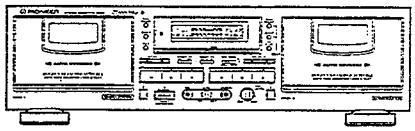
PIONEER®
The Art of Entertainment

Service Manual



• The above illustration shows CT-W803RS.

ORDER NO.
RRV1074

STEREO DOUBLE CASSETTE DECK

CT-W603RS

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	CT-W603RS		
KUXJ	○	AC120V	
KCXJ	○	AC120V	

CONTENTS

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T – SSG FEB. 1994 Printed in Japan

1. SAFETY INFORMATION

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

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

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

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

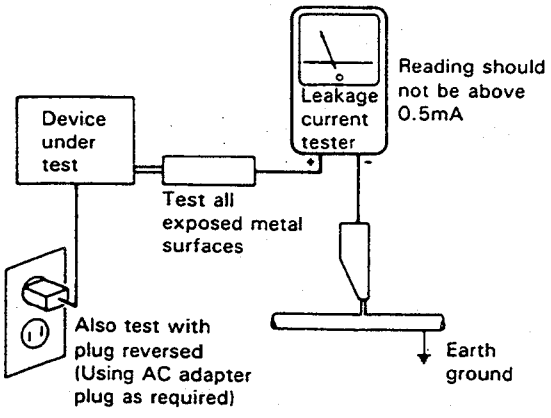
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

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

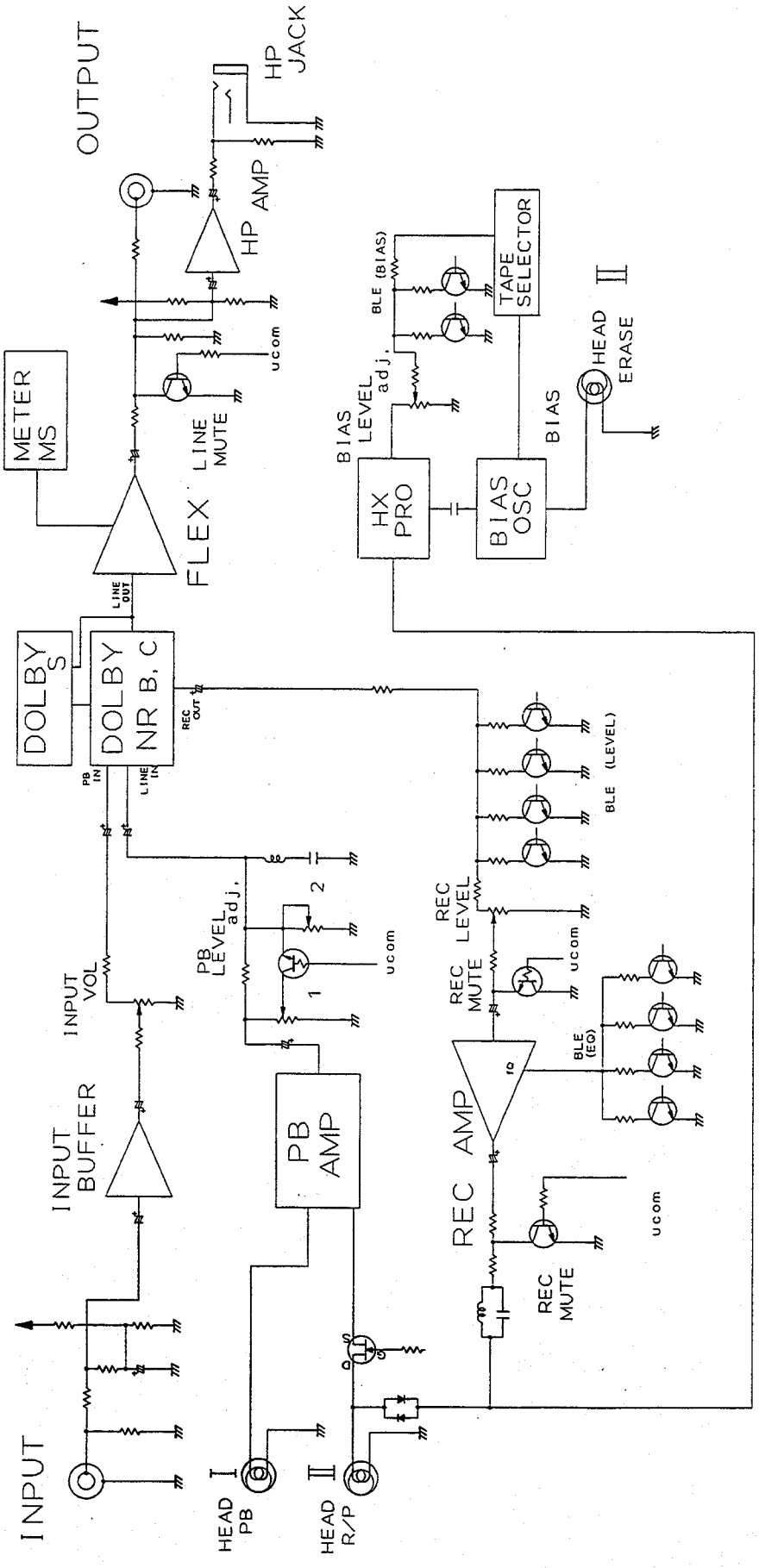
2. PRODUCT SAFETY NOTICE

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

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

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

2. BLOCK DIAGRAM



3. EXPLODED VIEWS, PACKING AND PARTS LIST

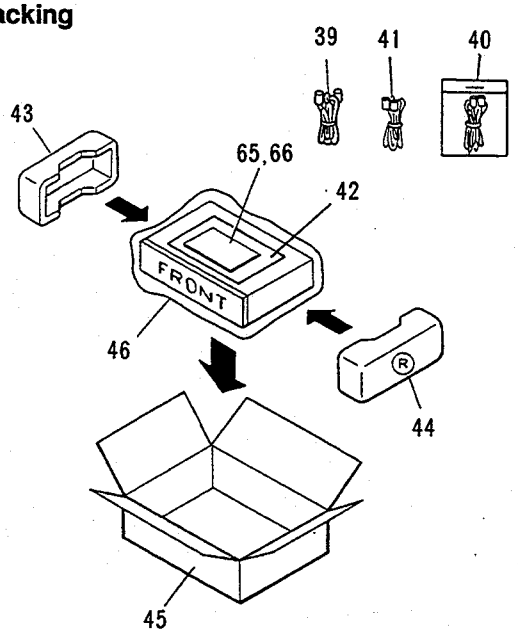
NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1. EXTERIOR AND PACKING

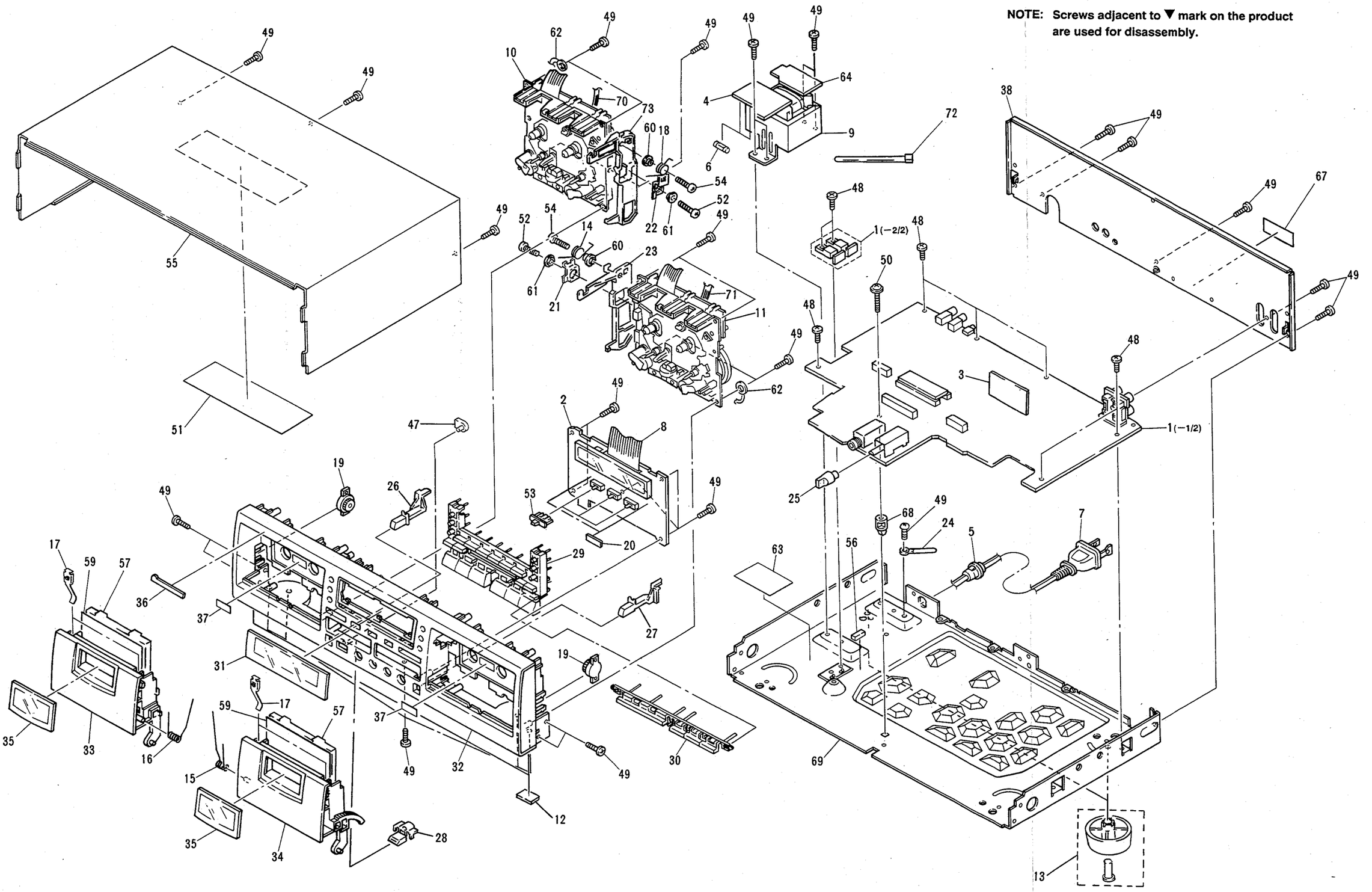
Mark	No.	Description	Part No.
	1	Main Unit	RWZ3177
	2	Sub Unit	RWZ3178
	3	Dolby S Unit	RWX1101
NSP	4	Transformer 2 Unit	RWZ3180
⚠	5	Strain Relief	CM – 22C
⚠	6	Fuse (1.5A)	REK1059
⚠	7	AC Power Cord	PDG1015
	8	Lead Card 31P	RDD1299
⚠	9	Power Transformer	RTT1223
	10	1 Mechanism Unit	RYM1230
	11	2 Mechanism Unit	RYM1231
	12	Rubber Sheet	AEB1111
	13	Foot Assy	AEC1531
	14	Eject Spring L	RBH1379
	15	Door Spring L	RBH1304
	16	Door Spring R	RBH1305
	17	Half Pressure Spring	RBK1004
	18	Eject Spring R	RBH1380
	19	Damper Assy	REC1005
	20	Knob Spacer	REC1195
	21	Eject Arm L	RNE1763
	22	Eject Arm R	RNE1764
	23	Eject Lever L	RNK2045
	24	Cord Clamper	RNH – 184
	25	Balance Knob	RAC1705
	26	Eject Konb L	RAC1881
	27	Eject Konb R	RAC1882
	28	Power Knob	RAC1883
	29	Control Knob	RAC1877
	30	REC Knob B	RAC1788
	31	FL Lens	RAH2376
	32	Front Panel	RAH2359
	33	Door Pocket L	RAH2395
	34	Door Pocket R	RAH2370
	35	Door Lens	RAH2435
	36	Name Plate	RAM1007
	37	Remain Display Paper	REE – 113
	38	Rear Panel (CT – W603RS/KUXJ)	RNA1776
	38	Rear Panel (CT – W603RS/KCXJ)	RNA1777
	39	Connection Cord with Mini Plug	PDE – 319
	40	Connection Cord Assy	RDE1036
	41	Control Cord	RDE1030
	42	Operating Instructions (English) (CT – W603RS/KUXJ)	RRB1143
	42	Operating Instructions (English/French) (CT – W603RS/KCXJ)	RRE1095
	43	Pad	RHA1115
	44	Pad R	RHA1116
	45	Packing Case (CT – W603RS/KUXJ)	RHG1524
	45	Packing Case (CT – W603RS/KCXJ)	RHG1553
	46	Sheet	Z23 – 007
	47	LED Lens	PNW2019
	48	Screw	BBZ30P060FMC
	49	Screw	BBZ30P080FZK
	50	Screw	IBZ30P150FCU
	51	65 Label (CT – W603RS/KUXJ only)	ORW1069
	52	Screw	BCZ26P050FMC
	53	Slide Knob	REA1078
	54	Screw	BSZ26P120FMC
	55	Bonnet	REA1077
NSP	56	FL Spacer	REB1171
	57	Protector	RHC1053
	58	.....	
	59	Caution Sheet	RRN1006
NSP	60	Eject Collar	RLA1283
NSP	61	Arm Collar	RLA1290
NSP	62	Earth Lead Unit	XDF – 504
NSP	63	Fuse Caution Label	RRW – 111
NSP	64	Transformer 1 PCB	RNZ2592
NSP	65	Warranty Card (CT – W603RS/KUXJ)	ARY1051
NSP	66	Warranty Card (CT – W603RS/KCXJ)	ARY1039
NSP	67	CSA Pas Label (CT – W603RS/KCXJ only)	RRW – 021
NSP	68	PCB Spacer	PNY – 404
NSP	69	Chassis	RNB1091
	70	Connector Assy 3P	RKP1675
	71	Connector Assy 5P	RKP1677
NSP	72	Binder	Z09 – 058
	73	Eject Lever R	RNK2046

