	Transistor, Chip HN1C03F
		- MISCELLANEOUS -	QY09	79050012	Transistor, Chip RN4601

LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION	LOCATION NUMBER	PART NUMBER	DESCRIPTION			
QY10	79050014	Transistor,Chip	HN1C03F			CY63	79020089	Cap,Film	220pF	J	100V
QY11	79050014	Transistor,Chip	HN1C03F			CY64	79020085	Cap,Electrolytic	100MF	M	10V
QY12	79050012	Transistor,Chip	RN4601			CY65	79020085	Cap,Electrolytic	100MF	M	10V
QY13	79050014	Transistor,Chip	HN1C03F			CY66	79020086	Cap,Electrolytic	220MF	M	16V
QY14	79050030	Transistor,Chip	DTC143EKA			CY67	79020086	Cap,Electrolytic	220MF	M	16V
QY15	79050001	Transistor,Chip	RN2402			CY72	79020083	Cap,Electrolytic	10MF	M	50V
QY16	79050001	Transistor,Chip	RN2402			CY75	79020085	Cap,Electrolytic	100MF	M	10V
QY17	79050001	Transistor,Chip	RN2402			CY76	79020086	Cap,Electrolytic	220MF	M	16V
QY18	79050012	Transistor,Chip	RN4601			CY77	79020086	Cap,Electrolytic	220MF	M	16V
QY19	79050001	Transistor,Chip	RN2402			CY78	79020086	Cap,Electrolytic	220MF	M	16V
QY20	79050001	Transistor,Chip	RN2402			CY79	79020086	Cap,Electrolytic	220MF	M	16V
QY21	79050001	Transistor,Chip	RN2402			CY80	79020090	Cap,Film	1000pF	J	100V
QY22	79050001	Transistor,Chip	RN2402			CY81	79020090	Cap,Film	1000pF	J	100V
QY23	79050001	Transistor,Chip	RN2402			CY82	79020089	Cap,Film	220pF	J	100V
QY24	79050001	Transistor,Chip	RN2402			CY83	79020090	Cap,Film	1000pF	J	100V
QY25	79050001	Transistor,Chip	RN2402			CY84	79020090	Cap,Film	1000pF	J	100V
QY26	79050001	Transistor,Chip	RN2402			CY85	79020089	Cap,Film	220pF	J	100V
QY27	79050001	Transistor,Chip	RN2402			CY86	79020086	Cap,Electrolytic	220MF	M	16V
QY28	79050014	Transistor,Chip	HN1C03F			CY87	79020086	Cap,Electrolytic	220MF	M	16V
QY29	79050014	Transistor,Chip	HN1C03F			CY88	79020089	Cap,Film	220pF	J	100V
QY30	79050014	Transistor,Chip	HN1C03F			CY89	79020089	Cap,Film	220pF	J	100V
		- DIODES -				CY90	79020085	Cap,Electrolytic	100MF	M	10V
DY01	79060022	Diode,Chip	1SS368			CY91	79020085	Cap,Electrolytic	100MF	M	10V
DY02	79060022	Diode,Chip	1SS368			CY92	79020091	Cap,Film	4700pF	J	63V
DY03	79060026	Diode	UDZS10B			CY93	79020091	Cap,Film	4700pF	J	63V
DY04	79060022	Diode,Chip	1SS368			CY94	79020091	Cap,Film	4700pF	J	63V
DY05	79060022	Diode,Chip	1SS368			CY95	79020091	Cap,Film	4700pF	J	63V
		- CAPACITORS -				CY96	79020091	Cap,Film	4700pF	J	63V
CW05	79020083	Cap,Electrolytic	10MF	M	50V	CY97	79020091	Cap,Film	4700pF	J	63V
CW06	79020083	Cap,Electrolytic	10MF	M	50V	CY98	79020091	Cap,Film	4700pF	J	63V
CW09	79020095	Cap,Electrolytic	1000MF	M	25V	CY99	79020091	Cap,Film	4700pF	J	63V
CW10	79020086	Cap,Electrolytic	220MF	M	16V			- MISCELLANEOUS -			
CW11	79020086	Cap,Electrolytic	220MF	M	16V	FLX01	79010008	Coil	TH286LAIS15674		
CW12	79020086	Cap,Electrolytic	220MF	M	16V	FLX02	79010008	Coil	TH286LAIS15674		
CW13	79020086	Cap,Electrolytic	220MF	M	16V	FLX03	79010008	Coil	TH286LAIS15674		
CX01	79020039	Cap,Electrolytic	47MF	M	10V	FLX04	79010008	Coil	TH286LAIS15674		
CX17	79020088	Cap,Electrolytic	1000MF	M	10V	FLX05	79010008	Coil	TH286LAIS15674		
CX20	79020088	Cap,Electrolytic	1000MF	M	10V	FLX06	79010016	Filter	H287LDKS-15818		
CX21	79020088	Cap,Electrolytic	1000MF	M	10V	FLX07	79010016	Filter	H287LDKS-15818		
CX22	79020033	Cap,Electrolytic	470MF	M	6.3V	FLX08	79010016	Filter	H287LDKS-15818		
CX23	79020033	Cap,Electrolytic	470MF	M	6.3V	JX01	79089004	Plate,Jack	Video		
CX37	79020039	Cap,Electrolytic	47MF	M	10V	JX02	79089013	Plate,Jack	Component		
CX38	79020035	Cap,Electrolytic	100MF	M	10V	JY01	79089006	Plate,Jack	Audio		
CX40	79020033	Cap,Electrolytic	470MF	M	6.3V	JY02	79089007	Plate,Jack	Digital Audio		
CX42	79020039	Cap,Electrolytic	47MF	M	10V	SY01	79080018	Relay	EG2-9		
CX43	79020039	Cap,Electrolytic	47MF	M	10V	XY02	79089008	Crystal	HC49/U24.576MHz		
CX46	79020033	Cap,Electrolytic	470MF	M	6.3V						
CX49	79020039	Cap,Electrolytic	47MF	M	10V						
CX52	79020033	Cap,Electrolytic	470MF	M	6.3V						
CX53	79020039	Cap,Electrolytic	47MF	M	10V						
CY10	79020086	Cap,Electrolytic	220MF	M	16V						
CY11	79020086	Cap,Electrolytic	220MF	M	16V						
CY12	79020086	Cap,Electrolytic	220MF	M	16V						
CY13	79020086	Cap,Electrolytic	220MF	M	16V						
CY14	79020090	Cap,Film	1000pF	J	100V						
CY15	79020090	Cap,Film	1000pF	J	100V						
CY16	79020089	Cap,Film	220pF	J	100V						
CY17	79020086	Cap,Electrolytic	220MF	M	16V						
CY18	79020090	Cap,Film	1000pF	J	100V						
CY19	79020090	Cap,Film	1000pF	J	100V						
CY20	79020089	Cap,Film	220pF	J	100V						
CY21	79020086	Cap,Electrolytic	220MF	M	16V						
CY22	79020089	Cap,Film	220pF	J	100V						
CY23	79020089	Cap,Film	220pF	J	100V						
CY25	79020085	Cap,Electrolytic	100MF	M	10V						
CY26	79020085	Cap,Electrolytic	100MF	M	10V						
CY29	79020084	Cap,Electrolytic	47MF	M	25V						
CY42	79020085	Cap,Electrolytic	100MF	M	10V						
CY43	79020085	Cap,Electrolytic	100MF	M	10V						
CY49	79020085	Cap,Electrolytic	100MF	M	10V						
CY50	79020083	Cap,Electrolytic	10MF	M	50V						
CY52	79020086	Cap,Electrolytic	220MF	M	16V						
CY53	79020086	Cap,Electrolytic	220MF	M	16V						
CY54	79020086	Cap,Electrolytic	220MF	M	16V						
CY55	79020086	Cap,Electrolytic	220MF	M	16V						
CY56	79020090	Cap,Film	1000pF	J	100V						
CY57	79020090	Cap,Film	1000pF	J	100V						
CY58	79020089	Cap,Film	220pF	J	100V						
CY59	79020090	Cap,Film	1000pF	J	100V						
CY60	79020090	Cap,Film	1000pF	J	100V						
CY61	79020089	Cap,Film	220pF	J	100V						
CY62	79020089	Cap,Film	220pF	J	100V						