Packing

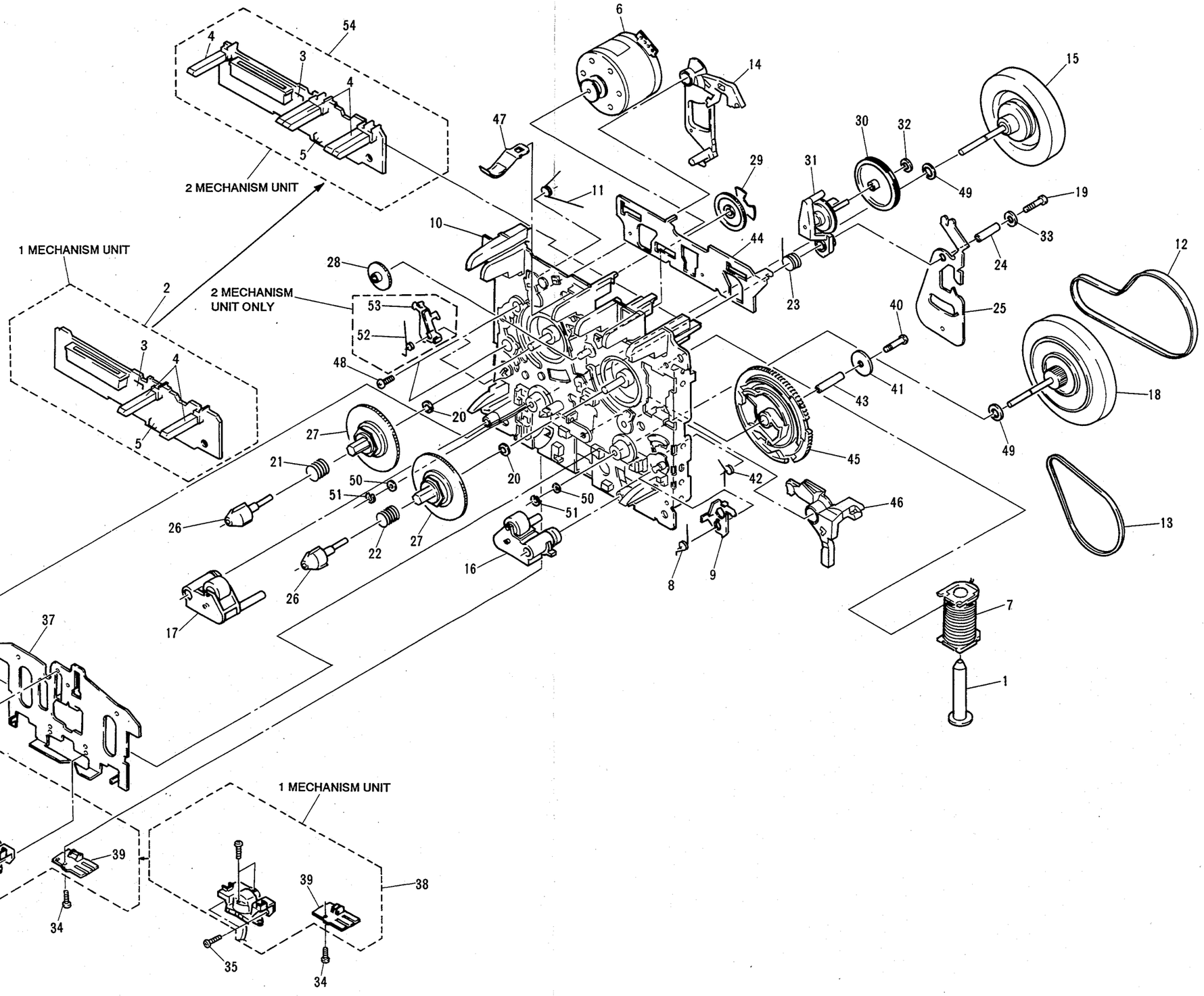


Exterior

NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.



2. 1 MECHANISM UNIT AND 2 MECHANISM UNIT



Parts List

Mark	No.	Description	Part No.
	1	Plunger	RLA1288
	2	PCB Control BLK (1 Mechanism Unit)	RXA1623
	3	Push Switch	RSG1018
	4	SPLF	RSN1023
	5	Photo – Transistor	SPI33534FG
	6	MTR Main BLK	RXM1075
	7	Solenoid BLK	RXP1021
	8	Spring Interlock R	RBH1386
	9	Arm Interlock R	RNE1781
	10	Chassis Base BLK	RXA1626
	11	Spring Brake	RBH1387
	12	Main Belt	REB1157
	13	F/R Belt	REB1254
	14	Lever Brake	RNK2071
	15	F/W Assy	RXA1428
	16	Pinch Roller BLK R	RXA1628
	17	Pinch Roller BLK L	RXA1629
	18	Clutch Assy	RXA1631
	19	Screw	RBA1113
	20	Washer 2.1 × 0.25T	RBF1038
	21	Spring Reel (L)	RBH1388
	22	Spring Reel (R)	RBH1389
	23	Cam Spring	RBH1393
	24	Spacer	RLA1286
	25	Lever F/R	RNE1782
	26	Reel Feather	RNK2072
	27	Reel Base	RNK2073
	28	Play Gear (A)	RNK2074
	29	FF Gear (A)	RNK2075
	30	F/R Pulley	RNK2076
	31	Clutch Assy BLK	RXA1632
	32	Washer	WA17D040D025
	33	Washer	WA23F060M040
	34	Screw	PCZ20P040FMC
	35	Screw	RBA1077
	36	Spring HB	RBH1390
	37	Head Base	RNE1783
	38	Plate HD BLK (1 Mechanism Unit)	RXA1633
	39	HD PCB 5P	RXA1635
	40	Screw	RBA1113
	41	Washer 2.0 × 0.3	RBE1009
	42	Spring Arm Play	RBH1392
	43	Spacer	RLA1286
	44	Plate Slide	RNE1785
	45	Cam Gear	RNK2078
	46	Arm Play	RNK2079
	47	Spring Cassette	RNE1786
	48	Screw	BMZ26P040FZK
	49	Washer	WA26D045D025
	50	Washer	WA26D047D050
	51	Stop Ring	YE15FUC
	52	Spring Interlock L (2 Mechanism Unit only)	RBH1385
	53	Arm Interlock L (2 Mechanism Unit only)	RNE1780
	54	PCB Control (2 Mechanism Unit)	RXA1624
	55	Plate HD BLK (2 Mechanism Unit)	RXA1634

4. TEST MODE

Entering the Test Mode

To enter the test mode, set both DECK I and DECK II into the STOP mode and press the TIME/COUNT key of DECK I, RESET key of DECK I and PAUSE key of DECK II all together.
To change the MODE NO., press the STOP key so that the MODE NO. becomes 0 and enter other modes.

Exiting the Test Mode

To exit the test mode, press the RESET key of DECK I or turn off the power.

MODE NO.	DECK I Display	DECK II Display	Key Input	Adjustment and Check
0	–	0	STOP FWD REV FF REW REC PAUSE MUTE X1COPY X2COPY	● The mechanism will operate even in the "no-half" state only for this mode. ● Tape speed adjustment mode • During play (except during the assist), the speed can be doubled by pressing the FAST key (FF or REW key of DECK I or II). During double speed play, the play can be returned to normal speed by pressing the FWD or REV key. ● Auto-stop check • The RELAY mode will be turned on forcibly. But the REC is not relayed from DECK II to DECK I. • Auto stop is carried out at tape end for one second only in this mode. (Usually four seconds.) • Reverse is carried out as normally, but if the reverse is carried out in double speed, the tape will be played at constant speed.

CD SYNCHRO, SW check Modes

MODE NO.	Deck I Display	Deck II Display	Key Input	LINE MUTE	REC MUTE	BIAS	Adjustment and Check
1	–	1	CD SYNC	ON	ON	OFF	● CD SYNCHRO Check If a cord whose input/output is short-circuited is connected, "CD SYNC" will light up when a key is input.
1	–	1	1-CTR MODE	ON	ON	OFF	● SW Check (NORMAL) • When there is no-half, the corresponding counter will display "HALF". • Mistaken Erasure Detection Check When FWD recording is possible : "▶" lights up When REV recording is possible : "◀" lights up • Reverse SW Check ⇄ : "I" ↻ (REPEAT) : "II" • Tape Detection Check Deck II Check NORMAL : Lch +3dB lights up Rch +3dB lights up CR02 : Lch +3dB goes off Rch +3dB lights up DECK I Check NORMAL : Lch –20dB lights up Rch –20dB lights up CR02 : Lch –20dB goes off Rch –20dB lights up

BLE Adjustment Mode

● Entering the BLE Adjustment Mode

Set the MODE NO. to 0 and press the BLE keys of DECK I and DECK II. Both decks will set into the BLE adjustment mode in order.

● Exiting the BLE Adjustment Mode

To exit the BLE adjustment mode, press the STOP key or turn off the power.

MODE NO.	Deck I Display	Deck II Display	Key Input	LINE MUTE	REC MUTE	BIAS	Adjustment and Check
2	–	2 0	2-BLE	ON	ON	OFF	———————————
	400	2 1	2-BLE	OFF	OFF	OFF	• For AUTO BLE 400Hz OSC output level adjustment mode □□□■□□ ■■■□■■ Adjust so that the meter becomes as shown in the above diagram. (LINE OUT output = –26dBV)
	10K	2 2	2-BLE	OFF	OFF	OFF	• For AUTO BLE 10kHz OSC output level adjustment mode □□□■□□ ■■■□■■ Adjust so that the meter becomes as shown in the above diagram. (LINE OUT output = –26dBV)
	3K	2 3	2-BLE	ON	ON	OFF	• For AUTO BLE 3kHz OSC output level adjustment mode Not used (Used only for 3 POINT BLE)
	BIAS	2 4	2-BLE	ON	ON	ON	DECK II BIAS SWEEP mode
	LEVL	2 5	2-BLE	OFF	OFF	OFF	DECK II LEVEL SWEEP mode
	EQ	2 6	2-BLE	OFF	OFF	OFF	DECK II EQ SWEEP mode

5. ADJUSTMENTS

5.1 MECHANICAL ADJUSTMENT

5.1.1 Door Damping Check and Adjustment

Set the door spring of the DECK I side to position (A) as shown in Fig. 5-1. Then, erect the front panel assembly vertically.
Open the doors of DECK I and DECK II at the same time. At this point, confirm that the difference between the door completely opened and the other door is within 15mm. If this standard is not satisfied install the door spring of DECK I at another position and adjust as follows:

- When the door of DECK I opens later than that of DECK II : Change the door spring of DECK II from A to B.
- When the door of DECK I opens faster than that of DECK II : Change the door spring of DECK I from A to B.

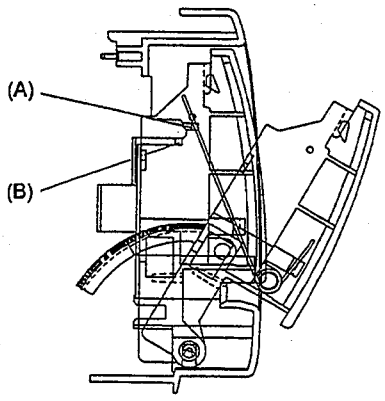


Fig. 5–1

5.1.2 Tape Speed

- Perform this adjustment in the test mode.
- TEST mode setting.

1. Press the TIME/COUNT and RESET keys of DECK I together with the PAUSE key of DECK II.
2. The speed becomes normal when the PLAY key is pressed, and double when the FF key is pressed.
3. To cancel the TEST mode, press the RESET key of DECK I.

1. Tape Speed Adjustment and Check

No.	Deck	Mode	Test tape	Adjusting points	Specifications/Ratings (playback frequency)	Remarks
1	I	Double speed PLAY	STD-301 (3 kHz)	check	6000 Hz ± 600 Hz	
2	II			VR851	Within ± 10 Hz against the measurement value of the step 1 (deck I)	
3	I	NORMAL speed PLAY		VR802	2980 Hz ± 5 Hz	
4	II			VR852	Within ± 5 Hz against the measurement value of the step 3 (deck I)	

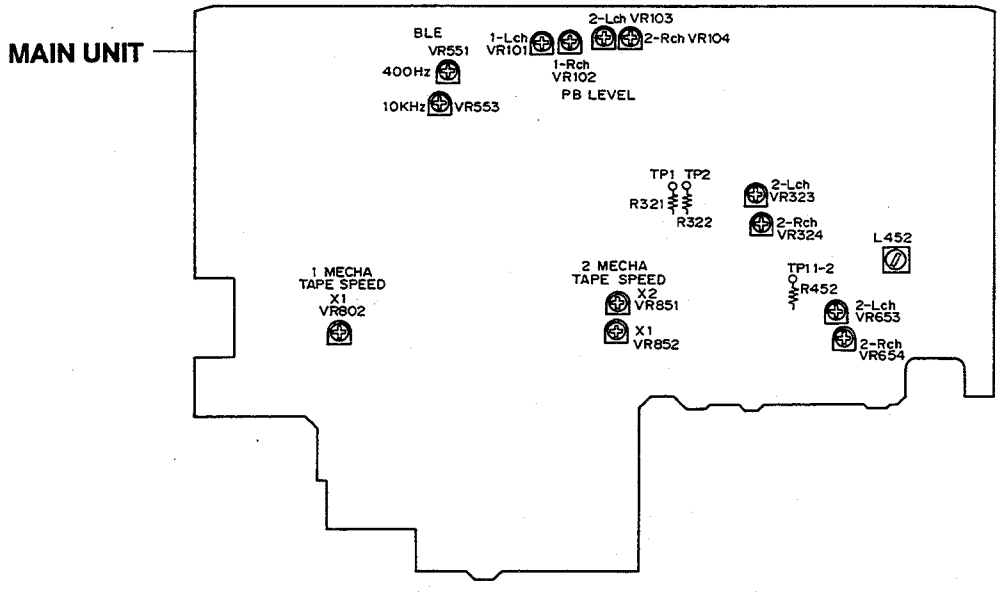


Fig. 5–2 Adjusting points

5.2 ELECTRICAL ADJUSTMENTS

Adjustment Conditions

1. The mechanical adjustments must be completed first.
2. The head must be cleaned and demagnetized.
3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
4. The reference signal is 0 dBV=1 Vrms.
5. Connect a 50 kΩ (or between 47k to 52 kΩ) load resistance to the OUTPUT terminals.
6. Unless otherwise specified, the switches listed below are left in the positions indicated.
   DOLBY NR : OFF
   TAPE SELECTOR : NORM

Test Tapes

STD–331E	: Playback adjustments (See Fig. 5–3)
STD–631 or STD–632	: NORMAL blank tape
STD–621	: CrO_2 blank tape
STD–610	: METAL blank tape

* As the reference recording level is 250 nwb/m for STD–331E, the recording level will be higher by 4 dB for STD–331B (160 nwb/m). When adjusting, pay carefull attention to the type of tape used.

List of Adjustments

Playback sections

1. Head azimuth adjustment.
2. Playback level adjustment.

Recording sections

1. Bias oscillator adjustment.
2. Recording bias adjustment.
3. Recording level adjustment.
4. Level meter check.
5. AUTO BLE adjustment.

NOTE: This unit has an automatic tape selection feature.

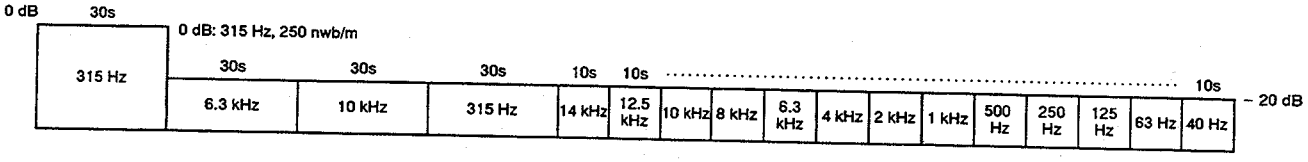


Fig. 5–3 Constants of the test tape STD–331E

DECK I and II

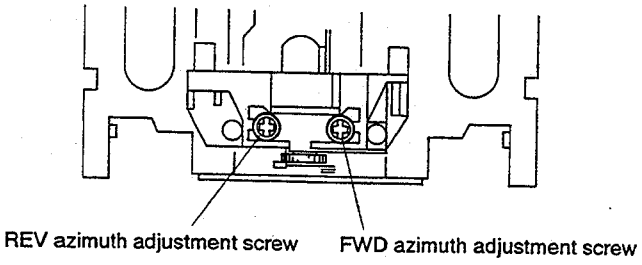
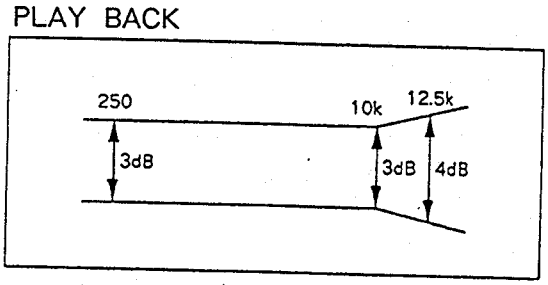


Fig. 5–4 Head azimuth adjustment



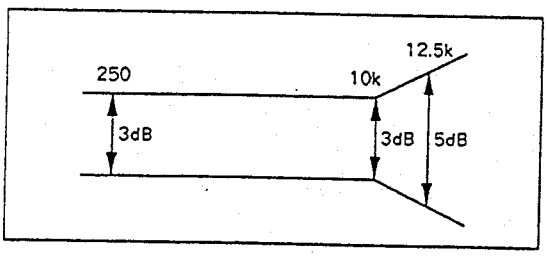


Fig. 5–5 Frequency response zone

PLAYBACK SECTION

1. Head Azimuth Adjustment

- Turn VR101, 102 (Deck I) or VR103, 104 (Deck II) to mechanical center positions.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10 kHz/–20 dB section of STD–331E test tape.	Head azimuth adjustment screw. (See Fig. 5–4)	LINE OUT	Maximum playback signal level.	
2.	STOP	Lock the screw with screw lock after completing adjustment.				

2. Playback Level Adjustment

- This adjustment determines the DOLBY NR level, and must be performed with great care.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315 Hz/0 dB section of the STD–331E test tape.	Deck II	VR 103 (Lch) VR 104 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	–6.7 dBV	
			Deck I	VR 101 (Lch) VR 102 (Rch)			

RECORDING SECTION

1. Bias Oscillator Adjustment

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD–610 test tape with no input signal.	Deck II	L 452	TP. 11 – 2	105 kHz ± 0.3kHz	If the values on the left cannot be attained by adjusting, the value should be below $105 \pm \frac{4}{0.3}$ kHz.

2. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Record the 315 Hz and 6.3 kHz signals at –20 dB input level and playback. (STD-631 or STD-632)	Deck II	VR653(Lch) VR654(Rch)	LINE OUT	Repeatedly record, playback and adjust so that the playback level of 6.3 kHz signal becomes 0 dB ± 0.5 dB when compared with the 315 Hz signal.	

3. Recording Level Adjustment (Deck II only)

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC PAUSE	Apply a 315 Hz/0 dBV signal to the line input terminals, load the STD–631 or STD–632 test tape.	REC level control volume		TP. 1 (Lch) TP. 2 (Rch)	–11.2 dBV	
2.	REC/ PLAY	Record the above signal onto the STD–631 or STD–632 test tape, and playback.	Deck II	VR323 (Lch) VR324 (Rch)	TP. 1 (Lch) TP. 2 (Rch)	Repeatedly record, playback and adjust so that the playback signal level becomes – 11.2 dBV.	
3.	REC/ PLAY	Record the above signal onto the STD–621 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	–11.2 dBV ± 1.5dB	
4.	REC/ PLAY	Record the above signal onto the STD–610 test tape, and playback.	Check		TP. 1 (Lch) TP. 2 (Rch)	–11.2 dBV ± 1.5dB	

4. Level Meter Check

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	REC PAUSE	Apply a 315 Hz/–6 dBV (500 mV) signal to the Line Input terminals.	REC level control volume	TP. 1 (Lch) TP. 2 (Rch)	Check that the level meters "0 dB" light up within –7.2 dBV ± 2 dB of the signal output level.	

5. AUTO BLE Adjustment (Deck II only)

- BLE adjustment should be performed after all other adjustments are completed.
- This adjustment should be performed in the test mode.
- Entering the test mode.
  For details of how to enter the test mode, refer to the "Mechanical Adjustment" section (Page 13)

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	–	Set to test mode.	–	–	–	
2.		Press the BLE key on the front panel.	Level meter (R channel)	VR551	Adjust so that – 3 dB on the level meter turn on.	400 Hz adjustment
3.		Press the BLE key on the front panel.		VR553		10 kHz adjustment

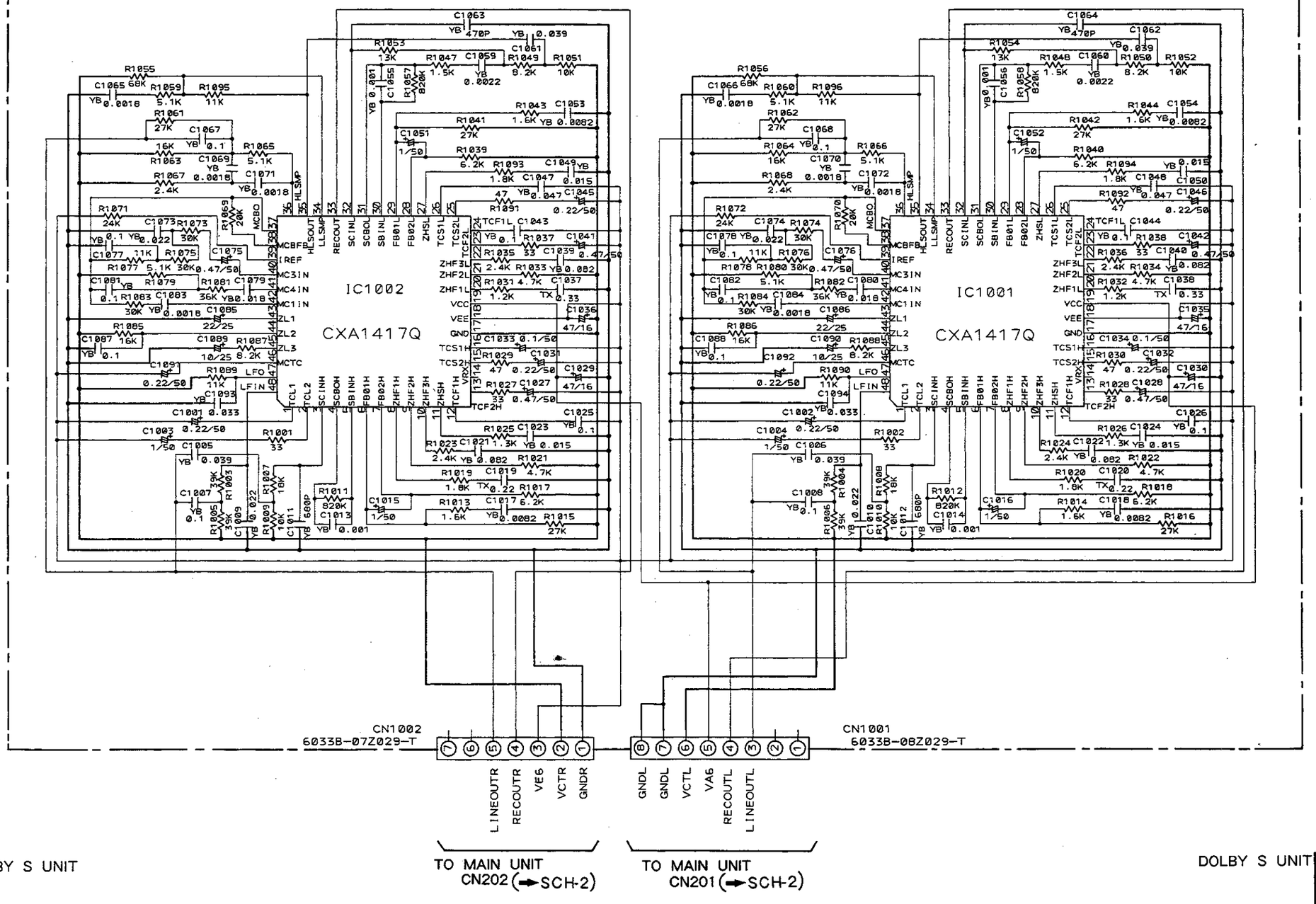
Reference: The output of LINE OUT after completing the adjustments for 400 Hz, 10 kHz becomes – 23 dBV ± 1dB.

6. SCHEMATIC AND PCB CONNECTION DIAGRAMS

1. DOLBY S UNIT

SCH-1

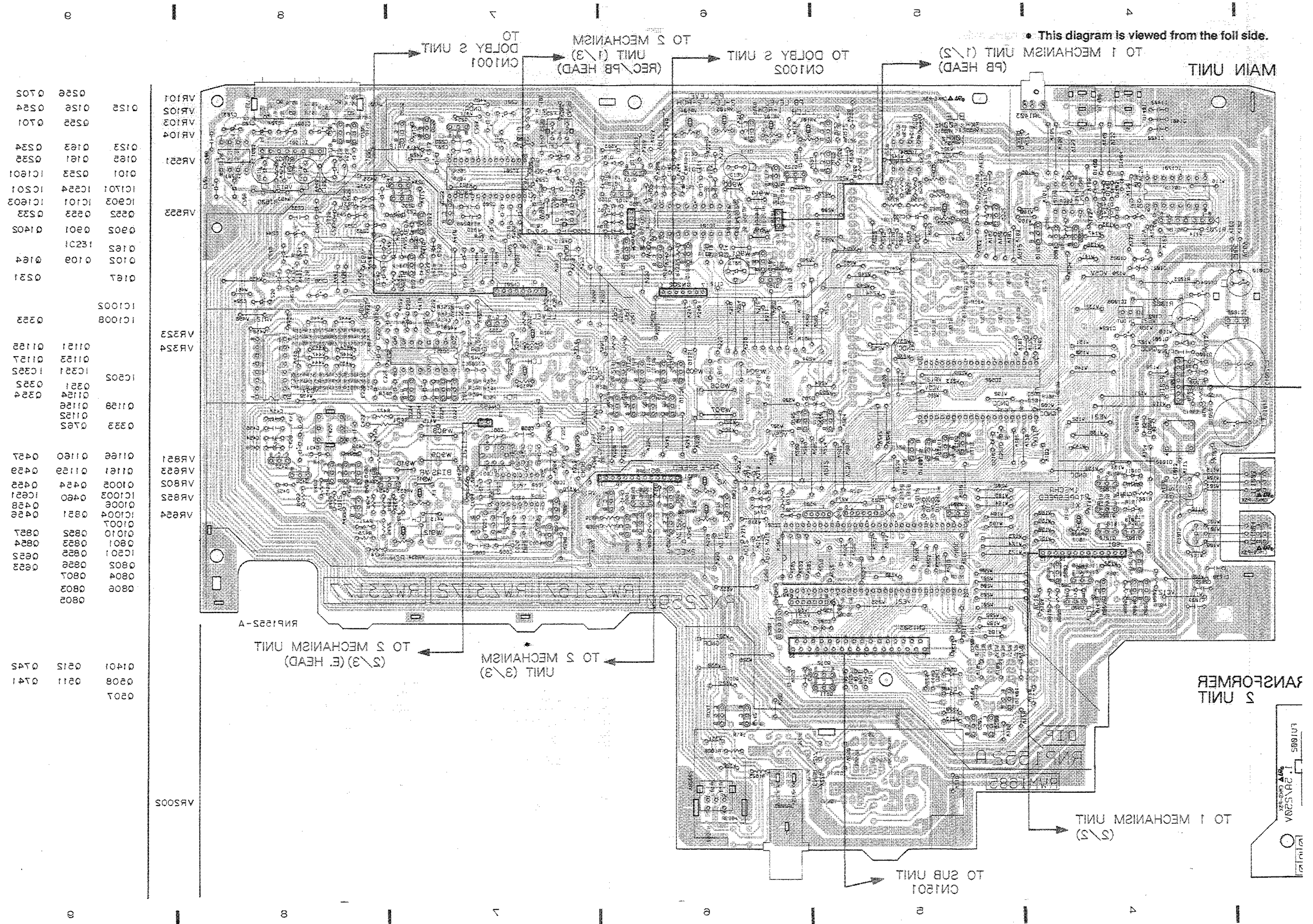
DOLBY S UNIT (RWX1101)