SPECIFICATIONS

DVD Video Player/Outputs/Supplied Accessories

[DVD Video Player]

Power supply	120V AC, 60 Hz
Power consumption	25W
Mass	7.0 kg
External dimensions	430 x 96 x 300 mm (W/H/D)
Signal system	Standard NTSC
Laser	Semiconductor laser, wavelength 650 nm
Frequency range	DVD linear sound : 48kHz sampling 4 Hz to 22 kHz 96kHz sampling 4 Hz to 44 kHz Audio CD : 4Hz to 20 kHz
Signal-to-noise ratio	More than 112 dB
Audio dynamic range	More than 112 dB
Harmonic distortion	Less than 0.001%
Wow and flutter	Below measurable level (less than $\pm 0.001\%$ (W. PEAK))
Operating conditions	Temperature: 5 °C to 35 °C, Operation status: Horizontal

[Outputs]

Video output	1.0 V (p-p), 75 Ω , negative sync., pin jack x 1
S video output	(Y) 1.0 V (p-p), 75 Ω , negative sync., Mini DIN 4-pin x 1 (C) 0.286 V (p-p), 75 Ω
Color difference output (interlaced)	(Y) 1.0 V (p-p), 75 Ω , negative sync., pin jack x 1 (Cb)/(Cr) 0.7 V (p-p), 75 Ω , pin jack x 2
Color difference output (progressive)	(Y) 1.0 V (p-p), 75 Ω , negative sync., pin jack x 1 (Cb,Pb)/(Cr,Pr) 0.7 V (p-p), 75 Ω , pin jack x 2
Audio output (optical)	Optical connector x 1
Audio output (coaxial)	0.5 V (p-p), 75 Ω , pin jack x 1
Audio output (mixed out)	2.0 V (rms), 220 Ω , pin jacks (L, R) x 1
Audio output (5.1ch surround)	2.0 V (rms), 220 Ω , pin jacks x 6
Headphone terminal	32 Ω (10 mW), impedance; more than 8 Ω

[Supplied Accessories]

S video cable	1
Audio /video cable	1
Remote control (SE-R0002)	1
Batteries (AA)	2

* Designs and specifications are subject to change without notice.

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