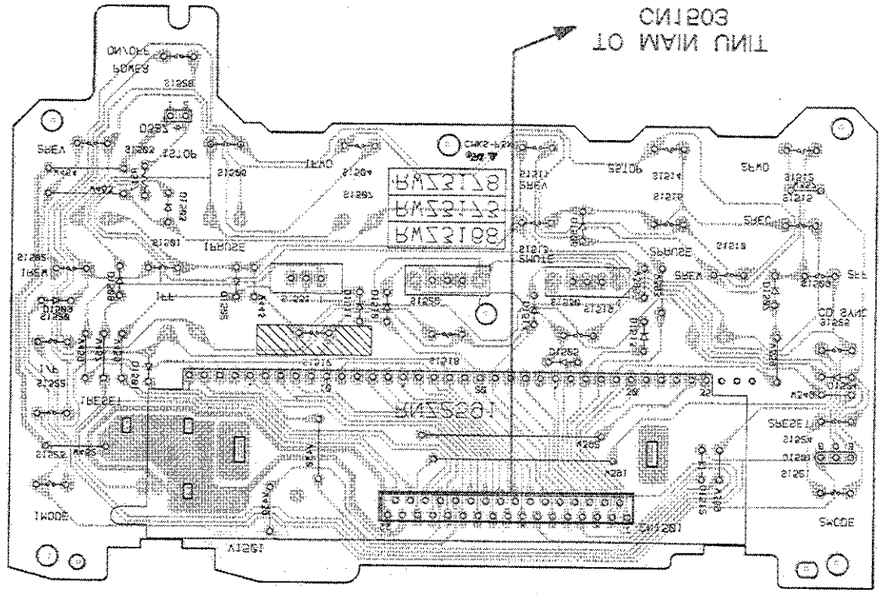


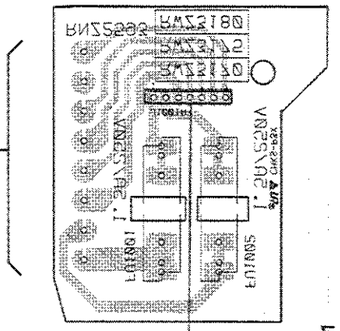
SCH-1 DOLBY S UNIT

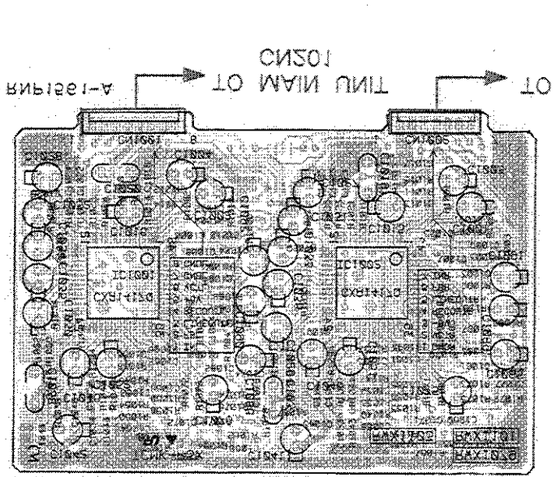
DOLBY S UNIT SCH-1

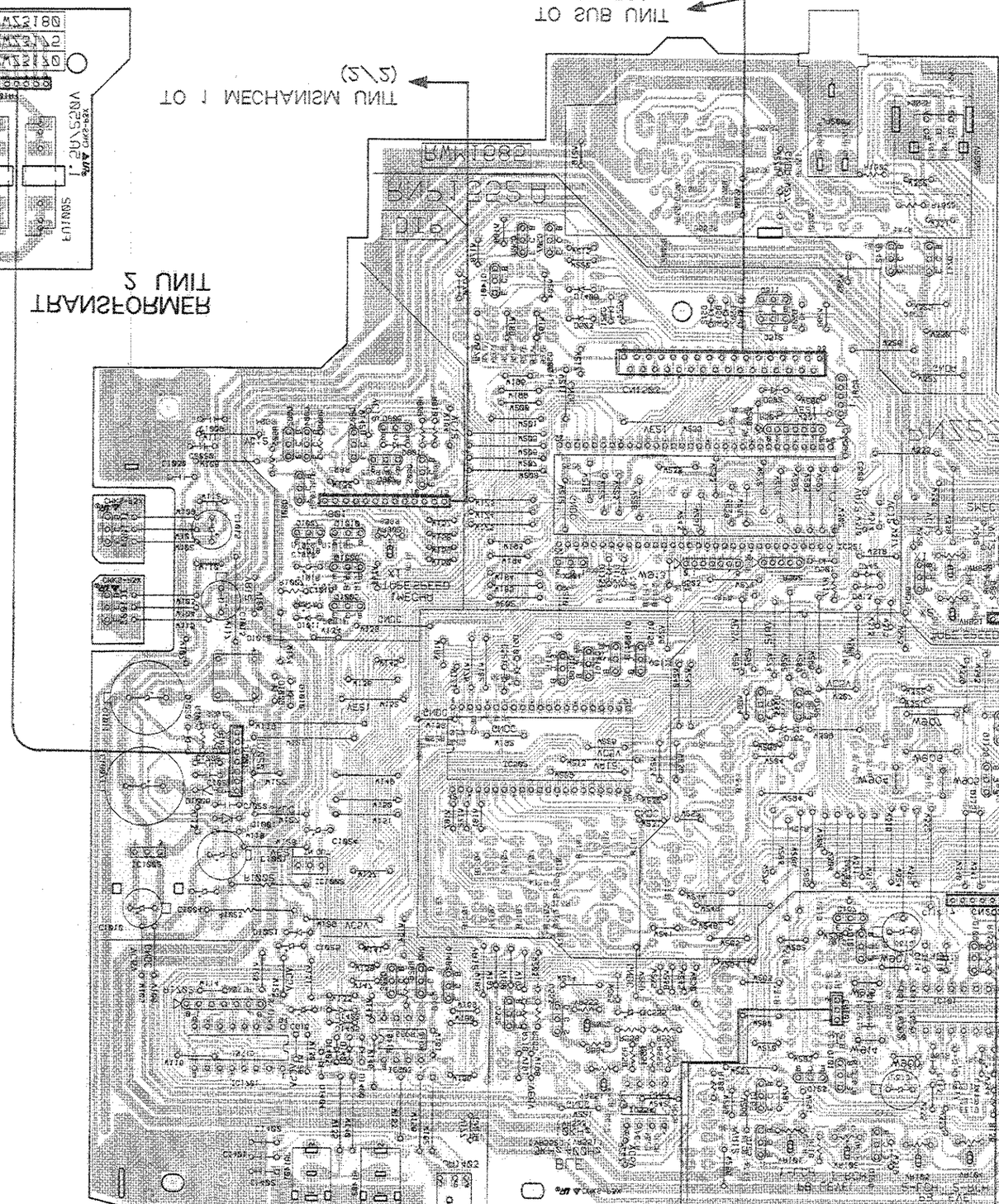
• **This diagram is viewed from the foil side.**











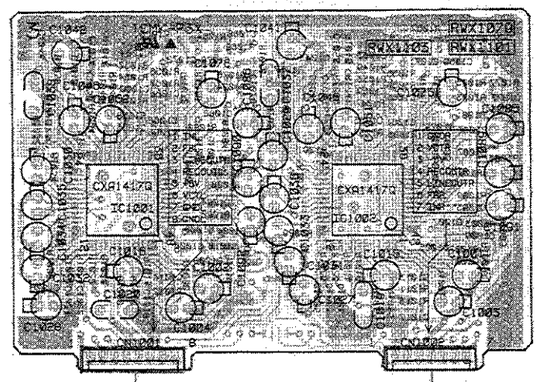
• This diagram is viewed from the foil side.

• This diagram is viewed from the gray colored foil side.
• This PCB is double sided.

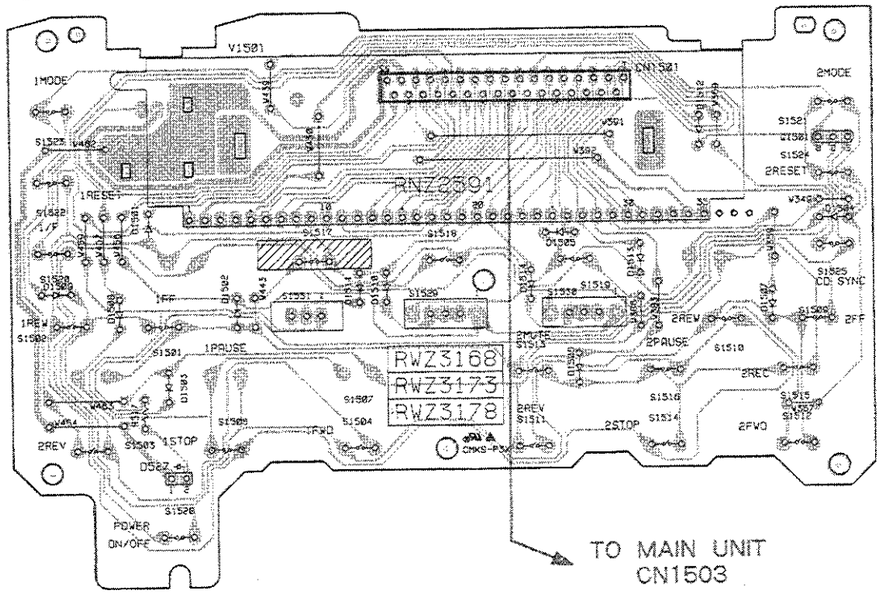
CT-W603RS

- This diagram is viewed from the pink colored foil side.
- This PCB is double sided.

DOLBY S UNIT

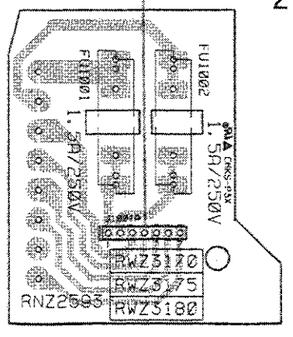


SUB UNIT



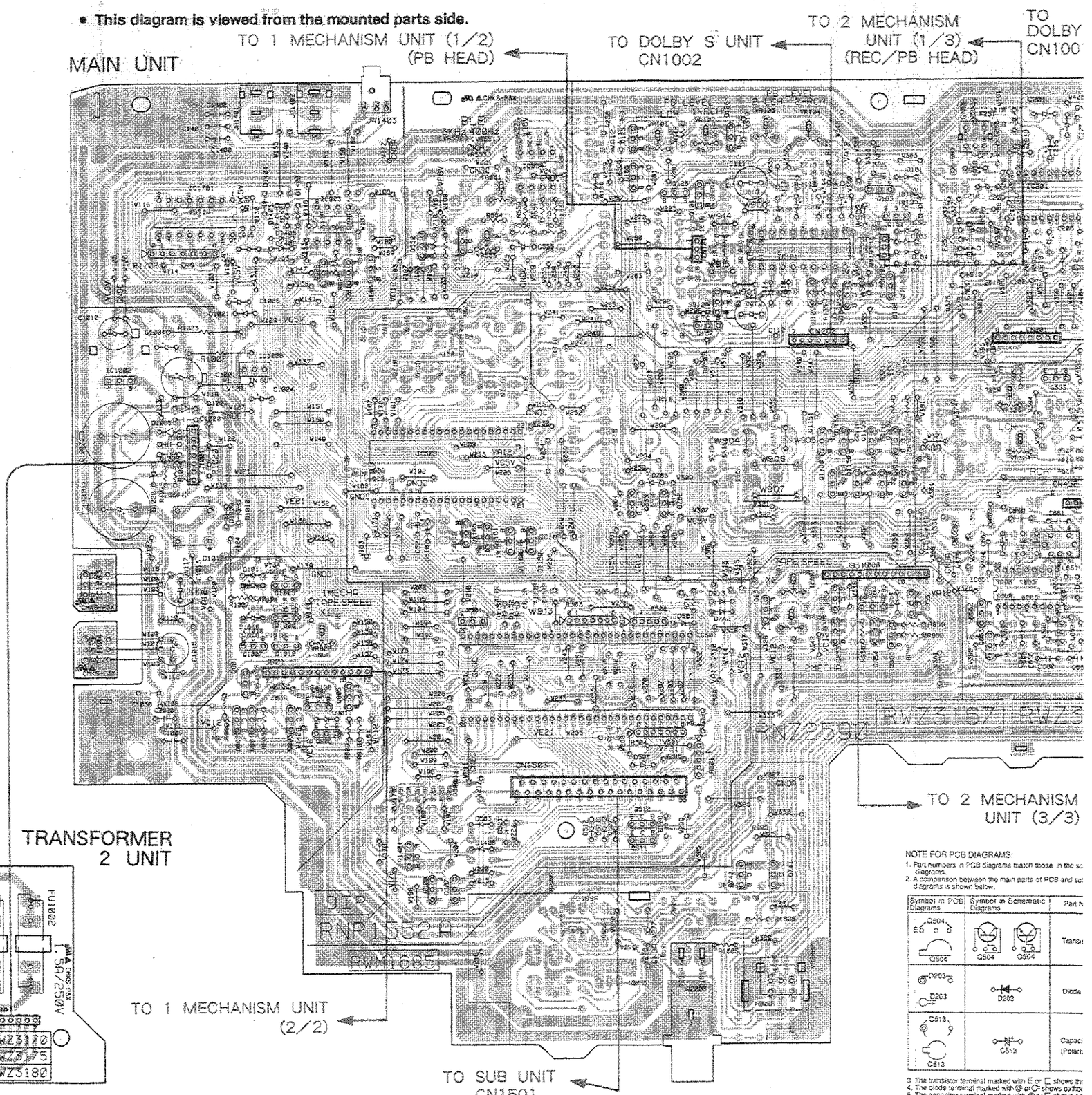
- This diagram is viewed from the mounted parts side.

TRANSFORMER 2 UNIT



- This diagram is viewed from the mounted parts side.

MAIN UNIT



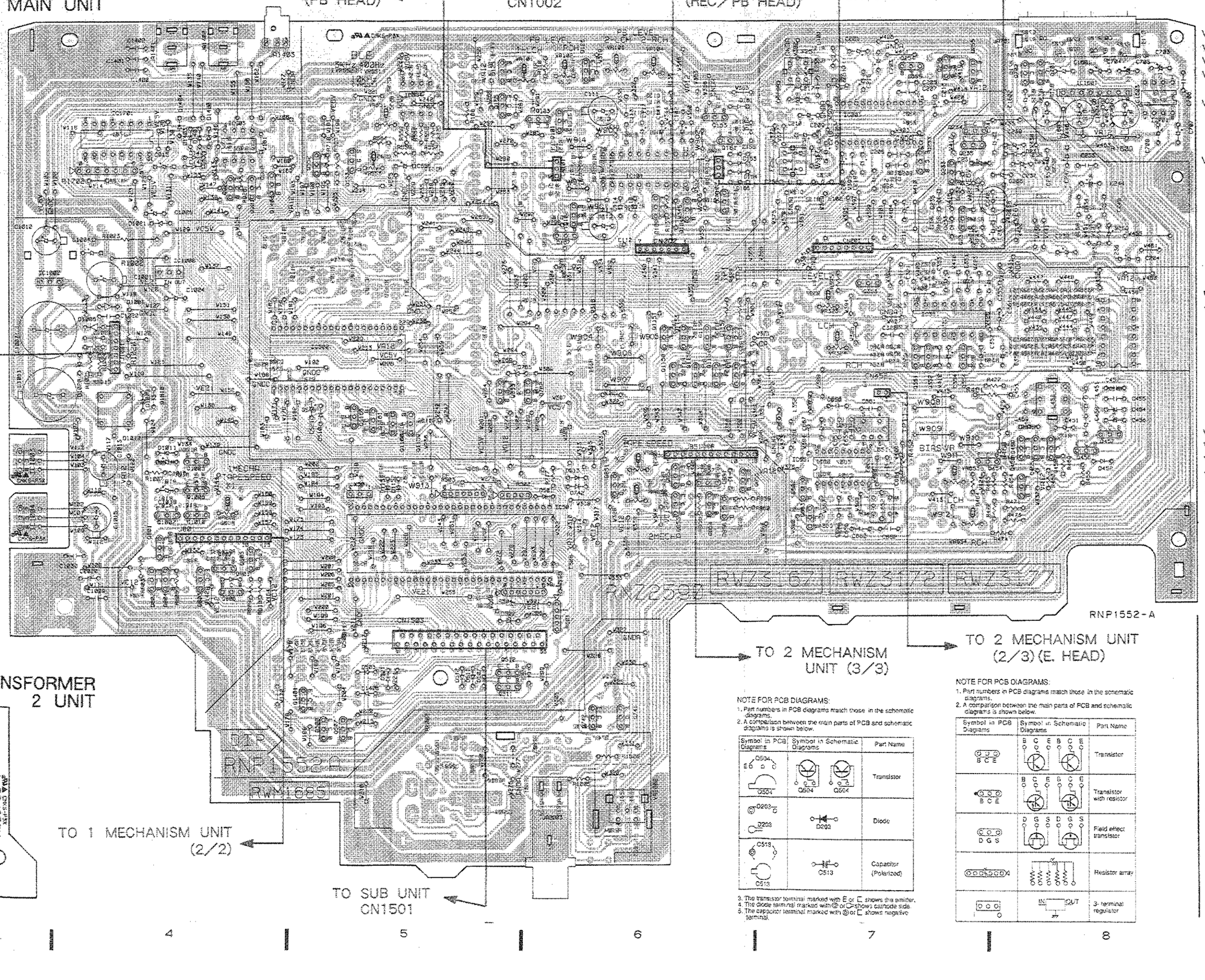
NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the sc diagrams.
2. A comparison between the main parts of PCB and sc diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part N
Q504	Q504 Q504	Transi
D203	D203	Diode
C513	C513	Capaci (Polari

3. The transistor terminal marked with E or ⊏ shows th
4. The diode terminal marked with ⊕ or ⊐ shows cathod
5. The capacitor terminal marked with ⊕ or ⊏ shows ne terminal.

• This diagram is viewed from the mounted parts side.



VR101 VR102 VR103 VR104 — Q125, Q256, Q126, Q255, Q702, Q254, Q701

VR551 — Q123, Q165, Q101, Q163, Q161, Q253, Q234, Q235, IC1601

IC1701, IC903, Q552, IC554, IC101, Q553, IC201, IC1603, Q233

VR553 — Q902, Q901, Q1402, IC531, Q162, Q102, Q109, Q164, Q167, Q231

IC1002, IC1008, Q353

VR323 VR324 — Q1151, Q1153, IC351, Q1155, Q1157, IC352, IC502, Q351, Q1154, Q352, Q354, Q1158, Q1156, Q1152, Q333, Q762

VR851 VR653 VR802 VR852 VR654 — Q1166, Q1160, Q457, Q1161, Q1159, Q459, Q1005, Q454, Q455, IC1003, Q1006, Q460, IC651, Q458, IC1004, Q851, Q456, Q1007, Q1010, Q852, Q857, Q801, Q853, Q854, IC501, Q855, Q652, Q802, Q856, Q653, Q804, Q807, Q806, Q803, Q805

Q1401, Q512, Q742, Q508, Q511, Q741, Q507

VR2002

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
E Q504 Q504	Q504 Q504	Transistor
D203 D203	D203	Diode
C513 C513	C513	Capacitor (Polarized)

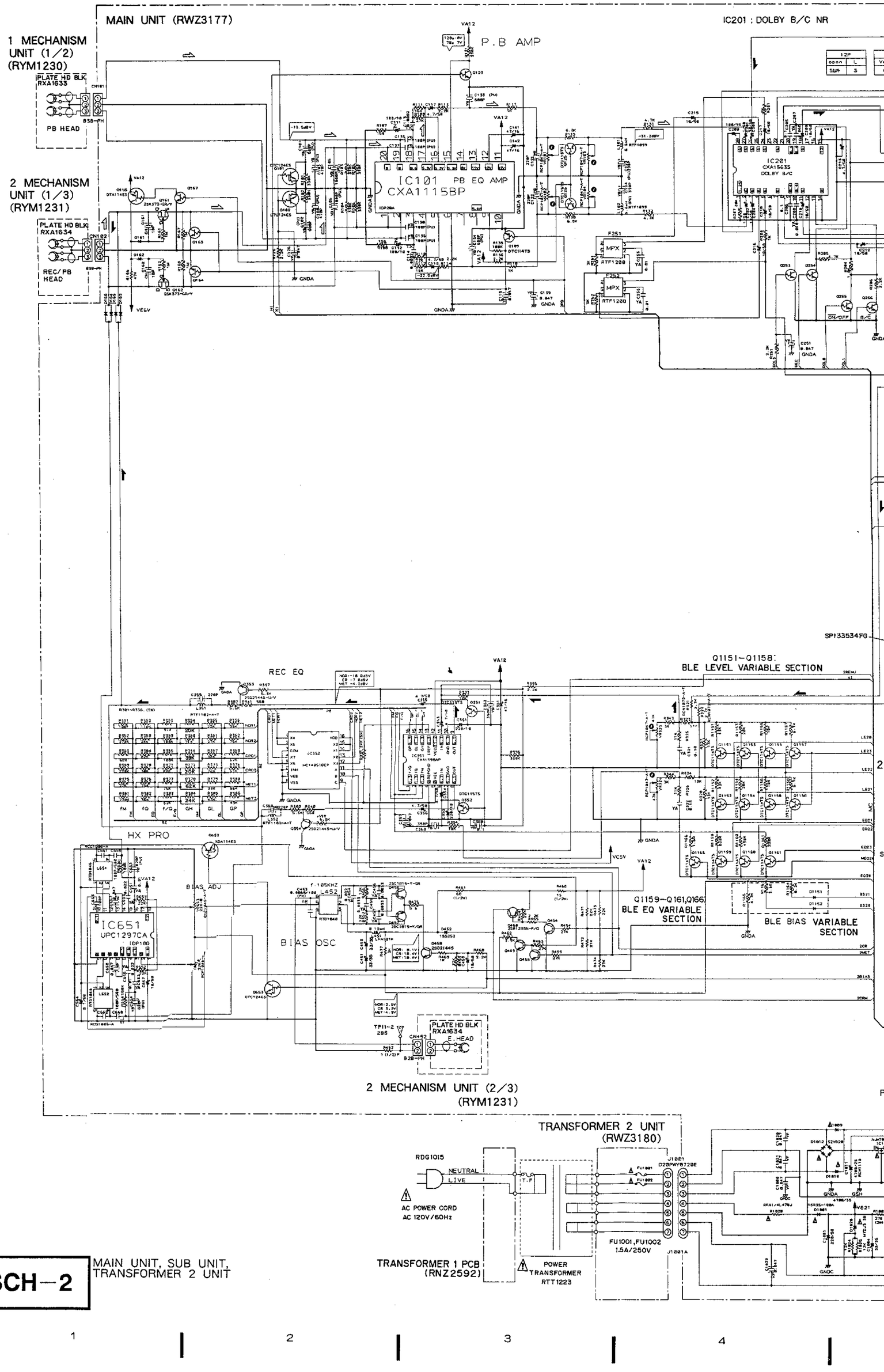
3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
	IN OUT	3- terminal regulator

2. MAIN, SUB, TRANSFORMER 2 UNIT



SCH—2 MAIN UNIT, SUB UNIT, TRANSFORMER 2 UNIT

POWER SUPPLY

RESET

CD SYNC.

SR

SUB UNIT (RW2317B)

2 MECHANISM UNIT (3/3)
(RYM1231)

1 MECHANISM UNIT (2/2)
(RYM1230)

IC501 : SYSTEM CONTROL

IC502:
EXPANDER IC

BLE BIAS VARIABLE
SECTION

BLE EQ VARIABLE
SECTION

0159-0161,0166

0151-0158:
BLE LEVEL VARIABLE SECTION

SPI3353-4FG

TO DOLBY S UNIT
(→SCH-1)

IC201 : DOLBY B/C NR

BLE PILOT SIGNAL FILTER

INPUT BUFFER

METER
AMP

H. PHONE AMP

SIGNAL ROUTE

⇨ : PLAYBACK SIGNAL

⇦ : RECORDING MONITOR

➡ : RECORDING SIGNAL

NOTE : If the parts are not identified in the followings are used.

1SS254

2SA1309A(R/S)

2SC3311A(R/S)

DTA114TS

SIGNAL RUTE

⇨ : PLAYBACK SIGNAL

⇨ : RECORDING MONITOR SIGNAL

➡ : RECORDING SIGNAL

INPUT BUFFER

TO DOLBY S UNIT (→SCH-1)

H. PHONE AMP

BLE PILOT SIGNAL FILTER

400Hz L.P.F

400Hz LEVEL ADJ.

3kHz LEVEL ADJ.

10kHz LEVEL ADJ.

3kHz Buffer AMP

METER AMP

1 MECHANISM UNIT (2/2) (RYM1230)

MECHANISM UNIT (3/3) (RYM1231)

IC501 : SYSTEM CONTROL

IC502: EXPANDER IC

POWER SUPPLY

RESET

CD SYNC.

SR

SUB UNIT (RWZ3178)

S1501 ~ 1506
S1509 ~ 1525
S1528: RSG1034

NOTE : If the parts are not identified in the diagram the followings are used.

SCH-2

1SS254

2SA1309A(R/S)

2SC3311A(R/S)

DTA114TS

DTC114TS

XDA114ES

XDC124ES

MAIN UNIT, SUB UNIT, TRANSFORMER 2 UNIT

SCH—2

7. PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 × 10¹ → 561 ····· RD1/8PM 5 6 1 J
47k Ω → 47 × 10³ → 473 ····· RD1/4PS 4 7 3 J
0.5 Ω → 0R5 ····· RN2H 0 R 5 K
1 Ω → 010 ····· RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 × 10¹ → 5621 ····· RN1/4PC 5 6 2 1 F

Mark	No.	Description	Part No.
		LIST OF ASSEMBLIES	
		DOLBY S UNIT	RWX1101
⚠NSP		MOTHER UNIT	RWM1685
		├ MAIN UNIT	RWZ3177
		├ SUB UNIT	RWZ3178
		└ TRANSFORMER 2 UNIT	RWZ3180
		DOLBY S UNIT	
		SEMICONDUCTORS	
	IC1001, IC1002	DOLBY S-TYPE IC	CXA1417Q
		CAPACITORS	
	C1001, C1002	ELECT. CAPACITOR	CEJAR22M50
	C1003, C1004	ELECT. CAPACITOR	CEJA010M50
	C1005, C1006	CHIP CAPACITOR	CKSQYB393K50
	C1007, C1008	CERAMIC CAPACITOR	CKSQYB104K25
	C1009, C1010	CHIP CAPACITOR	CKSQYB223K50
	C1011, C1012	CERAMIC CAPACITOR	CKSQYB681K50
	C1013, C1014	CHIP CAPACITOR	CKSQYB102K50
	C1015, C1016	ELECT. CAPACITOR	CEJA010M50
	C1017, C1018	CERAMIC CAPACITOR	CKSQYB822K50
	C1019, C1020	AUDIO FILM CAPACITOR	CFTYA224J50
	C1021, C1022	CERAMIC CAPACITOR	CKSQYB823K25
	C1023, C1024	CERAMIC CAPACITOR	CKSQYB153K50
	C1025, C1026	CERAMIC CAPACITOR	CKSQYB104K25
	C1027, C1028	ELECT. CAPACITOR	CEJAR47M50
	C1029, C1030	ELECT. CAPACITOR	CEJA470M16
	C1031, C1032	ELECT. CAPACITOR	CEJAR22M50
	C1033, C1034	ELECT. CAPACITOR	CEJAR10M50
	C1035, C1036	ELECT. CAPACITOR	CEJA470M16
	C1037, C1038	AUDIO FILM CAPACITOR	CFTYA334J50
	C1039, C1040	CERAMIC CAPACITOR	CKSQYB823K25
	C1041, C1042	ELECT. CAPACITOR	CEJAR47M50
	C1043, C1044	CERAMIC CAPACITOR	CKSQYB104K25
	C1045, C1046	ELECT. CAPACITOR	CEJAR22M50
	C1047, C1048	CERAMIC CAPACITOR	CKSQYB473K50
	C1049, C1050	CERAMIC CAPACITOR	CKSQYB153K50
	C1051, C1052	ELECT. CAPACITOR	CEJA010M50
	C1053, C1054	CERAMIC CAPACITOR	CKSQYB822K50
	C1055, C1056	CHIP CAPACITOR	CKSQYB102K50
	C1059, C1060	CHIP CAPACITOR	CKSQYB222K50
	C1061, C1062	CHIP CAPACITOR	CKSQYB393K50
	C1063, C1064	CERAMIC CAPACITOR	CKSQYB471K50
	C1065, C1066	CERAMIC CAPACITOR	CKSQYB182K50
	C1067, C1068	CERAMIC CAPACITOR	CKSQYB104K25
	C1069-C1072	CERAMIC CAPACITOR	CKSQYB182K50
	C1073, C1074	CHIP CAPACITOR	CKSQYB223K50
	C1075, C1076	ELECT. CAPACITOR	CEJAR47M50
	C1077, C1078	CERAMIC CAPACITOR	CKSQYB104K25
	C1079, C1080	CERAMIC CAPACITOR	CKSQYB183K50
	C1081, C1082	CERAMIC CAPACITOR	CKSQYB104K25
	C1083, C1084	CERAMIC CAPACITOR	CKSQYB182K50
	C1085, C1086	ELECT. CAPACITOR	CEJA220M25
	C1087, C1088	CERAMIC CAPACITOR	CKSQYB104K25
	C1089, C1090	ELECT. CAPACITOR	CEJA100M25
	C1091, C1092	ELECT. CAPACITOR	CEJAR22M50
	C1093, C1094	CERAMIC CAPACITOR	CKSQYB333K50
		RESISTORS	
		ALL RESISTORS	RS1/10S□□□J
		OTHERS	
	CN1001	CONNECTOR	6033B-08Z029
	CN1002	CONNECTOR	6033B-07Z029
		PCB BINDER	VEF1040
		EARTH METAL FITTING	VNF-091
		MAIN UNIT	
		SEMICONDUCTORS	
⚠	IC1002	REGULATOR IC	NJM78M06FA
⚠	IC1003, IC1004	REGULATOR IC	NJM7812FA
⚠	IC1008	REGULATOR IC	NJM79L06A
	IC101	PB-EQ AMP IC	CXA1115BP
	IC1601	OP-AMP IC	XRA15218N
	IC1701	LOGIC IC	MC14050BCP
	IC201	DOLBY B/C IC	CXA1563S
	IC231	FLEX IC	PA0059AM
	IC351	REC EQUALIZER IC	CXA1198AP
	IC352	LOGIC IC	MC14051BCP
	IC501	MCU	PD4507A
	IC502	FL STATIC DRIVER IC	LC7570
	IC554	OP-AMP IC	XRA15218
	IC651	DOLBY HX PRO IC	UPC1297CA
	IC701	OP-AMP IC	XRA15218
	IC903	COMPARATOR	XRA10393
	Q1005	TRANSISTOR	2SA1309A
	Q1006, Q1007	TRANSISTOR	2SC3311A
	Q101	TRANSISTOR	XDC124ES
	Q1010	TRANSISTOR	XDA124ES
	Q102	TRANSISTOR	XDC124ES
	Q109, Q1151	DIGITAL TRANSISTOR	DTC114TS
	Q1152-Q1161	DIGITAL TRANSISTOR	DTC114TS
	Q1166, Q123	DIGITAL TRANSISTOR	DTC114TS
	Q125, Q126	DIGITAL TRANSISTOR	DTC115TS
	Q1401	DIGITAL TRANSISTOR	DTA114TS
	Q1402	DIGITAL TRANSISTOR	DTC114TS
	Q161, Q162	N-FET	2SK373
	Q163, Q164	DIGITAL TRANSISTOR	DTC114TS
	Q165	DIGITAL TRANSISTOR	XDA114ES
	Q167	DIGITAL TRANSISTOR	DTC114TS
	Q231, Q233	TRANSISTOR	XDC124ES
	Q234	DIGITAL TRANSISTOR	DTC114TS
	Q235	TRANSISTOR	2SA1309A
	Q253-Q256	DIGITAL TRANSISTOR	DTC114TS
	Q333	DIGITAL TRANSISTOR	DTA114TS
	Q351, Q352	DIGITAL TRANSISTOR	DTC115TS
	Q353, Q354	TRANSISTOR	2SD2144S
	Q454, Q455	TRANSISTOR	2SC3311A
	Q456, Q457	TRANSISTOR	2SC1815
	Q458	TRANSISTOR	2SD2144S
	Q459	TRANSISTOR	2SC3311A
	Q460	TRANSISTOR	2SB1238X
	Q507, Q508	TRANSISTOR	XDA124ES
	Q511, Q512	TRANSISTOR	XDA124ES
	Q552	DIGITAL TRANSISTOR	DTC114TS
	Q553	N-FET	2SK246
	Q652	DIGITAL TRANSISTOR	XDA114ES
	Q653	TRANSISTOR	XDC124ES
	Q701, Q702	TRANSISTOR	2SD2144S
	Q741, Q742	TRANSISTOR	2SD2144S
	Q762	DIGITAL TRANSISTOR	DTA114TS
	Q801	TRANSISTOR	2SA1309A
	Q802	TRANSISTOR	XDC124ES
	Q803	TRANSISTOR	2SB1425
	Q804	TRANSISTOR	XDC124ES
	Q805	TRANSISTOR	2SB1238X
	Q806	TRANSISTOR	XDC124ES
	Q807	TRANSISTOR	2SC3311A
	Q851	TRANSISTOR	2SA1309A
	Q852	TRANSISTOR	XDC124ES
	Q853	TRANSISTOR	2SB1425
	Q854	TRANSISTOR	XDC124ES
	Q855	TRANSISTOR	2SB1238X
	Q856	TRANSISTOR	XDC124ES

Mark	No.	Description	Part No.
	IC352	LOGIC IC	MC14051BCP
	IC501	MCU	PD4507A
	IC502	FL STATIC DRIVER IC	LC7570
	IC554	OP-AMP IC	XRA15218
	IC651	DOLBY HX PRO IC	UPC1297CA
	IC701	OP-AMP IC	XRA15218
	IC903	COMPARATOR	XRA10393
	Q1005	TRANSISTOR	2SA1309A
	Q1006, Q1007	TRANSISTOR	2SC3311A
	Q101	TRANSISTOR	XDC124ES
	Q1010	TRANSISTOR	XDA124ES
	Q102	TRANSISTOR	XDC124ES
	Q109, Q1151	DIGITAL TRANSISTOR	DTC114TS
	Q1152-Q1161	DIGITAL TRANSISTOR	DTC114TS
	Q1166, Q123	DIGITAL TRANSISTOR	DTC114TS
	Q125, Q126	DIGITAL TRANSISTOR	DTC115TS
	Q1401	DIGITAL TRANSISTOR	DTA114TS
	Q1402	DIGITAL TRANSISTOR	DTC114TS
	Q161, Q162	N-FET	2SK373
	Q163, Q164	DIGITAL TRANSISTOR	DTC114TS
	Q165	DIGITAL TRANSISTOR	XDA114ES
	Q167	DIGITAL TRANSISTOR	DTC114TS
	Q231, Q233	TRANSISTOR	XDC124ES
	Q234	DIGITAL TRANSISTOR	DTC114TS
	Q235	TRANSISTOR	2SA1309A
	Q253-Q256	DIGITAL TRANSISTOR	DTC114TS
	Q333	DIGITAL TRANSISTOR	DTA114TS
	Q351, Q352	DIGITAL TRANSISTOR	DTC115TS
	Q353, Q354	TRANSISTOR	2SD2144S
	Q454, Q455	TRANSISTOR	2SC3311A
	Q456, Q457	TRANSISTOR	2SC1815
	Q458	TRANSISTOR	2SD2144S
	Q459	TRANSISTOR	2SC3311A
	Q460	TRANSISTOR	2SB1238X
	Q507, Q508	TRANSISTOR	XDA124ES
	Q511, Q512	TRANSISTOR	XDA124ES
	Q552	DIGITAL TRANSISTOR	DTC114TS
	Q553	N-FET	2SK246
	Q652	DIGITAL TRANSISTOR	XDA114ES
	Q653	TRANSISTOR	XDC124ES
	Q701, Q702	TRANSISTOR	2SD2144S
	Q741, Q742	TRANSISTOR	2SD2144S
	Q762	DIGITAL TRANSISTOR	DTA114TS
	Q801	TRANSISTOR	2SA1309A
	Q802	TRANSISTOR	XDC124ES
	Q803	TRANSISTOR	2SB1425
	Q804	TRANSISTOR	XDC124ES
	Q805	TRANSISTOR	2SB1238X
	Q806	TRANSISTOR	XDC124ES
	Q807	TRANSISTOR	2SC3311A
	Q851	TRANSISTOR	2SA1309A
	Q852	TRANSISTOR	XDC124ES
	Q853	TRANSISTOR	2SB1425
	Q854	TRANSISTOR	XDC124ES
	Q855	TRANSISTOR	2SB1238X
	Q856	TRANSISTOR	XDC124ES

Mark	No.	Description	Part No.
	Q857	TRANSISTOR	2SC3311A
	Q901, Q902	TRANSISTOR	XDC124ES
⚠	D1001, D1006	DIODE	1SR35-100AVL
⚠	D1009-D1011	DIODE	1SS254
⚠	D1012	BRIDGE STACK	S2VB20
⚠	D1020	ZENER DIODE	MTZJ3.3B
	D1021	ZENER DIODE	MTZJ5.1B
	D1151, D1152	DIODE	1SS254
	D1400-D1406	DIODE	1SS254
	D161-D166	DIODE	1SS254
	D231-D233	DIODE	1SS254
	D235	DIODE	1SS254
	D452	DIODE	1SS252
	D501	DIODE	1SS254
	D502	ZENER DIODE	MTZ9.1B
	D503, D507	DIODE	1SS254
	D508, D510	DIODE	1SS254
	D511, D512	DIODE	1SS254
	D521, D742	DIODE	1SS254
	D765	ZENER DIODE	MTZJ3.9B
	D801, D851	DIODE	11ES2
	D913	DIODE	1SS254

COILS AND FILTERS

	F251, F252	FILTER	RTF1208
	L101, L102	COIL	RTF1099
	L351, L352	COIL	RTF1102
	L451	RADIAL INDUCTOR	LFA121K
	L452		RTD1048
	L651, L652	COIL	RTD1046

CAPACITORS

	C1001	ELECT. CAPACITOR	CEAS221M50
	C1004	ELECT. CAPACITOR	CEAS330M35
	C1007	ELECT. CAPACITOR	PCH1116
	C1008	CERAMIC CAPACITOR	CKCYF473Z50
	C101	CERAMIC CAPACITOR	CKSQYB561K50
	C1010	ELECT. CAPACITOR	PCH1117
	C1011	ELECT. CAPACITOR	RCH1116
	C1013, C1015	ELECT. CAPACITOR	CEAS331M16
	C1016	ELECT. CAPACITOR	CEAS100M50
	C1018	ELECT. CAPACITOR	CEAS220M50
	C102	CERAMIC CAPACITOR	CKSQYB561K50
	C1020, C1021	CERAMIC CAPACITOR	CKCYF473Z50
	C1022	CERAMIC CAPACITOR	CKSQYF473Z50
	C1024, C1025	ELECT. CAPACITOR	CEAS470M16
	C103	CERAMIC CAPACITOR	CKSQYB471K50
	C1030	CERAMIC CAPACITOR	CKCYF473Z50
	C104	CERAMIC CAPACITOR	CKSQYB471K50
	C105, C106	CHIP CAPACITOR	CKSQYB102K50
	C111, C112	ELECT. CAPACITOR	CEANL101M10
	C113, C114	AUDIO FILM CAPACITOR	CFTXA822J50
	C117, C118	ELECT. CAPACITOR	CEAS4R7M50
	C119	CERAMIC CAPACITOR	CKSQYF473Z50
	C121, C122	CERAMIC CAPACITOR	CKSQYB221K50
	C123, C124	CERAMIC CAPACITOR	CKSQYB391K50
	C126	CERAMIC CAPACITOR	CKSQYF473Z50

Mark	No.	Description	Part No.
	C133, C134	CERAMIC CAPACITOR	CKSQYB681K50
	C135-C138	CHIP CAPACITOR	CCSQSL101J50
	C139	CERAMIC CAPACITOR	CKSQYF473Z50
	C1400	CERAMIC CAPACITOR	CKCYF103Z50
	C1401	CERAMIC CAPACITOR	CKCYF473Z50
	C1402	CERAMIC CAPACITOR	CKCYF103Z50
	C141, C142	ELECT. CAPACITOR	CEAS470M16
	C1601, C1602	ELECT. CAPACITOR	CEASR22M50
	C1603, C1604	ELECT. CAPACITOR	CEAS101M16
	C1605	ELECT. CAPACITOR	CEAS331M16
	C161, C162	CHIP CAPACITOR	CCSQCH100D50
	C1701	CERAMIC CAPACITOR	CKSQYF473Z50
	C200	ELECT. CAPACITOR	CEAS101M16
	C201, C202	ELECT. CAPACITOR	CEAS010M50
	C2020	CERAMIC CAPACITOR	CKCYF473Z50
	C203, C204	ELECT. CAPACITOR	CEAS100M50
	C205, C206	AUDIO FILM CAPACITOR	CFTYA104J50
	C207, C208	AUDIO FILM CAPACITOR	CFTYA683J50
	C209-C212	ELECT. CAPACITOR	CEAS100M50
	C213	ELECT. CAPACITOR	CEAS4R7M50
	C215-C218	ELECT. CAPACITOR	CEAS100M50
	C231	ELECT. CAPACITOR	CEAS101M16
	C233, C234	AUDIO FILM CAPACITOR	CFTYA103J50
	C235-C238	ELECT. CAPACITOR	CEAS4R7M50
	C239	ELECT. CAPACITOR	CEAS470M16
	C240	ELECT. CAPACITOR	CEAS101M16
	C241	ELECT. CAPACITOR	CEAS4R7M50
	C244, C245	ELECT. CAPACITOR	CEAS101M16
	C247, C248	ELECT. CAPACITOR	CEAS4R7M50
	C249, C250	CHIP CAPACITOR	CKSQYB222K50
	C251	CERAMIC CAPACITOR	CKSQYF473Z50
	C255, C256	AUDIO FILM CAPACITOR	CFTYA103J50
	C263	ELECT. CAPACITOR	CEAS010M50
	C321, C322	AUDIO FILM CAPACITOR	CFTYA184J50
	C351, C352	ELECT. CAPACITOR	CEAS221M10
	C353-C356	ELECT. CAPACITOR	CEAS4R7M50
	C357	CERAMIC CAPACITOR	CKSQYF473Z50
	C358	CERAMIC CAPACITOR	CKSQYF104Z50
	C359	CHIP CERAMIC C.	CCSQCH221J50
	C360	CERAMIC CAPACITOR	CKSQYB221K50
	C361	ELECT. CAPACITOR	CEAS470M16
	C362, C363	CERAMIC CAPACITOR	CKSQYB391K50
	C451	ELECT. CAPACITOR	CEAS330M35
	C453	CAPACITOR	CQPA682J100
	C454	AUDIO FILM CAPACITOR	CFTYA223J50
	C455-C457	CERAMIC CAPACITOR	CGCYX332K25
	C458	ELECT. CAPACITOR	CEAS330M35
	C459	ELECT. CAPACITOR	CEAS100M50
	C501, C502	CHIP CAPACITOR	CKSQYF103Z50
	C503	CERAMIC CAPACITOR	CKSQYB104K25
	C505	CHIP CAPACITOR	CKSQYB223K50
	C506, C507	CHIP CAPACITOR	CKSQYF103Z50
	C508	ELECT. CAPACITOR	CEAS470M16
	C521	ELECT. CAPACITOR	CEAS330M35
	C551	CERAMIC CAPACITOR	CKSQYB823K25
	C554	CERAMIC CAPACITOR	CKSQYB103K50

Mark	No.	Description	Part No.
	Q857	TRANSISTOR	2SC3311A
	Q901, Q902	TRANSISTOR	XDC124ES
	D1001, D1006	DIODE	ISR35-100AVL
	D1009-D1011	DIODE	ISS254
	D1012	BRIDGE STACK	S2VB20
	D1020	ZENER DIODE	MTZJ3.3B
	D1021	ZENER DIODE	MTZJ5.1B
	D1151, D1152	DIODE	ISS254
	D1400-D1406	DIODE	ISS254
	D1501, D1152	DIODE	ISS254
	D1502	ZENER DIODE	MTZ9.1B
	D1503, D1507	DIODE	ISS254
	D1508, D1510	DIODE	ISS254
	D1511, D1512	DIODE	ISS254
	D1521, D1742	DIODE	ISS254
	D1765	ZENER DIODE	MTZJ3.9B
	D1801, D1851	DIODE	11ES2
	D1913	DIODE	ISS254
	F2511, F2512	FILTER	RTF1208
	L1101, L1102	COIL	RTF1099
	L1511, L1512	COIL	RTF1102
	L1451	RADIAL INDUCTOR	LPA121K
	L1452		RTD1048
	L1651, L1652	COIL	RTD1046
		CAPACITORS	
	C1001	ELECT. CAPACITOR	CEAS221M50
	C1004	ELECT. CAPACITOR	CEAS330M35
	C1007	ELECT. CAPACITOR	PCH1116
	C1008	CERAMIC CAPACITOR	CKCYF473Z50
	C101	CERAMIC CAPACITOR	CKSQYB561K50
	C1010	ELECT. CAPACITOR	PCH1117
	C1011	ELECT. CAPACITOR	RCH1116
	C1013, C1015	ELECT. CAPACITOR	CEAS331M16
	C1016	ELECT. CAPACITOR	CEAS100M50
	C1018	ELECT. CAPACITOR	CEAS220M50
	C102	CERAMIC CAPACITOR	CKSQYB561K50
	C1020, C1021	CERAMIC CAPACITOR	CKCYF473Z50
	C1022	CERAMIC CAPACITOR	CKSQYF473Z50
	C1024, C1025	ELECT. CAPACITOR	CEAS470M16
	C103	CERAMIC CAPACITOR	CKSQYB471K50
	C1030	CERAMIC CAPACITOR	CKCYF473Z50
	C104	CERAMIC CAPACITOR	CKSQYB471K50
	C105, C106	CHIP CAPACITOR	CKSQYB102K50
	C111, C112	ELECT. CAPACITOR	CEANL101M10
	C113, C114	AUDIO FILM CAPACITOR	CFTXA822J50
	C117, C118	ELECT. CAPACITOR	CEAS4R7M50
	C119	CERAMIC CAPACITOR	CKSQYF473Z50
	C121, C122	CERAMIC CAPACITOR	CKSQYB221K50
	C123, C124	CERAMIC CAPACITOR	CKSQYB391K50
	C126	CERAMIC CAPACITOR	CKSQYF473Z50

Mark	No.	Description	Part No.
	C133, C134	CERAMIC CAPACITOR	CKSQYB681K50
	C135-C138	CHIP CAPACITOR	CCSQSL101J50
	C139	CERAMIC CAPACITOR	CKSQYF473Z50
	C1400	CERAMIC CAPACITOR	CKCYF103Z50
	C1401	CERAMIC CAPACITOR	CKCYF473Z50
	C1402	CERAMIC CAPACITOR	CKCYF103Z50
	C141, C142	ELECT. CAPACITOR	CEAS470M16
	C1601, C1602	ELECT. CAPACITOR	CEASR22M50
	C1603, C1604	ELECT. CAPACITOR	CEAS101M16
	C1605	ELECT. CAPACITOR	CEAS331M16
	C1701	CERAMIC CAPACITOR	CKSQYF473Z50
	C200	ELECT. CAPACITOR	CEAS101M16
	C201, C202	ELECT. CAPACITOR	CEAS010M50
	C2020	CERAMIC CAPACITOR	CKCYF473Z50
	C203, C204	ELECT. CAPACITOR	CEAS100M50
	C205, C206	AUDIO FILM CAPACITOR	CFTYA104J50
	C207, C208	AUDIO FILM CAPACITOR	CFTYA683J50
	C209-C212	ELECT. CAPACITOR	CEAS100M50
	C213	ELECT. CAPACITOR	CEAS4R7M50
	C215-C218	ELECT. CAPACITOR	CEAS100W50
	C231	ELECT. CAPACITOR	CEAS101M1C
	C233, C234	AUDIO FILM CAPACITOR	CFTYA103J50
	C235-C238	ELECT. CAPACITOR	CEAS4R7M50
	C239	ELECT. CAPACITOR	CEAS470M16
	C240	ELECT. CAPACITOR	CEAS101M16
	C241	ELECT. CAPACITOR	CEAS4R7M50
	C244, C245	ELECT. CAPACITOR	CEAS101M16
	C247, C248	ELECT. CAPACITOR	CEAS4R7M50
	C249, C250	CHIP CAPACITOR	CKSQYB222K50
	C251	CERAMIC CAPACITOR	CKSQYF473Z50
	C255, C256	AUDIO FILM CAPACITOR	CFTYA103J50
	C263	ELECT. CAPACITOR	CEAS010M50
	C321, C322	AUDIO FILM CAPACITOR	CFTYA184J50
	C351, C352	ELECT. CAPACITOR	CEAS221M10
	C353-C356	ELECT. CAPACITOR	CEAS4R7M50
	C357	CERAMIC CAPACITOR	CKSQYF473Z50
	C358	CERAMIC CAPACITOR	CKSQYF104Z50
	C359	CHIP CERAMIC C.	CCSQCH221J50
	C360	CERAMIC CAPACITOR	CKSQYB221K50
	C361	ELECT. CAPACITOR	CEAS470M16
	C362, C363	CERAMIC CAPACITOR	CKSQYB391K50
	C451	ELECT. CAPACITOR	CEAS330M35
	C453	CAPACITOR	CQPA682J100
	C454	AUDIO FILM CAPACITOR	CFTXA223J50
	C455-C457	CERAMIC CAPACITOR	CCCYX332KZ5
	C458	ELECT. CAPACITOR	CEAS330M35
	C459	ELECT. CAPACITOR	CEAS100M50
	C501, C502	CHIP CAPACITOR	CKSQYF103Z50
	C503	CERAMIC CAPACITOR	CKSQYB104K25
	C505	CHIP CAPACITOR	CKSQYB223K50
	C506, C507	CHIP CAPACITOR	CKSQYF103Z50
	C508	ELECT. CAPACITOR	CEAS470M16
	C521	ELECT. CAPACITOR	CEAS330M35
	C551	CERAMIC CAPACITOR	CKSQYB823K25
	C554	CERAMIC CAPACITOR	CKSQYB103K50

Mark	No.	Description	Part No.
	C555	ELECT. CAPACITOR	CEAS010M50
	C651, C652	AUDIO FILM CAPACITOR	CFTYA103J50
	C653, C654	CERAMIC CAPACITOR	CKSQYB821K50
	C655, C656	AUDIO FILM CAPACITOR	CFTYA223J50
	C657, C658	CERAMIC CAPACITOR	CKSQYF473Z50
	C659, C660	CERAMIC CAPACITOR	CCCSL101K500
	C661, C662	CERAMIC CAPACITOR	RCG1005
	C663	CHIP CAPACITOR	CCSQSL101J50
	C664	ELECT. CAPACITOR	CEASR10M50
	C667	ELECT. CAPACITOR	CEAS100M50
	C701, C702	CHIP CAPACITOR	CCSQSL101J50
	C703, C704	ELECT. CAPACITOR	CEAS010M50
	C705	ELECT. CAPACITOR	CEAS470M16
	C706	CERAMIC CAPACITOR	CKCYF473Z50
	C707, C708	ELECT. CAPACITOR	CEAS100M50
	C711, C712	CHIP CAPACITOR	CCSQSL101J50
	C723, C724	CHIP CAPACITOR	CCSQSL101J50
	C769	CERAMIC CAPACITOR	CKSQYF473Z50
	C801, C851	CHIP CAPACITOR	CKSQYB102K50
	C915	ELECT. CAPACITOR	CEASR47M50
	C919	CERAMIC CAPACITOR	CKSQYF473Z50
		RESISTORS	
	R1002	METAL OXIDE RESISTOR	RS2LMF271J
	R1007	CARBON FILM RESISTOR	RD1/6PM362J
⚠	R1020	FUSIBLE RESISTOR	RFA1/4L470J
	R1023	METAL OXIDE RESISTOR	RS1LMF150J
	R1024, R1025	CARBON FILM RESISTOR	RD1/6PM123J
	R118	CARBON FILM RESISTOR	RD1/6PM102J
	R135	CARBON FILM RESISTOR	RD1/6PM104J
	R136	CARBON FILM RESISTOR	RD1/6PM222J
	R1602	CARBON FILM RESISTOR	RD1/6PM823J
	R1605, R1606	CARBON FILM RESISTOR	RD1/6PM470J
	R1609	METAL OXIDE RESISTOR	RS2LMF750J
	R1702	LADDER RESISTOR	RCX1020
	R236, R241	CARBON FILM RESISTOR	RD1/6PM122J
	R395	CARBON FILM RESISTOR	RD1/6PM222J
	R452	CARBON FILM RESISTOR	RD1/2LMF010J
	R454, R455	CARBON FILM RESISTOR	RD1/6PM273J
	R460	CARBON FILM RESISTOR	RD1/6PM222J
	R461	CARBON FILM RESISTOR	RD1/2LMF680J
	R464	CARBON FILM RESISTOR	RD1/6PM223J
	R465	CARBON FILM RESISTOR	RD1/6PM222J
	R468	CARBON FILM RESISTOR	RD1/2LMF150J
	R469	CARBON FILM RESISTOR	RD1/6PM102J
	R471	CARBON FILM RESISTOR	RD1/6PM222J
	R472	CARBON FILM RESISTOR	RD1/6PM273J
	R473	CARBON FILM RESISTOR	RD1/6PM223J
	R474	CARBON FILM RESISTOR	RD1/6PM273J
	R477	CARBON FILM RESISTOR	RD1/6PM302J
	R501	RESISTOR ARRAY (22K)	RA416J
	R502	RESISTOR ARRAY (22K)	RA412J
	R503	RESISTOR ARRAY (22K)	RA6T223J
	R504	RESISTOR ARRAY (68K)	RA6T683J
	R552	CARBON FILM RESISTOR	RD1/6PM104J
	R557-R559	CARBON FILM RESISTOR	RD1/6PM103J

NOTE FOR SCHEMATIC DIAGRAMS (Type 6A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ← V :
   DC voltage (V) in STOP mode unless otherwise noted.
   ⇦ mA or ← mA :
   DC current in STOP mode unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - ◁ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH—□ ON THE SCHEMATIC DIAGRAM:**
   - SCH—□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

~~SUB UNIT~~
S1501 : 1 – FF
S1502 : 1 – REW
S1503 : 1 – REV
S1504 : 1 – FWD
S1506 : 1 – STOP
S1509 : 2 – FF
S1510 : 2 – REW
S1511 : 2 – REV
S1512 : 2 – FWD
S1513 : 2 – MUTE
S1514 : 2 – STOP
S1515 : 2 – REC
S1516 : 2 – PAUSE
S1517 : × 1
S1518 : × 2
S1519 : 2 – BLE
S1520 : 1/F
S1521 : MODE 2 – COUNTER
S1522 : RESET 1 – COUNTER
S1523 : MODE 1 – COUNTER
S1524 : RESET 2 – COUNTER
S1525 : CD SYNC
S1528 : POWER ON/OFF
S1529 : DOLBY B – C – S
S1530 : ⊏ – ⊂
S1531 : DOLBY OFF/ON

Mark	No.	Description	Part No.
	R564	CARBON FILM RESISTOR	RD1/6PM202J
	R565	CARBON FILM RESISTOR	RD1/6PM683J
	R717	CARBON FILM RESISTOR	RD1/6PM222J
	R718	CARBON FILM RESISTOR	RD1/6PM473J
	R803	CARBON FILM RESISTOR	RD1/6PM124J
	R806	CARBON FILM RESISTOR	RD1/6PM222J
	R809, R810	CARBON FILM RESISTOR	RD1/6PM152J
	R856	CARBON FILM RESISTOR	RD1/6PM222J
	R859, R860	CARBON FILM RESISTOR	RD1/6PM152J
	R926	CARBON FILM RESISTOR	RD1/6PM223J
	VR101-VR104	VR	RCP1047
	VR2002	VARIABLE RESISTOR	RCV1089
	VR323, VR324	VR	RCP1047
	VR551, VR553	VR	RCP1046
	VR653, VR654	VR	RCP1046
	VR802	VR	RCP1044
	VR851	VR	RCP1019
	VR852	VR	RCP1044
	OTHER RESISTORS		RS1/10S□□□J
OTHERS			
	CN101, CN102	CONNECTOR POST	B3B-PH-K
	CN1503 30P	CONNECTOR	52045-3145
	CN452	CONNECTOR POST	B2B-PH-K
	JA1401, JA1402	JACK	RKN1004
	JA1403	JACK	PKN1005
	JA2003	JACK	RKN1002
	JA701	JACK	RKB-020
	X501	CERAMIC RESONATOR	VSS1014

SUB UNIT

SEMICONDUCTORS

	Q1501	DIGITAL TRANSISTOR	DTA114TS
	D1501-D1514	DIODE	1SS254
	D527	LED	SEL6210S

SWITCHES

	S1501-S1506	SWITCH	RSG1034
	S1509-S1525	SWITCH	RSG1034
	S1528	SWITCH	RSG1034
	S1529, S1530	SWITCH	RSH1041
	S1531	SWITCH	RSH1042

RESISTORS

	ALL RESISTORS		RD1/6PM□□□J

OTHERS

	CN1501	CONNECTOR	9604S-31F
	V1501	FL TUBE	RAW1132

TRANSFORMER 2 UNIT

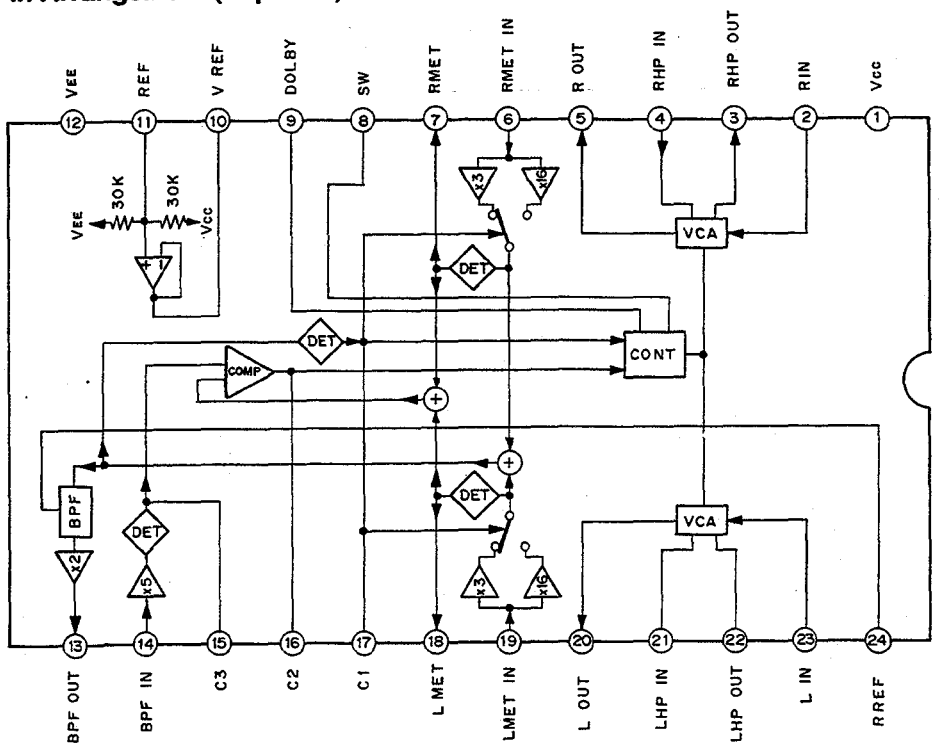
This unit has no service parts.

8. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PA0059AM (MAIN UNIT, IC231)

● Pin Arrangement (Top view)



● Pin Functions

Pin No.	Name	I/O	Function
1	VCC	–	Power supply pin.
2, 23	RIN/LIN	I	Signal input pin.
3, 22	RHP OUT/LHP OUT	O	High-pass filter output pin.
4, 21	RHP IN/LHP IN	I	High band signal input pin.
5, 20	R OUT/L OUT	O	Output signal buffer output pin.
6, 19	RMET IN/LMET IN	I	Level meter detection input pin.
7, 18	RMET/LMET	O	Level meter detection output pin.
8	SW	I	Input pin controlling the 1/f correction. "L": 1/f mode ON.
9	DOLBY	I	Input pin controlling the correction gain of the 1/f correction. "H": When DOLBY OFF.
10	VREF	O	Reference voltage output pin.
11	REF	I	Reference voltage input pin.
12	VEE	–	VEE pin.
13	BPF OUT	O	Band-pass filter output pin. 10kHz central frequency
14	BPF IN	I	High band detection input pin.
15	C3	–	High band detection smoothing capacitor pin.
16	C2	–	Comparator detection smoothing capacitor pin.
17	C1	–	Level detection smoothing capacitor pin.
24	RREF	–	Band-pass filter reference resistor pin.

■ LC7570 (MAIN UNIT, IC502)

● Pin Function

Pin No.	Name	I/O	Function
1	–	–	Connected to GND.
2	WR	I	Input pin of write-in permission from PD4507A.
3	CLK	I	Clock input pin from PD4507A.
4	DATA	I	Data input pin from PD4507A.
5	VC	I	Power supply pin. Connected to +5V.
6	$\overline{\text{RESET}}$	I	Reset pin. Reset when "L". All output pins output "L".
7	GND	–	Connected to GND.
8	–	–	————————
9	2BIAS	O	Deck II BIAS oscillation output pin. Bias oscillation when "H".
10	–	–	OPEN
11	EQ20	O	Pins 11 to 14 are BLE high band EQ correction output pins. Only EQ23 becomes "H" when BLE is off.
12	EQ23		
13	EQ22		
14	EQ21		
15	$\overline{\text{2RMUTE}}$	O	Deck II recording amplifier mute output pin. "L"=ON.
16	2SOL	O	2-mechanism solenoid driving output pin. "H"=ON.
17	2CPM	O	2-mechanism capstan motor driving output pin. "H"=ON.
18	LE23	O	Pins 18 to 21 are BLE level correction output pins. Only LE23 becomes "H" when BLE is off.
19	LE22		
20	LE21		
21	LE20		
22	DEC	O	DOLBY DECODE/ENCODE selection output pin. "H"=DECODE, "L"=ENCODE.
23	1/FON	O	FLEX control output pin. "L"=ON.
24	2PB	O	REC/PB head selection output pin. "H" in 2-mechanism playback.
25	DOL 0	O	DOLBY NR position control output pin. Controls as shown in right diagram.
26	DOL 1		
27	DOLS		
28	HI	O	Playback system circuit control output pin. "H" when metal and chrome tapes are played back.
29	TOCD	O	CD SYNCHRO output pin. "H" in REC.
30	FSE 1	O	Pins 30 and 31 are BLE OSC output control pins. Controls as shown in right diagram according to the frequency.
31	FSE 0		
32 to 42	–	–	OPEN

	DOLS	DOL 1	DOL 0
OFF	L	L	H
B	L	H	L
C	L	L	L
S	H	L	L

	FSEL 1	FSEL 0
400	H	H
3K	H	L
10K	L	H

■ PD4507A (MAIN UNIT, IC501) System Controller IC

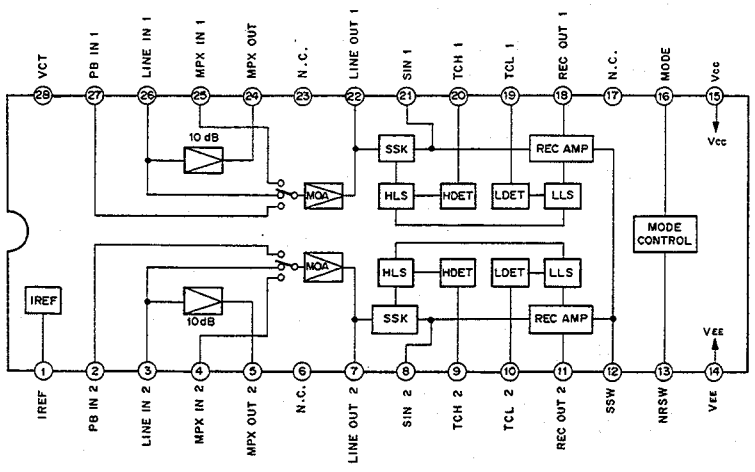
● Pin Function

Pin No.	Name	I/O	Function
1	S3	O	Pins 1 to 4 are FL segment and key scan output pins.
2	S2		
3	S1		
4	S0		
5	2SEN	I	2-mechanism sensing pulse input pin.
6	2CR	I	2-mechanism Cr SW input pin. "H" when chrome and metal tapes are used.
7	1CR	I	1-mechanism Cr SW input pin. "H" when chrome and metal tapes are used.
8	1SEN	I	1-mechanism sensing pulse input pin.
9	P_OFF	I	POWER OFF input pin. "H" when active.
10	$\overline{\text{REMOCON}}$	I	Remote control input pin.
11	METL	I	Lch level detection input pin.
12	METR	I	Rch level detection input pin.
13	1MOD	I	1-mechanism MODE SW input pin. "H" in STOP.
14	1HAF	I	1-mechanism HALF SW input pin. "L" when there is HALF.
15	2MOD	I	2-mechanism MODE SW input pin. "H" in STOP.
16	2HAF	I	2-mechanism HALF SW input pin. "L" when there is HALF.
17	DATA	O	Output expansion data output pin.
18	CLK	O	Output expansion clock output pin.
19	–	–	OPEN
20	–		
21	K/A 0	I/O	Pins 21 to 24 are key scan input pins and level scan output pins.
22	K/A 1		
23	K/A 2		
24	K/A 3		
25	A4	O	Level scan output pin.
26	BS20	O	For auto BLE function. Deck II BIAS correction output pin. "H" when BLE is OFF.
27	BS21	O	For auto BLE function. Deck II BIAS correction output pin. "L" when BLE is OFF.
28	WR	O	Output expansion write-in permission output pin.
29	OSC	O	For auto BLE function. OSC output pin.
30	OSC1	I	Pins 30 and 31 are main system clock input pins.
31	OSC2	I	
32	GND	–	Connected to GND.
33	–	I	Connected to GND.
34	–	–	Open
35	1SOL	O	1-mechanism solenoid driving output pin. "H"=ON.
36	1CPM	O	1-mechanism capstan motor driving output pin. "H"=ON.
37	X1	O	Motor speed control output pin. Constant speed when "H". Double speed when "L".
38	$\overline{\text{LMUTE}}$	O	Line mute output pin. "L"=ON.
39	$\overline{\text{RESET}}$	I	Reset signal input pin. Reset when "L".

Pin No.	Name	I/O	Function
40	T0	O	Pins 40 to 49 are FL scan grid output pins. (Incorporate pull-down resistors)
41	T1		
42	T2		
43	T3		
44	T4		
45	T5		
46	T6		
47	T7		
48	T8		
49	T9		
50	SBY	O	Standby display LED control output pin. "H" when standbying.
51	MSGAIN	O	Gain control output pin of meter circuit.
52	MRECV	O	Recovery time selection output pin of meter circuit.
53	BLEON	O	BLE circuit control output pin. "H" when BLE.
54	S11	O	Pins 54 and 55 are FL segments and key scan output pins.
55	S10		
56	VLOAD	I	Power supply pin for built-in pull-down resistor. Connected to –21V.
57	VPRE	I	Connected to approximately –5V.
58	S9	O	Pins 58 to 63 are FL segment and key scan output pins.
59	S8		
60	S7		
61	S6		
62	S5		
63	S4		
64	Vc	–	Power supply pin. Connected to +5V.

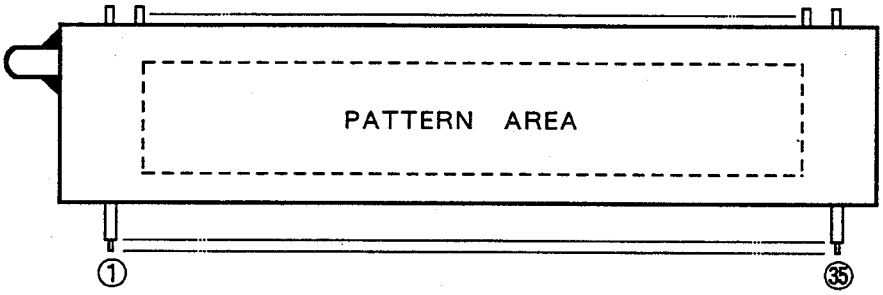
■ CXA1563S (MAIN UNIT, IC201)
Incorporates a 2-channel dolby B/C type noise reduction processor and dolby S type selection switch

● Pin Arrangement (Top view)



9. FL INFORMATION

■ RAW1132 (V1501)

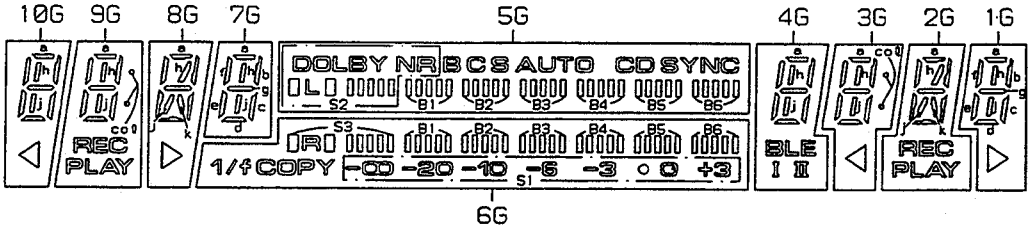


Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
CONNECTION	F1	F1	NP	NC	10G	9G	8G	7G	NC	6G	5G	NC	4G	3G	2G	1G	NC	NC	NP	21	11	10	9G	8G	NC	7G	6G	5G	4G	3G	2G	1G	NC	P2	F2

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) NC ------ No connection.
4) 1G~10G --- Grid

Grid Assignment

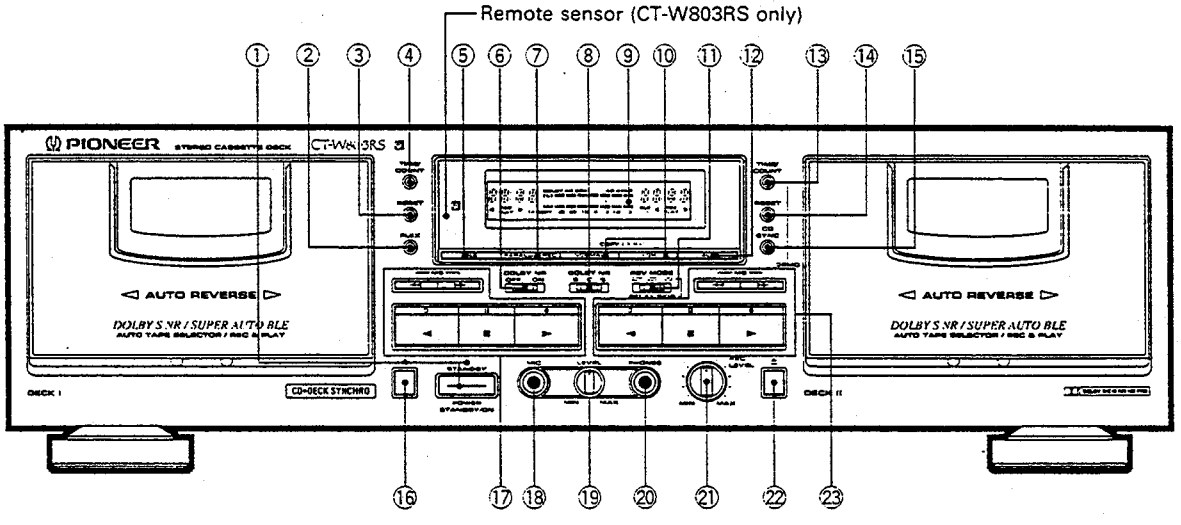


Anode Connection

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	a	a	a	B1	B1	a	a	a	a
P2	b	b	b	b	B2	B2	b	b	b	b
P3	f	f	f	f	B3	B3	f	f	f	f
P4	g	g	g	g	B4	B4	g	g	g	g
P5	c	c	c	c	B5	B5	c	c	c	c
P6	e	e	e	e	B6	B6	e	e	e	e
P7	d	d	d	d	-	CD SYNC	d	d	d	d
P8	h,j	h,j	h,j	h,j	-	B	h,j	h,j	h,j	h,j
P9	-	col	k	-	COPY	AUTO	BLE	col	k	-
P10	◁	PLAY	▷	-	1/4	C	I	◁	PLAY	▷
P11	-	REC	-	-	S1	S	II	-	REC	-
P12	-	-	-	-	S3	S2	-	-	-	-

10. PANEL FACILITIES

The illustration shows model CT-W803RS.



① POWER STANDBY/ON switch/indicator
The POWER switch activates the secondary transformer only. Even when the switch is in the STANDBY position, there will be a power flow to the deck's circuits as long as the power cord is connected to a power outlet.

② FLEX button

③ DECK I counter reset button (RESET)

④ DECK I counter mode button (TIME/COUNT)

⑤ DECK I BLE button (Except for CT-W603RS)

⑥ DOLBY NR ON/OFF switch

⑦ (CT-W803RS only) Parallel recording button (PARALLEL REC)
(CT-W603RS only) Synchro copy button (COPY I ▶II)
Normal: Normal speed copy

⑧ DOLBY* NR switch (B/C/S)

*

- *Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.*
- *"DOLBY", the double-D symbol ⧈ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

⑨ Function display

⑩ (CT-W803RS/CT-W703RS) Synchro copy buttons (COPY I▶II)
NORMAL : Normal speed copy
HIGH : Double speed copy
(CT-W603RS only) Synchro copy button (COPY I ▶II)
HIGH: Double speed copy
DECK II BLE button

⑪ Reverse mode switch (REV MODE RELAY/SKIP)

⑫ DECK II BLE button (CT-W803RS/CT-W703RS)

⑬ DECK II counter mode button (TIME/COUNT)

⑭ DECK II counter reset button (RESET)

⑮ CD•DECK SYNCHRO recording button (CD SYNC)

⑯ DECK I eject button (⏏)
- If the tape is moving (recording, playback, tape winding, etc.), press the stop (■) button before pressing this button.

NOTE:
If the power is turned off while the tape is moving, the cassette door may remain locked. In this case, turn the power on before pressing the eject (⏏) button.

⑰ Deck I operation buttons
◀ : Reverse playback
▶ : Forward playback
◀◀/MS : Fast reverse/music search
■ : Stop
▶▶/MS : Fast forward/music search
[Except for CT-W603RS]
O : Recording mute
II : Pause
● : Recording

⑱ Microphone jack (MIC) (CT-W803RS/CT-W703RS (U.S. and Canadian models only))

⑲ MIC LEVEL control (CT-W803RS/CT-W703RS (U.S. and Canadian models only))

⑳ Headphones jack (PHONES)

㉑ Recording level control (REC LEVEL)

㉒ DECK II eject button (⏏)
- If the tape is moving (recording, playback, tape winding, etc.), press the stop (■) button before pressing this button.

NOTE:
If the power is turned off while the tape is moving, the cassette door may remain locked. In this case, turn the power on before pressing the eject (⏏) button.

㉓ DECK II operation buttons
◀ : Reverse playback
▶ : Forward playback
◀◀/MS : Fast reverse/music search
■ : Stop
▶▶/MS : Fast forward/music search
O : Recording mute
II : Pause
● : Recording

11. SPECIFICATIONS

System ..... 4-track, 2-channel stereo
Heads
CT-W803RS/CT-W703RS ..... "Hard Permalloy" recording/playback head × 2
"Ferrite" erasing head × 2
CT-W603RS..... "Hard Permalloy" recording/playback head × 1
"Hard Permalloy" playback head × 1
"Ferrite" erasing head × 1
Motor ..... DC servo motor × 2
Wow and Flutter ..... 0.1% (WRMS)
Fast Winding Time ..... Approximately 100 seconds (C-60 tape)

Frequency Response
−20 dB recording:
CT-W803RS/CT-W703RS
TYPE IV (Metal) tape ..... 20 to 20,000 Hz
TYPE II (High/CrO_2) tape ..... 20 to 19,000 Hz
TYPE I (Normal) tape ..... 20 to 18,000 Hz
CT-W603RS
TYPE IV (Metal) tape ..... 20 to 16,500 Hz
TYPE II (High/CrO_2) tape ..... 20 to 16,000 Hz
TYPE I (Normal) tape ..... 20 to 16,000 Hz
Signal-to-Noise Ratio
Dolby NR OFF ..... More than 57 dB
Noise Reduction Effect
Dolby B-type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C-type NR ON ..... More than 19 dB (at 5 kHz)
Dolby S-type NR ON ..... More than 22 dB (at 5 kHz)
Harmonic Distortion ..... No more than 0.8% (at −4 dB: 160 nwb/m)

Input (Sensitivity)
LINE (INPUT) ..... 100 mV (Input impedance 68 kΩ)
MIC ..... 0.63 mV
(CT-W803RS/CT-W703RS: U.S. and Canadian model only)
Output (Reference level)
LINE (OUTPUT) ..... 0.5 V (Output impedance 1.9 kΩ)
Headphones ..... 0.63 mW (Load impedance 8 Ω)

Subfunctions

- Super AUTO BLE tuning system (CT-W803RS/CT-W703RS)
- AUTO BLE tuning system (CT-W603RS)
- Automatic reverse
- Double recording/playback reverse (CT-W803RS/CT-W703RS)
- DOLBY HX PRO recording function
- DOLBY B/C/S type NR
- Relay recording (CT-W803RS/CT-W703RS)
- Parallel recording (CT-W803RS only)
- Music search over ±15 selections
- Synchronized copy start
- High-speed and normal-speed copy (Deck I — Deck II)
- Relay playback/blank skip
- CD•DECK SYNCHRO recording capability
- Peak level meter with peak-hold function
- MPX FILTER (Interlocks with DOLBY NR switch) (CT-W803RS/CT-W703RS)
- Automatic space recording mute
- Automatic tape selector
- SR System remote control available (CT-W703RS/CT-W603RS only)
- 2-mode electronic 4-digit twin tape counter
- Michrophone jack (CT-W803RS/CT-W703RS: U.S. and Canadian model only)
- Headphone jack
- Wireless remote control operation (CT-W803RS: UK model only)
- Flex system

Miscellaneous

Power Requirements
U.S., Canadian models ..... AC 120 V, 60 Hz
U.K. model ..... AC 230—240 Volts~, 50/60 Hz

Power Consumption
CT-W803RS 24W
CT-W703RS/CT-W603RS 19W
Dimensions ..... 420(W) × 125(H) × 250(D) mm
16-1/2 (W)×4-7/8 (H)×9-13/16 (D) in.
Weight (without package)
CT-W803RS/CT-W703RS ..... 4.2 kg (9 lb 4 oz.)
CT-W603RS ..... 4.1 kg (9 lb 2 oz.)

Accessories

Operating instructions 1
Connection cord with pin plugs 2
SR Remote control cord (CT-W703RS/CT-W603RS only) 1
CD•DECK SYNCHRO control cord 1
Remote control unit (CT-W803RS: UK model only) 1
Dry cell batteries (size AAA IEC R03/UM-4)
(CT-W803RS: UK model only) 2

NOTE:
Specifications and design subject to possible modifications without notice, due to improvements.